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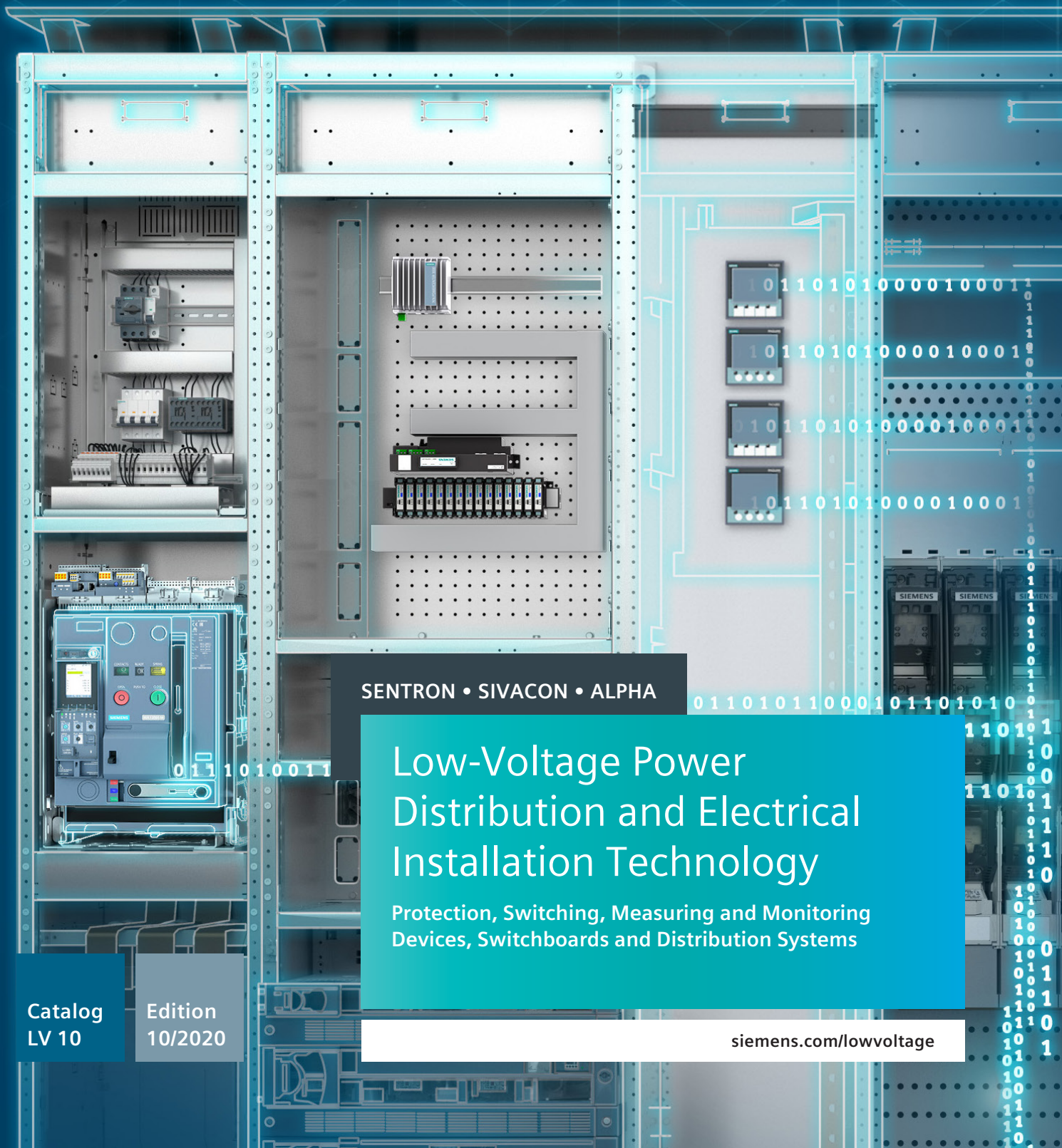

SENTRON • SIVACON • ALPHA

Low-Voltage Power Distribution and Electrical Installation Technology

Protection, Switching, Measuring and Monitoring Devices, Switchboards and Distribution Systems

Catalog
LV 10

Edition
10/2020

siemens.com/lowvoltage

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Making sure power makes its way

Consistent, safe and intelligent low-voltage power distribution and electrical installation technology

Whether industries, infrastructures or buildings: Each environment depends on a reliable power supply.

Which is why products and systems featuring maximum safety and optimum efficiency are in demand. This comprehensive portfolio for low-voltage power distribution and electrical installation technology covers every requirement – from the switchboard to the socket outlet.



We are there when you need us

Your personal contact can be found at
www.siemens.com/lowvoltage/contact

Catalog LV 10 · 10/2020

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www.siemens.com/industrymall

The products and systems listed in this catalog are developed and manufactured using a certified quality management system in accordance with DIN EN ISO 9001:2008.

Technical data
The technical specifications are for general information purposes only. Always heed the operating instructions and notices on individual products during assembly, operation and maintenance.

All illustrations are not binding.

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Low-Voltage Power Distribution and Electrical Installation Technology

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New products

3WA air circuit breakers. Made for makers. Simply reliable.



The new 3WA air circuit breaker continues the globally acknowledged tradition at Siemens for circuit breakers with a high standard of quality and reliability. It is characterized by new, sophisticated features that meet current market trends and set new standards.

- The 3WA air circuit breaker puts power distribution into the Internet of Things (IoT) and literally carries its intelligence inside it. All data about power, power quality and circuit breaker status can be measured and included in automation, cloud-based energy management and medium-voltage systems. Based on transparent energy data, the energy efficiency can be improved by up to 30%.
- Protection and metering functionality in one device reduces the space requirement and wiring complexity in the installation.
- Protection algorithms are automatically adapted to the direction of power flow. Distributed power networks such as buildings, infrastructure and industrial plants that produce electricity themselves, store it and feed it into the power system are optimally protected in this way.
- Several million circuit breaker variants can already be generated virtually in 3D and 2D as part of planning. The wiring is planned at the press of a button. This saves up to 7 hours of work.
- Features and upgrades can then simply be downloaded from the Internet and imported.
- The robust circuit breaker withstands voltage fluctuations and thus minimizes the risk of faults in the installation. Penalties imposed on system operators for power outages are reduced.

See chapter 1, page 1/4

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3VA2 molded case circuit breakers for 690 V applications



- New breaking capacity class E
- Breaking capacity 85 kA at 690 V AC and 200 kA at 415 V AC

See chapter 2, page 2/12

3LD5 UL main control and EMERGENCY-STOP switch



- New certification of the proven 3LD main control and EMERGENCY-STOP switches according to UL489
- Ideal for use as a main control switch for machinery and plants for export to the USA.

See chapter 8, page 8/52

3LD2 main control and EMERGENCY-STOP switches in enclosure



- New maintenance and repair switch with EMC shield plate
- Suitable for use between the converter and motor
- To enable international use, the 3LD2 main control and EMERGENCY-STOP switches in the enclosure are certified according to EL508

See chapter 8, page 8/42

3KD switch disconnectors in size 0



- The proven series of 3KD switch disconnectors is expanded with a new design 0:
  3KD01: 16 ... 63 A
  3KD02: 63 ... 125 A
- Space saving due to compact switch disconnectors in the new design
- High AC-23 415 V AC breaking capacity

See chapter 8, page 8/62

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New products

I

7KM PAC1020 measuring devices



- Compact, new measuring device in the new design for front mounting
- Integrated communication via Modbus RTU
- Direct measurement up to 400 V UL-L or transformer measurement possible
- Measuring accuracy: Active energy and active power class 1

See chapter 10, page 10/18

7KM PAC2200 CLP measuring devices for third-party consumption metering



The solution for measuring the third-party consumption for self-producers to be charged for under the German Renewable Energy Sources Act (EEG) in compliance with measurement and calibration law

- MID-compliant meter with load profile storage in compliance with calibration legislation and national approval according to PTB-A 50.7
- Integrated load profile memory for 15 min values with a memory depth for all data relevant to billing over 2 years
- Reaction-free Ethernet interface with integrated web server, DHCP, Modbus TCP
- Internal device clock with high accuracy and time synchronization via SNTP
- All further functions of the 7KM PAC2200 basic unit

See chapter 10, page 10/18

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SIMARIS Suite

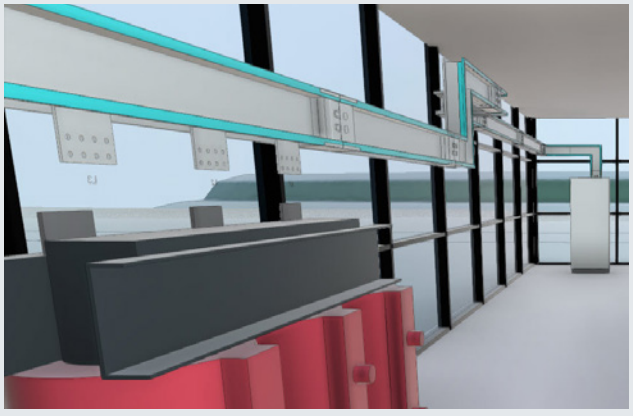


The SIMARIS Suite is the platform for your standard access to all SIMARIS planning tools, including SIMARIS Online Toolbox.

- After initial registration, you can benefit from all the advantages. You will find our SIMARIS planning tools at a glance, obtain up-to-date information, e.g. on regional training courses and useful support documents and videos.
- As a special highlight, you can now plan and dimension radial, ring and meshed networks with Version 10 of SIMARIS design.
- You can download the free SIMARIS Suite easily and conveniently: **www.siemens.com/simaris**

See chapter 16, page 16/7

SIMARIS busbarplan planning tool



- Simple configuration of SIVACON 8PS busbars
- Plugin based on the BIM Autodesk REVIT software
- Version for planners and for Siemens project engineers

See chapter 16, page 16/8

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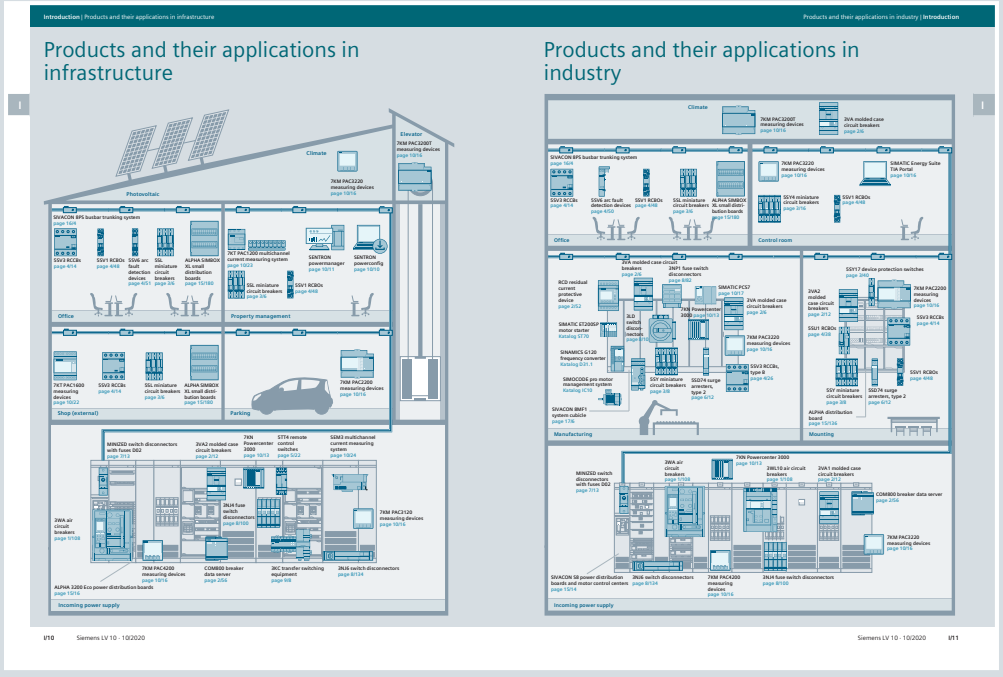
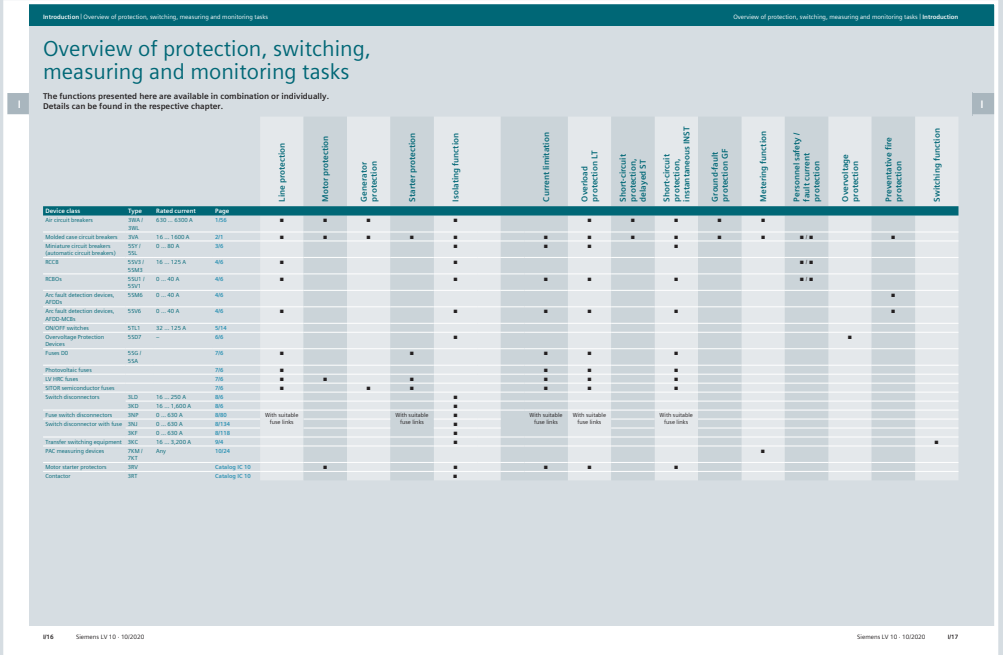
The fast route to the product

Overviews and matrix tables for better orientation within the catalog



Overview of products and their applications

On pages I/10 to I/13 you can find an overview of the diverse portfolio of catalog LV 10.



Protection, switching, measuring and monitoring tasks

From page I/16 onwards, the catalog LV 10 portfolio is dedicated to the most important protection, switching, measuring and monitoring tasks.

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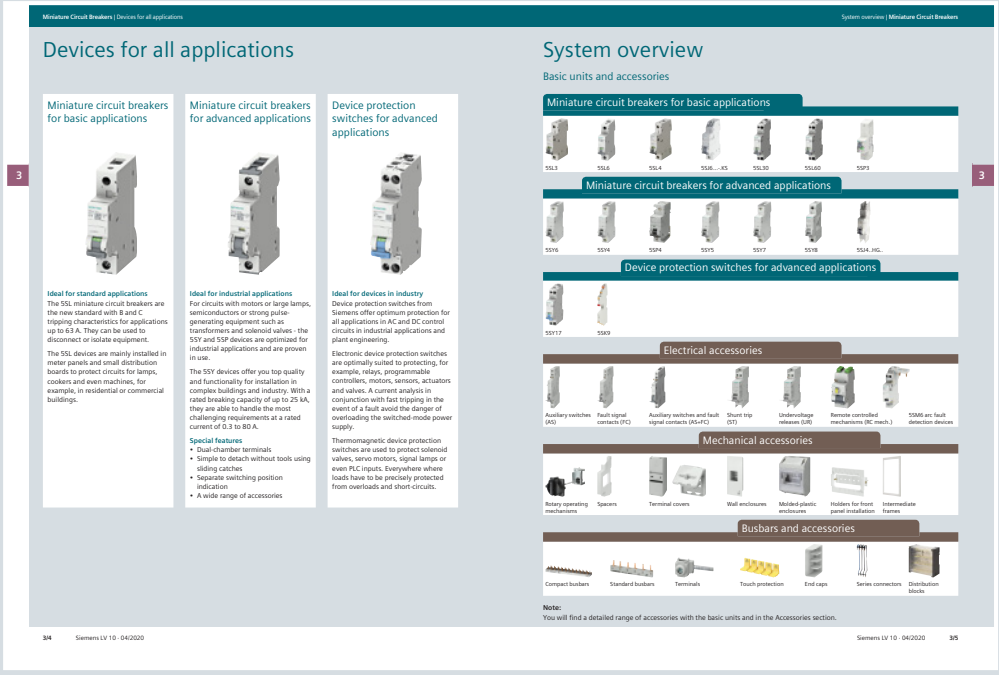

Miniature Circuit Breakers | Devices for all applications

System overview | Miniature Circuit Breakers

Devices for all applications

Miniature circuit breakers for basic applications

Ideal for standard applications
The 5SL miniature circuit breakers are the new standard with B and C tripping characteristics for applications up to 63 A. They can be used to disconnect or isolate equipment.

The 5SL devices are mainly installed in meter panels and small distribution boards to protect circuits for lamps, cookers and even machines, for example, in residential or commercial buildings.

Miniature circuit breakers for advanced applications

Ideal for industrial applications
For circuits with motors or large lamps, semiconductors or strong pulse-generating equipment such as transformers and solenoid valves - the 5SY and 5SP devices are optimized for industrial applications and are proven in use.

The 5SY devices offer you top quality and functionality for installation in complex buildings and industry. With a rated breaking capacity of up to 25 kA, they are able to handle the most challenging requirements at a rated current of 0.3 to 80 A.

Special features
- Dual-chamber terminals
- Simple to detach without tools using sliding catches
- Separate switching position indication
- A wide range of accessories

Device protection switches for advanced applications

Ideal for devices in industry
Device protection switches from Siemens offer optimum protection for all applications in AC and DC control circuits in industrial applications and plant engineering.

Electronic device protection switches are optimally suited to protecting, for example, relays, programmable controllers, motors, sensors, actuators and valves. A current analysis in conjunction with fast tripping in the event of a fault avoid the danger of overloading the switched-mode power supply.

Thermomagnetic device protection switches are used to protect solenoid valves, servo motors, signal lamps or even PLC inputs. Everywhere where loads have to be precisely protected from overloads and short-circuits.

System overview

Basic units and accessories

Note:
You will find a detailed range of accessories with the basic units and in the Accessories section.

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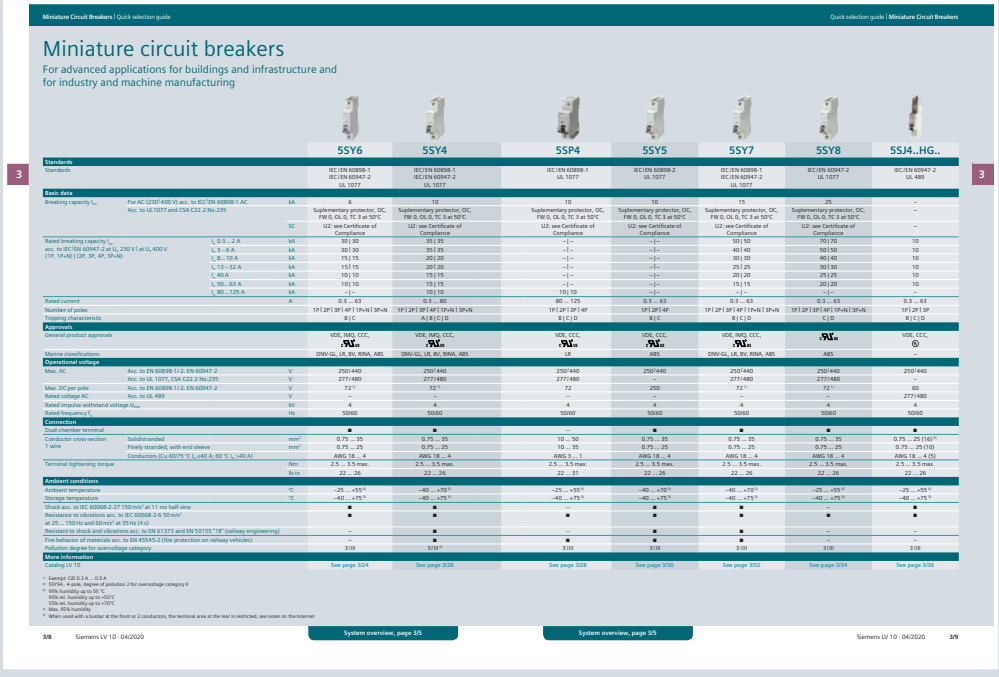
System overview

An overview of the basic units and accessories can be found in the system overview at the beginning of the chapter or section. The color helps you recognize the accessory at a glance.



Miniature Circuit Breakers | Quick selection guide

Quick selection guide | Miniature Circuit Breakers

Miniature circuit breakers

For advanced applications for buildings and infrastructure and for industry and machine manufacturing

				5SY6	5SY4	5SP4	5SY5	5SY7	5SY8	5SJ4..HG..
Standards										
Standards				IEC/EN 60898-1 IEC/EN 60947-2 UL 1077	IEC/EN 60898-1 IEC/EN 60947-2 UL 1077	IEC/EN 60898-1 UL 1077	IEC/EN 60898-2 UL 1077	IEC/EN 60898-1 IEC/EN 60947-2 UL 1077	IEC/EN 60947-2 UL 1077	IEC/EN 60947-2 UL 489
Basic data										
Breaking capacity I_{cn}	For AC (230/400 V) acc. to IEC/EN 60898-1 AC	kA		6	10	10	10	15	25	–
	Acc. to UL 1077, CSA C22.2 No. 235			Supplementary protector, OC, FW 0, OL 0, TC 3 at 50°C	Supplementary protector, OC, FW 0, OL 0, TC 3 at 50°C	Supplementary protector, OC, FW 0, OL 0, TC 3 at 50°C	Supplementary protector, OC, FW 0, OL 0, TC 3 at 50°C	Supplementary protector, OC, FW 0, OL 0, TC 3 at 50°C	Supplementary protector, OC, FW 0, OL 0, TC 3 at 50°C	–
		SC		UZ: see Certificate of Compliance	UZ: see Certificate of Compliance	UZ: see Certificate of Compliance	UZ: see Certificate of Compliance	UZ: see Certificate of Compliance	UZ: see Certificate of Compliance	–
Rated breaking capacity I_{cn} acc. to IEC/EN 60947-2 at U_e 230 V / at U_e 400 V (1P, 1P+N) | (2P, 3P, 4P, 3P+N)	I_n 0.3 ... 2 A	kA		30 | 30	35 | 35	– | –	– | –	50 | 50	70 | 70	10
	I_n 3 ... 6 A	kA		30 | 30	35 | 35	– | –	– | –	40 | 40	50 | 50	10
	I_n 8 ... 10 A	kA		15 | 15	20 | 20	– | –	– | –	30 | 30	40 | 40	10
	I_n 13 ... 32 A	kA		15 | 15	20 | 20	– | –	– | –	25 | 25	30 | 30	10
	I_n 40 A	kA		10 | 10	15 | 15	– | –	– | –	20 | 20	25 | 25	10
	I_n 50 ... 63 A	kA		10 | 10	15 | 15	– | –	– | –	15 | 15	20 | 20	10
	I_n 80 ... 125 A	kA		– | –	10 | 10	10 | 10	– | –	– | –	– | –	–
Rated current		A		0.3 ... 63	0.3 ... 80	80 ... 125	0.3 ... 63	0.3 ... 63	0.3 ... 63	0.3 ... 63
Number of poles				1P | 2P | 3P | 4P | 1P+N | 3P+N	1P | 2P | 3P | 4P | 1P+N | 3P+N	1P | 2P | 3P | 4P	1P | 2P | 3P | 4P	1P | 2P | 3P | 4P | 1P+N | 3P+N	1P | 2P | 3P | 4P | 1P+N | 3P+N	1P | 2P | 3P
Tripping characteristic				B | C	A | B | C | D	B | C | D	B | C	B | C | D	C | D	B | C | D
Approvals										
General product approvals				VDE, IMQ, CCC, cULus	VDE, IMQ, CCC, cULus	VDE, CCC, cULus	VDE, CCC, cULus	VDE, IMQ, CCC, cULus	cULus	VDE, CCC, ⑥
Marine classifications				DNV-GL, LR, BV, RINA, ABS	DNV-GL, LR, BV, RINA, ABS	LR	ABS	DNV-GL, LR, BV, RINA, ABS	ABS	–
Operational voltage										
Max. AC	Acc. to EN 60898-1/-2, EN 60947-2	V		250/440	250/440	250/440	250/440	250/440	250/440	250/440
	Acc. to UL 1077, CSA C22.2 No. 235	V		277/480	277/480	277/480	–	277/480	277/480	–
Max. DC per pole	Acc. to EN 60898-1/-2, EN 60947-2	V		72 [1]	72 [1]	72	250	72 [1]	72 [1]	60
Rated voltage AC	Acc. to UL 489	V		–	–	–	–	–	–	277/480
Rated impulse withstand voltage U_{imp}		kV		4	4	4	4	4	4	4
Rated frequency f_n		Hz		50/60	50/60	50/60	50/60	50/60	50/60	50/60
Connection										
Dual-chamber terminal				■	■	–	■	■	■	■
Conductor cross-section 1 wire	Solid/stranded	mm²		0.75 ... 35	0.75 ... 35	10 ... 50	0.75 ... 35	0.75 ... 35	0.75 ... 35	0.75 ... 25 (16) [5]
	Finely stranded, with end sleeve	mm²		0.75 ... 25	0.75 ... 25	10 ... 35	0.75 ... 25	0.75 ... 25	0.75 ... 25	0.75 ... 25 (10)
	Conductors (Cu 60/75 °C I_n ≤40 A; 60 °C I_n >40 A)			AWG 18 ... 4	AWG 18 ... 4	AWG 3 ... 1	AWG 18 ... 4	AWG 18 ... 4	AWG 18 ... 4	AWG 18 ... 4 (5)
Terminal tightening torque		Nm		2.5 ... 3.5 max.	2.5 ... 3.5 max.	2.5 ... 3.5 max.	2.5 ... 3.5 max.	2.5 ... 3.5 max.	2.5 ... 3.5 max.	2.5 ... 3.5 max.
		lb-in		22 ... 26	22 ... 26	22 ... 31	22 ... 26	22 ... 26	22 ... 26	22 ... 26
Ambient conditions										
Ambient temperature		°C		–25 ... +55 [3]	–40 ... +70 [3]	–25 ... +55 [3]	–40 ... +70 [3]	–40 ... +70 [3]	–25 ... +55 [3]	–25 ... +55 [3]
Storage temperature		°C		–40 ... +75 [3]	–40 ... +75 [3]	–40 ... +75 [3]	–40 ... +75 [3]	–40 ... +75 [3]	–40 ... +75 [3]	–40 ... +75 [3]
Shock acc. to IEC 60068-2-27 150 m/s² at 11 ms half-sine				■	■	–	■	■	–	■
Resistance to vibrations acc. to IEC 60068-2-6 50 m/s² at 25 ... 150 Hz and 60 m/s² at 35 Hz (4 s)				■	■	■	■	■	■	■
Resistant to shock and vibrations acc. to EN 61373 and EN 50155 "1B" (railway engineering)				–	■	–	■	■	–	–
Fire behavior of materials acc. to EN 45545-2 (fire protection on railway vehicles)				–	■	■	■	■	–	–
Pollution degree for overvoltage category				3/III	3/III [4]	3/III	3/III	3/III	3/III	3/III
More information										
Catalog LV 10				See page 3/24	See page 3/26	See page 3/28	See page 3/30	See page 3/32	See page 3/34	See page 3/36

[1] Exempt: I_n 0.3 A ... 0.5 A
[2] 50/60 ... 4 pole, degree of pollution 2 for overvoltage category II
[3] • 95% humidity up to 50 °C
95% rel. humidity up to +55 °C
55% rel. humidity up to +70 °C
[4] Max. 95% humidity
[5] When used with a busbar at the front or 2 conductors, the terminal area at the rear is restricted, see notes on the Internet

System overview, page 3/5

System overview, page 3/5

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Overview of basic units

The overviews at the beginning of the chapters and sections help you make a quick advance selection of the basic units. You can use the important technical data to compare the basic units. Page references quickly take you to the suitable devices.

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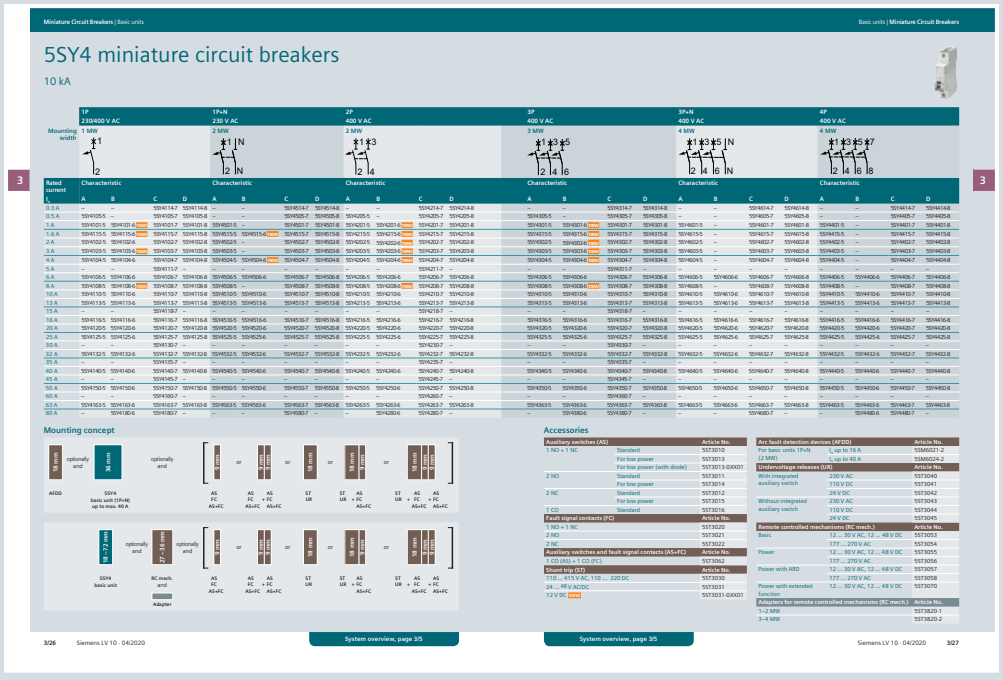
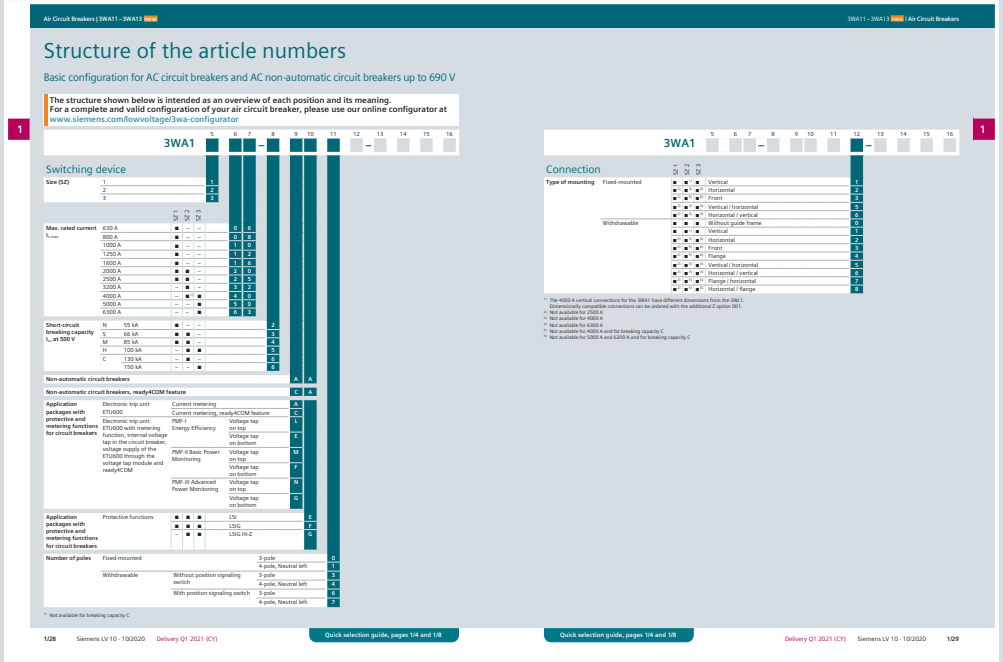
The fast route to the product

Overviews and matrix tables for better orientation within the catalog



Product page

The article number matrix shows you on the spot which product variants are available. The matching accessories are clearly dedicated to each basic device – often directly on the same page.



Configurable products

For products which are conveniently configurable online, the structure of the article numbers is clearly displayed. A link takes you directly to the configurator which permits complete and verified configuration.

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new Search function

Search for new products by entering new in the text field of the search function:



Clickable article numbers

Direct forwarding to the individual products in the Industry Mall by clicking on the Article No. in the catalog



or by entering this web address incl. Article No.
www.siemens.com/product?Article No.

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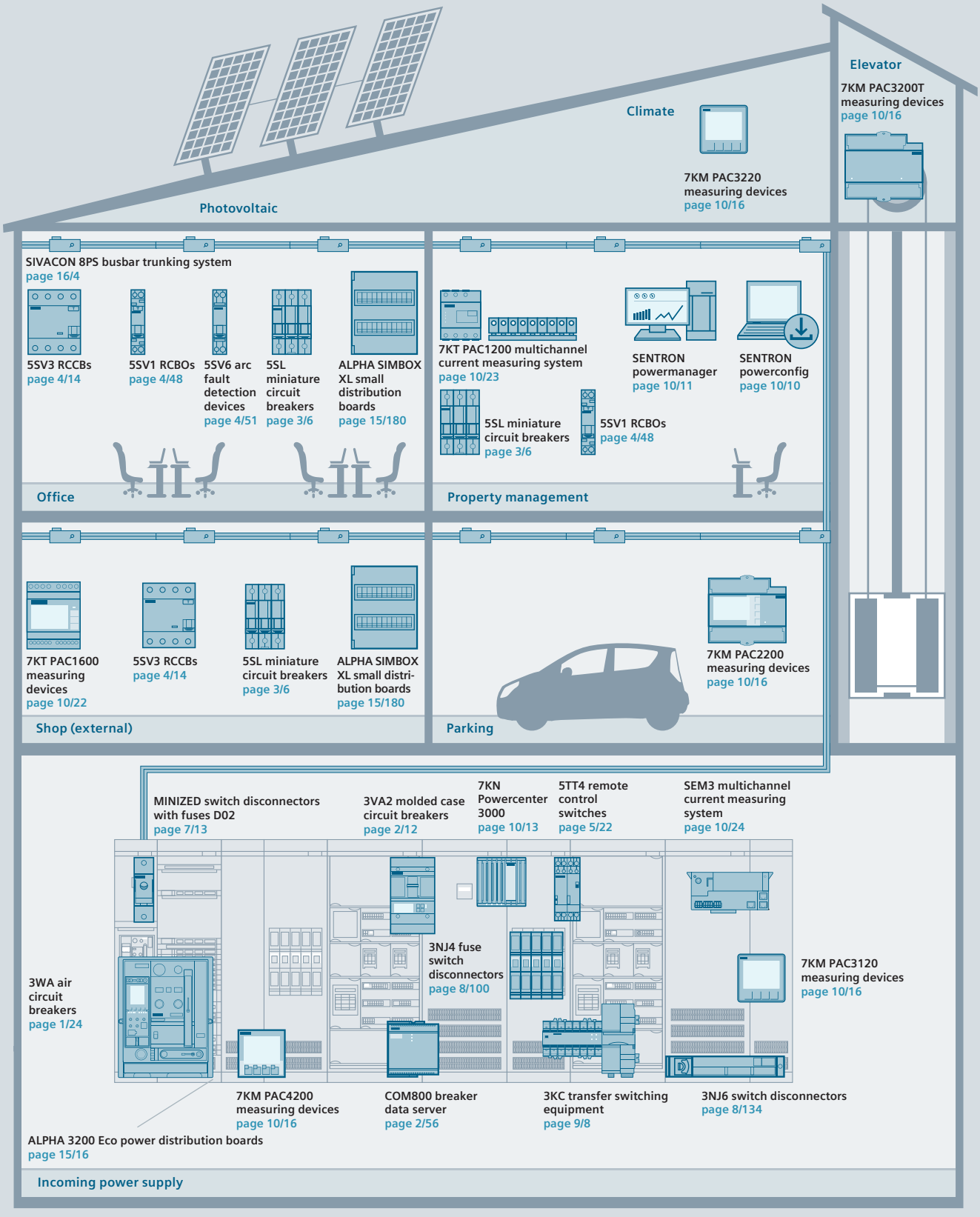
Products and their applications in infrastructure



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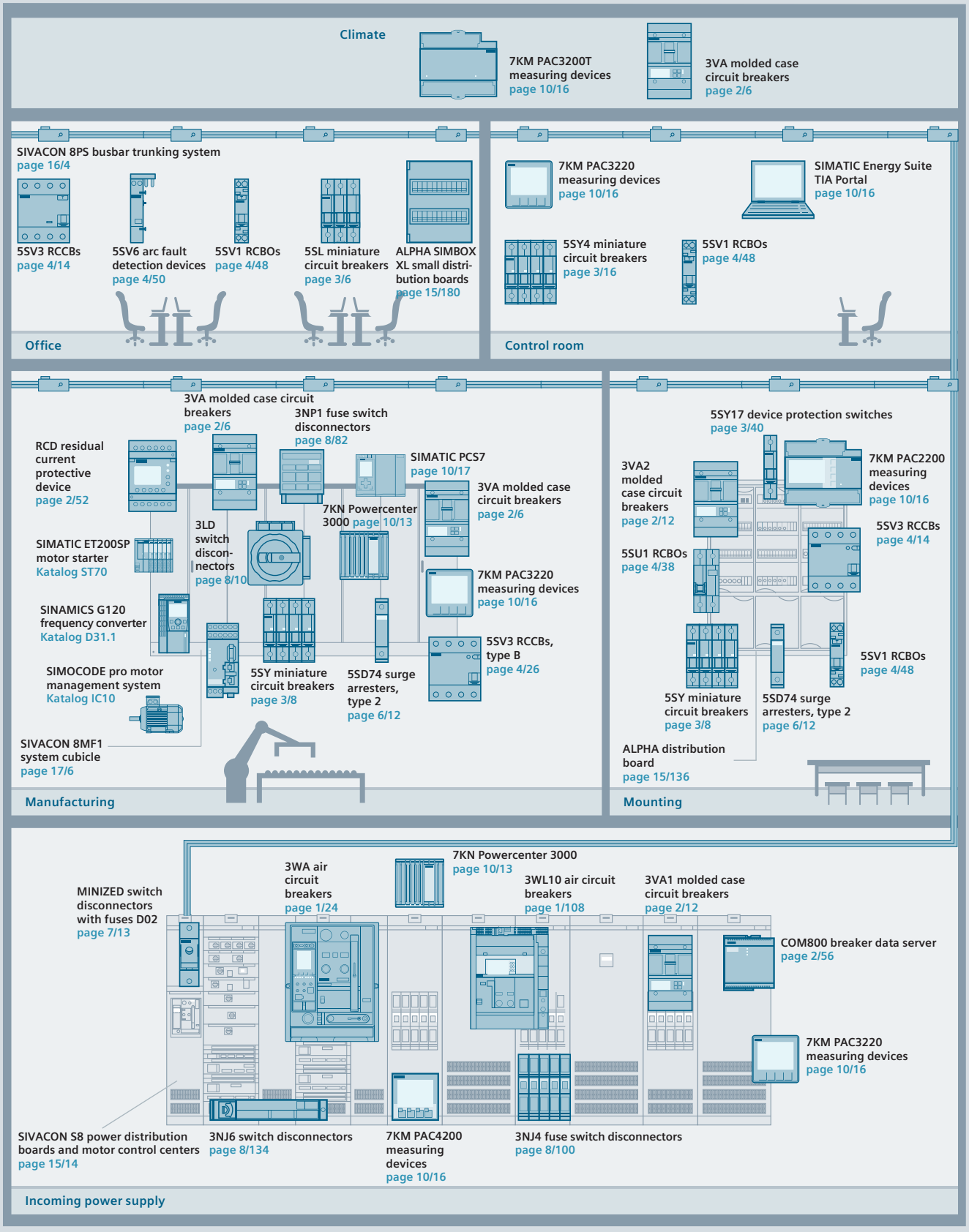
Products and their applications in industry



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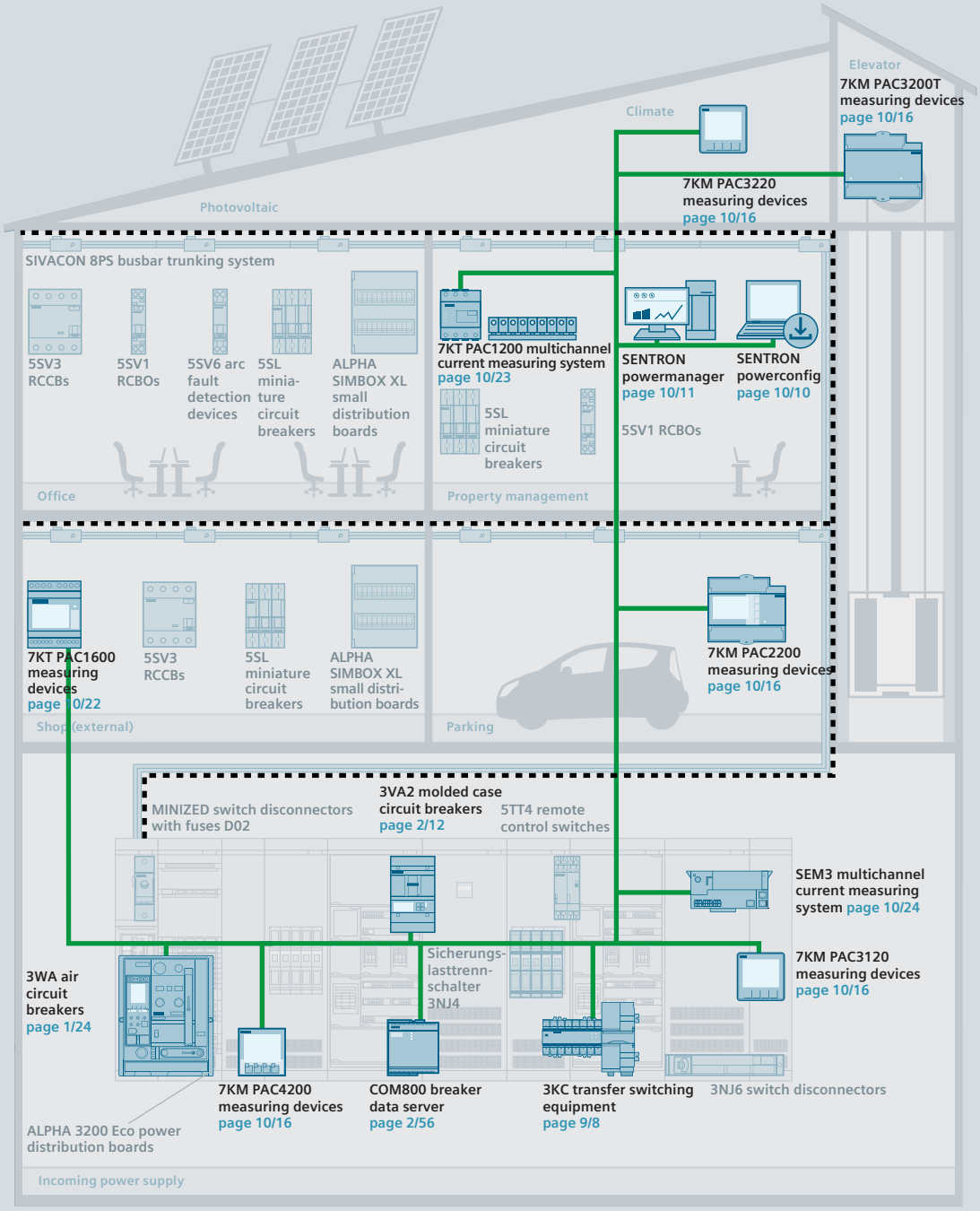
Examples of digitalization in infrastructure



Cloud-based analysis



Condition monitoring

Predictive maintenance

Power monitoring

On premises



Measuring, evaluating and controlling with SENTRON powermanager / Desigo CC power monitoring software

Stand-alone



Decentralized visualization of measured values, states and alarms via integrated web servers in measuring devices and Powercenter 3000

Industrial Ethernet
3VA-line
powerline

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Examples of digitalization in industry

Cloud-based analysis



Condition monitoring

Predictive maintenance

Power monitoring

On premises

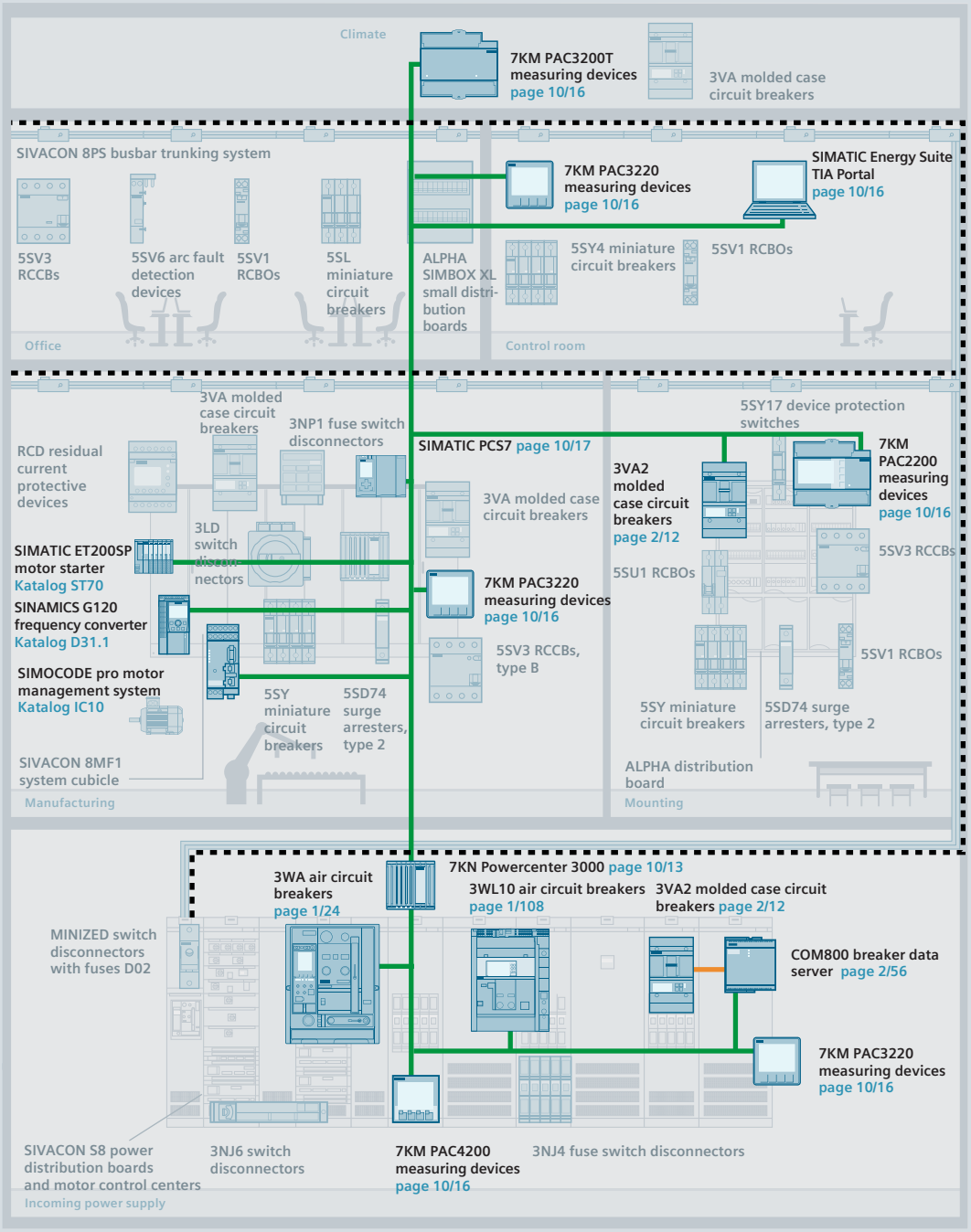


Measuring, evaluating and controlling with SIMATIC Energy Suite / TIA Portal

Stand-alone



Decentralized visualization of measured values, states and alarms via integrated web servers in measuring devices and Powercenter 3000



Industrial Ethernet
3VA-line
powerline

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Introduction to the topic of digitalization and Industry 4.0

In industrial automation, the demand for communication capability, data transparency and flexibility is growing constantly. To enable industrial switchgear technology to meet this demand, the use of bus systems and intelligent switching devices is unavoidable.

Digitalization

Switching, protection and measuring devices in power distribution systems can display important information on local visualization via integrated communication, e.g. in Powercenter, or transmit it to energy data management systems (EDMS), e.g. SENTRON powermanager, as well as to cloud systems and applications.

- Diagnostics management
- Fault management – Email alarm
- Maintenance management – predictive maintenance
- Cost center management

1. Visualization and plant transparency



- Greater operational reliability thanks to remote access to the plant.
- Plant visualization for central and simple access to all device information.

2. Digital documentation



- Uniform access to digital data and documentation.
- Provision of extensive CAx data for systems and components during planning and operation.
- Support in planning and process creation using SIMARIS planning tools, product and system configurators.

3. Power monitoring



- Fulfilling the ISO 50001 by detecting and transparently presenting the energy flows within energy distribution.

4. Optimization and retrofit



- Retrofitting solutions such as SEM3 offer a simple option for integrating energy monitoring into existing systems.
- Energy monitoring and plant transparency help you efficiently plan plant expansion.

5. Maintenance management



- Maintenance support, even remotely, by transparently presenting the status of a switchgear and controlgear assembly.

6. Emergency management



- Quick error localization which therefore leads to a minimization of outage times.

7. Cybersecurity



- Protection from unauthorized access and manipulation to switchgear and controlgear assemblies and devices ensures integrity, availability and confidentiality.

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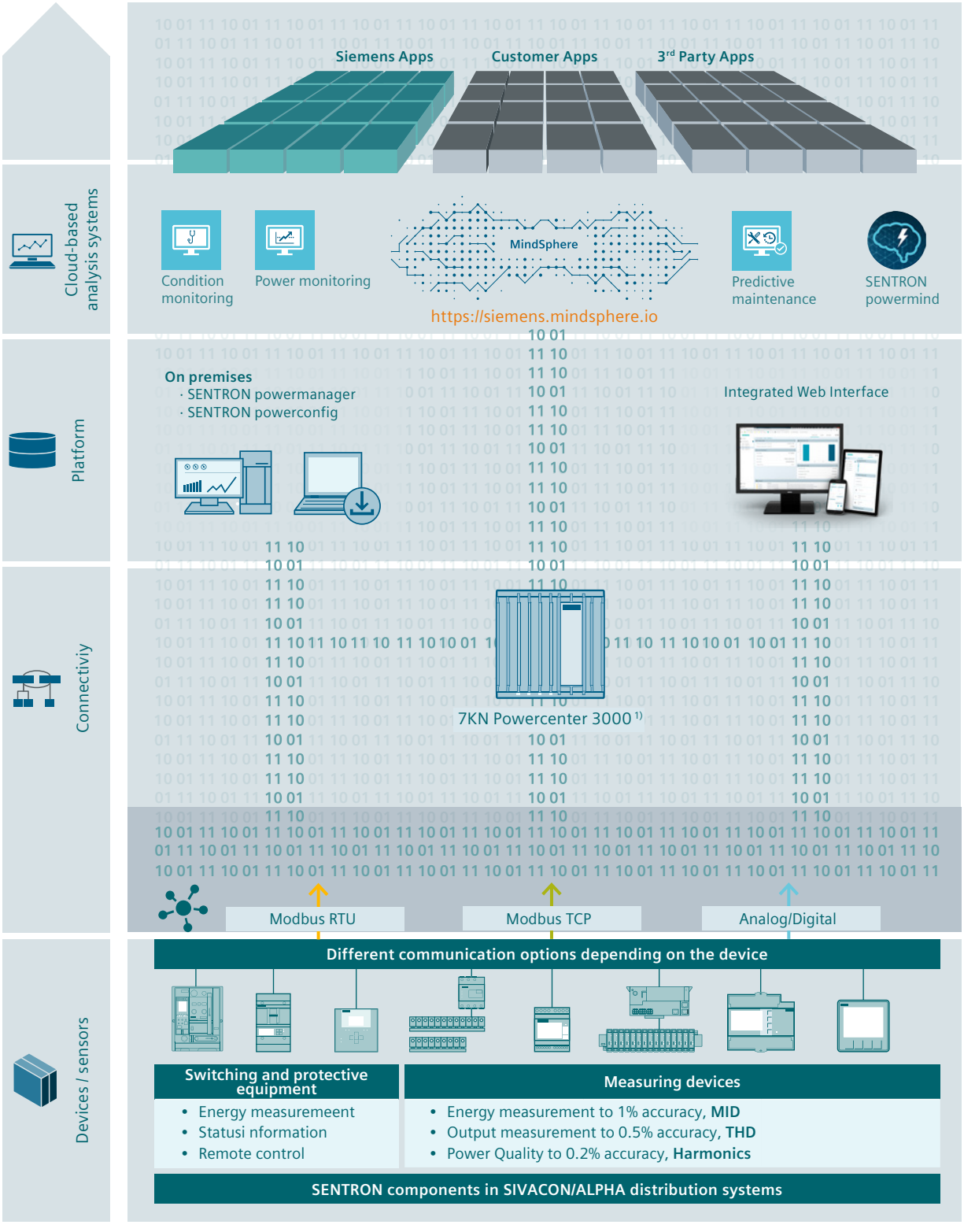

1) Modbus TCP

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Overview of protection, switching, measuring and monitoring tasks

The functions presented here are available in combination or individually. Details can be found in the respective chapter.

Device class	Type	Rated current	Page	Line protection	Motor protection	Generator protection	Starter protection	Isolating function
Air circuit breakers	3WA / 3WL	630 ... 6300 A	1/24	■	■	■		■
Molded case circuit breakers	3VA	16 ... 1600 A	2/1	■	■	■	■	■
Miniature circuit breakers (automatic circuit breakers)	5SY / 5SL	0 ... 80 A	3/6					■
RCCB	5SV3 / 5SM3	16 ... 125 A	4/6	■				■
RCBOs	5SU1 / 5SV1	0 ... 40 A	4/6	■				■
Arc fault detection devices, AFDDs	5SM6	0 ... 40 A	4/6					
Arc fault detection devices, AFDD-MCBs	5SV6	0 ... 40 A	4/6	■				■
ON/OFF switches	5TL1	32 ... 125 A	5/14					
Overvoltage Protection Devices	5SD7	–	6/6					■
Fuses D0	5SG / 5SA		7/6	■			■	
Photovoltaic fuses			7/6	■				
LV HRC fuses			7/6	■	■		■	
SITOR semiconductor fuses			7/6	■		■	■	
Switch disconnectors	3LD	16 ... 250 A	8/6					■
	3KD	16 ... 1,600 A	8/6					■
Fuse switch disconnectors	3NP	0 ... 630 A	8/80	With suitable fuse links			With suitable fuse links	■
Switch disconnector with fuse	3NJ	0 ... 630 A	8/134					■
	3KF	0 ... 630 A	8/118					■
Transfer switching equipment	3KC	16 ... 3,200 A	9/4					■
PAC measuring devices	7KM / 7KT	Any	10/24					
Motor starter protectors	3RV		Catalog IC 10		■			■
Contactor	3RT		Catalog IC 10					■

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Current limitation	Overload protection LT	Short-circuit protection, delayed ST	Short-circuit protection, instantaneous INST	Ground-fault protection GF	Metering function	Personnel safety / fault current protection	Overvoltage protection	Preventative fire protection	Switching function
	■	■	■	■	■				
■	■	■	■	■	■	■ / ■		■	
■	■		■						
						■ / ■			
■	■		■			■ / ■			
								■	
■	■		■					■	
							■		
■	■		■						
■	■		■						
■	■		■						
■	■		■						
With suitable fuse links	With suitable fuse links		With suitable fuse links						
									■
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■	■		■						

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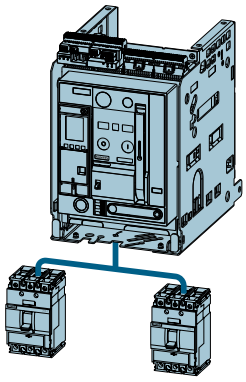
Overview of protection, switching, measuring and monitoring tasks

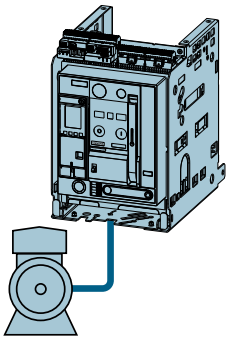
Line protection



The trip units for line protection are designed to provide overload and short-circuit protection for:

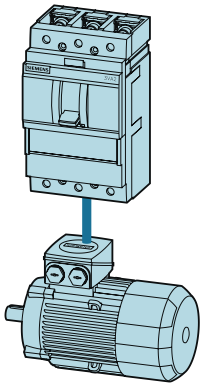
- Cables
- Leads
- Non-motor loads

Generator protection



The setting values of the trip units are matched to protecting generators.

Motor protection

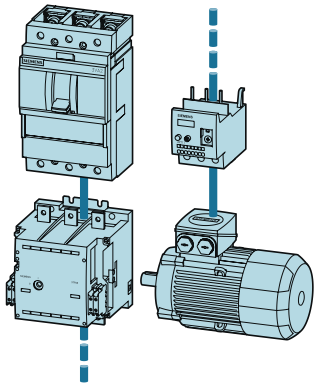


The overload and short-circuit releases are designed for optimal protection and direct starting of three-phase AC squirrel-cage motors.

The molded case circuit breakers for motor protection have phase-failure sensitivity and a thermal image that protects the motor against overheating.

The adjustable time lag class enables users to adjust the overload release to the startup conditions of the motor to be protected.

Starter protection



Starter combinations consist of:

Molded case circuit breaker + contactor + overload relay.

The molded case circuit breaker handles short-circuit protection and the isolating function. The task of the contactor is the operational switching of the feeder. The overload relay handles overload protection that can be specially matched to the motor.

The molded case circuit breaker for the starter combination is therefore equipped with an adjustable and instantaneous short-circuit release.

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Isolating function

Switching devices are described that meet the requirements defined for the isolating function when in the open position.

- Load switches, disconnectors, switch disconnectors according to IEC 60947-3

Switching operational currents up to the maximum rated current of the switching devices is part of the tasks performed by these devices (see chapter 8).



- Non-automatic circuit breakers according to IEC 60947-2 Annex L

Non-automatic circuit breakers can disconnect operational currents up to the maximum rated current, including fault currents up to the specified I_{cc} value.



Metering function

There are two possibilities for selecting the metering function in low-voltage power distribution (See chapter 10):

- Measuring devices (stand-alone) combined with protection and switching devices



- Switching devices with integrated metering function (all-in-one), metering function equivalent to measuring device



Current limitation

Current limitation means that the peak value of the prospective peak short-circuit current is limited to a smaller let-through current.

- Current-limiting devices include molded case circuit breakers (MCCB), motor starter protectors (MSP), miniature circuit breakers (MCB) and fuses



- Air circuit breakers (ACB) are non-current-limiting devices



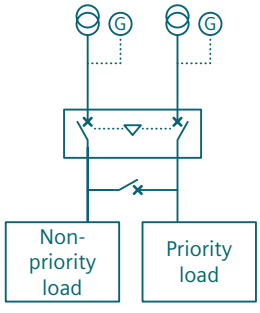
Transfer switching function

In the selection of transfer switch equipment, the following functions are distinguished (See chapter 9):

- Transfer control
- Load transfer

The following possibilities for transfer switching are available:

- MTSE = manual transfer switch equipment
- RTSE = remote transfer switch equipment
- ATSE = automatic transfer switch equipment



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Tripping characteristics

The protection function of protection and switching devices in low-voltage power distribution systems is determined by the correct selection of the respective tripping characteristic (fuses, miniature circuit breakers) or TMTU/ETU trip units (air circuit breakers, molded case circuit breakers).

All current-limiting protection devices, such as MCCBs, MSPs, MCBs and fuses, can be described in terms of three characteristic curves:

- Tripping curve (time/current)
- Let-through current curve
- Let-through energy curve

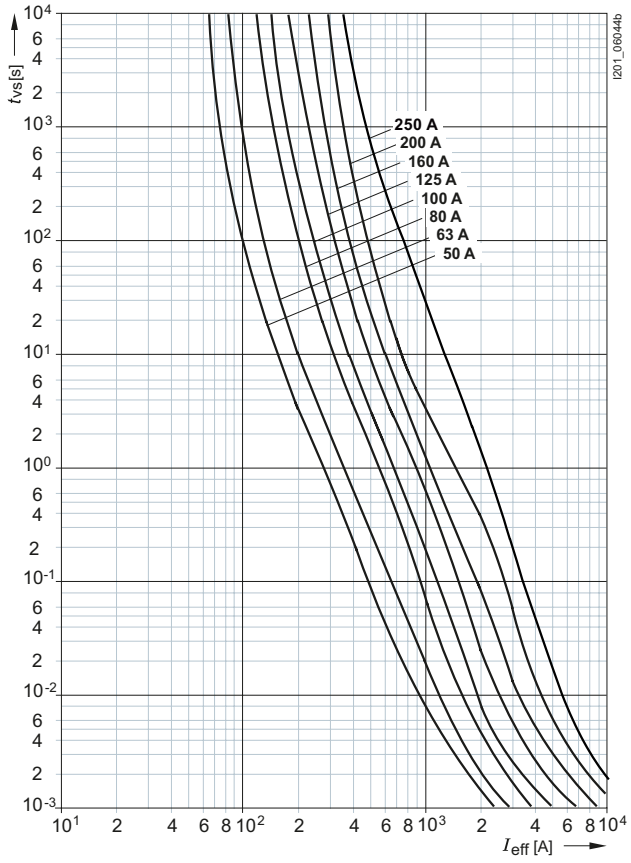
In the following, the functions of the tripping curves are presented as an example.

Fuses

The time-current characteristic curve of fuses denotes the virtual melting time as a function of the overload or short-circuit current.

Different characteristics must be considered in dimensioning depending on the protection requirement and operational class (e.g. gG, gR, aR, etc.).

See configuration manual – Fuse systems **(45314810)**

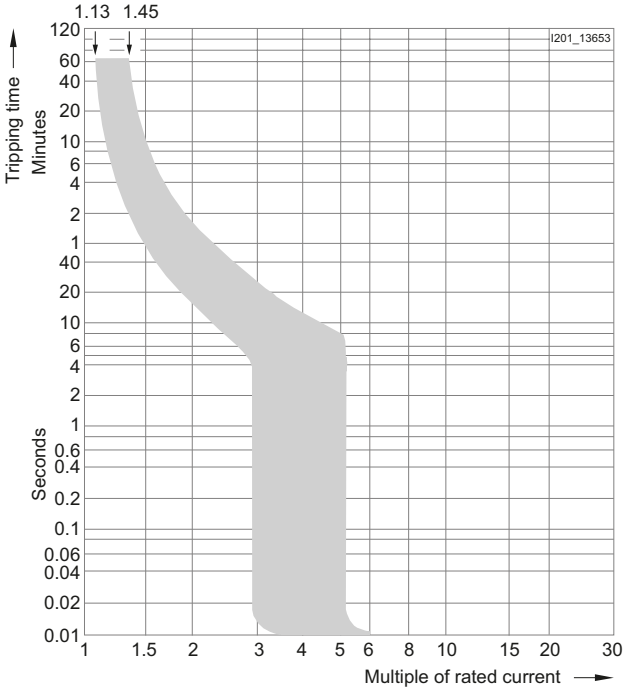


Miniature circuit breakers (MCB)

The characteristic curve is chosen based on the application and is classified, for example, as tripping characteristic A, B, C or D.

Tripping curve = tripping characteristics according to IEC / EN 60898-1

See configuration manual – Miniature circuit breakers **(45302792)**



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Molded case circuit breakers (MCCB)

The choice of electronic trip unit is based on the protection function required in power distribution.

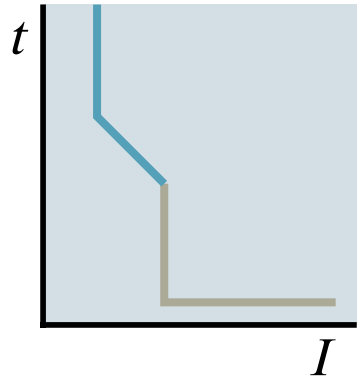
The trip units are classified as:

- thermal-magnetic trip units (TMTU; previously known as electromechanical trip units)
- electronic trip units (ETU).

Depending on the application and requirements, TMTUs are available with different protection setting options for both overload and short-circuit.

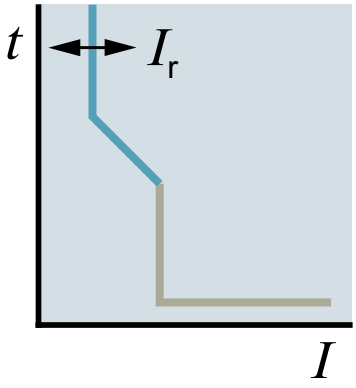
See equipment manual – 3VA molded case circuit breakers with IEC certificate (90318775)

FTFM (Fixed Thermal Fixed Magnetic)



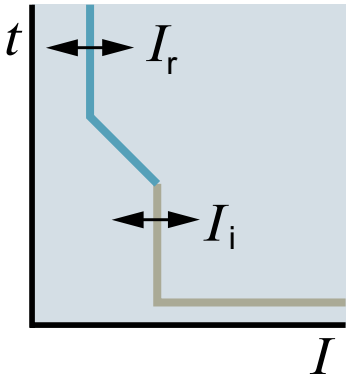
Permanently set thermal overload trip unit, permanently magnetic trip unit with short-circuit protection

ATFM (Adjustable Thermal Fixed Magnetic)



Adjustable thermal overload trip unit, permanently set magnetic trip unit with short-circuit protection

ATAM (Adjustable Thermal Adjustable Magnetic)



Adjustable thermal overload trip unit, adjustable magnetic trip unit with short-circuit protection

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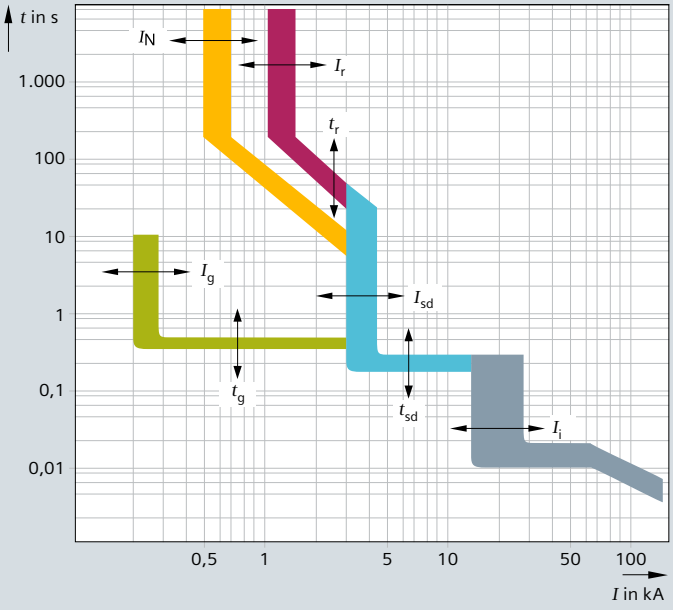
Tripping characteristics

Molded case circuit breakers (MCCB) / air circuit breakers (ACB) with ETU

Selection of the electronic trip unit determines the protection function in power distribution.
Electronic trip units offer the most extensive and variable protection settings of all protection and switching devices for low-voltage power distribution.

- See equipment manual – 3VA molded case circuit breakers with IEC certificate **(90318775)**
- See operating Instructions – SENTRON WL – 3WL1 circuit breaker (IEC) **(109761064)**

The graphs below show an overview of the time-current characteristic curve.



LT Overload protection LT

N Neutral conductor overload protection N

ST Short-circuit protection, delayed ST

INST Short-circuit protection, instantaneous INST

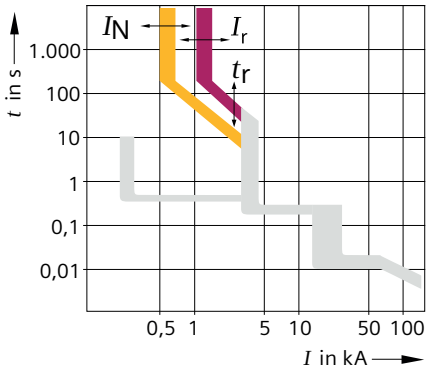
GF Ground-fault protection GF

Overload protection LT

The ID letter for overload protection is LT (stands for "Long-time delay").The trip unit is inverse-time delayed and exhibits the following characteristics depending on the trip unit type:

- Bimetal characteristic with thermal-magnetic trip units
- I^2t characteristics for molded case circuit breakers MCCB and I^2t and I^4t characteristics for ACBs
- Depending on the electronic trip units, only I^2t characteristic or I^2t and I^4t characteristic

The letters Ir refer to the current setting value; the associated tripping time is identical to t_r.



Neutral conductor overload protection N

The ID letter for neutral conductor overload protection is N. The letters I_N refer to the current setting value for the overload protection; the associated tripping time is identical to t_r.

Possible reasons for implementing overload protection in the neutral conductor include:

- The neutral conductor has a smaller cross-section than the phase conductors.
- Higher harmonic components in the system can be expected.
- A large number of loads, or predominantly single-phase loads, are connected.

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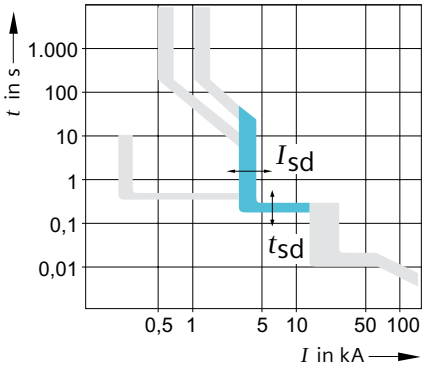
Short-circuit protection, delayed ST

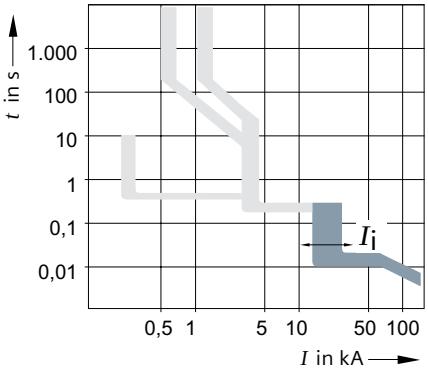
The ID letter for short-time delayed short-circuit protection is ST (stands for "Short-time"). The ST function of the electronic trip unit can be used to implement time-selective short-circuit tripping in low-voltage networks in which multiple circuit breakers are installed in series.

The short-time delayed short-circuit protection function protects phases L1 to L3 and the neutral conductor. The protection function responds if the current in at least one phase exceeds the set tripping current I_{sd} for the set delay period t_{sd}.



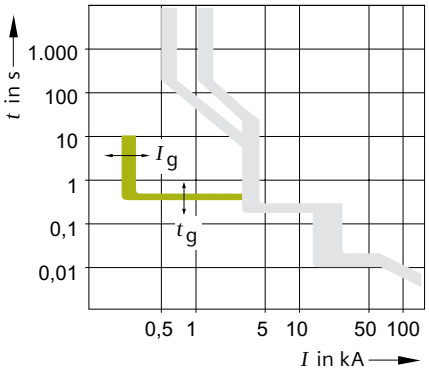
Short-circuit protection, instantaneous INST

The ID letter for instantaneous short-circuit protection is INST (stands for "Instantaneous"). This short-circuit protection function protects phases L1 to L3. The instantaneous short-circuit protection function responds if the instantaneous value equal to the rms of the current in at least one phase exceeds the instantaneous tripping current I_i.



Ground-fault protection GF

The ID letter for ground-fault protection is GF (ground fault). The G release measures fault currents between phases and grounded, electrically conductive parts. Ground-fault protection protects against the flow of current to ground in the rated current range. As ground-fault currents can produce arcing, ground-fault protection consequently offers extended fire protection.



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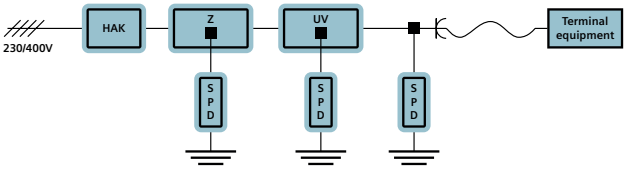
Overview of protection, switching, measuring and monitoring tasks

Overvoltage protection

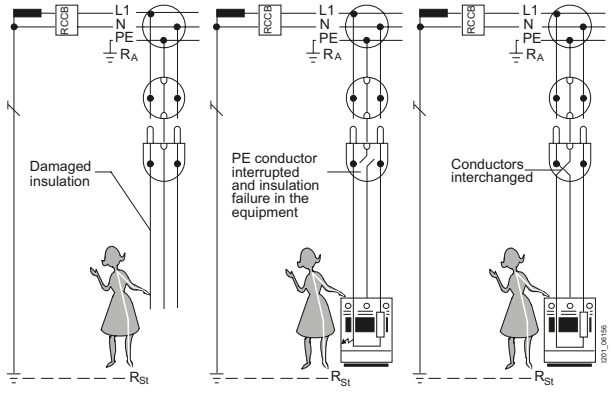
Overvoltage protection refers to the protection of electrical and electronic devices against excessively high electrical voltages. Overvoltage can be caused by switching operations or electrostatic discharging (ESD).



Personnel safety / fault current protection

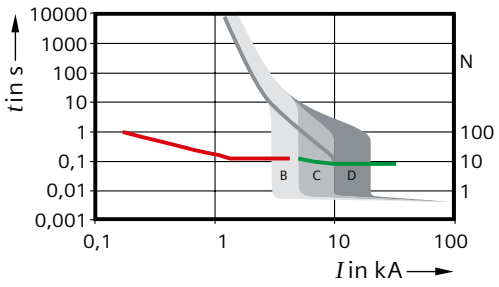
Protection in the event of direct contact:
Additional protection contact refers to direct contact with a part that is live under operating conditions.

Protection in the case of indirect contact:
Fault protection refers to contact with an electrically conductive part which is not live under operating conditions.



Preventative fire protection

Arc-fault detection devices evaluate occurring faults in the current and voltage wave using an electronic switch and shutting off the current when it recognizes a contact fault. This prevents overheating at poor contact points which can prevent fires.



Potential failure causes

- Damaged cable insulation, e.g. by nails, screws or brackets
- The risk of a cable break exists for cables with a too-tight bending radius
- Cables which are laid through open doors and windows can be crushed when doors or windows are closed resulting in damaged insulation and arcing faults
- Environmental influences such as UV rays, temperature, humidity, gases can damage or age the insulation
- Damage caused by rodents
- Loose contact, e.g. caused by too low torque
- Conductor damaged by claw fixing

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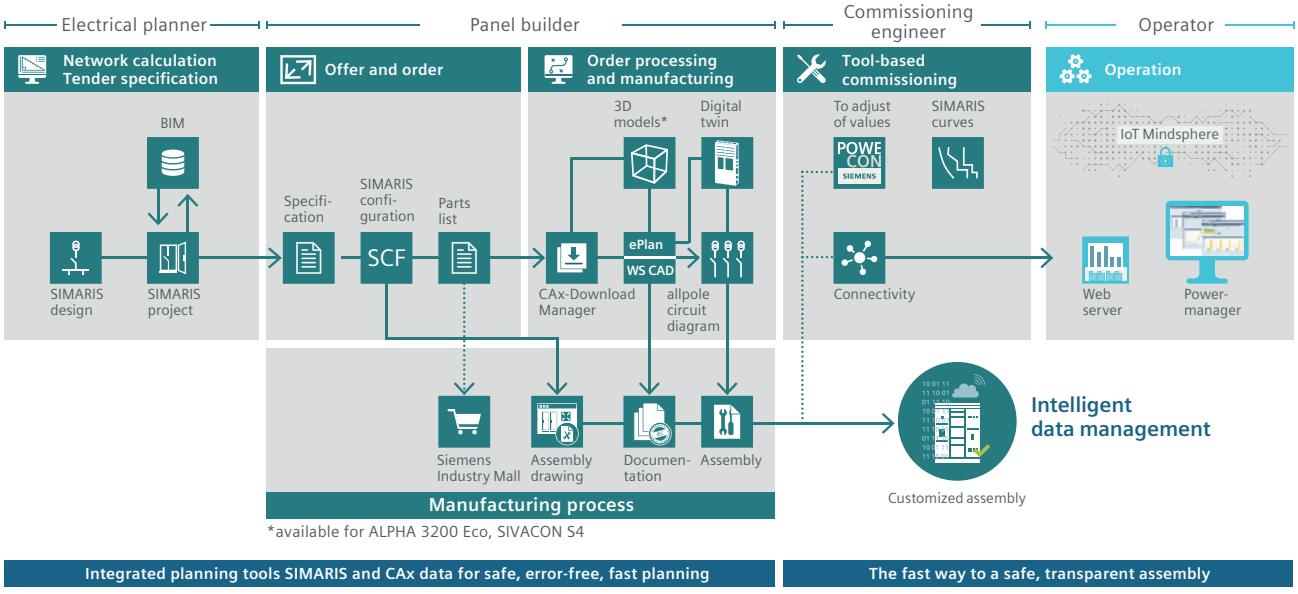
SIMARIS planning tools

For planning and visualizing the power distribution system

From planning to operation



Highlights

- Thorough support of the engineering process with interlinked software tools
- Provision of extensive CAx data for systems and components
- Reduction of cost and time aspects during planning

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Distribution systems

For industrial plants or in infrastructure

SIVACON S8 power distribution boards and motor control centers

- Reliable, economical, flexible and communication-capable
- For all applications in infrastructure and process industry



See page 15/14 for the overview

SIVACON 8PS busbar trunking systems

- For economic and reliable power supply
- Space-saving and simple to install
- Low fire load, good electromagnetic compatibility



See page 16/4 for the overview

ALPHA 3200 power distribution boards

- Compact, space-saving construction
- Perfectly matched to the SENTRON components



See page 15/16 for the overview

ALPHA 3200 Eco power distribution boards

- **Saves resources:** lower use of copper with centrally positioned busbar
- **Practical:** optimized performance – from the transformer connection via the busbar to the outgoing feeders
- **Modular:** a high packing density in a compact space due to flexible use of ALPHA assembly kits



See page 15/16 for the overview

ALPHA distribution boards (DIN technology)

- Comprehensive portfolio with wall-mounted and floor-mounted distribution boards for currents between 160 A to 1,250 A



See page 15/136 for the overview

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SIVACON S4 power distribution boards

- Modular system for safe, end-to-end, cost-efficient power distribution up to 4000 A
- System for creating design-verified switchgear assemblies in accordance with IEC 61439
- Flexible application, thanks to a range of installation methods and variable accessories
- Simplified installation and device connection makes assembly faster



See page 15/18 for the overview

ALPHA UNIVERSAL distribution boards (NF technology)

- Comprehensive portfolio with wall-mounted and floor-mounted distribution boards for currents between 125 A to 800 A
- Easy planning and assembly thanks to modular platform structure



See page 15/104 for the overview

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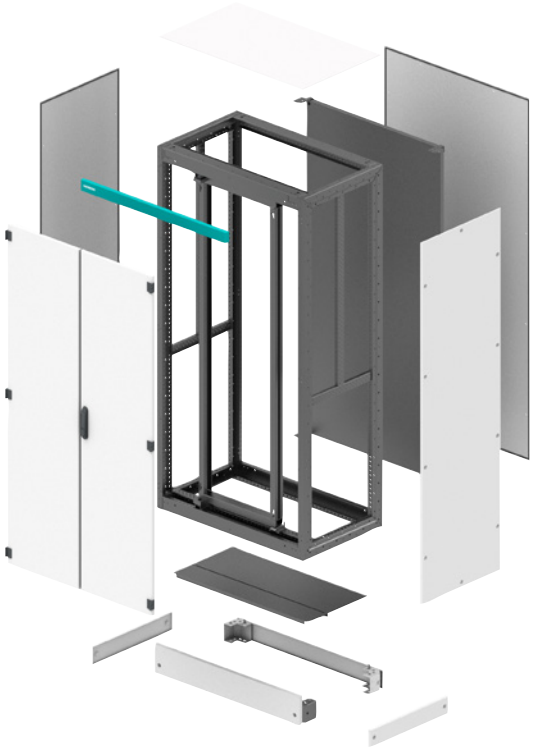
Control cabinets / System cubicles

For plant engineering, process control, network technology, secondary systems / energy automation

SIVACON 8MF1 system cubicles

- Modular system
- Fully assembled, adapted according to your specifications, or entirely customized



See page 17/6 for the overview

SIVACON 8MR system air-conditioning

Ensures fault-free operation of the electrical and electronic built-in units installed in the cubicle, even under the harshest ambient conditions.



See page 17/36 for the overview

SIVACON 8MF/8MR system lighting

Offers optimum lighting conditions during installation or maintenance. The LED technology conserves energy and is maintenance-free.



See page 17/34 for the overview

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Made for makers. Simply reliable.

All power distribution systems rely on a secure infeed of electrical energy.
The 3WA air circuit breaker combines all of the functions which are required of power distribution equipment in the digital companies of today: from reliably protecting people and equipment from electrical accidents and damage, to flexible application and retrofit options, a long service life and low maintenance, to innovative features for integrated e-engineering, reliable energy data recording and seamless integration into digital environments. As the central component of the electrical power distribution, the 3WA air circuit breaker provides the basis for a holistic energy system in the digital age.

Reliable, versatile and perfectly integrated

The 3WL air circuit breakers reliably protect electrical equipment from damage or fire resulting from short circuit, ground fault or overload failures.

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Air Circuit Breakers



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A multitude of additional information ...

Information + ordering

All the important things at a glance

Information to get you started

For information about air circuit breakers, please visit our website
www.siemens.com/3WA
www.siemens.com/3WL

Contact persons in your region

We are there when you need us

You can find your local contacts at
www.siemens.com/lowvoltage/contact

Your product in detail

The Siemens Industry Online Support portal provides comprehensive information
www.siemens.com/lowvoltage/product-support

- Quick selection guide – 3WA air circuit breakers (109781967)
- Brochure – 3WA air circuit breakers (109781968)
- Quick selection guide – 3WL air circuit breakers (109751638)
- Technical basic information – 3WL air circuit breakers (109767789)

The relevant tender specifications can be found at
www.siemens.com/lowvoltage/tenderspecifications

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Our video range

Siemens YouTube channel

- Power Distribution Low Voltage (EN)
  bit.ly/3iiuhXS
- 3WL air circuit breakers (general)
  bit.ly/2ZH1rXH

Everything you need for your order

Refer to the Industry Mall for an overview of your products

- Air circuit breakers sie.ag/2lXiZjB

Direct forwarding to the individual products in the Industry Mall by clicking on the Article No. in the catalog or by entering this web address incl. Article No.
www.siemens.com/product?Article No.

Configurators

Exactly the right circuit breaker for your application

The configurator reduces the time and effort required in the planning and ordering process, and allows for individual adaptations. Configure your 3WL air circuit breaker at
www.siemens.com/lowvoltage/3wa-configurator
www.siemens.com/lowvoltage/3wl-configurator
www.siemens.com/lowvoltage/3wl10-configurator

For your configured 3WL air circuit breaker, you can additionally find

- 3D views
- CAD data
- Unit wiring diagrams
- Dimension drawings

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… can be found in our online services

Commissioning + operation

Configuration software

SENTRON powerconfig

The combined commissioning and service tool for communication-capable measuring devices and circuit breakers from the SENTRON portfolio.
www.siemens.com/powerconfig

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Your product in detail

The Siemens Industry Online Support portal provides detailed technical information
www.siemens.com/lowvoltage/product-support

- Operating instructions
- Characteristic curves
- Certificates

Engineering data for CAD or CAE systems are available in the CAx Download Manager at
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- Protection systems in low-voltage power distribution (WT-LVAPS)
- 3WL air circuit breakers (WT-LVA3WL)
- Communication with SENTRON components (LV-COM)
- Maintenance and operation of 3WL circuit breakers (LV-CBMAIN)
- Project planning and selection of SENTRON circuit breakers (LV-CBPROJ)

Video tutorial on the 3WL air circuit breaker – descriptive supplement to Operating Instructions
www.lowvoltage.siemens.com/wcms/3wl-tutorial

Manuals

Manuals are available for downloading in Siemens Industry Online Support at
www.siemens.com/lowvoltage/manuals

- Equipment manual – 3WA air circuit breakers (109763061)
- Configuration manual – 3WL1 air circuit breakers (35681108)
- Configuration manual – Low-voltage protection devices selectivity tables (109748621)
- System manual – 3WL/3VL circuit breakers with communication capability – Modbus (39850157)
- System manual – 3WL/3VL circuit breakers with communication capability – PROFIBUS (12560390)
- Equipment manual – 3VA27 molded case circuit breakers & 3WL10 air circuit breakers (109753821)
- Communications manual – 3WL air circuit breakers via COM35 – PROFINET IO, Modbus TCP (109757987)
- Communication manual – 3WL10 air circuit breakers & 3VA27 molded case circuit breakers (109760220)

Technical overview – Air circuit breakers

3WA 3WL

The fast way to get you to our online services

This page provides you with comprehensive information and links on air circuit breakers

3WA: www.siemens.com/lowvoltage/product-support (109781188)
3WL: www.siemens.com/lowvoltage/product-support (109766020)

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Switching devices for AC and DC

IEC 60947-2

AC





			3WA11		3WA12	
Basic data						
Rated operational voltage U_e		V	≤1000		≤1150	
Rated current I_n		A	630 ... 2500		2000 ... 4000	
Size			1		2	
Type of mounting			Withdrawable	Fixed-mounted	Withdrawable	Fixed-mounted
Number of poles			3/4-pole	3/4-pole	3/4-pole	3/4-pole
Dimensions						
Width (3-pole | 4-pole)		mm	320|410	320|410	460|590	460|590
Height (for breaking capacity N, S, M, H and D | C and E)		mm	468|518	437|462	468|518	437|462
Depth		mm	471	357	471	357
Approvals						
General product approvals			VDE, EAC, CCC, CE, C-Tick		VDE, EAC, CCC, CE, C-Tick	
Marine / shipbuilding			ABS, DNV, GL, LRS, BV, PRS, CCS, RMRS		ABS, DNV, GL, LRS, BV, PRS, CCS, RMRS	
Breaking capacity			N	S	M	E	S	M	H	C	E
Rated short-circuit breaking capacity											
I_{cu} | I_{cs} at U_e up to 415/440 V AC		kA	55|55	66|66	85|85	–|–	66|66	85|85	100|100	130|130	–|–
I_{cu} | I_{cs} at U_e up to 500 V AC		kA	55|55	66|66	85|85	–|–	66|66	85|85	100|100	130|130	–|–
I_{cu} | I_{cs} at U_e up to 690 V AC		kA	42|42	50|50	66|66	85|85	50|50	66|66	85|85	100|100	85|85
I_{cu} | I_{cs} at U_e up to 1000 V AC		kA	–|–	–|–	–|–	50|50	–|–	–|–	–|–	–|–	85|85
I_{cu} | I_{cs} at U_e up to 1150 V AC		kA	–|–	–|–	–|–	–|–	–|–	–|–	–|–	–|–	50|50
Rated short-circuit making capacity U_e											
I_{cm} at U_e up to 415 V AC		kA	121	145	187	–	145	187	220	286	–
I_{cm} at U_e up to 500 V AC		kA	121	145	187	–	145	187	220	286	–
I_{cm} at U_e up to 690 V AC		kA	88	105	145	187	105	145	187	220	187
I_{cm} at U_e up to 1000 V AC		kA	–	–	–	105	–	–	–	–	187
I_{cm} at U_e up to 1150 V AC		kA	–	–	–	–	–	–	–	–	105
Rated short-time withstand current I_{cw} [1]											
I_{cw} at U_e up to 500 V AC	0.5 s	kA	55	66	85	–	66	85	100	100	–
	1 s	kA	50	66	85	–	66	85	85	100	–
	2 s	kA	35 [2]/45 [3]	45	70	–	66	66 [4]/85 [5]	66 [4]/85 [5]	85	–
	3 s	kA	30 [2]/35 [3]	35	60	–	55 [4]/66 [5]	55 [4]/75 [5]	55 [4]/75 [5]	75	–
I_{cw} at U_e up to 690 V AC	0.5 s	kA	42	50	66	85	50	66	85	100	85
	1 s	kA	42	50	66	85	50	66	85	100	85
	2 s	kA	35 [2]/42 [3]	45	66	70	50	66	66 [4]/85 [5]	85	66 [4]/85 [5]
	3 s	kA	30 [2]/35 [3]	35	60	60	50	55 [4]/66 [5]	55 [4]/75 [5]	75	55 [4]/75 [5]
I_{cw} at U_e up to 1000 V AC	0.5 s	kA	–	–	–	50	–	–	–	–	85
	1 s	kA	–	–	–	50	–	–	–	–	85
	2 s	kA	–	–	–	50	–	–	–	–	66 [4]/85 [5]
	3 s	kA	–	–	–	50	–	–	–	–	55 [4]/75 [5]
I_{cw} at U_e up to 1150 V AC	0.5 s	kA	–	–	–	–	–	–	–	–	50
	1 s	kA	–	–	–	–	–	–	–	–	50
	2 s	kA	–	–	–	–	–	–	–	–	50
	3 s	kA	–	–	–	–	–	–	–	–	50
I_{cw} at U_e up to 220 V DC	1 s	kA	–	–	–	–	–	–	–	–	–
I_{cw} at U_e up to 300 V DC	1 s	kA	–	–	–	–	–	–	–	–	–
I_{cw} at U_e up to 600 V DC	1 s	kA	–	–	–	–	–	–	–	–	–
I_{cw} at U_e up to 1000 V DC	1 s	kA	–	–	–	–	–	–	–	–	–

[1] At rated operational voltage U_e ≥690 V, the I_{cw} value of the circuit breaker corresponds to the I_{cu} or I_{cs} value

[2] Size 1 with $I_{n\,max}$ ≤1250 A

[3] Size 1 with $I_{n\,max}$ ≥1600 A

[4] $I_{n\,max}$ ≤2500 A

[5] $I_{n\,max}$ ≥3200 A

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AC		DC	
			
3WA13		**3WA12**	
≤1150		≤600 / 1000	
4000 ... 6300		1000 ... 4000	
3		2	
Withdrawable	Fixed-mounted	Withdrawable	Fixed-mounted
3/4-pole	3/4-pole	3/4-pole	3/4-pole
704 | 914	704 | 914	460 | 590	460 | 590
468 | 518	437 | 462	468 | 518	437 | 462
471	357	471	357
VDE, EAC, CCC, CE, C-Tick		VDE, EAC, CCC, CE, C-Tick	
ABS, DNV, GL, LRS, BV, PRS, CCS, RMRS		ABS, DNV, GL, LRS, BV, PRS, CCS, RMRS	

H	C	E	D	E	D	E
–|–	–|–	–|–	–|–	–|–	–|–	–|–
100|100	150|150 (3-pole); 130|130 (4-pole)	–|–	–|–	–|–	–|–	–|–
85|85	150|150 (3-pole); 130|130 (4-pole)	150|150 (3-pole); 130|130 (4-pole)	–|–	–|–	–|–	–|–
–|–	–|–	125|125	–|–	–|–	–|–	–|–
–|–	–|–	70|70	–|–	–|–	–|–	–|–
220	330 (3-pole); 286 (4-pole)	–	–	–	–	–
220	330 (3-pole); 286 (4-pole)	–	–	–	–	–
187	330 (3-pole); 286 (4-pole)	330 (3-pole); 286 (4-pole)	–	–	–	–
–	–	275	–	–	–	–
–	–	154	–	–	–	–
100	130 (3-pole); 120 (4-pole)	130 (3-pole); 120 (4-pole)	–	–	–	–
100	130 (3-pole); 120 (4-pole)	130 (3-pole); 120 (4-pole)	–	–	–	–
100	130 (3-pole); 120 (4-pole)	130 (3-pole); 120 (4-pole)	–	–	–	–
100	130 (3-pole); 120 (4-pole)	130 (3-pole); 120 (4-pole)	–	–	–	–
85	130 (3-pole); 120 (4-pole)	130 (3-pole); 120 (4-pole)	–	–	–	–
85	130 (3-pole); 120 (4-pole)	130 (3-pole); 120 (4-pole)	–	–	–	–
85	130 (3-pole); 120 (4-pole)	130 (3-pole); 120 (4-pole)	–	–	–	–
85	130 (3-pole); 120 (4-pole)	130 (3-pole); 120 (4-pole)	–	–	–	–
–	–	125 (3-pole); 120 (4-pole)	–	–	–	–
–	–	125 (3-pole); 120 (4-pole)	–	–	–	–
–	–	125 (3-pole); 120 (4-pole)	–	–	–	–
–	–	125 (3-pole); 120 (4-pole)	–	–	–	–
–	–	70|70	–	–	–	–
–	–	70|70	–	–	–	–
–	–	70|70	–	–	–	–
–	–	70|70	–	–	–	–
–	–	–	35	–	35	–
–	–	–	30	–	30	–
–	–	–	25	–	25	–
–	–	–	–	20	–	20

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Switching devices for AC and DC

IEC 60947-2 (continued)

AC





			3WA11				3WA12				
Breaking capacity			**N**	**S**	**M**	**E**	**S**	**M**	**H**	**C**	**E**
Rated conditional short-circuit current I_{cc} of the non-automatic air circuit breakers											
Up to 500 V AC		kA	55	66	85	–	66	85	100	100	–
Up to 690 V AC		kA	42	50	66	85	50	66	85	100	85
Up to 1000 V AC		kA	–	–	–	50	–	–	–	–	85
Up to 1150 V AC		kA	–	–	–	–	–	–	–	–	50
Up to 220 V/300 V DC		kA	–	–	–	–	–	–	–	–	–
Up to 600 V/1000 V DC		kA	–	–	–	–	–	–	–	–	–
IT system capability											
1-pole short-circuit breaking capacity I_{IT} acc to. IEC 60947-2 Annex H	≤500 V	kA	50	50	50	–	50	50	50	50	–
	≤690 V	kA	–	–	–	50	–	–	–	–	50
	1000 V	kA	–	–	–	–	–	–	–	–	–

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AC



DC



3WA13			3WA12			
H	C	E	D	E	D	E
100	130 (3-pole); 120 (4-pole)	–	–	–	–	–
85	130 (3-pole); 120 (4-pole)	130 (3-pole); 120 (4-pole)	–	–	–	–
–	–	125 (3-pole); 120 (4-pole)	–	–	–	–
–	–	70	–	–	–	–
–	–	–	35/30	–/–	35/30	–/–
–	–	–	25/–	–/20	25/–	–/20
50	50	–	–	–	–	–
–	–	50	–	–	–	–
–	–	–	–	–	–	–

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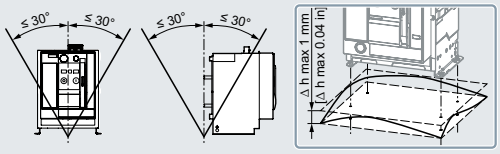
Switching devices for AC

IEC 60947-2

3WA11



Rated current I_n			630 A	800 A	1000 A	1250 A	1600 A	2000 A	2500 A
General data									
Isolating function acc. to EN 60947-2			Yes						
Utilization category			B						
Permissible ambient temperature	Operation	°C	–40 ... +70						
	Storage	°C	–40 ... +80						
Mounting position									
Degree of protection			IP20 without control cabinet door, IP41 with door sealing frame, IP55 with cover						
Voltage									
Rated operational voltage U_e at 50/60 Hz	1000 V version	V AC	≤1000						
Rated insulation voltage U_i		V AC	1000						
Rated impulse withstand voltage U_{imp}	Main conducting paths	kV	12						
	Auxiliary circuits	kV	4						
	Control circuits	kV	2.5						
Permissible load									
Permissible load for withdrawable versions									
For all connection types (except rear vertical main connections)	Up to 55 °C (Cu bare)	A	630	800	1000	1250	1600	2000	–
	Up to 60 °C (Cu bare)	A	630	800	1000	1250	1600	1930	–
	Up to 70 °C (Cu bare)	A	630	800	1000	1210	1490	1780	–
With rear vertical connections	Up to 55 °C (Cu bare)	A	630	800	1000	1250	1600	2000	2500
	Up to 60 °C (Cu bare)	A	630	800	1000	1250	1600	2000	2500
	Up to 70 °C (Cu bare)	A	630	800	1000	1250	1545	1855	2215
Permissible load for fixed-mounted versions									
For all connection types (except rear vertical main connections)	Up to 55 °C (Cu bare)	A	630	800	1000	1250	1600	2000	–
	Up to 60 °C (Cu bare)	A	630	800	1000	1250	1600	2000	–
	Up to 70 °C (Cu bare)	A	630	800	1000	1250	1600	2000	–
With rear vertical connections	Up to 55 °C (Cu bare)	A	630	800	1000	1250	1600	2000	2500
	Up to 60 °C (Cu bare)	A	630	800	1000	1250	1600	2000	2500
	Up to 70 °C (Cu bare)	A	630	800	1000	1250	1600	2000	2500
Power loss at I_n									
With three-phase symmetrical load with maximum rated current, complete device (3/4p)	Fixed-mounted circuit breaker	W	30	45	70	105	135	240	360
	Withdrawable circuit breaker	W	55	85	130	205	310	440	600

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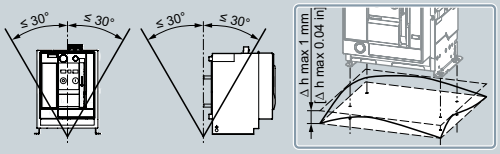
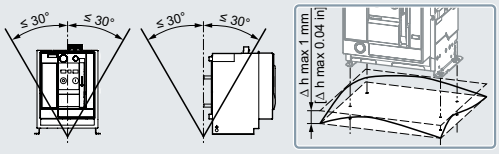
	3WA12			3WA13		
						
2000 A	**2500 A**	**3200 A**	**4000 A**	**4000 A**	**5000 A**	**6300 A**
Yes				Yes		
B				B		
–40 ... +70				–40 ... +70		
–40 ... +80				–40 ... +80		
						
IP20 without control cabinet door, IP41 with door sealing frame, IP55 with cover				IP20 without control cabinet door, IP41 with door sealing frame, IP55 with cover		
≤1150				≤1150		
≤1150				≤1150		
12				12		
4				4		
2.5				2.5		
2000	2500	3200	–	4000	5000	–
2000	2500	3020	–	4000	5000	–
2000	2280	2870	–	4000	5000	–
2000	2500	3200	4000	4000	5000	5920
2000	2500	3200	3910	4000	5000	5810
2000	2390	2945	3645	4000	5000	5500
2000	2500	3200	–	4000	5000	–
2000	2500	3200	–	4000	5000	–
2000	2500	3200	–	4000	5000	–
2000	2500	3200	4000	4000	5000	6300
2000	2500	3200	4000	4000	5000	6300
2000	2500	3200	4000	4000	5000	5920
180	270	410	750	520	630	900
320	520	710	1040	810	1050	1600

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Switching devices for AC

IEC 60947-2 (continued)

3WA11



Rated current I_n			630 A	800 A	1000 A	1250 A	1600 A	2000 A	2500 A
Switching times									
Closing time		ms				35			
Opening time		ms				38			
Electrical closing time (through closing coil)		ms				80 / 50 [1]			
Electrical opening time (through shunt trip)		ms				73			
Electrical opening time (instantaneous undervoltage release)		ms				73			
Opening time due to ETU, instantaneous short-circuit release		ms				50			
Service life/endurance									
Breaking capacity N, 3/4-pole									
Mechanical	Without maintenance	Operating cycles				15000			
	With maintenance [2]	Operating cycles				30000			
Electrical	Without maintenance 690 V	Operating cycles				10000			
	With maintenance [2]	Operating cycles				30000			
Breaking capacity S, 3/4-pole									
Mechanical	Without maintenance	Operating cycles				15000			
	With maintenance [2]	Operating cycles				30000			
Electrical	Without maintenance 690 V	Operating cycles				15000			
	With maintenance [2]	Operating cycles				30000			
Breaking capacity M, 3/4-pole									
Mechanical	Without maintenance	Operating cycles				10000			
	With maintenance [2]	Operating cycles				15000			
Electrical	Without maintenance 690 V	Operating cycles				7500			
	With maintenance [2]	Operating cycles				15000			
Breaking capacity E, 3/4-pole									
Mechanical	Without maintenance	Operating cycles				10000			
	With maintenance [2]	Operating cycles				15000			
Electrical	Without maintenance 690 V	Operating cycles				7500			
	Without maintenance 1000 V	Operating cycles				1000			
	Without maintenance 1150 V	Operating cycles				–			
	With maintenance [2]	Operating cycles				15000			
Breaking capacity H, 3/4-pole									
Mechanical	Without maintenance	Operating cycles				–			
	With maintenance [2]	Operating cycles				–			
Electrical	Without maintenance 690 V	Operating cycles				–			
	With maintenance [2]	Operating cycles				–			
Breaking capacity C, 3/4-pole									
Mechanical	Without maintenance	Operating cycles				–			
	With maintenance [2]	Operating cycles				–			
Electrical	Without maintenance 690 V	Operating cycles				–			
	With maintenance 690 V [2]	Operating cycles				–			
Operating frequency									
Breaking capacity N and S									
Electrical	3-pole	1/h				45			
	4-pole	1/h				60			
Breaking capacity M, H and C									
Electrical	3/4-pole	1/h				60 / 60			
Breaking capacity E									
Electrical	3/4-pole	1/h				20 / 20			

[1] Closing time through closing coil for momentary duty for synchronization purposes = 50 ms
[2] Maintenance means: Replacing main contact elements and arc chutes (see Operating Manual: www.siemens.com/lowvoltage/manuals).

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3WA12				3WA13		
						
2000 A	**2500 A**	**3200 A**	**4000 A**	**4000 A**	**5000 A**	**6300 A**
35				35		
34				34		
100				100		
73				73		
73				73		
50				50		
–				–		
–				–		
–				–		
–				–		
10000				–		
20000				–		
7500	7500	4000	2000	–		
20000				–		
10000				–		
20000				–		
7500	7500	4000	2000	–		
20000				–		
10000				7500		
20000				15000		
7500	7500	4000	2000	2000		
1000				1000		
500				500		
20000				10000		
10000				7500		
20000				15000		
7500	7500	4000	2000	2000		
20000	20000	20000	20000	15000		
5000				5000		
10000				10000		
5000	5000	4000	2000	1000		
10000	10000	8000	8000	10000		
45				–		
60				–		
60 / 60				60 / 60		
20 / 20				20 / 20		

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Switching devices for AC

IEC 60947-2 (continued)

3WA11



Rated current I_n			630 A	800 A	1000 A	1250 A	1600 A	2000 A	2500 A
Connection									
Main conductor minimum cross-sections									
Copper bars, bare		Unit, mm²	1× 40 × 10	1× 50 × 10	1× 60 × 10	2× 40 × 10	2× 50 × 10	3× 50 × 10	4× 50 × 10
Copper bars, painted black		Unit, mm²	1× 40 × 10	1× 50 × 10	1× 60 × 10	2× 40 × 10	2× 50 × 10	3× 50 × 10	4× 50 × 10
Auxiliary conductor (Cu) max. number of auxiliary conductors × cross-section (solid/stranded)									
Standard connection = push-in	Without end sleeve		2× 0.5 ... 2.5 mm² (AWG 20 ... 14)						
	With end sleeve acc. to DIN 46228 Part 2		2× 0.5 ... 2.5 mm² (AWG 20 ... 14)						
	With twin end sleeve		2× 0.5 ... 1.5 mm² (AWG 20 ... 16)						
	Stripped length		10 ... 12 mm (0.39 ... 0.47 inch)						
Optional connection with screw connection	Without end sleeve		2× 0.5 ... 2.5 mm² (AWG 20 ... 14)						
	With end sleeve acc. to DIN 46228 Part 2		1× 0.5 ... 1.5 mm² (AWG 20 ... 16)						
	With twin end sleeve		1× 0.5 ... 1.5 mm² (AWG 20 ... 16)						
	Stripped length		7 ... 8 mm (0.28 ... 0.31 inch)						
Position signaling switch									
Spring-loaded terminals for standard signaling contacts	Without end sleeve		0.08 ... 2.5 mm² (AWG 20 ... 12)						
	With end sleeve acc. to DIN 46228 Part 2		0.25 ... 1.5 mm²						
	Stripped length		5 ... 6 mm (0.2 ... 0.24 inch)						
Push-in connection for communication signaling contacts	Without end sleeve		0.14 ... 1.5 mm² (AWG 20 ... 16)						
	With end sleeve acc. to DIN 46228 Part 2		0.25 ... 1.5 mm² (AWG 20 ... 16)						
	Stripped length		9 mm (0.35 inch)						
Weights									
3-pole	Fixed-mounted circuit breaker	kg	43	43	43	43	43	43	43
	Withdrawable circuit breaker	kg	45	45	45	45	45	45	45
	Guide frames	kg	25	25	25	25	25	25	25
4-pole	Fixed-mounted circuit breaker	kg	50	50	50	50	50	50	50
	Withdrawable circuit breaker	kg	54	54	54	54	54	54	54
	Guide frames	kg	30	30	30	30	30	30	30

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	3WA12			3WA13		
						
2000 A	**2500 A**	**3200 A**	**4000 A**	**4000 A**	**5000 A**	**6300 A**
3× 50 × 10	2× 100 × 10	3× 100 × 10	4× 120 × 10	4× 100 × 10	6× 100 × 10	6× 120 × 10
3× 50 × 10	2× 100 × 10	3× 100 × 10	4× 120 × 10	4× 100 × 10	6× 100 × 10	6× 120 × 10
2× 0.5 ... 2.5 mm² (AWG 20 ... 14)				2× 0.5 ... 2.5 mm² (AWG 20 ... 14)		
2× 0.5 ... 2.5 mm² (AWG 20 ... 14)				2× 0.5 ... 2.5 mm² (AWG 20 ... 14)		
2× 0.5 ... 1.5 mm² (AWG 20 ... 16)				2× 0.5 ... 1.5 mm² (AWG 20 ... 16)		
10 ... 12 mm (0.39 ... 0.47 inch)				10 ... 12 mm (0.39 ... 0.47 inch)		
2× 0.5 ... 2.5 mm² (AWG 20 ... 14)				2× 0.5 ... 2.5 mm² (AWG 20 ... 14)		
1× 0.5 ... 1.5 mm² (AWG 20 ... 16)				1× 0.5 ... 1.5 mm² (AWG 20 ... 16)		
1× 0.5 ... 1.5 mm² (AWG 20 ... 16)				1× 0.5 ... 1.5 mm² (AWG 20 ... 16)		
7 ... 8 mm (0.28 ... 0.31 inch)				7 ... 8 mm (0.28 ... 0.31 inch)		
0.08 ... 2.5 mm² (AWG 20 ... 12)				0.08 ... 2.5 mm² (AWG 20 ... 12)		
0.25 ... 1.5 mm²				0.25 ... 1.5 mm²		
5 ... 6 mm (0.2 ... 0.24 inch)				5 ... 6 mm (0.2 ... 0.24 inch)		
0.14 ... 1.5 mm² (AWG 20 ... 16)				0.14 ... 1.5 mm² (AWG 20 ... 16)		
0.25 ... 1.5 mm² (AWG 20 ... 16)				0.25 ... 1.5 mm² (AWG 20 ... 16)		
9 mm (0.35 inch)				9 mm (0.35 inch)		
56	59	64	85	82	82	90
60	63	68	121	88	88	96
31	39	45	52	60	60	70
67	71	77	103	99	99	108
72	76	82	146	106	106	108
37	47	54	62	84	84	119

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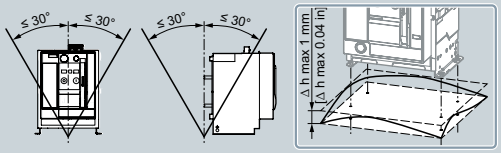
Switching devices for DC

IEC 60947-2

3WA12



Rated current I_n			1000 A	2000 A	4000 A
General data					
Isolating function acc. to EN 60947-2				Yes	
Utilization category				B	
Permissible ambient temperature	During operation (in operation with LCD max. 55 °C)	°C		−40 ... +70	
	Storage	°C		−40 ... +80	
Mounting position					
Degree of protection				IP20 without control cabinet door, IP41 with door sealing frame, IP55 with cover	
Voltage					
Rated operational voltage U_e	1000 V version	V DC		1000	
Rated insulation voltage U_i		V DC		1000	
Rated impulse withstand voltage U_{imp}	Main conducting paths	kV		12	
	Auxiliary circuits	kV		4	
	Control circuits	kV		2.5	
Permissible load					
Permissible load for withdrawable versions					
For all connection types (except rear vertical main connections)	Up to 40 °C (Cu bare)	A	1000	2000	4000
	Up to 55 °C (Cu bare)	A	1000	2000	3640
	Up to 60 °C (Cu bare)	A	1000	2000	3500
	Up to 70 °C (Cu bare)	A	1000	1950	3250
With rear vertical connections	Up to 40 °C (Cu bare)	A	1000	2000	4000
	Up to 55 °C (Cu bare)	A	1000	2000	4000
	Up to 60 °C (Cu bare)	A	1000	2000	3640
	Up to 70 °C (Cu bare)	A	1000	2000	3400
Permissible load for fixed-mounted versions					
For all connection types (except rear vertical main connections)	Up to 40 °C (Cu bare)	A	1000	2000	4000
	Up to 55 °C (Cu bare)	A	1000	2000	4000
	Up to 60 °C (Cu bare)	A	1000	2000	4000
	Up to 70 °C (Cu bare)	A	1000	2000	3900
With rear vertical connections	Up to 40 °C (Cu bare)	A	1000	2000	4000
	Up to 55 °C (Cu bare)	A	1000	2000	4000
	Up to 60 °C (Cu bare)	A	1000	2000	4000
	Up to 70 °C (Cu bare)	A	1000	2000	4000
Power loss at I_n					
With three-phase symmetrical load, complete device (3/4p)	Withdrawable circuit breaker	W	280	770	1640
	Fixed-mounted circuit breaker	W	140	390	820
Switching times					
Closing time		ms	35	35	35
Opening time		ms	34	34	34
Electrical closing time (through closing coil)		ms	100	100	100
Electrical opening time (through shunt trip)		ms	73	73	73
Electrical opening time (instantaneous undervoltage release)		ms	73	73	73

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3WA12



Rated current I_n			1000 A	2000 A	4000 A
Service life/endurance					
Breaking capacity D, 3/4-pole					
Mechanical	Without maintenance	Operating cycles	10000	10000	10000
	With maintenance [1]	Operating cycles	20000	20000	20000
Electrical	Without maintenance 600 V	Operating cycles	6000	6000	4000
	With maintenance [1]	Operating cycles	20000	20000	20000
Breaking capacity E, 3/4-pole					
Mechanical	Without maintenance	Operating cycles	10000	10000	10000
	With maintenance [1]	Operating cycles	20000	20000	20000
Electrical	Without maintenance 1000 V	Operating cycles	1000	1000	1000
	With maintenance [1]	Operating cycles	20000	20000	20000
Operating frequency					
Breaking capacity D					
Electrical	3/4-pole	1/h	60 / 60	60 / 60	60 / 60
Breaking capacity E					
Electrical	3/4-pole	1/h	20 / 20	20 / 20	20 / 20
Connection					
Main conductor minimum cross-sections					
Copper bars, bare		Unit, mm^2	1× 50 x 10	2× 50 x 10	3 x 100 x 10 on the infeed and outgoing side; 6 x 250 x 500 x 5 for jumpers
Copper bars, painted black		Unit, mm^2	1× 50 x 10	2× 50 x 10	3 x 100 x 10 on the infeed and outgoing side; 6 x 250 x 500 x 5 for jumpers
Auxiliary conductor (Cu) max. number of auxiliary conductors × cross-section (solid/stranded)					
Standard connection = push-in	Without end sleeve		2× 0.5 ... 2.5 mm^2 (AWG 20 ... 14)		
	With end sleeve acc. to DIN 46228 Part 2		2× 0.5 ... 2.5 mm^2 (AWG 20 ... 14)		
	With twin end sleeve		2× 0.5 ... 1.5 mm^2 (AWG 20 ... 16)		
	Stripped length		10 ... 12 mm (0.39 ... 0.47 inch)		
Optional connection with screw connection	Without end sleeve		2× 0.5 ... 2.5 mm^2 (AWG 20 ... 14)		
	With end sleeve acc. to DIN 46228 Part 2		1× 0.5 ... 1.5 mm^2 (AWG 20 ... 16)		
	With twin end sleeve		1× 0.5 ... 1.5 mm^2 (AWG 20 ... 16)		
	Stripped length		7 ... 8 mm (0.28 ... 0.31 inch)		
Position signaling switch					
Spring-loaded terminals for standard signaling contacts	Without end sleeve		0.08 ... 2.5 mm^2 (AWG 20 ... 12)		
	With end sleeve acc. to DIN 46228 Part 2		0.25 ... 1.5 mm^2		
	Stripped length		5 ... 6 mm (0.2 ... 0.24 inch)		
Push-in connection for communication signaling contacts	Without end sleeve		0.14 ... 1.5 mm^2 (AWG 20 ... 16)		
	With end sleeve acc. to DIN 46228 Part 2		0.25 ... 1.5 mm^2 (AWG 20 ... 16)		
	Stripped length		9 mm (0.35 inch)		
Weights					
3-pole	Fixed-mounted circuit breaker	kg	56	56	64
	Withdrawable circuit breaker	kg	60	60	68
	Guide frames	kg	31	31	45
4-pole	Fixed-mounted circuit breaker	kg	67	67	77
	Withdrawable circuit breaker	kg	72	72	82
	Guide frames	kg	37	37	54

[1] Maintenance means: Replacing main contact elements and arc chutes (see Operating Manual: www.siemens.com/lowvoltage/manuals).

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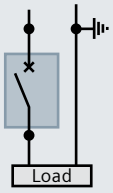
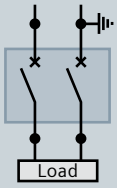
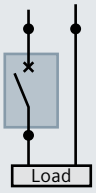
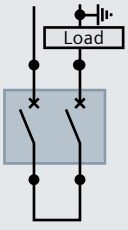
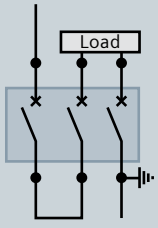
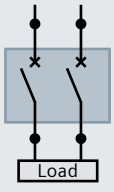
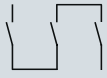
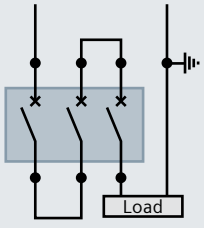
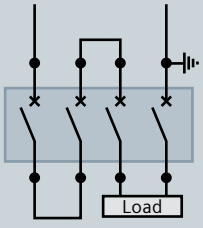
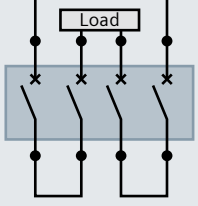
Switching devices for DC

Application examples

The connection to the circuit breakers is not dependent on direction and polarity; the circuit diagrams can be adapted accordingly. If the parallel or series connections are made directly to the connecting bars, for thermal reasons the continuous load on the circuit breakers must only be 80% of the permissible operational current. If the parallel or series connection is made at a distance of 1 m from the connecting bars, the circuit breaker can be used at full operational current load.

Required contact gaps at rated voltage	DC 1-pole disconnection Grounded system	DC 2-pole (all-pole) disconnection Grounded system	Non-grounded system
Rated operational voltage <300 V			
			
Rated operational voltage >300 V ... 600 V			
			
Rated operational voltage >600 V ... 1000 V			
			

Note:
DC 2-pole (all-pole) disconnection; grounded system
The grounded pole is always assigned to the individual conducting path, so that, in the event of a ground fault, there are always 2 conducting paths in series in a circuit with 3-pole circuit breakers and 3 conducting paths in series in a circuit with 4-pole circuit breakers.

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Electronic trip unit ETU600

Protective functions

ETU600 LSI, ETU600 LSIG, ETU600 LSIG Hi-Z			Current metering	PMF-I Energy efficiency	PMF-II Basic Power Monitoring	PMF-III Advanced Power Monitoring
Protective function	**Setting range**	**Setting values with rotary switch**				
L: Overload protection LT						
Tripping operation	Can be switched on/off		■	■	■	■
Current setting I_r	0.4 ... 1.0 × I_n	0.5 / 0.6 / 0.7 / 0.75 / 0.8 / 0.85 / 0.9 / 0.95 / 1.0 x I_n	■	■	■	■
Tripping time t_r at 6 × I_r	For I^2t: 0.5 ... 30 s and at I^4t: 1 ... 5 s	1 / 2 / 5 / 8 / 10 / 14 / 17 / 21 / 25 s	■	■	■	■
Characteristic LT curve	I^2t and I^4t		■	■	■	■
Thermal memory	Can be switched on/off		■	■	■	■
Cooling time constant	10 and 18 x t_r		■	■	■	■
Phase failure detection	Can be switched on/off		■	■	■	■
Overload pre-alarm PAL	Can be switched on/off		■	■	■	■
Current setting $I_{r\ PAL}$	0.7 ... 1.0 x I_r		■	■	■	■
Delay time $t_{r\ PAL}$	0.5 ... 1.0 x t_r		■	■	■	■
L: Overload protection LT, neutral conductor						
Tripping	Can be switched on/off		■	■	■	■
Current setting I_N	0.2 ... 2.0 × I_n for 4-pole circuit breakers max. I_{nmax}		■	■	■	■
Current setting $I_{N\ PAL}$	0.7 ... 1.0 × I_N		■	■	■	■
S: Delayed short-circuit protection ST						
Tripping	Can be switched on/off		■	■	■	■
Current setting I_{sd}	0.6 x I_n ... 0.8 x I_{cw}	1.5 / 2 / 2.5 / 3 / 4 / 5 / 6 / 8 / 10 x I_r	■	■	■	■
Tripping time t_{sd}	0.02 ... 0.4 s	For Fix: 0.08 / 0.15 / 0.22 / 0.3 / 0.4 s For I^2t: 0.1 / 0.2 / 0.3 / 0.4 s	■	■	■	■
Characteristic ST curve	I^0t and I^2t		■	■	■	■
Reference point $I_{ST\ ref}$	6-12 x I_r		■	■	■	■
Intermittent acquisition	Can be switched on/off		■	■	■	■
S: Directed delayed short-circuit protection dST						
Tripping	Can be switched on/off		□	□	■	■
Current setting I_{sd} FW	0.6 x I_n ... 0.8 x I_{cw}		□	□	■	■
Current setting I_{sd} REV	0.6 x I_n ... 0.8 x I_{cw}		□	□	■	■
Tripping time t_{sd} FW	0.05 ... 0.4 s		□	□	■	■
Tripping time t_{sd} REV	0.05 ... 0.4 s		□	□	■	■
I: instantaneous short-circuit protection INST						
Tripping	Can be switched on/off		■	■	■	■
Current setting I_i	1.5 x I_n ... 0.8 x I_{cs}	1.5 / 2 / 3 / 4 / 6 / 8 / 10 / 12 / 15 x I_n	■	■	■	■
Reverse power protection RP						
Tripping	Can be switched on/off		□	□	■	■
Setting value P_{RP}	0.05 ... 0.5 × P_n		□	□	■	■
Tripping time t_{RP}	0.01 ... 25 s		□	□	■	■
Enhanced protective functions EPF						
Unbalance (voltage, current)			□	□	■	■
Harmonic distortion			□	□	■	■
Voltage			□	□	■	■
Active power			□	□	■	■
Frequency			□	□	■	■
Phase rotation			□	□	■	■
DAS+ dynamic arc sentry						
Current setting $I_{i\ DAS+}$	1.5 ... 10 x I_n		■	■	■	■
Current setting $I_{g\ DAS+}$	With LSIG GFx option plug Residual: - Sizes 1 and 2: 100 ... 2000 A and - Size 3: 400 ... 2000 A Direct: 15 ... 2000 A		■	■	■	■
Tripping time $t_{g\ DAS+}$	0 ... 5 s		■	■	■	■
Second parameter set						
Parameter set changeover	Switchable between parameter set A and B		□	□	■	■

■ Available, feature of the application package
□ Can be retrofitted

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Electronic trip unit ETU600

Protective functions

ETU600 LSIG			Current metering	PMF-I Energy efficiency	PMF-II Basic Power Monitoring	PMF-III Advanced Power Monitoring
Protective function	**Setting range**					
G: Ground fault GF						
Tripping	Can be switched on/off		■	■	■	■
Method of ground fault detection	Residual	Detection of ground-fault current via summation current formation in all phases and the N-conductor	■	■	■	■
	Direct	Direct metering of the ground-fault current with a current transformer	■	■	■	■
	Dual	Protection zone UREF: Detection of the ground-fault current by means of summation current formation, Protection zone REF: Measurement of the ground-fault current with an external current transformer	■	■	■	■
Characteristic GF curve	With LSIG GFx option plug	For Fix (I^0t) / I^2t / I^4t / I^6t	■	■	■	■
Current setting I_g with LSIG GFx option plug	Detection method Residual	Sizes 1 and 2: 100 ... 2000 A Size 3: 400 ... 2000 A	■	■	■	■
	Detection method Direct	15 ... 2000 A	■	■	■	■
Tripping time t_g	For Fix (I^0t)	0 ... 5 s	■	■	■	■
	For I^xt at 3 x I_g	0 ... 30 s	■	■	■	■
Intermittent acquisition	Can be switched on/off		■	■	■	■
G: ground fault GF alarm						
Alarm	Can be switched on/off		■	■	■	■
Current setting $I_{g\ alarm}$ with LSIG GFx option plug	Detection method Residual	Sizes 1 and 2: 100 ... 5000 A Size 3: 400 ... 5000 A	■	■	■	■
	Detection method Direct	15 ... 5000 A	■	■	■	■
Alarm time $t_{g\ alarm}$		0 ... 0.5 s	■	■	■	■

■ Available, feature of the application package

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ETU600 LSIG Hi-Z			Current metering	PMF-I Energy efficiency	PMF-II Basic Power Monitoring	PMF-III Advanced Power Monitoring
Protective function	**Setting range**					
G: Ground fault GF Hi-Z						
Tripping	Can be switched on/off		■	■	■	■
Method of ground fault detection	Residual	Detection of ground-fault current via summation current formation in all phases and the N-conductor	■	■	■	■
	Dual Hi-Z, For high-impedance connection of the external current transformers	Protection zone UREF: Detection of the ground-fault current by means of summation current formation, Protection zone REF: Measurement of the ground-fault current with an external current transformer combination	■	■	■	■
Characteristic GF curve	With LSIG GFx option plug	For Fix (I^0t) / I^2t / I^4t / I^6t	■	■	■	■
Current setting I_g with LSIG GFx option plug	Protection zone UREF	Size 2: 100 ... 2000 A and Size 3: 400 ... 2000 A	■	■	■	■
	Protection zone REF	15 ... 2000 A	■	■	■	■
Tripping time t_g	For Fix (I^0t)	0 ... 5 s	■	■	■	■
	For I^xt 3 x I_g in protection zone UREF	0 ... 30 s	■	■	■	■
Intermittent acquisition	Can be switched on/off		■	■	■	■
G: ground fault GF alarm						
Alarm	Can be switched on/off		■	■	■	■
Current setting $I_{g\ alarm}$ with LSIG GFx option plug	Protection zone UREF	Size 2: 100 ... 5000 A and Size 3: 400 ... 5000 A	■	■	■	■
Alarm time $t_{g\ alarm}$		0 ... 0.5 s	■	■	■	■

■ Available, feature of the application package

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Electronic trip unit ETU600

Operation, interfaces and metering function

ETU600		Current metering	PMF-I Energy efficiency	PMF-II Basic Power Monitoring	PMF-III Advanced Power Monitoring	Non-automatic circuit breakers
Operation and interfaces						
Rotary switch		■	■	■	■	–
Display and operating keys		■	■	■	■	–
SENTRON powerconfig configuration software		■	■	■	■	–
Fieldbus communication		■	■	■	■	–
Color display		■	■	■	■	–
Bluetooth and USB interface		■	■	■	■	–
Communication						
Prepared for connection of a communication module (ready4COM feature)	Status messages of the circuit breaker	□	■	■	■	□
	Status messages of the electronic trip unit ETU600	□	■	■	■	–
	Remote operation, requires a communication module, closing coil, shunt trip	□	■	■	■	□
Communication module COM190 PROFINET-IO/Modbus-TCP		□	□	□	□	□
Digital input and output on the electronic trip unit ETU600						
Parameterizable input	For activating DAS+ dynamic arc sentry or can be used for parameter set changeover	■	■	■	■	–
Parameterizable output	Can be used as a "life contact" and for display of "Parameter set B active" or "DAS+ dynamic arc sentry active".	■	■	■	■	–
IOM230 digital input and output module						
Two parameterizable inputs	For controlling the circuit breaker and transmitting information from the switchboard via communication.	□	□	□	□	□
Three parameterizable outputs	For signaling events, states, tripping operations or alarms of the switching device	□	□	□	□	□

– Not available
■ Available, feature of the application package
□ Can be retrofitted

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ETU600		Current metering	PMF-I Energy efficiency	PMF-II Basic Power Monitoring	PMF-III Advanced Power Monitoring
Metering function					
Integrated voltage tap at top/bottom		□	■	■	■
Voltage tap module VTM		□	■	■	■
Type acc. to IEC 61557-12	PMF-I	□	■	■	■
	PMF-II	□	□	■	■
	PMF-III	□	□	□	■
Metering values acc. to IEC61557-12					
Phase current I_{L1}, I_{L2}, I_{L3}	Class 1	■	■	■	■
Neutral conductor current I_N	Class 1	■	■	■	■
Voltage U_{LN}	Class 1	□	■	■	■
Voltage U_{LL}	Class 1	□	■	■	■
Active energy E_a	Class 2	□	■	■	■
Reactive energy E_r		□	□	■	■
Apparent energy E_{ap}		□	□	■	■
Active power P	Class 2	□	□	■	■
Reactive power Q		□	□	■	■
Apparent power S		□	□	■	■
Power totals S, P, Q		□	□	■	■
Power factor PF		□	□	■	■
cos φ		□	□	■	■
Frequency f		□	□	■	■
Current unbalance		□	□	■	■
Voltage unbalance		□	□	■	■
Total harmonic distortion THD-I		□	□	□	■
Total harmonic distortion THD-U		□	□	□	■

■ Available, feature of the application package
□ Can be retrofitted

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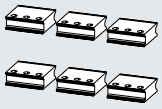
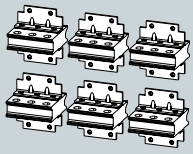
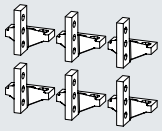
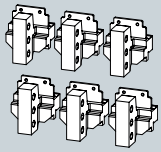
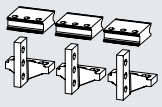
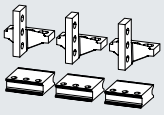
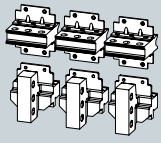
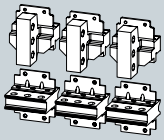
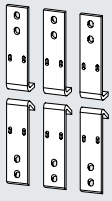
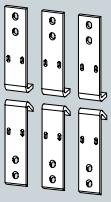
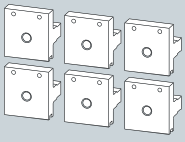
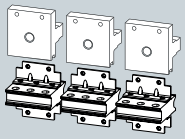
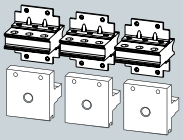
Connection

Main circuit connection

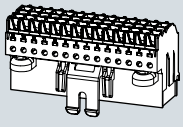
3WA11 – 3WA13

Fixed-mounted		Withdrawable	
 Rear horizontal		 Rear horizontal	
 Rear vertical		 Rear vertical	
 Horizontal on top, vertical at the bottom	 Vertical on top, horizontal at the bottom	 Horizontal on top, vertical at the bottom	 Vertical on top, horizontal at the bottom
 Front connection with double hole		 Front connection with double hole	
		 Flange	
		 Flange on top and horizontal at bottom	 Flange on bottom and horizontal at top

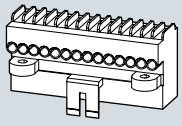
Secondary disconnect terminal

The auxiliary and control cables are connected at the manual connectors using the push-in technology of the auxiliary conductor connections of the circuit breaker.

Coding pins on the manual connectors prevent them being inserted in the wrong slots.



Screwless connection (push-in)



Screw connection (optional)

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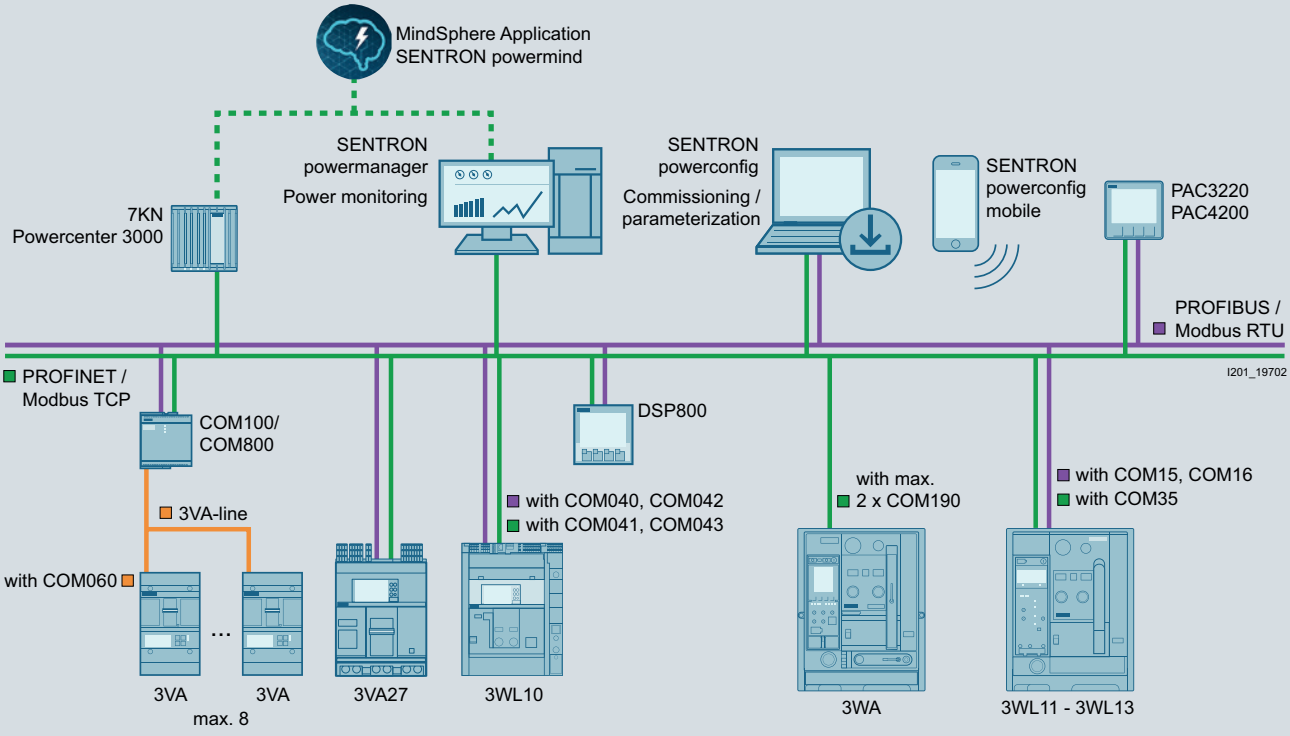
Communication



The 3WA can be equipped with up to two PROFINET IO / Modbus TCP COM190 communication modules and up to five IOM230 digital input/output modules.

For the optional communications interface with COM190 communication module, a "ready4COM" must be selected as the switching device. The first COM190 communication module must be selected via a Z option. If you want to use a further COM190 communication module, this must be ordered separately as an accessory. Both COM190 communication modules can be run in parallel.

The first IOM230 digital input/output module can be selected via a Z option.
The up to four further digital input/output modules must be ordered separately as accessories.

You will find further information on the COM190 in the equipment manual – 3WA air circuit breakers **(109763061)**

Technical specifications	COM190
Operating values	
U_s	24 V DC ±20%
Rated power dissipation	1 W
Switched Ethernet Ports	2
Protocol	PROFINET IO (CC-C) and Modbus TCP
Security functions	Yes
Number	Up to 2

Technical specifications	IOM230
Operating values	
U_s	24 V DC ±20%
Rated power dissipation	1 W
Inputs	2
Outputs	3
Maximum switching current	24 V DC, 4 A
	250 V AC, 5 A
Maximum continuous current	24 V DC, 0.2 A
	250 V AC, 0.2 A
Number	Up to 5

System overview, page 1/24

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System overview 3WA11 – 3WA13

Switching devices for AC and DC

For a complete and valid configuration of your air circuit breaker, please use our online configurator at www.siemens.com/lowvoltage/3wa-configurator

Switching devices



Sizes 1 to 3

Main circuit connection



Front double hole



Flange





Main connection
vertical, horizontal

Electronic trip unit and metering function



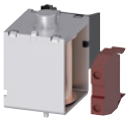
ETU600

Operating mechanisms and auxiliary switches



Spring charging motor

Closing coil and remote trip alarm reset coil



Closing coil (CC)



Remote trip alarm reset coil

Note:
You will find a detailed range of accessories in the Accessories and spare parts section.

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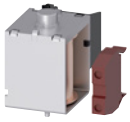
Auxiliary releases



Closing coil (CC)



Shunt trip (ST)



Undervoltage release (UVR)

Accessories for electronics



Communication module



Digital input/output module



Sealable and lockable cover



Internal current sensors

Accessories for auxiliary circuit



Trip alarm switch



Motor disconnect switch



Local electric close



Emergency OPEN button

Interlocks and locking provisions



Locking provision for charging handle



Locking provision against unauthorized closing



Mutual mechanical interlockings

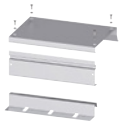


Locking mechanisms

Other accessories



Door sealing frame



Arc chute cover



Automatic reset of the reclosing lockout

Note:
You will find a detailed range of accessories in the Accessories section.

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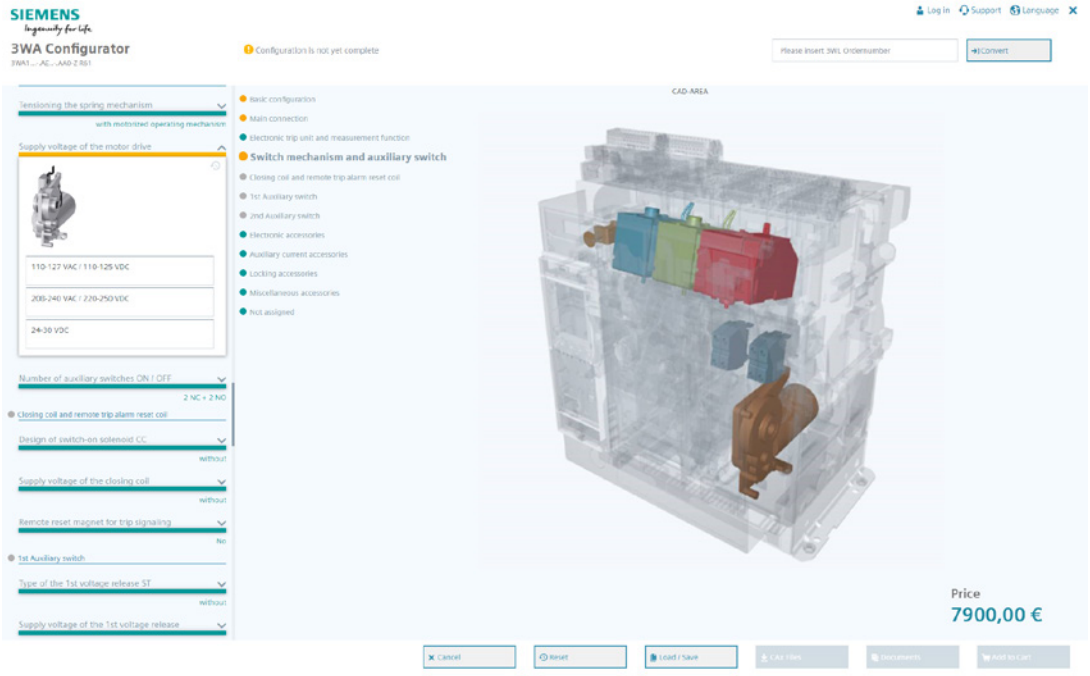
Online configurator highlights

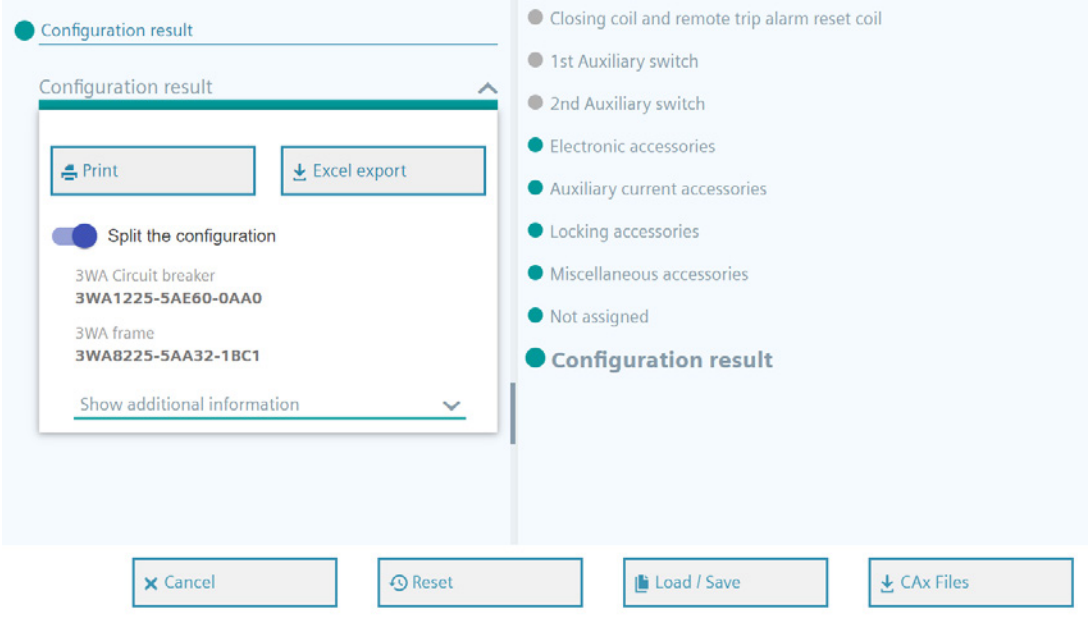
www.siemens.com/lowvoltage/3wa-configurator

Graphical display

- Integration of the legend as a color system
  - Orange: still to be selected
  - Petrol: already selected
  - Gray: preselected (default)
- Graphical highlighting of the individual configuration steps: "What you see is what you get"



Splitting function (Frame and circuit breaker can be ordered separately)



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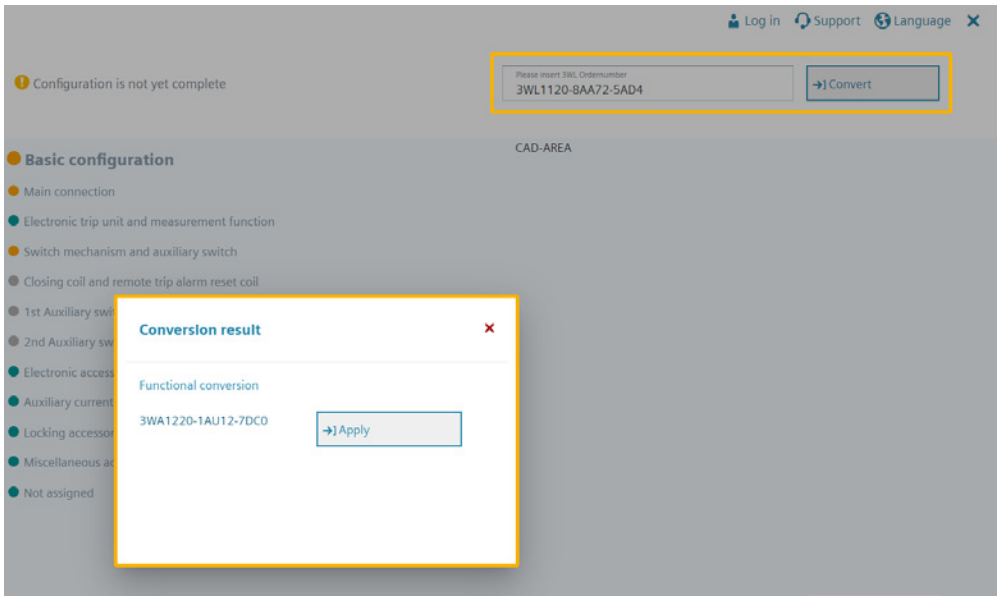
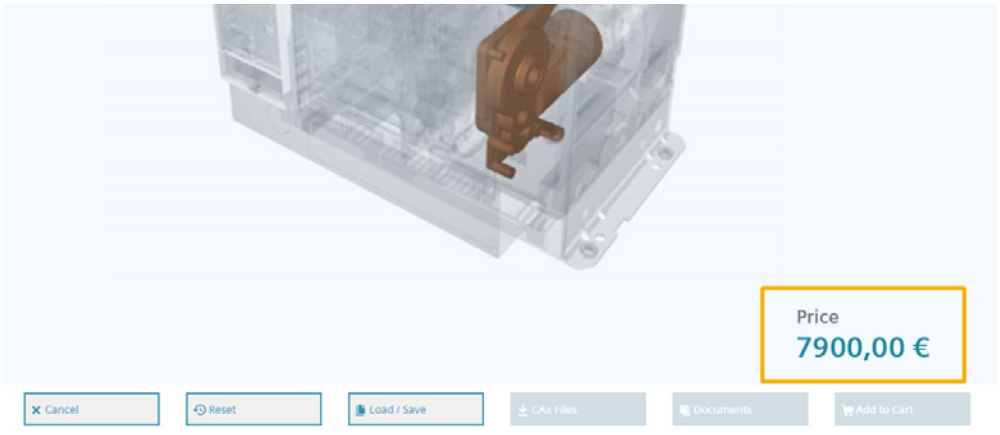
Direct conversion of a 3WL article number to a 3WA article number in the configurator



Responsive design (adapted to the differing requirements of the displaying devices)



Dynamic customer price during configuration



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Structure of the article numbers

Basic configuration for AC circuit breakers and AC non-automatic circuit breakers up to 690 V

The structure shown below is intended as an overview of each position and its meaning.
For a complete and valid configuration of your air circuit breaker, please use our online configurator at
www.siemens.com/lowvoltage/3wa-configurator

1

3WA1	5	6	7	–	8	9	10	11	12	–	13	14	15	16
	■	■	■	–	■	■	■	■		–				

Switching device

Size (SZ)	1					1								
	2					2								
	3					3								
			SZ 1	SZ 2	SZ 3									
Max. rated current $I_{n\,max}$	630 A		■	–	–		0	6						
	800 A		■	–	–		0	8						
	1000 A		■	–	–		1	0						
	1250 A		■	–	–		1	2						
	1600 A		■	–	–		1	6						
	2000 A		■	■	–		2	0						
	2500 A		■	■	–		2	5						
	3200 A		–	■	–		3	2						
	4000 A		–	■ [1]	■		4	0						
	5000 A		–	–	■		5	0						
	6300 A		–	–	■		6	3						
Short-circuit breaking capacity I_{cu} at 500 V	N	55 kA	■	–	–				2					
	S	66 kA	■	■	–				3					
	M	85 kA	■	■	–				4					
	H	100 kA	–	■	■				5					
	C	130 kA	–	■	–				6					
		150 kA	–	–	■				6					
Non-automatic circuit breakers										A	A			
Non-automatic circuit breakers, ready4COM feature										C	A			
Application packages with protective and metering functions for circuit breakers	Electronic trip unit ETU600	Current metering								A				
		Current metering, ready4COM feature								C				
	Electronic trip unit ETU600 with metering function, internal voltage tap in the circuit breaker, voltage supply of the ETU600 through the voltage tap module and ready4COM	PMF-I Energy Efficiency	Voltage tap on top							L				
			Voltage tap on bottom							E				
		PMF-II Basic Power Monitoring	Voltage tap on top							M				
			Voltage tap on bottom							F				
		PMF-III Advanced Power Monitoring	Voltage tap on top							N				
			Voltage tap on bottom							G				
Application packages with protective and metering functions for circuit breakers	Protective functions		■	■	■	LSI					E			
			■	■	■	LSIG					F			
			–	■	■	LSIG Hi-Z					G			
Number of poles	Fixed-mounted						3-pole							0
							4-pole, Neutral left							1
	Withdrawable	Without position signaling switch					3-pole							3
							4-pole, Neutral left							4
		With position signaling switch					3-pole							6
							4-pole, Neutral left							7

[1] Not available for breaking capacity C

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3WA1	5	6	7	–	8	9	10	11	12	–	13	14	15	16

Connection

		SZ 1	SZ 2	SZ 3		
Type of mounting	Fixed-mounted	■	■ [1]	■	Vertical	1
		■ [2]	■ [3]	■ [4]	Horizontal	2
		■ [2]	■ [5]	■ [6]	Front	3
		■ [2]	■ [3]	■ [4]	Vertical / horizontal	5
		■ [2]	■ [3]	■ [4]	Horizontal / vertical	6
	Withdrawable	■	■	■	Without guide frame	0
		■	■ [1]	■	Vertical	1
		■ [2]	■ [3]	■ [4]	Horizontal	2
		■ [2]	■ [5]	■ [6]	Front	3
		■ [2]	■ [5]	■ [6]	Flange	4
		■ [2]	■ [3]	■ [4]	Vertical / horizontal	5
		■ [2]	■ [3]	■ [4]	Horizontal / vertical	6
		■ [2]	■ [5]	■ [6]	Flange / horizontal	7
		■ [2]	■ [5]	■ [6]	Horizontal / flange	8

[1] The 4000 A vertical connections for the 3WA1 have different dimensions from the 3WL1. Dimensionally compatible connections can be ordered with the additional Z option D01.
[2] Not available for 2500 A
[3] Not available for 4000 A
[4] Not available for 6300 A
[5] Not available for 4000 A and for breaking capacity C
[6] Not available for 5000 A and 6300 A and for breaking capacity C

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Structure of the article numbers

Basic configuration for AC circuit breakers and AC non-automatic circuit breakers up to 690 V

The structure shown below is intended as an overview of each position and its meaning.
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3WA1	5	6	7	8	–	9	10	11	12	–	13	14	15	16

Operating mechanism, auxiliary switch and auxiliary release

				13	14	15
Operating mechanism and auxiliary switch	Manual recharging of the stored energy mechanism	Without spring charging motor	2 NO contacts, 2 NC contacts	0		
			4 NO contacts, 4 NC contacts	1		
	Recharging of the stored energy mechanism by spring charging motor (M)	24 … 30 V DC	2 NO contacts, 2 NC contacts	2		
			4 NO contacts, 4 NC contacts	5		
		48 … 60 V DC	4 NO contacts, 4 NC contacts	6		
		110 … 127 V AC / 110 … 125 V DC	2 NO contacts, 2 NC contacts	3		
			4 NO contacts, 4 NC contacts	7		
		208 … 240 V AC / 220 … 250 V DC	2 NO contacts, 2 NC contacts	4		
			4 NO contacts, 4 NC contacts	8		
Closing coil and remote trip alarm reset coil [1)2)]	Without closing coil	Without remote trip alarm reset coil			A	
	With closing coil (CC) for continuous duty, 100% OP	Without remote trip alarm reset coil	24 … 30 V DC		B	
			48 … 60 V DC		C	
			110 … 127 V AC / 110 … 125 V DC		D	
			208 … 240 V AC / 220 … 250 V DC		E	
		With remote trip alarm reset coil (RR) for momentary duty 1% OP	24 … 30 V DC		F	
			48 … 60 V DC		G	
			110 … 127 V AC / 110 … 125 V DC		H	
			208 … 240 V AC / 220 … 250 V DC		J	
	With closing coil (CC) for momentary duty, 5% OP	Without remote trip alarm reset coil	24 … 30 V DC		K	
			48 … 60 V DC		L	
			110 … 127 V AC / 110 … 125 V DC		M	
			208 … 240 V AC / 220 … 250 V DC		N	
		With remote trip alarm reset coil (RR) for momentary duty 1% OP	24 … 30 V DC		P	
			48 … 60 V DC		Q	
			110 … 127 V AC / 110 … 125 V DC		R	
			208 … 240 V AC / 220 … 250 V DC		S	

			15
2nd auxiliary release	Without 2nd auxiliary release		A
	With shunt trip (ST), continuous duty 100% OP	24 … 30 V DC	B
		48 … 60 V DC	C
		110 … 127 V AC / 110 … 125 V DC	D
		208 … 240 V AC / 220 … 250 V DC	E
	With shunt trip (ST), momentary duty 5% OP	24 … 30 V DC	F
		48 … 60 V DC	G
		110 … 127 V AC / 110 … 125 V DC	H
		208 … 240 V AC / 220 … 250 V DC	J
	With undervoltage release (UVR), instantaneous (≤0.08 s) and short-time delayed (≤0.2 s)	24 … 30 V DC	L
		48 … 60 V DC	N
		110 … 127 V AC / 110 … 125 V DC	P
		208 … 240 V AC / 220 … 250 V DC	Q
		380 … 415 V AC	R
	With undervoltage release (UVR-t), adjustable delay 0.2 … 3.2 s	48 V DC	S
		60 V DC	T
		110 … 127 V AC / 110 … 125 V DC	U
		208 … 240 V AC / 220 … 250 V DC	V
		380 … 415 V AC	W

1) Remote trip alarm reset coil is not available for non-automatic circuit breakers
2) When using the remote trip alarm reset coil, the reclosing lockout is generally deactivated. The circuit breaker can be closed again immediately if the conditions for closing are fulfilled.

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3WA1	5	6 7	8	–	9 10	11	12	–	13	14	15	16

Auxiliary releases

1st auxiliary release	Without 1st auxiliary release		**0**
	With shunt trip (ST), continuous duty 100% OP	24 ... 30 V DC	**1**
		48 ... 60 V DC	**2**
		110 ... 127 V AC / 110 ... 125 V DC	**3**
		208 ... 240 V AC / 220 ... 250 V DC	**4**
	With shunt trip (ST), momentary duty 5% OP	24 ... 30 V DC	**5**
		48 ... 60 V DC	**6**
		110 ... 127 V AC / 110 ... 125 V DC	**7**
		208 ... 240 V AC / 220 ... 250 V DC	**8**

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Structure of the article numbers

Basic configuration for AC circuit breakers and AC non-automatic circuit breakers in a 690 V IT system and for higher voltages

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1

3WA1	5	6	7	–	8	9	10	11	12	–	13	14	15	16

Switching device

Size (SZ)	1				1				
	2				2				
	3				3				
		SZ 1	SZ 2	SZ 3					
Max. rated current $I_{n\,max}$	630 A	■	–	–		0	6		
	800 A	■	–	–		0	8		
	1000 A	■	–	–		1	0		
	1250 A	■	–	–		1	2		
	1600 A	■	–	–		1	6		
	2000 A	■	■	–		2	0		
	2500 A	■	■	–		2	5		
	3200 A	–	■	–		3	2		
	4000 A	–	■	■		4	0		
	5000 A	–	–	■		5	0		
	6300 A	–	–	■		6	3		
Short-circuit breaking capacity I_{cu} at 690 V / 1000 V / 1150 V	Breaking capacity E	■	–	–	85 / 50 kA / –			8	
		–	■	–	85 / 85 / 50 kA			8	
		–	–	■	3-pole: 150 / 125 / 70 kA 4-pole: 130 / 125 / 70 kA			8	
Non-automatic circuit breakers								A	A
Non-automatic circuit breaker, ready4COM feature								C	A
Application packages with protective and metering functions for circuit breakers	Electronic trip unit ETU600	Current metering						A	
		Current metering, ready4COM feature						C	
	Electronic ETU600 trip unit with metering function, internal voltage tap in the circuit breaker, voltage supply of the ETU600 through the voltage tap module and ready4COM	PMF-I Energy Efficiency	Voltage tap on top					U	
			Voltage tap on bottom					Q	
		PMF-II Basic Power Monitoring	Voltage tap on top					V	
			Voltage tap on bottom					R	
		PMF-III Advanced Power Monitoring	Voltage tap on top					W	
			Voltage tap on bottom					S	
Application packages with protective and metering functions for circuit breakers	Protective functions	■	■	■	LSI				E
		■	■	■	LSIG				F
		–	■	■	LSIG Hi-Z				G
Number of poles	Fixed-mounted						3-pole		0
							4-pole, Neutral left		1
	Withdrawable	Without position signaling switch					3-pole		3
							4-pole, Neutral left		4
		With position signaling switch					3-pole		6
							4-pole, Neutral left		7

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1

3WA1	5	6	7	–	8	9	10	11	12	–	13	14	15	16

Connection

		SZ 1	SZ 2	SZ 3		
Type of mounting	Fixed-mounted	■	■ 3)	■	Vertical	1
		■ 1)	■ 2)	■ 4)	Horizontal	2
		■ 1)	■ 2)	■ 5)	Front double hole	3
		■ 1)	■ 2)	■ 4)	Vertical on top / horizontal at the bottom	5
		■ 1)	■ 2)	■ 4)	Horizontal on top / vertical at the bottom	6
	Withdrawable	■	■	■	Without guide frame	0
		■	■ 3)	■	Vertical	1
		■ 1)	■ 2)	■ 4)	Horizontal	2
		■ 1)	■ 2)	■ 5)	Front double hole	3
		■ 1)	■ 2)	■ 5)	Flange	4
		■ 1)	■ 2)	■ 4)	Vertical on top / horizontal at the bottom	5
		■ 1)	■ 2)	■ 4)	Horizontal on top / vertical at the bottom	6
		■ 1)	■ 2)	■ 5)	Flange on top / horizontal at the bottom	7
		■ 1)	■ 2)	■ 5)	Horizontal on top / flange at the bottom	8

1) Only ≤2000 A is available for size 1
2) Only ≤3200 A is available for size 2
3) Vertical connection for 3WA size 2 for 4000 A has different dimensions than for the 3WL.
With Z option D01, vertical connection can be changed to the connection compatible with 3WL.
4) Only ≤5000 A is available for size 3
5) Only for 4000 A is available for size 3

Quick selection guide, pages 1/4 and 1/8

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Structure of the article numbers

Basic configuration for AC circuit breakers and AC non-automatic circuit breakers in a 690 V IT system and for higher voltages

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1

	5	6	7	8		9	10	11	12		13	14	15	16
3WA1					–					–				

Operating mechanism, auxiliary switch and auxiliary release

				13	14	15
Operating mechanism and auxiliary switch	Manual recharging of the stored energy mechanism	Without spring charging motor	2 NO contacts, 2 NC contacts	0		
			4 NO contacts, 4 NC contacts	1		
	Recharging of the stored energy mechanism by spring charging motor (M)	24 ... 30 V DC	2 NO contacts, 2 NC contacts	2		
			4 NO contacts, 4 NC contacts	5		
		48 ... 60 V DC	4 NO contacts, 4 NC contacts	6		
		110 ... 127 V AC / 110 ... 125 V DC	2 NO contacts, 2 NC contacts	3		
			4 NO contacts, 4 NC contacts	7		
		208 ... 240 V AC / 220 ... 250 V DC	2 NO contacts, 2 NC contacts	4		
			4 NO contacts, 4 NC contacts	8		
Closing coil and remote trip alarm reset coil [1]	Without closing coil	Without remote trip alarm reset coil			A	
	With closing coil (CC) for continuous duty, 100% OP	Without remote trip alarm reset coil	24 ... 30 V DC		B	
			48 ... 60 V DC		C	
			110 ... 127 V AC / 110 ... 125 V DC		D	
			208 ... 240 V AC / 220 ... 250 V DC		E	
		With remote trip alarm reset coil (RR) for momentary duty 1% OP	24 ... 30 V DC		F	
			48 ... 60 V DC		G	
			110 ... 127 V AC / 110 ... 125 V DC		H	
			208 ... 240 V AC / 220 ... 250 V DC		J	
	With closing coil (CC) for momentary duty, 5% OP	Without remote trip alarm reset coil	24 ... 30 V DC		K	
			48 ... 60 V DC		L	
			110 ... 127 V AC / 110 ... 125 V DC		M	
			208 ... 240 V AC / 220 ... 250 V DC		N	
		With remote trip alarm reset coil (RR) for momentary duty 1% OP	24 ... 30 V DC		P	
			48 ... 60 V DC		Q	
			110 ... 127 V AC / 110 ... 125 V DC		R	
			208 ... 240 V AC / 220 ... 250 V DC		S	

			15
2nd auxiliary release	Without 2nd auxiliary release		A
	With shunt trip (ST), continuous duty 100% OP	24 ... 30 V DC	B
		48 ... 60 V DC	C
		110 ... 127 V AC / 110 ... 125 V DC	D
		208 ... 240 V AC / 220 ... 250 V DC	E
	With shunt trip (ST), momentary duty 5% OP	24 ... 30 V DC	F
		48 ... 60 V DC	G
		110 ... 127 V AC / 110 ... 125 V DC	H
		208 ... 240 V AC / 220 ... 250 V DC	J
	With undervoltage release (UVR), instantaneous (≤0.08 s) and short-time delayed (≤0.2 s)	24 ... 30 V DC	L
		48 ... 60 V DC	N
		110 ... 127 V AC / 110 ... 125 V DC	P
		208 ... 240 V AC / 220 ... 250 V DC	Q
		380 ... 415 V AC	R
	With undervoltage release (UVR-t), adjustable delay 0.2 ... 3.2 s	48 V DC	S
		60 V DC	T
		110 ... 127 V AC / 110 ... 125 V DC	U
		208 ... 240 V AC / 220 ... 250 V DC	V
		380 ... 415 V AC	W

[1] Remote trip alarm reset coil is not available for non-automatic circuit breakers

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3WA1	5	6	7	8	–	9	10	11	12	–	13	14	15	16

Auxiliary releases

1st auxiliary release	Without 1st auxiliary release		**0**
	With shunt trip (ST), continuous duty 100% OP	24 ... 30 V DC	**1**
		48 ... 60 V DC	**2**
		110 ... 127 V AC / 110 ... 125 V DC	**3**
		208 ... 240 V AC / 220 ... 250 V DC	**4**
	With shunt trip (ST), momentary duty 5% OP	24 ... 30 V DC	**5**
		48 ... 60 V DC	**6**
		110 ... 127 V AC / 110 ... 125 V DC	**7**
		208 ... 240 V AC / 220 ... 250 V DC	**8**

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Structure of the article numbers

Basic configuration for DC non-automatic circuit breakers

**The structure shown below is intended as an overview of each position and its meaning.
For a complete and valid configuration of your air circuit breaker, please use our online configurator at
www.siemens.com/lowvoltage/3wa-configurator**

1

	5	6	7	8	9	10	11	12	13	14	15	16
3WA1				–				–				

Switching device

Size (SZ)	2							
		SZ 2						
Max. rated current $I_{n\,max}$	1000 A	■		1	0			
	2000 A	■		2	0			
	4000 A	■		4	0			
Short-circuit breaking capacity I_{cc}	D	■	25 kA, 600 V DC			1		
	E	■	20 kA, 1000 V DC			8		
Non-automatic circuit breakers							A	U
Non-automatic circuit breaker, ready4COM feature							C	U

Number of poles [1]	Fixed-mounted		3-pole	0
			4-pole	1
	Withdrawable	Without position signaling switch	3-pole	3
			4-pole	4
		With position signaling switch	3-pole	6
			4-pole	7

Connection

		SZ 2		
Type of mounting	Fixed-mounted	■	Vertical	1
		■	Horizontal	2
		■	Front double hole	3
		■	Vertical on top / horizontal at the bottom	5
		■	Horizontal on top / vertical at the bottom	6
	Withdrawable	■	Without guide frame	0
		■	Vertical	1
		■	Horizontal	2
		■	Front double hole	3
		■	Flange	4
		■	Vertical on top / horizontal at the bottom	5
		■	Horizontal on top / vertical at the bottom	6
		■	Flange on top / horizontal at the bottom	7
		■	Horizontal on top / flange at the bottom	8

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3WA1 5 6 7 8 – 9 10 11 12 – 13 14 15 16

Operating mechanism, auxiliary switch and auxiliary release

				13	14	15	16
Operating mechanism and auxiliary switch	Manual recharging of the stored energy mechanism	Without spring charging motor	2 NO contacts, 2 NC contacts	0			
			4 NO contacts, 4 NC contacts	1			
	Recharging of the stored energy mechanism by spring charging motor (M)	24 ... 30 V DC	2 NO contacts, 2 NC contacts	2			
			4 NO contacts, 4 NC contacts	5			
		48 ... 60 V DC	4 NO contacts, 4 NC contacts	6			
		110 ... 127 V AC / 110 ... 125 V DC	2 NO contacts, 2 NC contacts	3			
			4 NO contacts, 4 NC contacts	7			
		208 ... 240 V AC / 220 ... 250 V DC	2 NO contacts, 2 NC contacts	4			
			4 NO contacts, 4 NC contacts	8			
Closing coil	Without closing coil				A		
	With closing coil (CC) for continuous duty, 100% OP		24 ... 30 V DC		B		
			48 ... 60 V DC		C		
			110 ... 127 V AC / 110 ... 125 V DC		D		
			208 ... 240 V AC / 220 ... 250 V DC		E		
	With closing coil (CC) for momentary duty, 5% OP		24 ... 30 V DC		K		
			48 ... 60 V DC		L		
			110 ... 127 V AC / 110 ... 125 V DC		M		
			208 ... 240 V AC / 220 ... 250 V DC		N		
2nd auxiliary release	Without 2nd auxiliary release					A	
	With shunt trip (ST), continuous duty 100% OP		24 ... 30 V DC			B	
			48 ... 60 V DC			C	
			110 ... 127 V AC / 110 ... 125 V DC			D	
			208 ... 240 V AC / 220 ... 250 V DC			E	
	With shunt trip (ST), momentary duty 5% OP		24 ... 30 V DC			F	
			48 ... 60 V DC			G	
			110 ... 127 V AC / 110 ... 125 V DC			H	
			208 ... 240 V AC / 220 ... 250 V DC			J	
	With undervoltage release (UVR), instantaneous (≤0.08 s) and short-time delayed (≤0.2 s)		24 ... 30 V DC			L	
			48 ... 60 V DC			N	
			110 ... 127 V AC / 110 ... 125 V DC			P	
			208 ... 240 V AC / 220 ... 250 V DC			Q	
			380 ... 415 V AC			R	
	With undervoltage release (UVR-t), adjustable delay 0.2 ... 3.2 s		48 V DC			S	
			60 V DC			T	
			110 ... 127 V AC / 110 ... 125 V DC			U	
			208 ... 240 V AC / 220 ... 250 V DC			V	
			380 ... 415 V AC			W	
1st auxiliary release	Without 1st auxiliary release						0
	With shunt trip (ST), continuous duty 100% OP		24 ... 30 V DC				1
			48 ... 60 V DC				2
			110 ... 127 V AC / 110 ... 125 V DC				3
			208 ... 240 V AC / 220 ... 250 V DC				4
	With shunt trip (ST), momentary duty 5% OP		24 ... 30 V DC				5
			48 ... 60 V DC				6
			110 ... 127 V AC / 110 ... 125 V DC				7
			208 ... 240 V AC / 220 ... 250 V DC				8

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Accessory options

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To specify the options, add "-Z" to the complete Article No. and indicate the appropriate order code(s).

3WA....-.....-.... -Z

						Order code		
		SZ1	SZ2	SZ3				
Option plug for electronic trip unit								
• To reduce the rated current of the circuit breaker • Only one module is possible per circuit breaker. As standard, the electronic trip unit is equipped with an option plug which is equal to the maximum rated breaker current ($I_{n\,max}$). The rated current of the selected option plug must be less than $I_{n\,max}$.								
Option plug	250 A	■	■	–		B	0	2
	315 A	■	■	–		B	0	3
	400 A	■	■	–		B	0	4
	500 A	■	■	–		B	0	5
	630 A	■	■	–		B	0	6
	800 A	■	■	–		B	0	8
	1000 A	■	■	–		B	1	0
	1250 A	■	■	–		B	1	2
	1600 A	■	■	■		B	1	6
	2000 A	■	■	■		B	2	0
	2500 A	–	■	■		B	2	5
	3200 A	–	■	■		B	3	2
	4000 A	–	–	■		B	4	0
	5000 A	–	–	■		B	5	0
IOM230 digital input/output module								
Module with 2 inputs and 3 outputs	A module including adapter for mounting on the secondary disconnect terminal system of the circuit breaker, connecting cables and **Cubicle**BUS^2 terminating resistor; five modules can be operated at the same time. Further modules must be ordered separately as 3WA9111-0EC11, which includes the adapter for mounting on the secondary disconnect terminal system of the circuit breaker and the adapter for external mounting on a standard mounting rail.					F	2	3
COM190 communication module								
• The precondition for connection is a circuit breaker or non-automatic circuit breaker with the "ready4COM" feature								
PROFINET IO / Modbus TCP	A module including 2 Switched Ethernet ports, circuit breaker internal. A module including adapter for mounting on the secondary disconnect terminal system of the circuit breaker, connecting cables and **Cubicle**BUS^2 terminating resistor; two communication modules can be run at the same time. The second communication module must be ordered separately as 3WA9111-0EC13.					F	1	9
Automatic reset								
• Only possible for circuit breakers with an electronic trip unit								
Automatic reset	Automatic reset of the reclosing lockout after ETU tripping; this option is not required when ordering a circuit breaker with a remote trip alarm reset coil RR.					K	0	1
Tinned version of the main connections on the guide frame								
• Only for switching devices in withdrawable version with horizontal connection or flange connection. • Cannot be ordered for circuit breakers without a guide frame • The normal delivery time increases to 15 work days								
Tinned connections	Sizes 1, 2, 3					D	0	8

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To specify the options, add "-Z" to the complete Article No. and indicate the appropriate order code(s).

3WA....-.....-.... -Z

			Order code		
Broadened vertical main connection					
• Only possible on complete order for a withdrawable switching device or when ordering the guide frame separately					
Main circuit connection	For 3WA1, 4000 A, size 2	Compatible with 3WL1240 for retrofit	D	0	1
Secondary disconnect terminal system					
• Cannot be ordered for circuit breakers without a guide frame					
Secondary disconnect terminal system	With screw connection instead of push-in connection (standard)		N	0	3
Mechanical operating cycles counter					
Mechanical operating cycles counter, 5-digit	Can be used with all circuit breakers and non-automatic circuit breakers including those without a spring charging motor		C	0	1
Signaling switch					
Tripped signaling switch	2nd tripped signaling switch (S25) 1st tripped signaling switch included as standard. Can only be used with circuit breakers with an electronic trip unit	1 NO contact	K	0	6
Pushbuttons / shutdown switches / closing lockouts / special packaging / Arc chute cover					
Emergency OPEN button	Mushroom pushbutton instead of the mechanical OFF pushbutton		C	2	5
Local electrical close on the operator panel (S10)	This prevents unauthorized electrical closing from the operator panel. Mechanical closing and remote closing remain possible. Only possible in combination with a closing coil (CC)	With sealing cap	C	1	1
		With CES lock	C	1	2
Motor disconnect switch on operator panel (S12)	This prevents automatic charging of the stored energy mechanism by the spring charging motor		C	2	4
Cardboard packaging with water-repellent coating on corrugated cardboard (moisture protection)			P	6	1
Arc chute cover mounted on the guide frame	Not available for: – Fixed-mounted – Breaking capacity C, E and D – 4000 A size 2		R	1	0
Sealable and lockable cover	For electronic trip unit		F	4	0
Internal current sensors (without energy core) for applications with frequency converters					
• Used in converter applications with high harmonic components; can only be used for circuit breakers with an electronic trip unit – External 24 V DC supply required – Undervoltage release required – Additionally contains a relay for monitoring the 24 V DC and warning labels					
Internal current sensors	Sizes 2, 3		K	6	0
Mutual mechanical interlockings					
• Interlocking module with Bowden cable 2 m					
Mutual mechanical interlockings	For fixed-mounted breakers		S	5	5
	For withdrawable circuit breakers with guide frame		R	5	5
	For guide frames (ordered separately)		R	5	6
	For withdrawable circuit breakers (ordered separately)		R	5	7

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Accessory options

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1

To specify the options, add "-Z" to the complete Article No. and indicate the appropriate order code(s).

3WA....-.....-.... -Z

			Order code		
Locking provisions (for fixed-mounted and withdrawable circuit breakers)					
Locking provision	To prevent unauthorized activation in the operator panel of the circuit breaker. The disconnector unit fulfills the requirements for main circuit breakers according to EN 60204-1	Made by CES	S	0	1
		Made by IKON	S	0	3
		Assembly kit FORTRESS or CASTELL [1]	S	0	5
		Assembly kit for padlocks [2]	S	0	7
		Made by RONIS	S	0	8
		Made by PROFALUX	S	0	9
Locking provision	For charging handle with padlock [2]		S	3	3
Locking provisions (for withdrawable circuit breakers)					
Locking provision to prevent movement of the withdrawable circuit breakers	Safety lock for mounting onto the circuit breaker	Made by CES	S	7	1
		Made by PROFALUX	S	7	5
		Made by RONIS	S	7	6
Locking provisions against unauthorized closing, for withdrawable circuit breakers • The disconnector unit fulfills the requirements for main circuit breakers acc. to EN 60204-1, consisting of a lock in the guide frame, active in the connected position, function is retained when circuit breaker is replaced. • Not available in combination with order code "R81", "R85" or "R86". • Only possible on complete order for a withdrawable switching device or when ordering the guide frame separately					
Made by CES			R	6	1
Made by RONIS			R	6	8
Made by PROFALUX			R	6	0
Locking mechanisms • Not available in combination with order code "R81", "R85" or "R86". • R30 and R50 only possible on complete order for a circuit breaker with a guide frame or when ordering the guide frame separately • R40 can only be ordered with the circuit breaker					
For fixed-mounted circuit breakers	To prevent opening of the control cabinet door in ON position		S	3	0
For withdrawable circuit breakers	To prevent opening of the control cabinet door in connected position		R	3	0
	To prevent activation when the control cabinet door is open [3]		R	4	0
	To prevent movement when the control cabinet door is open [4]		R	5	0
Locking provisions to prevent movement of the withdrawable circuit breaker in disconnected position • Consisting of Bowden cable and lock in the control cabinet door • Not available in combination with order code "R30", "R40", "R50", "R61", "R68" or "R60" • Only possible for a complete order for a circuit breaker with a guide frame or when ordering the guide frame separately					
Made by CES			R	8	1
Made by PROFALUX			R	8	5
Made by RONIS			R	8	6
Increased degree of protection for installation in a control cabinet					
Door sealing frame for degree of protection IP41			T	4	0

[1] Locks must be ordered from the manufacturer.
[2] Padlock not included in the scope of supply
[3] Not available in combination with R50
[4] Not available in combination with R40

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Guide frames for AC

The structure shown below is intended as an overview of each position and its meaning.
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	5	6	7		8	9	10	11	12		13	14	15	16
3WA8				–		A	A			–				

Guide frames

			SZ 1	SZ 2	SZ 3		5	6	7	8	11	12
Size	1						1					
	2						2					
	3						3					
Max. rated current $I_{n\,max}$ [1]	630 ... 1000 A		■	–	–			1	0			
	1250 ... 1600 A		■	–	–			1	6			
	630 ... 2000 A		■	■	–			2	0			
	2500 A		■	■	–			2	5			
	2000 ... 3200 A		–	■	–			3	2			
	4000 A		–	■	■			4	0			
	4000 ... 5000 A		–	–	■			5	0			
	6300 A		–	–	■			6	3			
Short-circuit breaking capacity I_{cu}	At 500 V [1]	N	■	–	–	55 kA				2		
		S	■	■	–	66 kA				3		
		M	■	■	–	85 kA				4		
		H	–	■	■	100 kA				5		
		C	–	■	■	150 kA				6		
	At 690 V / 1000 V / 1150 V	E	■	–	–	80 / 50 kA / –				8		
			–	■	–	85 / 85 / 50 kA				8		
			–	–	■	3-pole: 150 / 125 / 70 kA 4-pole: 130 / 125 / 70 kA				8		
Number of poles	3-pole										3	
	4-pole, Neutral left										4	
Main connection			■	■ [6]	■	Vertical						1
			■ [2]	■ [3]	■ [4]	Horizontal						2
			■ [2]	■ [3]	■ [5]	Front double hole						3
			■ [2]	■ [3]	■ [5]	Flange						4
			■ [2]	■ [3]	■ [4]	Vertical on top / horizontal at the bottom						5
			■ [2]	■ [3]	■ [4]	Horizontal on top / vertical at the bottom						6
			■ [2]	■ [3]	■ [5]	Flange on top / horizontal at the bottom						7
			■ [2]	■ [3]	■ [5]	Horizontal on top / flange at the bottom						8

[1] Generate the selection of positions 6, 7 and 8 according to the list below
[2] Only ≤2000 A is available for size 1
[3] Only ≤3200 A is available for size 2
[4] Only ≤5000 A is available for size 3
[5] Only for 4000 A is available for size 3
[6] Vertical connection for 3WA size 2 for 4000 A has different dimensions than for the 3WL. With Z option D01, vertical connection can be changed to the connection compatible with 3WL.

The following combinations of positions 6, 7 and 8 are technically possible

Size	Short-circuit breaking capacity I_{cu} at 500 V AC (position 8)			Max. rated current $I_{n\,max}$ (positions 6 and 7)											
				630 A	800 A	1000 A	1250 A	1600 A	2000 A	2500 A	3200 A	4000 A	5000 A	6300 A	
				3P 4P	3P 4P	3P 4P	3P 4P	3P 4P	3P 4P	3P 4P	3P 4P	3P 4P	3P 4P	3P 4P	
1	N	2	55 kA	10-2	10-2	10-2	16-2	16-2	20-3	25-3	–	–	–	–	
	S	3	66 kA	10-3	10-3	10-3	16-3	16-3	20-3	25-3	–	–	–	–	
	M	4	85 kA	20-4	20-4	20-4	20-4	20-4	20-4	25-4	–	–	–	–	
	E	8	50 kA at 1000 V	20-8	20-8	20-8	20-8	20-8	20-8	25-8	–	–	–	–	
2	S	3	66 kA	–	–	–	–	–	20-5	25-5	32-5	40-5	–	–	
	M	4	85 kA	–	–	–	–	–	20-5	25-5	32-5	40-5	–	–	
	H	5	100 kA	–	–	–	–	–	20-5	25-5	32-5	40-5	–	–	
	E	8	85 kA at 1000 V	–	–	–	–	–	20-8	25-8	32-8	40-8	–	–	
	C	6	150 kA	–	–	–	–	–	32-6	32-6	32-6	–	–	–	
3	H	5	100 kA	–	–	–	–	–	–	–	–	40-5	50-5	63-5	
	E	8	125 kA at 1000 V	–	–	–	–	–	–	–	–	50-8	50-8	63-8	
	C	6	150 kA	–	–	–	–	–	–	–	–	50-8	50-8	63-8	

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Guide frames for AC

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	3WA8	5	6	7	8	–	9	10	11	12	–	13	14	15	16
												1			1

Push-in connection [1]	SZ 1, SZ 2, SZ 3	X7, X6, X5	Non-automatic circuit breakers without ready4COM feature	A
		X8, X7, X6, X5	Circuit breakers/non-automatic circuit breakers with ready4COM feature	B
	SZ 2 / SZ 3	X9, X8, X7, X6, X5	Including external trip controller ETC600 for circuit breakers with ETU600 LSIG Hi-Z	K

Position signaling switch	Without position signaling switch	A
	Position signaling switch PSS (3x connected position, 2x test position, 1x disconnected position)	C
	Position signaling switch PSS-COM (1x connected position, 1x test position, 1x disconnected position) for connection to a communication module	G

[1] Conversion to screw-type connection is possible with Z option N03.

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Guide frames for DC

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	5	6	7		8	9	10	11	12		13	14	15	16
3WA8				–		A	U			–	1			1

Guide frames

Size (SZ)	2			2
Max. rated current $I_{n\,max}$	2000 A			2 0
	4000 A			4 0
Short-circuit breaking capacity	D	≤ 600 V DC	25 kA at 600 V DC	1
	E	≤ 1000 V DC	20 kA at 1000 V DC	8
Number of poles	3-pole			3
	4-pole			4
Connection	Withdrawable	Vertical		1
		Horizontal		2
		Front double hole		3
		Flange		4
		Vertical on top / horizontal at the bottom		5
		Horizontal on top / vertical at the bottom		6
		Flange on top / horizontal at the bottom		7
		Horizontal on top / flange at the bottom		8
Secondary disconnect terminal	Push-in connection	X7, X6, X5	Non-automatic circuit breakers	A
		X8, X7, X6, X5	Non-automatic circuit breakers with ready4COM	B
Position signaling switch	Without position signaling switch			A
	Position signaling switch PSS (3x connected position, 2x test position, 1x disconnected position)			C
	Position signaling switch PSS-COM (1x connected position, 1x test position, 1x disconnected position) for connection to a communication module			G

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Accessories and spare parts

Accessories for electronic trip unit

Electronic trip unit ETU600



Basic protective functions	Article No.
LSI / LSIG	3WA9111-0EE62
LSIG Hi-Z	3WA9111-0EE63

Replacement battery for ETU600



	Article No.
	3WA9111-0EE81

Option plug



Basic configuration	Size	Rated current I_n	Article No.	
Protective function LSI, LT, ST, INST			3WA9111-0EB	..
Protective function LSIG, LT, ST, INST, GF (ground-fault protection with extended setting range)			3WA9111-0EX	..
	1, 2	250 A		02
		315 A		03
		400 A		04
		500 A		05
		630 A		06
		800 A		08
		1000 A		10
	1, 2, 3	1250 A		12
		1600 A		16
		2000 A		20
		2500 A		25
	2, 3	3200 A		32
		4000 A		40
	3	5000 A		50
		6300 A		63

Function packages for ETU600



Protective and alarm functions	Article No.
Ground fault alarm (GF alarm)	3WA9111-0ES01
Directed short-time-delayed short-circuit protection (dST) and reverse power protection (RP) (requires an optional voltage tap module)	3WA9111-0ES05
Enhanced protective functions (EPF)	**Article No.**
Full package with unbalance, voltage, active power, frequency, THD and phase sequence detection	3WA9111-0ES11
Phase unbalance current and phase unbalance voltage	3WA9111-0ES12
Undervoltage and overvoltage	3WA9111-0ES13
Active power import and active power export	3WA9111-0ES14
Under-frequency and over-frequency	3WA9111-0ES15
Total harmonic distortion for current and voltage	3WA9111-0ES16
Phase sequence detection	3WA9111-0ES17
Functional expansions	**Article No.**
Second protection parameter set	3WA9111-0ES21
Extended metering function	**Article No.**
Upgrade to metering function PMF-II Basic Power Monitoring (metering values, see catalog page 1/21)	3WA9111-0ES52
Upgrade to metering function PMF-III Advanced Power Monitoring (metering values, see catalog page 1/21)	3WA9111-0ES53

External current sensors for the N-conductor



Version	Size	Article No.
For mounting on busbar	1	3WA9111-0AA21
	2	3WA9111-0AA22
	3	3WA9111-0AA23
For busbar connection	1	3WA9111-0AA31
	2	3WA9111-0AA32
	3	3WA9111-0AA33

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Accessories for electronic trip unit

Internal current sensors (without energy core) for applications with frequency converters

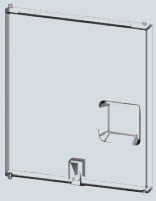
Note: Used in converter applications with high harmonic components
- External 24 V DC supply required
- Undervoltage release required



Scope of supply	Size	Article No.
All parts for 3-pole breaker	2	3WA9111-0AA43
	3	3WA9111-0AA44
All parts for 4-pole breaker	2	3WA9111-0AA46
	3	3WA9111-0AA47

Sealable and lockable cover





Accessory for	Article No.
ETU600	3WA9111-0EM22

Automatic reset of the reclosing lockout



Version	Article No.
Spare part for option K01 or for retrofitting	3WA9111-0EM31

Remote trip alarm reset coil



- For mechanical tripped indicator
- Including automatic reset of the reclosing lockout 3WA9111-0EM31

Voltage	Article No.
24 ... 30 V DC	3WA9111-0EM42
48 ... 60 V DC	3WA9111-0EM44
110 ... 127 V AC / 110 ... 125 V DC	3WA9111-0EM45
208 ... 240 V AC / 220 ... 250 V DC	3WA9111-0EM46

Second tripping solenoid (F6) with reclose lockout



Version	Article No.
For external control via the external trip controller ETC600, including the necessary parts for the secondary disconnect terminal	3WA9111-0EM61

External trip controller ETC600



Version	Article No.
Including adapter for mounting on the secondary disconnect terminal system of the circuit breaker, adapter for mounting on standard mounting rail	3WA9111-0EM62

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Accessories and spare parts

Locking provisions and interlocks

Interlocking sets for mechanical Close/Open





- Consisting of two transparent covers each for sealing or for attaching padlocks (padlocks not included in scope of supply)
- Cover with 6.35 mm hole (for tool actuation)
- Lock mount for safety lock for key operation

Version	Article No.
Without safety lock	3WA9111-0BA21
Made by CES	3WA9111-0BA22
Made by IKON	3WA9111-0BA23

Locking provision against unauthorized closing, in the operator panels



- The disconnector unit fulfills the requirements for main circuit breakers acc. to EN 60204-1
- Spare part for options S01 to S09

Variant	Scope of supply	Article No.
Assembly kit FORTRESS or CASTELL [1]	Without locks, cylinders or keys	3WA9111-0BA31
Made by RONIS	Locks, cylinders and keys included	3WA9111-0BA32
Made by KIRK-Key [1]	Without locks, cylinders or keys	3WA9111-0BA33
Made by PROFALUX	Locks, cylinders and keys included	3WA9111-0BA34
Made by CES	Locks, cylinders and keys included	3WA9111-0BA35
Made by IKON	Locks, cylinders and keys included	3WA9111-0BA36
Assembly kit for padlocks	Without padlock	3WA9111-0BA37

Locking provision against unauthorized closing of the withdrawable circuit breaker



- The disconnector unit fulfills the requirements for main circuit breakers acc. to EN 60204-1
- Consisting of lock in the guide frame, active in connected position, function is retained when circuit breaker is replaced
- Spare part for option R60, R61, R68

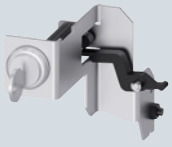
Variant	Scope of supply	Article No.
Made by CES	Locks, cylinders and keys included	3WA9111-0BA51
Made by IKON	Locks, cylinders and keys included	3WA9111-0BA53
Made by KIRK-Key [1]	Without locks, cylinders or keys	3WA9111-0BA57
Made by RONIS	Locks, cylinders and keys included	3WA9111-0BA58
Made by PROFALUX	Locks, cylinders and keys included	3WA9111-0BA50

Locking provision for charging handle with padlock



Version	Scope of supply	Article No.
Spare part for S33	Without padlock	3WA9111-0BA71

Locking provision to prevent movement of the withdrawable circuit breaker



- Safety lock for mounting onto the circuit breaker
- Spare part for option S71, S75, S76

Variant	Scope of supply	Article No.
Made by CES	Locks, cylinders and keys included	3WA9111-0BA73
Made by IKON	Locks, cylinders and keys included	3WA9111-0BA75
Made by PROFALUX	Locks, cylinders and keys included	3WA9111-0BA76
Made by RONIS	Locks, cylinders and keys included	3WA9111-0BA77
Made by KIRK-Key [1]	Without locks, cylinders or keys	3WA9111-0BA80

[1] Locks, cylinders and keys must be ordered from the manufacturer.
Suitable cylinder lock KIRK Key C 900-301.
Suitable lock FORTRESS CLIS X005.
Suitable lock CASTELL FS2.

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Locking provisions and interlocks

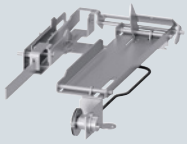
Interlock systems



- 2 of the same keys for 3 circuit breakers
- Locking provision in OFF position
- Lock in the operator panel
- A maximum of 2 circuit breakers can be switched on

Variant	Article No.
Made by CES	3WA9111-0BA43

Locking mechanisms to prevent movement of the withdrawable circuit breakers in disconnected position



- Consisting of Bowden cable and breaker mechanism in the control cabinet door
- Spare part for option R81, R85, R86
- **Note:** Not possible in combination with "Locking mechanism to prevent opening of the control cabinet door" (order code "R30") or "Locking mechanism to prevent movement with the control cabinet door open" (order code "R50")

Variant	Article No.
Made by CES	3WA9111-0BA81
Made by IKON	3WA9111-0BA82
Made by PROFALUX	3WA9111-0BA83
Made by RONIS	3WA9111-0BA84

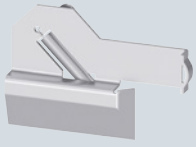
Locking mechanisms to prevent opening of the control cabinet door when the circuit breaker is closed



- Defeatable
- **Note:** Not possible in combination with "Locking mechanism to prevent movement of the withdrawable circuit breakers in disconnected position" (order codes "R81", "R85" or "R86").

Version		Article No.
Spare part for option S30	Fixed-mounted circuit breaker	3WA9111-0BB12
Spare part for option R30	Guide frames	3WA9111-0BB13

Locking mechanisms to prevent movement when the control cabinet door is open



- Mounted on guide frame
- **Note:** Not possible in combination with "Locking mechanism to prevent movement of the withdrawable circuit breakers in disconnected position" (order codes "R81", "R85" or "R86").

Version	Article No.
Spare part for option R50	3WA9111-0BB15

Mutual mechanical interlockings



- With Bowden cable 2000 mm (one required for each circuit breaker)

Type	Circuit breaker and guide frame when ordered separately	Spare part for	Article No.
Fixed-mounted circuit breaker	–	Option S55	3WA9111-0BB21
Module for withdrawable circuit breakers with guide frame	–	Option R55	3WA9111-0BB22
Module for guide frame	✓	Option R56	3WA9111-0BB23
Module for withdrawable circuit breaker	✓	Option R57	3WA9111-0BB24
Adapter for size 3 withdrawable circuit breaker	✓	–	3WA9111-0BB25

Coupling on the circuit breaker for mutual interlocking with Bowden cable



- Can be used in all circuit breakers

Article No.
3WA9111-0BB31

Bowden cable for mutual mechanical interlocking



Length	Article No.
2000 mm	3WA9111-0BB41
3000 mm	3WA9111-0BB42
4500 mm	3WA9111-0BB43

[1] Locks, cylinders and keys must be ordered from the manufacturer.

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Accessories and spare parts

Indicators and control elements

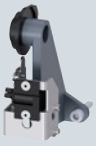
2nd trip alarm switch (S25)



- Can only be used with a circuit breaker with an electronic trip unit
- The 1st trip alarm switch (1 changeover contact) is installed in every circuit breaker with a trip unit as standard

Version	Contacts	Article No.
Spare part for option K06	1 NO contact	3WA9111-0AH03

Mechanical operating cycles counter (5-digit)



Version	For circuit breakers / non-automatic circuit breakers	Article No.
Spare part for option C01	With manual operating mechanism	3WA9111-0AH04
	With spring charging motor	3WA9111-0AH05

Spring charged signaling switch (S21)



- Standard when a spring charging motor is installed to charge the stored energy mechanism
- When a spring charging motor is retrofitted, the spring charged signaling switch can also be retrofitted

Contacts	Article No.
1 NO contact	3WA9111-0AH06

Position signaling switch for withdrawable circuit breakers



Contacts	Article No.
PSS: 6 changeover contacts; 3× connected position, 2× test position, 1× disconnected position	3WA9111-0AH11
PSS-COM: 3 changeover contacts; 1× connected position, 1× test position, 1× disconnected position and option for connection to a communication module	3WA9111-0AH12

Local electric close (S10) for operator panel





- Scope of supply: Button + wiring
- Not available with motor disconnect switch
- **Note:** Possible only for circuit breakers with closing coil

Version	Variant	Article No.
Spare part for option C11	With sealing cap	3WA9111-0AH21
	With CES assembly kit	3WA9111-0AH22
Spare part for option C12	With IKON assembly kit	3WA9111-0AH23

Motor disconnect switch (S12)



- Mounting onto operator panel
- Only in combination with the spring charging motor for charging the stored energy mechanism
- Not available in combination with local electric close

Version	Article No.
Spare part for option S25	3WA9111-0AH24

Emergency OPEN button





- Mushroom pushbutton instead of local mechanical open

Variant	Article No.
Spare part for option S24	3WA9111-0AH25

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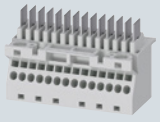
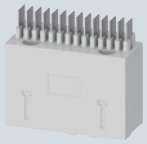
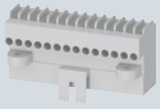
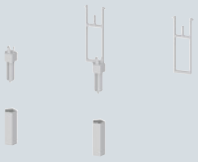
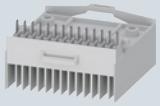
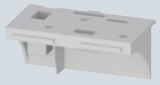
Secondary disconnect terminals for circuit breakers and guide frames

- For size 1, up to 4 secondary disconnect terminal blocks are possible; for sizes 2 and 3, up to 5 secondary disconnect terminal blocks are possible
- Circuit breakers and non-automatic circuit breakers with secondary disconnect terminal blocks are supplied from the factory:
  - Non-automatic circuit breakers with 3 blocks
  - Non-automatic circuit breakers with ready4COM feature with 4 blocks
  - Non-automatic circuit breakers with ETU600 LSI or LSIG with 4 blocks
  - Non-automatic circuit breaker with ETU600 LSIG-HiZ with 5 blocks

Secondary disconnect terminal

	Version	Variant	Article No.
	Base part 1		3WA9111-0AB01
	1000 V extension [1]		3WA9111-0AB02
	Manual connector 2	Screw connection	3WA9111-0AB03
		Push-in connection	3WA9111-0AB04
	Coding kit 3	For fixed-mounted X5 to X8	3WA9111-0AB07
	Sliding contact module 4	For guide frames	3WA9111-0AB08
	Blanking block		3WA9111-0AB12

For a complete secondary disconnect terminal block, you must order:
Fixed-mounted version: 1 + 2 + 3
Withdrawable version: 1 + 4 + 2

[1] Secondary disconnect terminal for circuit breakers with breaking capacity C and E must be ordered separately

Auxiliary releases

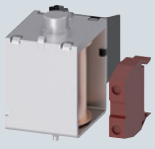
Closing coil (CC) / shunt trip (ST)



- Suitable for continuous duty

Version	Voltage	Article No.
100% OP Switching time ≦80 ms	24 ... 30 V DC	3WA9111-0AD02
	48 ... 60 V DC	3WA9111-0AD04
	110 ... 125 V DC/110 ... 127 V AC	3WA9111-0AD05
	220 ... 250 V DC/208 ... 240 V AC	3WA9111-0AD06

Closing coil (CC)



- For momentary duty, with cut-off switch S15

Version	Voltage	Article No.
5% OP Switching time 50 ms	24 ... 30 V DC	3WA9111-0AD12
	48 ... 60 V DC	3WA9111-0AD14
	110 ... 125 V DC/110 ... 127 V AC	3WA9111-0AD15
	220 ... 250 V DC/208 ... 240 V AC	3WA9111-0AD16

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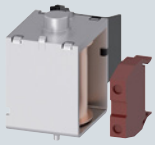
Accessories and spare parts

Auxiliary releases

Shunt trip (ST)



- For momentary duty, with cut-off switch S14

Version	Voltage	Article No.
5% OP Switching time 50 ms	24 ... 30 V DC	3WA9111-0AD22
	48 ... 60 V DC	3WA9111-0AD24
	110 ... 125 V DC/110 ... 127 V AC	3WA9111-0AD25
	220 ... 250 V DC/208 ... 240 V AC	3WA9111-0AD26

Capacitor trip device



- For shunt trips
- Storage time 5 min
- Also suitable for 3VL, 3VA, 3WL and 3WN circuit breakers
- **Note:** Rated control supply voltage must match the rated control supply voltage of the shunt trip

Rated control supply voltage/rated operational voltage		Article No.
AC 50/60 Hz	DC	
220 ... 240 V	220 ... 250 V	3WA9111-0AD81

Undervoltage release (UVR)



Version	Voltage	Article No.
Instantaneous ≤0.08 s (UVR) and short-time delayed ≤0.2 s	24 ... 30 V DC	3WA9111-0AE02
	48 ... 60 V DC	3WA9111-0AE04
	110 ... 125 V DC/110 ... 127 V AC	3WA9111-0AE05
	220 ... 250 V DC/208 ... 240 V AC	3WA9111-0AE06
	380 ... 415 V AC	3WA9111-0AE07
Delayed (UVR-t), adjustable delay 0.2 ... 3.2 s	48 V DC	3WA9111-0AE13
	60 V DC	3WA9111-0AE14
	110 ... 125 V DC/110 ... 127 V AC	3WA9111-0AE15
	220 ... 250 V DC/208 ... 240 V AC	3WA9111-0AE16
	380 ... 415 V AC	3WA9111-0AE17

Operating mechanism

Spring charging motor to charge the stored energy mechanism



Voltage	Article No.
24 ... 30 V DC	3WA9111-0AF02
48 ... 60 V DC	3WA9111-0AF04
110 ... 125 V DC/110 ... 127 V AC	3WA9111-0AF05
220 ... 250 V DC/208 ... 240 V AC	3WA9111-0AF06

Auxiliary contacts

Auxiliary switches (AUX)



Contacts	Article No.
2 NO contacts + 2 NC contacts	3WA9111-0AG01
2 NO contacts	3WA9111-0AG02
1 NO contact + 1 NC contact	3WA9111-0AG03

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Door sealing frame, protective cover

Door sealing frame



Version	Article No.
Spare part for option T40	3WA9111-0AP01

Protective cover IP55



- Cannot be used in conjunction with door sealing frames
- Hood removable and can be opened on both sides

Article No.
3WA9111-0AP03

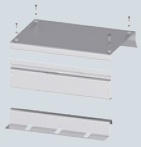
Arc chute, arc chute cover

Arc chute



Voltage	Size	Breaking capacity	Article No.
690 V AC	1	N, S	3WA9111-0AS01
		M	3WA9111-0AS02
	2	S, M, H	3WA9111-0AS10
		C	3WA9111-0AS11
	3	H	3WA9111-0AS17
		C	3WA9111-0AS18
1000 V AC	1	E	3WA9111-0AS04
			3WA9111-0AS05
	2	E	3WA9111-0AS12
	3	E	3WA9111-0AS18
600 V DC	2	D	3WA9111-0AS13
1000 V DC	1	E	3WA9111-0AS06
	2	E	3WA9111-0AS14

Arc chute cover



- Parts kit for guide frame
- Spare part for option R10
- Not available for:
  - Breaking capacity C, D and E
  - 4000 A size 2

Number of poles	Size	Article No.
3-pole	1	3WA9111-0AS31
	2	3WA9111-0AS32
	3	3WA9111-0AS33
4-pole	1	3WA9111-0AS41
	2	3WA9111-0AS42
	3	3WA9111-0AS43

Coding for withdrawable version

Coding for withdrawable version



- Variant coding by the customer with 36 coding options

Size	Article No.
1, 2	3WA9111-0AR11
3	3WA9111-0AR12

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Accessories and spare parts

Grounding connections

Grounding connection between the guide frame and the circuit breaker



- For 30 kA and 60 kA ground short-circuit current
- For 60 kA ground short-circuit current, order 2x contact modules for guide frame

Contact module	Size	Number of poles	Article No.
For guide frames	1, 2 [1]		3WA9111-0BG01
	3		3WA9111-0BG02
For withdrawable circuit breakers	1	3-pole	3WA9111-0BG11
		4-pole	3WA9111-0BG21
	2	3-pole [1]	3WA9111-0BG12
		3-pole [2]	3WA9111-0BG13
		4-pole [1]	3WA9111-0BG22
		4-pole [2]	3WA9111-0BG23

[1] Cannot be used for size 2 with breaking capacity C and size 2, 4000 A.
[2] Not for breaking capacity E

Support brackets

Support brackets



- For mounting fixed-mounted circuit breakers on vertical plane
- Only for sizes 1 and 2 (1 set = 2 units)

Article No.
3WA9111-0BB50

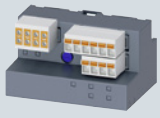
Modules of the **Cubicle**BUS²

COM190 Modbus TCP PROFINET IO communication module



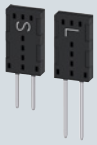
Version	Article No.
Circuit breaker internal or on standard mounting rail, including adapter for mounting on the secondary disconnect terminal system of the circuit breaker, adapter for mounting on standard mounting rail, connecting cables and **Cubicle**BUS² terminating resistor	3WA9111-0EC13

IOM230 digital input/output module (2 inputs and 3 outputs)



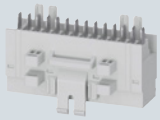
Version	Article No.
Including adapter for mounting on the secondary disconnect terminal system of the circuit breaker, adapter for mounting on standard mounting rail, connecting cables and terminating resistor for **Cubicle**BUS²	3WA9111-0EC11

Terminating resistor for CubicleBUS²



Version	Article No.
For **Cubicle**BUS² on the last module	3WA9111-0EC50

Adapters



Version	Article No.
For mounting the modules of the **Cubicle**BUS² on the secondary disconnect terminal system of the circuit breaker	3WA9111-0EC60
For mounting the modules of the **Cubicle**BUS² on standard mounting rail	3WA9111-0EC61

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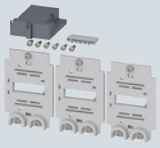
Internal voltage tap



Set of components for conversion of an existing internal voltage tap

Conversion of internal voltage tap on main contact	Circuit breaker	Size	Article No.
From bottom to top	3-pole	1	3WA9111-0EK11
		2	3WA9111-0EK12
		3	3WA9111-0EK13
	4-pole	1	3WA9111-0EK21
		2	3WA9111-0EK22
		3	3WA9111-0EK23
From top to bottom	3-pole	1	3WA9111-0EK31
		2	3WA9111-0EK32
		3	3WA9111-0EK33
	4-pole	1	3WA9111-0EK41
		2	3WA9111-0EK42
		3	3WA9111-0EK43



Retrofit of the internal voltage tap on the lower main conducting paths

For breaking capacity	All parts for circuit breaker	Size	Article No.
N, S, M, H, C with VTM680 voltage tap module	3-pole	1	3WA9111-0EK51
		2	3WA9111-0EK52
		3	3WA9111-0EK53
	4-pole	1	3WA9111-0EK61
		2	3WA9111-0EK62
		3	3WA9111-0EK63
E with VTM640 voltage tap module	3-pole	1	3WA9111-0EK55
		2	3WA9111-0EK56
		3	3WA9111-0EK57
	4-pole	1	3WA9111-0EK65
		2	3WA9111-0EK66
		3	3WA9111-0EK67

Retrofit kit to connect an external voltage transformer



Size	Article No.
2, 3 including VTM640 voltage tap module and the necessary connection components	3WA9111-0EK81

Main conductor connections, fixed-mounted versions

Front-accessible main connections according to DIN 43673, double hole for main connection at top



Size	Breaking capacity | Rated current I_n	Article No.
1	N, S | ≤ 1000 A AC	3WA9111-0AL11
	N, S | 1250 ... 2000 A AC; M, E | ≤ 2000 A AC	3WA9111-0AL12
2	S, M, H, E | 2000 A AC; D, E | ≤ 2000 A DC	3WA9111-0AL21
	S, M, H, E | 2500 A AC	3WA9111-0AL22
	S, M, H, E | 3200 A AC; D, E | 4000 A DC	3WA9111-0AL23
3	H | 4000 A AC	3WA9111-0AL31

Front-accessible main connections according to DIN 43673, double hole for main connection at bottom



Size	Breaking capacity | Rated current I_n	Article No.
1	N, S | ≤ 1000 A AC	3WA9111-0AL13
	N, S | 1250 ... 2000 A AC; M, E | ≤ 2000 A AC	3WA9111-0AL14
2	S, M, H, E | 2000 A AC; D, E | ≤ 2000 A DC	3WA9111-0AL24
	S, M, H, E | 2500 A AC	3WA9111-0AL25
	S, M, H, E | 3200 A AC; D, E | 4000 A DC	3WA9111-0AL26
3	H | 4000 A AC	3WA9111-0AL32

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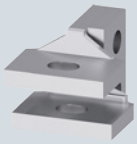
Accessories and spare parts

Main conductor connections, fixed-mounted versions

Rear vertical main connections



Size	Breaking capacity | Rated current I_n	Article No.
1	N, S, M, E | ≤ 2000 A AC [1]	3WA9111-0AM11
	N, S, M, E | 2500 A AC	3WA9111-0AM12
2	S, M, H, C, E | ≤ 3200 A AC [2]	3WA9111-0AM21
3	H, C, E | ≤ 6300 A AC	3WA9111-0AM33

[1] In the case of vertical connection size 1 with breaking capacity N and S, up to 1000 A one 3WA9111-0AM11 vertical connection is required for each connection, from 1250 A to 2000 A or with breaking capacity M or E two 3WA9111-0AM11 vertical connections are required for each connection.

[2] In the case of vertical connection size 2, up to 2500 A one 3WA9111–0AM21 vertical connection is required for each connection for breaking capacity S, M, H, E, D, for 3200 A and always for breaking capacity C, two 3WA9111-0AM21 vertical connections are required for each connection

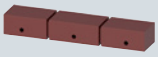
Main conductor connections for withdrawable units

Front-accessible main connections, according to DIN 43673, double hole at top or at bottom [1]



Size	Breaking capacity | Rated current I_n	Article No.
1	N, S | ≤ 1000 A AC	3WA9111-0AN11
	N, S | 1250 ... 2000 A AC; M, E | ≤ 2000 A AC	3WA9111-0AN12
2	N, S | 1250 ... 2000 A AC; M, E | ≤ 2000 A AC	3WA9111-0AN21
	S, M, H, E | 2500 A AC	3WA9111-0AN22
	S, M, H, E | 3200 A AC; D, E | 4000 A DC	3WA9111-0AN23
3	H | 4000 A AC	3WA9111-0AN31

Supports for front-accessible main connections according to DIN 43673



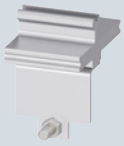
Number of poles	Size	Article No.
3-pole, set for 3 bars, top or bottom	1	3WA9111-0AN81
	2	3WA9111-0AN82
	3	3WA9111-0AN83
4-pole, set for 4 bars, top or bottom	1	3WA9111-0AN84
	2	3WA9111-0AN85
	3	3WA9111-0AN86

Rear vertical main connections



Size	Breaking capacity | Rated current I_n	Article No.
1	N, S | ≤ 1000 A AC	3WA9111-0AV11
	N, S | 1250 ... 2000 A AC; M, E | ≤ 2000 A AC	3WA9111-0AV12
2	S, M, H, E | 2000 A AC; D, E | ≤ 2000 A DC [2]	3WA9111-0AV21
	S, M, H, E | 2500 A AC [2]	3WA9111-0AV22
	S, M, H, E | 3200 A AC; D, E | 4000 A DC [2]	3WA9111-0AV23
	C | 2000 ... 3200 A AC	3WA9111-0AV24
3	H, C, E | ≤ 5000 A AC	3WA9111-0AV31

Rear horizontal main connections



Size	Breaking capacity | Rated current I_n	Article No.
1	N, S | ≤ 1000 A AC	3WA9111-0AX11
	N, S | 1250 ... 2000 A AC; M, E | ≤ 2000 A AC	3WA9111-0AX12
2	S, M, H, E | 2000 A AC; D, E | ≤ 2000 A DC [2]	3WA9111-0AX21
	S, M, H, E | 2500 A AC [2]	3WA9111-0AX22
	S, M, H, E | 3200 A AC; D, E | 4000 A DC [2]	3WA9111-0AX23
	C | 2000 ... 3200 A AC	3WA9111-0AX24
3	H, C, E | ≤ 5000 A AC	3WA9111-0AX31

[1] When using front-accessible main connections (withdrawable circuit breakers) supports are required.

[2] Not for circuit breakers with very high breaking capacity C.

Connecting flange



Size	Breaking capacity | Rated current I_n	Article No.
1	N, S | ≤ 1000 A AC	3WA9111-0AW11
	N, S | 1250 ... 2000 A AC; M, E | ≤ 2000 A AC	3WA9111-0AW12
2	S, M, H, E | 2000 A AC; D, E | ≤ 2000 A DC	3WA9111-0AW21
	S, M, H, E | 2500 A AC	3WA9111-0AW22
	S, M, H, E | 3200 A AC; D, E | 4000 A DC	3WA9111-0AW23
3	H | 4000 A AC	3WA9111-0AW31

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Conversion kit

Conversion kit for converting fixed-mounted circuit breakers into withdrawable circuit breakers

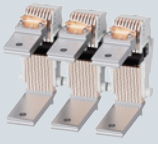


- Guide frames and sliding contact modules must be ordered separately.
- Conversion from fixed-mounted to withdrawable circuit breakers is not possible for 3WA circuit breakers with breaking capacity C and size 3 with breaking capacity E

Number of poles	Size	Article No.
3-pole	1	3WA9111-0BC11
	2	3WA9111-0BC12
	3	3WA9111-0BC13
4-pole	1	3WA9111-0BC14
	2	3WA9111-0BC15
	3	3WA9111-0BC16

Main contact elements

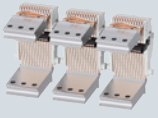
Main contact elements for AC circuit breakers



- **Notes:**
  - To be ordered only once for each circuit breaker
  - On the following circuit breakers, the main contact elements can only be replaced in the factory:
    3WA1 size 1 breaking capacity M and E
    3WA1 size 2 breaking capacity C
    3WA1 size 3 breaking capacity C and E

Number of poles	Size	Breaking capacity	Rated current I_n	Article No.
3	1	N	≤1000 A	3WA9111-0AQ01
			1250 A	3WA9111-0AQ02
			1600 A	3WA9111-0AQ04
		S	≤ 1000 A	3WA9111-0AQ03
			1250 ... 1600 A	3WA9111-0AQ04
		N, S	2000 ... 2500 A	3WA9111-0AQ05
	2	S, M , H, E	2000 A	3WA9111-0AQ08
			2500 A	3WA9111-0AQ11
			3200 A	3WA9111-0AQ13
		S, M, H, E	4000 A	3WA9111-0AQ15
	3	H	4000 A	3WA9111-0AQ20
			5000 ... 6300 A	3WA9111-0AQ22
4	1	N	≤ 1000 A	3WA9111-0AQ51
			1250 A	3WA9111-0AQ52
			1600 A	3WA9111-0AQ54
		S	≤1000 A	3WA9111-0AQ53
			1250 ... 1600 A	3WA9111-0AQ54
		N, S	2000 ... 2500 A	3WA9111-0AQ55
	2	S, M , H, E	2000 A	3WA9111-0AQ58
			2500 A	3WA9111-0AQ61
			3200 A	3WA9111-0AQ63
		S, M, H, E	4000 A	3WA9111-0AQ65
	3	H	4000 A	3WA9111-0AQ70
			5000 ... 6300 A	3WA9111-0AQ72

Main contact elements for DC non-automatic circuit breakers



- **Note:** To be ordered only once for each circuit breaker

Number of poles	Size	Breaking capacity	Rated current I_n	Article No.
3	2	D, E	1000 / 2000 A	3WA9111-0AQ17
			4000 A	3WA9111-0AQ18
4	2	D, E	1000 / 2000 A	3WA9111-0AQ67
			4000 A	3WA9111-0AQ68

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Switching devices for AC and DC

IEC 60947-2

AC





			3WL10		3WL11	
Basic data						
Rated operational voltage U_e		V	≤690		≤1000	
Rated current I_n		A	630 ... 1250		630 ... 2000	
Size			0		1	
Installation type			Withdrawable	Fixed-mounted	Withdrawable	Fixed-mounted
Number of poles			3/4-pole	3/4-pole	3/4-pole	3/4-pole
Dimensions						
Width (3-pole | 4-pole)		mm	278|348	210|280	320|410	320|410
Height (standard) | A05, A15, A16, DC greater than 600 V)		mm	363.5	296	468|518	462
Depth		mm	271	183	471	357
Approvals						
General product approvals			VDE, EAC, CCC, CE, C-Tick		VDE, EAC, CCC, CE, C-Tick	
Marine / shipbuilding			RMRS		ABS, DNV, LR, BV, GL, PRS, RMRS	
Breaking capacity			B	N	S	N	S	H
Rated short-circuit breaking capacity								
Rated operational voltage U_e up to 415 V AC I_{cu} | I_{cs}		kA	42|42	55|50	66|50	55|55	66|66	85|85
Rated operational voltage U_e up to 500 V AC I_{cu} | I_{cs}		kA	42|42	50|50	50|50	55|55	66|66	85|85
Rated operational voltage U_e up to 690 V AC I_{cu} | I_{cs}		kA	–|–	42|42	50|50	42|42	50|50	66|66
Rated operational voltage up to 690 V AC +20% [6], with Z option: A16 I_{cu} | I_{cs}		kA	–|–	–|–	–|–	–|–	–|–	50|50
Rated operational voltage U_e up to 1000 V AC, with Z option: A05 I_{cu} | I_{cs}		kA	–|–	–|–	–|–	–|–	–|–	50|50
Rated operational voltage U_e up to 1150 V AC, with Z option: A15 I_{cu} | I_{cs}		kA	–|–	–|–	–|–	–|–	–|–	–|–
Rated short-time withstand current I_{cw} [5]								
Rated short-time withstand current I_{cw} at U_e up to 500 V AC	0.5 s	kA	–	–	–	55	66	85
	1 s	kA	42	42	50	50	66	85
	2 s	kA	–	–	–	35 [1] / 45 [2]	45	70
	3 s	kA	24	24	36	35 [1] / 45 [2]	35	60
Rated short-time withstand current I_{cw} at U_e up to 690 V AC	0.5 s	kA	–	–	–	42	50	66
	1 s	kA	42	42	50	42	50	66
	2 s	kA	–	–	–	35 [1] / 42 [2]	45	66
	3 s	kA	24	24	36	30 [1] / 45 [2]	35	60
Rated short-time withstand current I_{cw} at DC	1 s	kA	–	–	–	–	–	–
Rated conditional short-circuit current I_{cc} of the non-automatic air circuit breakers								
Up to 500 V AC		kA	–	42	50	55	66	85
Up to 690 V AC		kA	–	42	50	42	50	66
Up to 1000 V/1150 V AC, with Z option: A05		kA	–	–	–	–	–	50/–
Up to 1000 V/1150 V AC, with Z option: A15		kA	–	–	–	–	–	–
Up to 220 V/300 V DC		kA	–	–	–	–	–	–
Up to 600 V/1000 V DC		kA	–	–	–	–	–	–
Rated short-circuit breaking capacity I_{cm}								
I_{cm} at 415 V AC		kA	88	121	145	121	145	187
I_{cm} at 500 V AC		kA	88	105	105	121	145	187
I_{cm} at 690 V AC		kA	–	88	105	88	105	145
I_{cm} at 1000 V AC		kA	–	–	–	–	–	105
I_{cm} at 1150 V AC		kA	–	–	–	–	–	–

[1] Size 1 with $I_{n\ max.}$ ≤1250 A
[2] Size 1 with $I_{n\ max.}$ ≥1600 A
[3] Size 2 with $I_{n\ max.}$ ≤2500 A
[4] Size 2 with $I_{n\ max.}$ ≤3200 A
[5] At a rated voltage ≥690 V the I_{cw} value of the circuit breaker corresponds with the I_{cu} or I_{cs} value

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AC





DC





3WL12				3WL13			3WL11	3WL12	
≤1150				≤1150			1000 DC	≤600/1000 DC	
800 ... 4000				4000 ... 6300			2000	1000 ... 4000	
2				3			1	2	
Withdrawable		Fixed-mounted		Withdrawable		Fixed-mounted	Fixed-mounted	Withdrawable	Fixed-mounted
3/4-pole		3/4-pole		3/4-pole		3/4-pole	4-pole	3/4-pole	3/4-pole
460|590		460|590		704|914		704|914	410	460|590	460|590
468|518		462		468|518		462	462	468|518	462
471		357		471		357	357	471	357
VDE, EAC, CCC, CE, C-Tick				VDE, EAC, CCC, VDE, CE, C-Tick			VDE, EAC, CCC, CE, C-Tick	VDE, EAC, CCC, CE, C-Tick	
ABS, DNV, LR, BV, GL, PRS, RMRS				ABS, DNV, LR, BV, GL, PRS, RMRS			ABS, DNV, LR, BV, GL, PRS, RMRS	ABS, DNV, LR, BV, GL, PRS, RMRS	
N	**S**	**H**	**C** [7]	**H**	**C 3p**	**C 4p**	**DC**	**DC**	
66|66	85|85	100|100	130|130	100|100	150|150	130|130	–	–	
66|66	85|85	100|100	130|130	100|100	150|150	130|130	–	–	
50|50	75|75	85|85	100|100	85|85	150|150	130|130	–	–	
–|–	–|–	–|–	–|–	–|–	–|–	–|–	–	–	
–|–	–|–	85|85	–|–	85|85	125|125	125|125	–	–	
–|–	–|–	50|50	–|–	70|70	–|–	–|–	–	–	
66	85	100	100	100	130	120	–	–	
66	85	85	100	100	130	120	–	–	
66	66 [3] / 85 [4]	66 [3] / 85 [4]	85	100	130	120	–	–	
55 [3] / 66 [4]	55 [3] / 75 [4]	55 [3] / 75 [4]	75	100	130	120	–	–	
50	75	85	100	85	130	120	–	–	
50	75	85	100	85	130	120	–	–	
50	66 [3] / 75 [4]	66 [3] / 85 [4]	85	85	130	120	–	–	
50	55 [3] / 75 [4]	55 [3] / 75 [4]	75	85	130	120	–	–	
–	–	–	–	–	–	–	20	35 [8] / 30 [9] / 25 [10] / 20 [11]	
66	85	100	130	100	130	120	–	–	
50	75	85	100	85	130	120	–	–	
–	–	85/85	–	85/85	–	–	–	–	
–	–	–/50	–	70/70	–	–	–	–	
–	–	–	–	–	–	–	20/20	35/30	
–	–	–	–	–	–	–	20/20	25/20	
145	187	220	286	220	330	286	–	–	
145	187	220	286	220	330	286	–	–	
105	165	187	220	187	330	286	–	–	
–	–	105	–	187	267	267	–	–	
–	–	105	–	147	–	–	–	–	

[6] At 690 V AC +5% the $I_{cu} = I_{cs} = 85$ kA
[7] Up to 3200 A
[8] At $U_e = 220$ V DC
[9] At $U_e = 300$ V DC
[10] At $U_e = 600$ V DC
[11] At $U_e = 1000$ V DC

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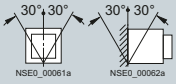
Switching devices for AC

IEC 60947-2





				3WL10				3WL11	
Rated current I_n				**630 A**	**800 A**	**1000 A**	**1250 A**	**1000 A**	**1250 A**
General data									
Isolating function acc. to EN 60947-2				Yes					
Utilization category				B					
Permissible ambient temperature	During operation (in operation with LCD max. 55 °C) [1]		°C	–25 ... +70				–40 ... +70	
	Storage		°C	–40 ... +70				–40 ... +80	
Mounting position									
Degree of protection				IP20 without cabinet door, IP30 with door sealing frame, IP54 with cover				IP20 without cabinet door, IP41 with door sealing frame, IP55 with cover	
Voltage									
Rated operational voltage U_e at 50/60 Hz	1000 V version		V AC	≤690				690/1000	
Rated insulation voltage U_i			V AC	1000				1000	
Rated impulse withstand voltage U_{imp}	Main conducting paths		kV	12				12	
	Auxiliary circuits		kV	4				4	
	Control circuits [9]		kV	2.5				2.5	
Rated rotor operational voltage U_{er}			V					2000	
Permissible load for withdrawable versions [2] [4] [10]									
At rear horizontal main connections	Up to 55 °C (Cu bare)		A	630	800	1000	1250	1000	1250
	Up to 60 °C (Cu bare)		A	630	800	1000	1250	1000	1250
	Up to 70 °C		A	630	800	1000	1250	1000 [8]	1210 [8]
Power loss at I_n									
With three-phase symmetrical load, complete device (3/4p)	Fixed-mounted circuit breaker		W	31	50	78	122	100	105
	Withdrawable circuit breaker		W	62	100	156	244	195	205
Switching times									
Make time			ms	<20	<20	<20	<20	35	
Opening time			ms	<20	<20	<20	<20	38	
Electrical make time (through closing coil) [5]			ms	<50	<50	<50	<50	80	
Electrical opening time (through shunt trip)			ms	<35	<35	<35	<35	73	
Electrical opening time (instantaneous undervoltage release)			ms	<50	<50	<50	<50	73	
Opening time due to ETU, instantaneous short-circuit release			ms	25	25	25	25	50	
Service life/endurance									
Breaking capacity N and S, 3/4-pole									
Mechanical	Without maintenance	Operating cycles		20000	20000	20000	20000	15000	15000
	With maintenance [6]	Operating cycles		–	–	–	–	25000	25000
Electrical	Without maintenance 440 V	Operating cycles		8000 [7]	8000 [7]	8000 [7]	8000 [7]	–	–
	Without maintenance 690 V	Operating cycles		8000 [7]	8000 [7]	8000 [7]	6500 [7]	10000	10000
	With maintenance [6]	Operating cycles		– [7]	– [7]	– [7]	– [7]	25000	25000
Breaking capacity H, 3-pole									
Mechanical	Without maintenance	Operating cycles		–	–	–	–	10000	10000
	With maintenance [6]	Operating cycles		–	–	–	–	15000	15000
Electrical	Without maintenance 690 V	Operating cycles		–	–	–	–	7500	7500
	Without maintenance 1000 V, with Z option: A05	Operating cycles		–	–	–	–	1000	1000
	Without maintenance 1150 V, with Z option: A15	Operating cycles		–	–	–	–	–	–
	With maintenance [6]	Operating cycles		–	–	–	–	15000	15000

[1] The LCD on the 3WL10 is always active.
[2] 4000 A, size 2 in fixed-mounted version, 3-pole
[4] ETU76B with graphics display can be used up to max. 55 °C.
[5] Make time through closing coil for synchronization purposes (short-time excited) 50 ms.
[6] Maintenance means: Replacing main contact elements and arc chutes (see Operating Manual). Greasing the breaker mechanism on the 3WL10, no replacement of components.

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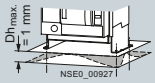
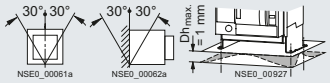
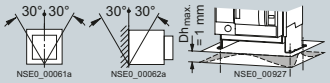
3WL11		3WL12								3WL13		
												
1600 A	**2000 A**	**800 A**	**1000 A**	**1250 A**	**1600 A**	**2000 A**	**2500 A**	**3200 A**	**4000 A**	**4000 A**	**5000 A**	**6300 A**
Yes												
B												
–40 ... +70		–40 ... +70								–40 ... +70		
–40 ... +80		–40 ... +80								–40 ... +80		
												
IP20 without cabinet door, IP41 with door sealing frame, IP55 with cover		IP20 without cabinet door, IP41 with door sealing frame, IP55 with cover								IP20 without cabinet door, IP41 with door sealing frame, IP55 with cover		
690/1000		690/1000								690/1000		
1000		1000								1000		
12		12								12		
4		4								4		
2.5		2.5								2.5		
2000		2000								2000		
1600	2000	800	1000	1250	1600	2000	2500	3200	3950	4000	5000	5920
1600	1930	800	1000	1250	1600	2000	2500	3020	3810	4000	5000	5810
1490 [8]	1780 [8]	800 [8]	1000 [8]	1250 [8]	1600 [8]	2000 [8]	2280 [8]	2870 [8]	3600 [8]	4000 [8]	5000 [8]	5500 [8]
150	240	40	45	80	85	180	270	410	750	520	630	900
350	440	85	95	165	175	320	520	710	925	810	1050	1600
35		35								35		
38		34								34		
80		100								100		
73		73								73		
73		73								73		
50		50								50		
15000	15000	10000	10000	10000	10000	10000	10000	10000	10000	–	–	–
25000	25000	17500	17500	17500	17500	17500	17500	17500	17500	–	–	–
–	–	–	–	–	–	–	–	–	–	–	–	–
10000	10000	7500	7500	7500	7500	7500	7500	4000	2000	–	–	–
25000	25000	17500	17500	17500	17500	17500	17500	17500	17500	–	–	–
10000	10000	10000	10000	10000	10000	10000	10000	10000	10000	5000	5000	5000
15000	15000	15000	15000	15000	15000	15000	15000	15000	15000	10000	10000	10000
7500	7500	7500	7500	7500	7500	7500	7500	4000	2000	2000	2000	2000
1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000
–	–	500	500	500	500	500	500	500	500	500	500	500
15000	15000	15000	15000	15000	15000	15000	15000	15000	15000	10000	10000	10000

[7] Periodic greasing of breaker mechanism on 3WL10 (see Manual), components not to be replaced

[8] Cu painted black

[9] Motorized operating mechanism U_{imp}=1.2 kV

[10] For 3WL size 2 4000A and size 3 6300A with rear vertical main connections.

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Switching devices for AC

IEC 60947-2 (continued)





			3WL10				3WL11	
Rated current I_n			**630 A**	**800 A**	**1000 A**	**1250 A**	**1000 A**	**1250 A**
Service life/endurance								
Breaking capacity H, 4-pole								
Mechanical	Without maintenance	Operating cycles	–	–	–	–	10000	10000
	With maintenance [6]	Operating cycles	–	–	–	–	15000	15000
Electrical	Without maintenance 690 V	Operating cycles	–	–	–	–	7500	7500
	Without maintenance 1000 V	Operating cycles	–	–	–	–	1000	1000
	Without maintenance 1150 V [7]	Operating cycles	–	–	–	–	–	–
	With maintenance [6]	Operating cycles	–	–	–	–	10000	10000
Breaking capacity C								
Mechanical	Without maintenance	Operating cycles	–	–	–	–	–	–
	With maintenance [6]	Operating cycles	–	–	–	–	–	–
Electrical	Without maintenance 690 V	Operating cycles	–	–	–	–	–	–
	With maintenance 690 V [6]	Operating cycles	–	–	–	–	–	–
Switching frequency [8]								
Mechanical / electrical	690 V version	1/h	60 / 30	60 / 30	60 / 30	60 / 30	–	–
	1000 V / 1150 V version	1/h	–	–	–	–	–	–
Connection								
Minimum phase size								
Copper bars, bare		Unit, mm²	2× 40 × 5	2× 50 × 5	2× 50 × 10 [12] 2× 50 × 8 [13]	2× 50 × 10 [12] 2× 50 × 8 [12]	1× 60 × 10	2× 40 × 10
Copper bars, painted black		Unit, mm²	–	–	–	–	1× 60 × 10	2× 40 × 10
Auxiliary conductor (Cu) max. number of auxiliary conductors × cross-section (solid/stranded)								
Standard connection = screw	Without end sleeve		–				2× 0.5 ... 2× 1.5 mm² (AWG 20 ... 16); 1× 2.5 mm² (AWG 14)	
	With end sleeve acc. to DIN 46228 Part 2		–				1× 0.5 ... 1× 1.5 mm² (AWG 20 ... 16)	
	With twin end sleeve		–				2× 0.5 ... 2× 1.5 mm² (AWG 20 ... 16)	
Screwless connection technology	Without end sleeve		0.5 ... 2.5 mm² (AWG 20 ... 14)				2× 0.5 ... 2× 2.5 mm² (AWG 20 ... 14)	
	With end sleeve acc. to DIN 46228 Part 2		0.5 ... 1.5 mm² (AWG 20 ... 16)				2× 0.5 ... 2× 1.5 mm² (AWG 20 ... 16)	
Position signaling switches								
Screwless connection technology			1× 0.5 ... 1× 2.5 mm² (AWG 20 ... 14)				1× 0.5 ... 1× 2.5 mm² (AWG 20 ... 14)	
Weights								
3-pole	Fixed-mounted circuit breaker	kg	14				43	43
	Withdrawable circuit breaker	kg	17.3				45	45
	Guide frames	kg	21				25	25
4-pole	Fixed-mounted circuit breaker	kg	16				50	50
	Withdrawable circuit breaker	kg	19.3				54	54
	Guide frames	kg	25				30	30

[6] Maintenance means: Replacing main contact elements and arc chutes (see Operating Manual).

[7] Size 2 with order code "A15" and size 3. Data for very high breaking capacity.

[8] Minimum interval time between 2 tripping operations

[9] 3-pole switching with breaking capacity N and S: 45/h.

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3WL11		3WL12								3WL13		
												
1600 A	**2000 A**	**800 A**	**1000 A**	**1250 A**	**1600 A**	**2000 A**	**2500 A**	**3200 A**	**4000 A**	**4000 A**	**5000 A**	**6300 A**
10000	10000	10000	10000	10000	10000	10000	10000	10000	10000	5000	5000	5000
15000	15000	15000	15000	15000	15000	15000	15000	15000	15000	10000	10000	10000
7500	7500	7500	7500	7500	7500	7500	7500	4000	2000	2000	2000	2000
1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000
–	–	500	500	500	500	500	500	500	500	500	500	500
10000	10000	15000	15000	15000	15000	15000	15000	15000	15000	10000	10000	10000
–	–	5000	5000	5000	5000	5000	5000	5000	–	5000	5000	5000
–	–	10000	10000	10000	10000	10000	10000	10000	–	10000	10000	10000
–	–	5000	5000	5000	5000	5000	5000	4000	–	1000	1000	1000
–	–	10000	10000	10000	10000	10000	10000	8000	–	–	–	–
–	20/20	60/60 [9]	60/60 [9]	60/60 [9]	60/60 [9]	60/60 [9]	60/60 [9]	60/60 [9]	60/60 [9]	60/60 [9]	60/60 [9]	60/60 [9]
–	–	20/20	20/20	20/20	20/20	20/20	20/20	20/20	20/20	20/20	20/20	20/20
2× 50×10	3× 50×10	1× 50×10	1× 60×10	2× 40×10	2× 50×10	3× 50×10	2× 100×10	3× 100×10	4× 120×10	4× 100×10	6× 100×10	6× 120×10
2× 50×10	3× 50×10	1× 50×10	1× 60×10	2× 40×10	2× 50×10	3× 50×10	2× 100×10	3× 100×10	4× 100×10	4× 100×10	6× 100×10	6× 120×10
2× 0.5 ... 2× 1.5 mm² (AWG 20 ... 16); 1× 2.5 mm² (AWG 14)		2× 0.5 ... 2× 1.5 mm² (AWG 20 ... 16); 1× 2.5 mm² (AWG 14)								2× 0.5 ... 2× 1.5 mm² (AWG 20 ... 16); 1× 2.5 mm² (AWG 14)		
1× 0.5 ... 1× 1.5 mm² (AWG 20 ... 16)		1× 0.5 ... 1× 1.5 mm² (AWG 20 ... 16)								1× 0.5 ... 1× 1.5 mm² (AWG 20 ... 16)		
2× 0.5 ... 2× 1.5 mm² (AWG 20 ... 16)		2× 0.5 ... 2× 1.5 mm² (AWG 20 ... 16)								2× 0.5 ... 2× 1.5 mm² (AWG 20 ... 16)		
2× 0.5 ... 2× 2.5 mm² (AWG 20 ... 14)		2× 0.5 ... 2× 2.5 mm² (AWG 20 ... 14)								2× 0.5 ... 2× 2.5 mm² (AWG 20 ... 14)		
2× 0.5 ... 2× 1.5 mm² (AWG 20 ... 16)		2× 0.5 ... 2× 1.5 mm² (AWG 20 ... 16)								2× 0.5 ... 2× 1.5 mm² (AWG 20 ... 16)		
1× 0.5 ... 1× 2.5 mm² (AWG 20 ... 14)		1× 0.5 ... 1× 2.5 mm² (AWG 20 ... 14)								1× 0.5 ... 1× 2.5 mm² (AWG 20 ... 14)		
43	43	56	56	56	56	56	59	64	85	82	82	90
45	45	60	60	60	60	60	63	68	121	88	88	96
25	25	31	31	31	31	31	39	45	52	60	60	70
50	50	67	67	67	67	67	71	77	103	99	99	108
54	54	72	72	72	72	72	76	82	146	106	106	108
30	30	37	37	37	37	37	47	54	62	84	84	119

[12] Horizontal
[13] Vertical

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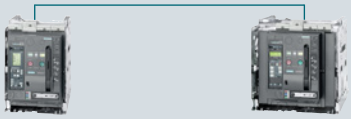
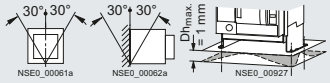
Switching devices for DC

IEC 60947-2



				3WL11		3WL12	
Rated current I_n				**2000 A**	**1000 A**	**2000 A**	**4000 A**
General data							
Size				1		2	
Isolating function acc. to EN 60947-2				Yes			
Utilization category				B			
Permissible ambient temperature	Operation		°C	–40 ... +70			
	Storage		°C	–40 ... +80			
Mounting position							
Degree of protection				IP20 without cabinet door, IP41 with door sealing frame, IP55 with cover			
Voltage							
Rated operational voltage U_e at 50/60 Hz	1000 V version		V DC	1000		600/1000	
Rated insulation voltage U_i			V DC	1000		1000	
Rated impulse withstand voltage U_{imp}	Main conducting paths		kV	12		12	
	Auxiliary circuits		kV	4		4	
	Control circuits		kV	2.5		2.5	
Permissible load							
At rear horizontal main connections	Up to 40 °C (Cu black painted)		A	2000	1000	2000	4000
	Up to 55 °C (Cu black painted)		A	1910	1000	2000	3640
	Up to 60 °C (Cu black painted)		A	1850	1000	2000	3500
	Up to 70 °C (Cu black painted)		A	1710	1000	1950	3250
Power loss at I_n							
With symmetrical load	Withdrawable circuit breaker		W	150	280	770	1640
Switching times							
Make time			ms	35		35	
Opening time			ms	38		34	
Electrical make time (through activation solenoid) [1]			ms	100		100	
Electrical opening time (through shunt trip)			ms	73		73	
Electrical opening time (instantaneous undervoltage release)			ms	73		73	
Service life/endurance [3]							
Mechanical	Without maintenance		Operating cycles	10000	10000	10000	10000
	With maintenance [2]		Operating cycles	15000	17500	17500	17500
Electrical	Without maintenance		Operating cycles	1000	6000	6000	4000
	Without maintenance 1000 V		Operating cycles	1000	1000	1000	1000
	With maintenance [2]		Operating cycles	2000	17500	17500	17500

[1] Make time through activation solenoid for synchronization purposes (short-time excited) 50 ms.

[2] Maintenance means: Replace main contact elements and arc chutes (see Operating Manual).

[3] Further technical specifications on request.

[4] At U_e = 220 V DC

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			3WL11		3WL12	
						
Rated current I_n			**2000 A**	**1000 A**	**2000 A**	**4000 A**
Short-circuit breaking capacity I_{cc}						
Up to 220 V DC		kA	20		35	
Up to 300 V DC		kA	20		30	
Up to 600 V DC		kA	20		25	
Up to 1000 V DC		kA	20		20	
Rated short-time withstand current I_{cw}						
0.5 s		kA	–		–	
1 s		kA	20		35 [4] / 30 [5] / 25 [6] / 20 [7]	
2 s		kA	–		–	
3 s		kA	–		–	
Switching frequency						
690 V version		1/h	–	60	60	60
1000 V version		1/h	20	20	20	20
Connection						
Auxiliary conductor (Cu) max. number of auxiliary conductors × cross-section (solid/stranded)						
Standard connection = strain-relief clamp	Without end sleeve		2× 0.5 ... 2× 1.5 mm² (AWG 20 ... 16); 1× 2.5 mm² (AWG 14)			
	With end sleeve acc. to DIN 46228 Part 2		1× 0.5 ... 1× 1.5 mm² (AWG 20 ... 16)			
	With twin end sleeve		2× 0.5 ... 2× 1.5 mm² (AWG 20 ... 16)			
Optional connection = tension spring	Without end sleeve		2× 0.5 ... 2× 2.5 mm² (AWG 20 ... 14)			
	With end sleeve acc. to DIN 46228 Part 2		2× 0.5 ... 2× 1.5 mm² (AWG 20 ... 16)			
Weights						
3-pole	Fixed-mounted circuit breaker	kg	43	56	56	64
	Withdrawable circuit breaker	kg	–	60	60	68
	Guide frames	kg	–	31	31	45
4-pole	Fixed-mounted circuit breaker	kg	50	67	67	77
	Withdrawable circuit breaker	kg	–	72	72	82
	Guide frames	kg	–	37	37	54

[5] At U_e = 300 V DC
[6] At U_e = 600 V DC
[7] At U_e = 1000 V DC.

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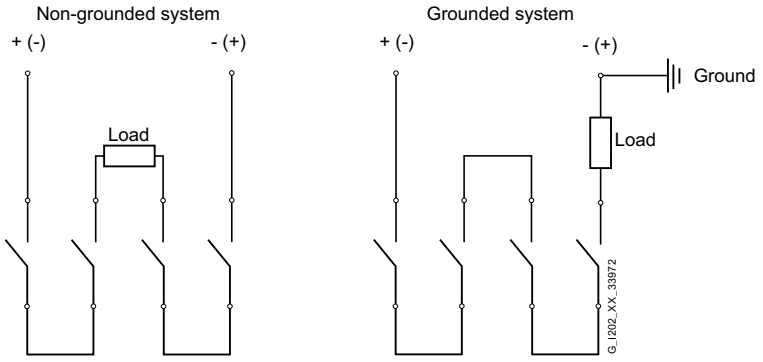
Switching devices for DC

Application examples size 1

Permissible interconnection circuit diagrams for size 1,
1000 V DC non-automatic air circuit breakers



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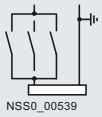
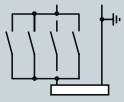
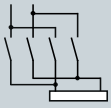
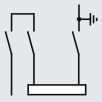
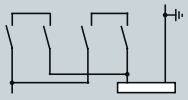
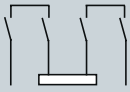
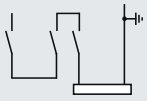
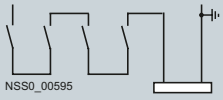
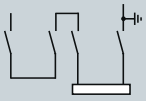
Application examples size 2

The connection to the circuit breakers is not dependent on direction and polarity; the circuit diagrams can be adapted accordingly. If the parallel or series connections are made directly to the connecting bars, for thermal reasons the continuous load on the circuit breakers must only be 80% of the permissible operational current. If the parallel or series connection is made at a distance of 1 m from the connecting bars, the circuit breaker can be used at full operational current load.

Required contact gaps at rated voltage	For 3-pole non-automatic air circuit breakers		For 4-pole non-automatic air circuit breakers	
	1-pole	2-pole	1-pole	2-pole
Rated operational voltage <300 V + 10%				
	 NSS0_00539 only with grounded system [2]		 only with grounded system [3]	
Rated operational voltage >300 V + 10% ... 600 V + 10%				
		 only with grounded system	 only with grounded system [2]	
Rated operational voltage >600 V + 10% ... 1000 V + 10% [4]				
	 only with grounded system		 NSS0_00595 only with grounded system	 only with grounded system

[1] Conducting paths series-connected
[2] 2 parallel conducting paths
[3] 3 parallel conducting paths
[4] Version for 1000 V required, order with "-Z" and order code A05
⊣ Grounded system
▭ Load

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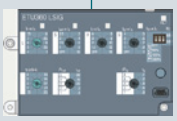
Electronic trip unit ETU

With watchdog monitoring

3WL10



			ETU320 (LI)	ETU350 (LSI)	ETU360 (LSIG)
Basic protection functions					
L	Overload protection (L tripping operation)	Setting range of operating value $I_r = I_n \times$ ...	0.4 | 0.5 | 0.6 | 0.7 | 0.75 | 0.8 | 0.85 | 0.9 | 0.95 | 1 | Default 0.4	0.4 | 0.5 | 0.6 | 0.7 | 0.75 | 0.8 | 0.85 | 0.9 | 0.95 | 1 | Default 0.4	0.4 | 0.5 | 0.6 | 0.7 | 0.75 | 0.8 | 0.85 | 0.9 | 0.95 | 1 | Default 0.4
		Switchable overload protection (from I^2t- to I^4t-dependent function)	–	–	–
		Setting range of delay t_r at I^2t (Reference point 6× I_n)	0.75 | 1 | 2 | 5 | 8 | 10 | 14 | 17 | 21 | 25 s | Default 0.75 s	0.75 | 1 | 2 | 5 | 8 | 10 | 14 | 17 | 21 | 25 s | Default 0.75 s	0.75 | 1 | 2 | 5 | 8 | 10 | 14 | 17 | 21 | 25 s | Default 0.75 s
		Setting range of delay t_r at I^4t (Reference point 6× I_n)	–	–	–
		Thermal memory can be switched on/off	Permanently switched on	Permanently switched on	Permanently switched on
		Phase failure sensitivity / asymmetry	–	–	–
S	Short-time delay short-circuit protection (ST tripping)	Setting range of operating value $I_{sd} = I_n \times$ ...	–	1 | 1.5 | 2 | 2.5 | 3 | 4 | 6 | 8 | 10 | Default OFF	1 | 1.5 | 2 | 2.5 | 3 | 4 | 6 | 8 | 10 | Default OFF
		Setting range of delay time t_{sd} at I^2t	–	0.1 | 0.2 | 0.3 | 0.4 | 0.5 | (Ref. 10× I_n)	0.1 | 0.2 | 0.3 | 0.4 | 0.5 | (Ref. 10× I_n)
		Setting range of delay time t_{sd} (t = const.)	–	0.08 | 0.15 | 0.22 | 0.3 | 0.4 s	0.08 | 0.15 | 0.22 | 0.3 | 0.4 s
		ZSI function	–	–	–
I	Instantaneous short-circuit protection (INST tripping operation)	Setting range 2 = $I_n \times$ ...	OFF | 1.5 | 2 | 3 | 4 | 6 | 8 | 10 | 12 | 15	OFF | 1.5 | 2 | 3 | 4 | 6 | 8 | 10 | 12 | 15	OFF | 1.5 | 2 | 3 | 4 | 6 | 8 | 10 | 12 | 15
N	Neutral conductor protection	Neutral conductor setting range $I_N = I_n \times$ ...	OFF | 50% | 100% | 200%	OFF | 50% | 100% | 200%	OFF | 50% | 100% | 200%
G	Ground-fault tripping (GF tripping) Detection of ground-fault current through summation current formation with internal or external N conductor transformer	Tripping function can be switched on/off	–	–	■
		Alarm function can be switched on/off	–	–	Permanently switched on
		Detection of ground-fault current through external current transformer	–	–	–
		Setting range of the operating current $I_g = I_n \times$ ...	–	–	0.1 | 0.2 | 0.3 | 0.4 | 0.5 | 0.6 | 0.7 | 0.8 | 1
		Setting range of the operating current I_g for alarm	–	–	–
		Setting range of the delay time t_g	–	–	0.1 | 0.2 | 0.4 | 0.6 | 0.8 s | (fixed delay)
		Switchable grounding protection characteristic (I^2t-dependent function)	–	–	t = const. / I^2t | Default I^2t
		Setting range of delay time t_g at I^2t	–	–	0.1 | 0.2 | 0.4 | 0.6 | 0.8 s (Ref. 2× I_n) (I^2t dependent) | Default 0.1 (I^2t)
		ZSI-G function	–	–	–

[1] Sizes 1 and 2 / size 3

■ Available – Not available/not present

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3WL10		3WL11 – 3WL13				
						
ETU650 (LSI)	**ETU660 (LSIG)**	**ETU15B (LI)**	**ETU25B (LSI)**	**ETU27B (LSIG)**	**ETU45B (LSIG)**	**ETU76B (LSIG)**
0.4 ... 1 | Default 1 (in steps of 0.001)	0.4 ... 1 | Default 1 (in steps of 0.001)	0.5 | 0.55 | 0.6 | 0.65 | 0.7 | 0.75 | 0.8 | 0.85 | 0.9 | 1	0.4 | 0.45 | 0.5 | 0.55 | 0.6 | 0.65 | 0.7 | 0.8 | 0.9 | 1	0.4 | 0.45 | 0.5 | 0.55 | 0.6 | 0.65 | 0.7 | 0.8 | 0.9 | 1	0.4 | 0.45 | 0.5 | 0.55 | 0.6 | 0.65 | 0.7 | 0.8 | 0.9 | 1	0.4 ... 1
■	■	–	–	–	■	■
0.75 ... 36 s | (in steps of 0.25 s) | Default 36 s	0.75 ... 36 s | (in steps of 0.25 s) | Default 36 s	10 s fixed	10 s fixed	10 s fixed	2 | 3.5 | 5.5 | 8 | 10 | 14 | 17 | 21 | 25 | 30 s	2 ... 30 s
0.75 ... 5 s | (in steps of 0.25 s) | Default 5 s	0.75 ... 5 s | (in steps of 0.25 s) | Default 5 s	–	–	–	1 | 2 | 3 | 4 | 5 s	1 ... 5 s
■	■	–	–	–	■	■
2% ... 90% (default 50%)	2% ... 90% (default 50%)	–	At t_{sd} = 20 ms (M)	At t_{sd} = 20 ms (M)	At t_{sd} = 20 ms (M)	■ (on/off)
0.6 ... 10 | OFF | (in steps of 0.1)	0.6 ... 10 | OFF | (in steps of 0.1)	–	1.25 | 1.5 | 2 | 2.5 | 3 | 4 | 6 | 8 | 10 | 12	1.25 | 1.5 | 2 | 2.5 | 3 | 4 | 6 | 8 | 10 | 12	1.25 | 1.5 | 2 | 2.5 | 3 | 4 | 6 | 8 | 10 | 12 | OFF	1.25 × I_n ... 0.8 × I_{cw} OFF
0.05 ... 0.5 s (Ref. 10× I_n)	0.05 ... 0.5 s (Ref. 10× I_n)	–	–	–	100 | 200 | 300 | 400 ms	100 ... 400 ms
0.05 ... 0.4 s	0.05 ... 0.4 s	–	M (0.02 ms) | 100 | 200 | 300 | 400 ms	M (0.02 ms) | 100 | 200 | 300 | 400 ms	M (0.02 ms) | 100 | 200 | 300 | 400 ms	M (0.02 ms) | 80 ... 4000 ms
–	–	–	–	–	Via module of the **Cubicle**BUS	Via module of the **Cubicle**BUS
OFF | 1.5 ... 15 | (in steps of 0.1)	OFF | 1.5 ... 15 | (in steps of 0.1)	2 | 3 | 4 | 5 | 6 | 7 | 8	Fixed at 2 ≥20 × I_n, max. 50 kA	Fixed at 2 ≥20 × I_n, max. 50 kA	OFF | 1.5 | 2.2 | 3 | 4 | 6 | 8 | 10 | 12 | 0.8 × I_{cs}	OFF | 1.5 × I_n ... 0.8 × I_{cs}
OFF | 50% | 100% | 150% | 200%	OFF | 50% | 100% | 200%	–	–	100%	OFF | 50% | 100%	OFF | 20% ... 200%
–	■	–	–	■	■	■
–	■	–	–	–	–	■
–	Alternative Rc or G-ret ground-fault monitoring	–	–	–	■	■
–	0.1 ... 1 | (in steps of 0.001) $I_g = I_n$ x	–	–	A [1] (100/400 A) | B [1] (300/600 A); C [1] (600/800 A) | D [1] (900/1000 A); E [1] (1200/1200 A)	A [1] (100/400 A) | B [1] (300/600 A); C [1] (600/800 A) | D [1] (900/1000 A); E [1] (1200/1200 A)	SZ 1, 2: 100 ... 1200 A SZ 3: 400 ... 1200 A
–	50% ... 90% × I_r | (in steps of 1%) PreAlarm	–	–	–	A [1] (100/400 A); B [1] (300/600 A); C [1] (600/800 A); D [1] (900/1000 A); E [1] (1200/1200 A)	SZ 1, 2: 100 ... 1200 A SZ 3: 400 ... 1200 A
–	0.1 ... 1 s | Default 0.1 s | (in steps of 0.05 s)	–	–	100 | 200 | 300 | 400 | 500 ms	100 | 200 | 300 | 400 | 500 ms	100 ... 500 ms
–	t = const. / I^2t | Default const.	–	–	–	■	■
–	0.1 ... 1 s | (in steps of 0.05 s) (Ref. 2× I_n)	–	–	–	100 | 200 | 300 | 400 | 500 ms	100 ... 500 ms
–	–	–	–	–	Via module of the **Cubicle**BUS	Via module of the **Cubicle**BUS

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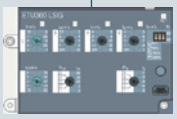
Electronic trip unit ETU

With watchdog monitoring (continued)

3WL10



		ETU320 (LI)	ETU350 (LSI)	ETU360 (LSIG)
Parameter set changeover	Switchable between parameter set A and B	–	–	–
LCD		–	–	–
Voltage tap on top/bottom		–	–	–
Metering function		–	–	–
Tripping operation as a result of extended protection function: (including: phase asymmetry current/voltage, harmonic distortion current/voltage, under/ overvoltage, phase rotation direction, active power in/opposite to normal direction, under/ over-frequency, protection functions dependent on direction of power flow)		–	–	–
Mode of communication				
Communication PROFIBUS | PROFINET | Modbus RTU | Modbus TCP		–	–	–
Output modules				
Signals via relay: Overload warning, load shedding / load carrying, leading signal, overload tripping 200 ms, temperature alarm, phase asymmetry, instantaneous short-circuit release, short time-delayed short-circuit release, overload trip, neutral conductor trip, auxiliary relay, ETU faults, grounding protection tripping and grounding protection alarm (only with grounding protection module)		IOM300	IOM300	IOM300

Increment size when settings are made for the ETU76B using the menu

From ... to	Increment size
0 ... 1	0.1
1 ... 100	1
100 ... 500	5
500 ... 1000	10
1000 ... 1600	50
1600 ... 10000	100
10000 ... max.	1000

■ Available – Not available/not present

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3WL10		3WL11 – 3WL13				
						
ETU650 (LSI)	**ETU660 (LSIG)**	**ETU15B (LI)**	**ETU25B (LSI)**	**ETU27B (LSIG)**	**ETU45B (LSIG)**	**ETU76B (LSIG)**
■	■	–	–	–	–	■
Integrated	Integrated	–	–	–	Optional	Integrated
Optional	Optional	–	–	–	Optional	Optional
Basic / Advanced	Basic / Advanced	–	–	–	Metering function Plus	Metering function Plus
■	■	–	–	–	■	■
■	■	–	–	–	■	■
IOM040 / IOM300	IOM040 / IOM300	–	–	–	■	■

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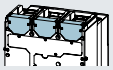
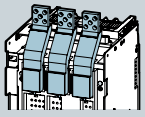
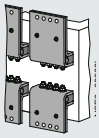
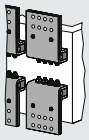
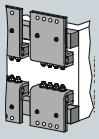
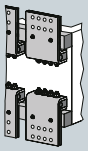
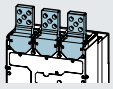
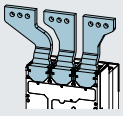
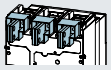
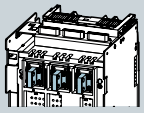
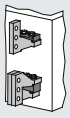
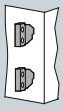
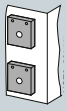
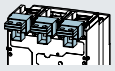
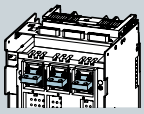
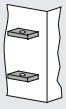
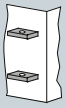
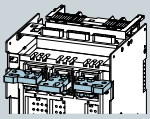
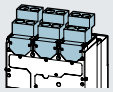
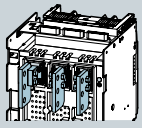
Connection

Main circuit connection

	3WL10		3WL11 – 3WL13			
Connection	**Fixed-mounted**	**Withdrawable**	**Fixed-mounted**		**Withdrawable**	
Front	 Direct	 Extended	 1-hole	 2-hole	 1-hole	 2-hole
	 Extended					
	 Broadened					
Rear	 Vertical	 Vertical	 Vertical		 Vertical	 Flanges
	 Horizontal	 Horizontal	 Horizontal		 Horizontal	
		 Broadened				
cable	 Cable terminals	 Cable lug				

Auxiliary circuit connections

3WL 10: Withdrawable / fixed-mounted version

- Direct engagement of the auxiliary conductor vertically onto the circuit breaker or horizontally in the guide frame



Screwless connection technology (push in)

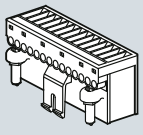
3WL11 – 3WL13: Withdrawable version

- Connection of the internal auxiliary switches to the male connector on the switch side
- When fully inserted, connection with the sliding contact module in the guide frame

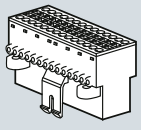
3WL11 – 3WL13: Fixed-mounted version

- Engagement of the auxiliary supply connectors directly onto the circuit breaker

Coding pins on the connectors prevent them being inserted in the wrong slots



Screw connection (standard)



Screwless connection (tension spring) (optional)

System overview, pages 1/108 and 1/72

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Operating mechanism, auxiliary release, auxiliary switch

Operating mechanism

The circuit breakers are available with various optional operating mechanisms:

- Manual operating mechanism with mechanical closing (standard design)
- Manual operating mechanism with mechanical and electrical closing
- Motorized operating mechanism with mechanical and electrical closing

The operating mechanisms with electrical closing are suitable for synchronization tasks.

	Available for air circuit breakers	
	3WL10	3WL11 – 3WL13
Closing coils (CC)	■	■
Undervoltage releases (UVR) / shunt trips (ST)	■	■
Shunt trips (ST)	■	■
Remote reset magnets (RR)	■	■
Spring charging motor (MO)	■	■
Mechanical operating cycles counters	■	■

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System overview 3WL11 – 3WL13

IEC AC 630 – 6300 A, IEC DC ..

For a complete and valid configuration of your air circuit breaker, please use our online configurator at www.siemens.com/lowvoltage/3wl-configurator

Switching devices



Sizes 1 to 3

ETU



LI



LSI



LSING



LSIN, LSING



LSIN, LSING

Accessories



Communi-cation modules



Rating plugs



Remote reset magnets

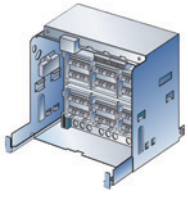


Breaker status sensors (BSS)



Ground-fault modules

Connection



Fixed-mounted, withdrawable versions



Main connection vertical, horizontal, front, flange

Accessories

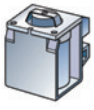


Auxiliary conductor plug-in system

Operating mechanisms and auxiliary releases



Motorized operating mechanisms



Auxiliary releases

Accessories



Closing coils

Note:
You will find a detailed range of accessories in the Accessories and spare parts section.

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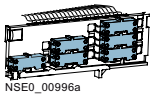
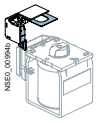
Auxiliary switches



Auxiliary switches



Position signaling switches



Signaling switches

Accessories

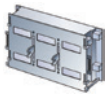


Position signaling switches

Further accessories



Door sealing frames



Shutters



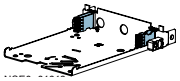
EMERGENCY-OFF pushbuttons



Operating cycle counters



Support brackets



Grounding connections

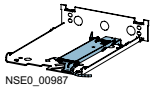
Interlocking



Interlocking sets



Key operation



Locking mechanisms

Note:
You will find a detailed range of accessories in the Accessories and spare parts section.

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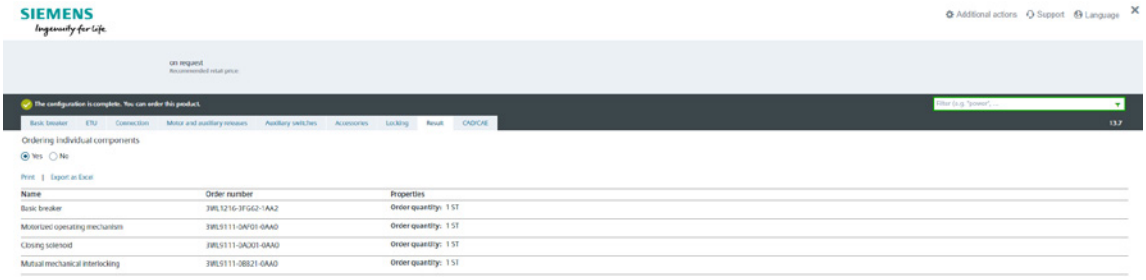
Online configurator highlights

www.siemens.com/lowvoltage/3wl-configurator

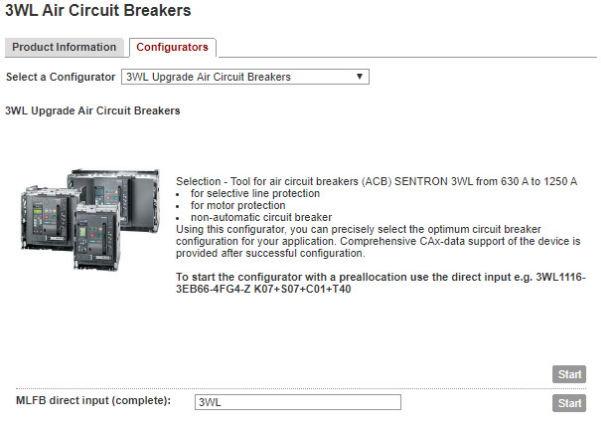
Ungroup into individual components: Divides the finished complete article number into single article numbers



Automatic generation of the 3D model, 2D dimension drawing and the internal circuit diagram according to IEC



Direct entry of an already known article number or parts of an article number



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Structure of the article numbers

Basic configuration for AC circuit breakers

**The structure shown below is intended as an overview of each position and its meaning.
For a complete and valid configuration of your air circuit breaker, please use our online configurator at
www.siemens.com/lowvoltage/3wl-configurator**

1

3WL1	5	6	7	–	8	9	10	11	12	–	13	14	15	16

Basic unit and ETU

		SZ 1	SZ 2	SZ 3		5	6	7
Size (SZ)	1					1		
	2					2		
	3					3		
Max. rated current I_n	630 A	■	–	–			0	6
	800 A	■	■[6]	–			0	8
	1000 A	■	■[6]	–			1	0
	1250 A	■	■[6]	–			1	2
	1600 A	■	■	–			1	6
	2000 A	■	■	–			2	0
	2500 A	–	■	–			2	5
	3200 A	–	■	–			3	2
	4000 A	–	■[6]	■			4	0
	5000 A	–	–	■			5	0
	6300 A	–	–	■			6	3

			SZ 1	SZ 2	SZ 3		8
Short-circuit breaking capacity I_{cu} at 500 V	N	ECO	■	–	–	55 kA	2
			–	■	–	66 kA	2
	S	Standard	■	–	–	66 kA	3
			–	■	–	85 kA	3
	H	High	■	–	–	85 kA	4
			–	■	■	100 kA	4
	C	Very high	–	■	■[8]	130 kA	5
			–	–	■[9]	150 kA	5

				9	10
Trip units	Without trip unit		–	A	A
	With trip unit, without ground-fault tripping	ETU15B [7]	LI	B	B
		ETU25B	LSI	C	B
		ETU45B (without display)	LSIN	E	B
		ETU45B (with display)	LSIN	F	B
		ETU76B	LSIN	N	B
	With trip unit, with ground-fault tripping	ETU27B (without display)	LSING	D	G
		ETU45B (without display)	LSING	E	G
		ETU45B (with display)	LSING	F	G
		ETU76B	LSING	N	G

		11
Number of poles	3-pole (3WL upgrade)	6
	4-pole (3WL upgrade)	7

Connection

		SZ 1	SZ 2	SZ 3		12
Installation type	Fixed-mounted	■	■	■	Vertical	1
		■	■[2]	■[3]	Horizontal	2
		■[4]	■[1]	■[5]	Front single hole	3
		■	■[1]	■[5]	Front double hole	4
	Withdrawable	■	■	■	Without guide frame	5
		■	■[2]	■[3]	Horizontal	6
		■	■	■	Vertical	7
		■	■[1]	■[5]	Flanges	8

[1] Not available for 4000 A and breaking capacity C
[2] Not available for 4000 A
[3] Not available for 6300 A
[4] Not available for 2000 A and breaking capacity H
[5] Not available for 5000 A, 6300 A and breaking capacity C
[6] Not available for breaking capacity C
[7] Not available for size 3
[8] Not available for 3-pole
[9] Not available for 4-pole

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	5	6	7	8	–	9	10	11	12	–	13	14	15	16
3WL1														

Operating mechanisms and auxiliary releases

				13
Stored energy mechanism	Manual recharging of the stored energy mechanismc	With mechanical operation		1
		With mechanical and electrical operation	110 V AC 50/60 Hz / 110 V DC	2
			230 V AC 50/60 Hz / 220 V DC	3
	Motorized operating mechanisms	With mechanical and electrical operation	208 ... 240 V AC 50/60 Hz / 220 ... 250 V DC	4
			110 ... 127 V AC 50/60 Hz / 110 ... 125 V DC	5
			24 V DC	6

			14
1st auxiliary release	Without 1st auxiliary release		A
	With shunt trip 100% OP	24 V DC	B
		30 V DC	C
		48 V DC	D
		60 V DC	E
		110 ... 127 V AC 50/60 Hz / 110 ... 125 V DC	F
		208 ... 240 V AC 50/60 Hz / 220 ... 250 V DC	G

			15
2nd auxiliary release	Without 2nd auxiliary release		A
	With shunt trip 100% OP	24 V DC	B
		30 V DC	C
		48 V DC	D
		60 V DC	E
		110 ... 127 V AC 50/60 Hz / 110 ... 125 V DC	F
		208 ... 240 V AC 50/60 Hz / 220 ... 250 V DC	G
	With undervoltage release, instantaneous	24 V DC	J
		30 V DC	K
		48 V DC	L
		60 V DC	U
		110 ... 127 V AC 50/60 Hz / 110 ... 125 V DC	M
		208 ... 240 V AC 50/60 Hz / 220 ... 250 V DC	N
		380 ... 415 V AC 50/60 Hz	P
	With undervoltage release, delay 0.2 ... 3.2 s	48 V DC	Q
		110 ... 127 V AC 50/60 Hz / 110 ... 125 V DC	R
		208 ... 240 V AC 50/60 Hz / 220 ... 250 V DC	S
		380 ... 415 V AC 50/60 Hz	T

Auxiliary switches

		16
1st auxiliary switch block	2 NO + 2 NC	2
1st + 2nd auxiliary switch block	4 NO + 4 NC	4
	6 NO + 2 NC	7
	5 NO + 3 NC	8

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Structure of the article numbers

Basic configuration for DC circuit breakers

The structure shown below is intended as an overview of each position and its meaning.
For a complete and valid configuration of your air circuit breaker, please use our online configurator at
www.siemens.com/lowvoltage/3wl-configurator

1

				5	6	7		8	9	10	11	12		13	14	15	16
3WL1							–						–				

Basic unit and ETU

Size (SZ)	1				1			
	2				2			
			SZ 1	SZ 2				
Max. rated current I_n	1000 A		–	■		1	0	
	2000 A		■	■		2	0	
	4000 A		–	■		4	0	
Short-circuit breaking capacity I_{cu}	1000 V DC	20 kA	■	–				8
	600 V DC	25 kA	–	■				8
Non-automatic air circuit breakers	Without trip unit						A	A
Number of poles	3-pole (3WL upgrade)		–	■				6
	4-pole (3WL upgrade)		■	■				7

Connection

		SZ 1	SZ 2		
Installation type	Fixed-mounted	■	■	Vertical	1
		■	■	Horizontal	2
		–	■[1]	Front single hole	3
		–	■[1]	Front double hole	4
	Withdrawable	–	■	Without guide frame	5
		–	■	Horizontal	6
		–	■	Vertical	7
		–	■	Flanges	8

[1] Not available for 4000 A

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3WL1 5 6 7 8 – 9 10 11 12 – 13 14 15 16

Operating mechanisms and auxiliary releases

				13	14	15	16
Stored energy mechanism	Manual recharging of the stored energy mechanism	With mechanical operation		1			
		With mechanical and electrical closing, closing coil suitable for uninterrupted duty, 100% ED	110 V AC 50/60 Hz / 110 V DC	2			
			230 V AC 50/60 Hz / 220 V DC	3			
	Motorized recharging	With mechanical and electrical closing, closing coil suitable for uninterrupted duty, 100% ED	208 ... 240 V AC 50/60 Hz / 220 ... 250 V DC	4			
			110 ... 127 V AC 50/60 Hz / 110 ... 125 V DC	5			
			24 V DC	6			
1st auxiliary release	Without 1st auxiliary release				A		
	With shunt trip 100% OP	24 V DC			B		
		30 V DC			C		
		48 V DC			D		
		60 V DC			E		
		110 ... 127 V AC 50/60 Hz / 110 ... 125 V DC			F		
		208 ... 240 V AC 50/60 Hz / 220 ... 250 V DC			G		
2nd auxiliary release	Without 2nd auxiliary release					A	
	With shunt trip 100% OP		24 V DC			B	
			30 V DC			C	
			48 V DC			D	
			60 V DC			E	
			110 ... 127 V AC 50/60 Hz / 110 ... 125 V DC			F	
			208 ... 240 V AC 50/60 Hz / 220 ... 250 V DC			G	
	With undervoltage release, instantaneous (≤80 ms), short-delay (≤200 ms)		24 V DC			J	
			30 V DC			K	
			48 V DC			L	
			60 V DC			U	
			110 ... 127 V AC 50/60 Hz / 110 ... 125 V DC			M	
			208 ... 240 V AC 50/60 Hz / 220 ... 250 V DC			N	
			380 ... 415 V AC 50/60 Hz			P	
	With undervoltage release, delay 0.2 ... 3.2 s		48 V DC			Q	
			110 ... 127 V AC 50/60 Hz / 110 ... 125 V DC			R	
			208 ... 240 V AC 50/60 Hz / 220 ... 250 V DC			S	
			380 ... 415 V AC 50/60 Hz			T	

Auxiliary switches

		16
1st auxiliary switch block	2 NO + 2 NC	2
1st + 2nd auxiliary switch block	4 NO + 4 NC	4
	6 NO + 2 NC	7
	5 NO + 3 NC	8

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Accessory options

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To specify the options, add "-Z" to the complete Article No. and indicate the appropriate order code(s).

3WL....-.....-.... -Z

Accessories for basic configuration

Rated voltage 1000 V AC and 690 V IT networks

- Only for circuit breakers of size 1 - 3 with high breaking capacity H and of size 3 C class.
- Cannot be combined with rated voltage 1150 V AC, order code "A15".

			Order code		
Rated voltage	Size 1 [1]	≤2000 A	A	0	5
	Size 2 [1] [2]	≤4000 A	A	0	5
	Size 3 [1]	≤6300 A	A	0	5

Rated voltage 1150 V AC

- Only for circuit breakers with high breaking capacity H (8th digit of the Article No. is a "4").
- Cannot be combined with rated voltage 1000 V AC, order code "A05".

Rated voltage	Size 2 [1] [2]	≤4000 A	A	1	5
	Size 3 [1] [3]	≤6300 A	A	1	5

Rated voltage 690 V AC (+ 20%)

- Only for 3WL11 circuit breakers, size 1, with high breaking capacity H (8th digit of the Article No. is a "4").

Rated voltage	Size 1	≤ 2000 A	A	1	6

[1] When ordering withdrawable circuit breaker and guide frame separately, specify order code "A05" for withdrawable circuit breaker and guide frame.

[2] Not possible for circuit breakers with very high breaking capacity C.

[3] Front connections are tinned as standard.

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To specify the options, add "-Z" to the complete Article No. and indicate the appropriate order code(s).

3WL....-.....-.... -Z

Accessories for electronic trip units ETU

Rating plugs

- Only one module is possible per circuit breaker (not in conjunction with electronic trip unit ETU15B).
- As standard, the electronic trip units are equipped with a rating plug which is equal to the maximum rated circuit breaker current ($I_{n\ max.}$). The rated current of the selected rating plug must be less than $I_{n\ max.}$.

			Order code		
Module	Sizes 1, 2	250 A	B	0	2
		315 A	B	0	3
		400 A	B	0	4
		500 A	B	0	5
		630 A	B	0	6
		800 A	B	0	8
		1000 A	B	1	0
	Sizes 1, 2, 3	1250 A	B	1	2
		1600 A	B	1	6
		2000 A	B	2	0
	Sizes 2, 3	2500 A	B	2	5
		3200 A	B	3	2
		4000 A	B	4	0
	Size 3	5000 A	B	5	0
		6300 A	B	6	3

Communication [1]

Breaker status sensor (BSS)	For determining the statuses ON / OFF / Tripped	F	0	1
PROFIBUS DP communication port [2]	Including COM15 and breaker status sensor (BSS)	F	0	2
MODBUS RTU communication port [2]	Including COM16 and breaker status sensor (BSS)	F	1	2
PROFINET IO / Modbus TCP communication port [2] new	Including COM35 and breaker status sensor (BSS)	F	3	5

Metering function (communication modules not included) [1]

Metering function Plus	With internal voltage tap on the lower main conducting paths [2]	F	3	6
	With internal voltage tap on the upper main conducting paths [2]	F	3	7
	For combination with external voltage transformer	F	3	8

EMC filter

- Common-mode interference suppressor filters (e.g. in converter applications)
- Insertion loss (asymmetric) in the range 40 kHz to 10 MHz >40 dB.

EMC filter		F	3	1

Overload and short-circuit protection for neutral conductors

- Only possible with 4-pole circuit breaker with ETU27B to ETU76B

Internal current transformer for N conductor	Size 1	F	2	3
	Size 2	F	2	3
	Size 3	F	2	3

[1] The precondition is an ETU45b or ETU76b

[2] When ordering withdrawable circuit breaker and guide frame separately, specify order code "F02", "F12" or "F35" only for withdrawable circuit breaker.

[3] Can only be used for rated voltages up to 690 V AC.

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Accessory options

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3WL....-.....-.... -Z

Accessories for electronic trip units ETU

Remote resetting

		Order code		
Automatic reset of the reclosing lockout		K	0	1
• Remote reset for displays and reset buttons including automatic reset of the reclosing lockout				
Remote reset magnets	24 V DC	K	1	0
	48 V DC	K	1	1
	110 ... 127 V AC 50/60 Hz / 110 ... 125 V DC	K	1	2
	208 ... 240 V AC 50/60 Hz / 220 ... 250 V DC	K	1	3

Connection

Tinned version of the customer's connections on the guide frame

- Only for circuit breakers in withdrawable version with horizontal connection or flange connection.
- The normal delivery time increases to 15 work days.

			Order code		
Customer's connections [1) 2)]	Size 1		A	0	8
	Size 2		A	0	8
	Size 3		A	0	8

Connection technology for main connections (fixed mounting)

			Order code		
Top: [3)] **horizontal Bottom: accessible from front, single hole**	Size 1	≤1600 A	N	1	1
	Size 2	≤3200 A	N	1	1
	Size 3 [4)]	≤4000 A	N	1	1
Top: vertical Bottom: horizontal	Size 1	≤2000 A	N	2	0
	Size 2	≤3200 A	N	2	0
	Size 3	≤5000 A	N	2	0
Top: horizontal Bottom: vertical	Size 1	≤2000 A	N	2	4
	Size 2	≤3200 A	N	2	4
	Size 3	≤5000 A	N	2	4

Connection technology for main connections (withdrawable versions)

			Order code		
Top and bottom: [5) 6)] **accessible from front, single hole**	Size 1	≤1600 A	P	0	0
	Size 2	≤3200 A	P	0	0
	Size 3	≤4000 A	P	0	0
Top and bottom: [5)] **accessible from front, double hole**	Size 1	≤1600 A	P	0	1
	Size 2	≤3200 A	P	0	1
	Size 3	≤4000 A	P	0	1
Top: [5) 6)] **horizontal Bottom: accessible from front, single hole**	Size 1	≤1600 A	P	0	7
	Size 2	≤3200 A	P	0	7
	Size 3	≤4000 A	P	0	7

1) Front connections are tinned as standard.
2) The permissible temperature-rise limits according to IEC 60947-2 are 5 K lower for a tin surface than for a silver surface.
3) Not for 3WL1 size 1 with high breaking capacity H and circuit breakers with very high breaking capacity C.
4) Not for size 3 with very high breaking capacity C.
5) Not for size 2, 3 circuit breakers with very high breaking capacity C.
6) Not for 3WL1 size 1 with high breaking capacity H

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To specify the options, add "-Z" to the complete Article No. and indicate the appropriate order code(s).

3WL....-.....-.... -Z Order code

Connection

Connection technology for main connections (withdrawable versions)

Top: vertical Bottom: horizontal	Size 1	≤2000 A	P	1	8
	Size 2	≤3200 A	P	1	8
	Size 3	≤5000 A	P	1	8
Top: [1] connecting flange Bottom: horizontal	Size 1	≤2000 A	P	1	9
	Size 2	≤3200 A	P	1	9
	Size 3	≤4000 A	P	1	9
Top: horizontal Bottom: vertical	Size 1	≤2000 A	P	2	3
	Size 2	≤3200 A	P	2	3
	Size 3	≤5000 A	P	2	3
Top: [1] horizontal Bottom: connecting flange	Size 1	≤2000 A	P	2	8
	Size 2	≤3200 A	P	2	8
	Size 3	≤4000 A	P	2	8

Connection technology for auxiliary conductors (for fixed-mounted and withdrawable versions)

Connection technology for screwless terminals (tension spring)	Fixed-mounted	N	6	1
	Withdrawable	P	6	1

Operating mechanisms and auxiliary releases

Motorized operating mechanisms	Only possible if the 13th digit of the Article No. = "1"	24 ... 30 V DC	M	0	1
		48 ... 60 V DC	M	0	3
		110 ... 127 V AC 50/60 Hz / 110 ... 125 V DC	M	0	5
		208 ... 240 V AC 50/60 Hz / 220 ... 250 V DC	M	0	6
Mechanical operating cycles counter, 5-digit [2]			C	0	1
Closing coils	• Suitable for uninterrupted duty, 100% OP • Only possible if the 13th digit of the Article No. = "1"	24 V DC	M	2	1
		30 V DC	M	2	2
		48 V DC	M	2	3
		60 V DC	M	2	4
		110 ... 127 V AC 50/60 Hz / 110 ... 125 V DC	M	2	5
		208 ... 240 V AC 50/60 Hz / 220 ... 250 V DC	M	2	6
	• Not suitable for uninterrupted duty, 5% OP, synchronizable [3] • Only possible if the 13th digit of the Article No. = "1"	24 V DC	M	3	1
		48 V DC	M	3	3
		110 ... 127 V AC 50/60 Hz / 110 ... 125 V DC	M	3	5
		208 ... 240 V AC 50/60 Hz / 220 ... 250 V DC	M	3	6
Opening coils (shunt trips) [3] [4]	Not suitable for uninterrupted duty, 5% OP, synchronizable	24 V DC	M	4	1
		48 V DC	M	4	3
		110 ... 127 V AC 50/60 Hz / 110 ... 125 V DC	M	4	5
		208 ... 240 V AC 50/60 Hz / 220 ... 250 V DC	M	4	6

[1] Not for size 2, 3 circuit breakers with very high breaking capacity C.

[2] Only possible with motorized operating mechanism.

[3] Overexcited, i.e. switching time 50 ms (standard >80 ms).

[4] Only possible if the 14th digit of the Article No. for the circuit breaker is "A", i.e. "without 1st auxiliary release".

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Accessory options

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To specify the options, add "-Z" to the complete Article No. and indicate the appropriate order code(s).

3WL....-.....-.... -Z

			Order code		
Auxiliary switches and signaling switches					
Position signaling switches for guide frames	1 CO | 1 CO | 1 CO (connected | test | disconnected position)		R	1	5
	3 CO | 2 CO | 1 CO (connected | test | disconnected position)		R	1	6
Signaling switches	Ready-to-close signaling switches (S20)	1 NO contact	C	2	2
	Spring charged signaling switch [1] (S21)	1 NO contact	C	2	0
	For the first auxiliary release [1] (S22)	1 CO contact	C	2	6
	For the second auxiliary release [1] (S23)	1 CO contact	C	2	7
	1st tripped signaling switch [1] [2] (S24)	1 CO contact	K	0	7
	2nd tripped signaling switch [1] [2] [3] (S25)	1 NO contact	K	0	6
Further accessories					
Pushbuttons / shutdown switches / closing lockouts					
EMERGENCY-OFF pushbuttons	Mushroom pushbutton instead of the mechanical OFF pushbutton		S	2	4
Electrical ON button S10 in the operator panel [1]	This prevents unauthorized electrical closing from the operator panel. Mechanical closing and remote closing remain possible. Possible only for circuit breakers with closing coil (CC)	With sealing cap	C	1	1
		With CES lock	C	1	2
Motor shutdown switch on control panel (S12) [4]	This prevents automatic charging of the stored energy mechanism by the spring charging motor		S	2	5
Special packaging for increased transport requirements (moisture protection)					
Cardboard packaging with water-repellent coating on corrugated cardboard (moisture protection)			A	6	1
Arc chute covers					
• Not available for – 1000 V version (order code "A05"), – DC version – 4000 A size 2 – 1150 V version (order code "A15") – 130 kA version, size 2 – 150 kA version, size 3					
Arc chute covers	3-pole, 4-pole		R	1	0
Shutters					
Shutter: 2-part, lockable, with padlocks [5]	3-pole, 4-pole		R	2	1

[1] Not possible with "communications interface" option, order code "F02", "F12" or "F35".
[2] Not available for non-automatic air circuit breakers.
[3] Only possible with option "K07".
[4] Only for breakers with motorized operating mechanism, not possible with order codes "C11", "C12".
[5] Padlock not included in the scope of supply.

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To specify the options, add "-Z" to the complete Article No. and indicate the appropriate order code(s).

3WL....-.....-.... -Z

Order code

Further accessories

Measuring transformers (without energy transformers), for powering the ETU

- Used in converter applications with high harmonic components; can only be used with ETU45B or ETU76B
  - External 24 V DC supply required
  - Undervoltage release required
- Comprises:
  - 3 (3-pole) or 4 (4-pole) transformers
  - 24 V DC relay
  - Warning signs
  - Manual

Transformer	3-pole, 4-pole	Size 2, 3	K	6	0

Operating manual, printed version

French/Italian			A	1	1
Spanish/Portuguese			A	1	2

Interlocking

Mechanical interlocks

- Interlocking module with Bowden cable 2 m

Mutual mechanical interlockings		For fixed-mounted breakers	S	5	5
		For withdrawable circuit breakers with guide frame	R	5	5
		For guide frames (ordered separately)	R	5	6
		For withdrawable circuit breakers (ordered separately)	R	5	7

Locking devices (for fixed-mounted and withdrawable versions)

- The disconnector unit fulfills the requirements for main circuit breakers according to EN 60204-1

Locking devices	To prevent unauthorized activation in the operator panel	Made by CES	S	0	1
		Made by IKON	S	0	3
		Assembly kit FORTRESS or CASTELL [1]	S	0	5
		Assembly kit for padlocks [2]	S	0	7
		Made by RONIS	S	0	8
		Made by PROFALUX	S	0	9

Locking devices (for fixed-mounted and withdrawable versions)

Locking devices	For operating mechanism handle with padlock [2]		S	3	3

[1] Locks must be ordered from the manufacturer.

[2] Padlock not included in the scope of supply.

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To specify the options, add "-Z" to the complete Article No. and indicate the appropriate order code(s).

3WL....-.....-.... -Z

			Order code		
Interlocking					
Locking devices (for withdrawable version)					
• The disconnector unit fulfills the requirements for main circuit breakers acc. to EN 60204-1, consisting of a lock in the guide frame, active in the connected position, function is retained when circuit breaker is replaced					
• Not possible in combination with order code "R81", "R85" or "R86"					
Locking devices	To prevent unauthorized activation in the operator panel	Made by CES	R	6	1
		Made by RONIS	R	6	8
		Made by PROFALUX	R	6	0
Locking devices (for withdrawable version)					
• Safety lock for mounting onto the circuit breaker					
Locking devices	To prevent movement of withdrawable circuit breaker	Made by CES	S	7	1
		Made by PROFALUX	S	7	5
		Made by RONIS	S	7	6
Locking mechanisms					
• Not possible in combination with order code "R81", "R85" or "R86"					
For fixed-mounted circuit breakers	To prevent opening of the cabinet door in ON position		S	3	0
For withdrawable circuit breakers	To prevent opening of the cabinet door in connected position		R	3	0
	To prevent activation when the cabinet door is open [1) 3)]		R	4	0
	To prevent movement when the cabinet door is open [2)]		R	5	0
Locking mechanisms to prevent movement of the withdrawable circuit breaker in disconnected position					
• Consisting of Bowden cable and lock in the cabinet door					
• Not possible in combination with order code "R30", "R50", "R61", "R68" or "R60"					
Made by CES			R	8	1
Made by PROFALUX			R	8	5
Made by RONIS			R	8	6
Seals					
Door sealing frame for degree of protection IP41			T	4	0
Accessories from current catalog					
Use of the withdrawable circuit breaker in combination with an older guide frame					
• Reduction of the technical specifications for withdrawable circuit breakers 3WL1 for use in combination with older guide frames supplied – as complete circuit breaker with 3WL1...-...3.-.... or 3WL1...-...4.-.... or – as 3WL92..-.A..-.... or – as 3WL92..-.B..-.... or – as 3WL92..-.D..-.... or – as 3WL92..-.E..-.... or					
• for sizes 1, 2, 3.					
Use of the circuit breaker in older guide frames, including the appropriate guide frame coding			A	4	1

[1)] Not available in combination with R50

[2)] Not available in combination with R40

[3)] Combination with R81, R85 and R86 on request

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Further technical specifications

Manual operating mechanism

		3WL11 – 3WL13
Switching on/charging the stored-energy operating mechanism		
Maximum force required to operate the hand lever		≤230 N
Required number of strokes on the hand lever		9

Closing coils

		3WL11 – 3WL13
Primary operating range		
Primary operating range		0.85 ... 1.1 × U_s
Extended operating range for battery operation	At 24 V DC, 48 V DC 60 V DC, 110 V DC 220 V DC	0.7 ... 1.26 × U_s
Rated voltage		
Rated control supply voltage U_s	50/60 Hz AC	110 ... 127 V, 208 ... 240 V
	DC	24 V, 30 V, 48 V, 60 V, 110 ... 125 V, 220 ... 250 V
Operation		
Power consumption	AC/DC	15 VA/15 W
Min. command duration at U_s for the closing coil		60 ms
Short-circuit protection		
Smallest permissible DIAZED fuse (operational class gL)/ automatic circuit breaker with C characteristic; manual operating mechanism with mechanical and electrical closing		1 A TDz (slow)/1 A
Smallest permissible DIAZED fuse (operational class gL)/ automatic circuit breaker with C characteristic; motor and closing coil for the same rated control supply voltages; motorized operating mechanism with mechanical and electrical closing		6 A TDz (slow)/2 A
Smallest permissible DIAZED fuse (operational class gL)/ automatic circuit breaker with C characteristic (for different rated control supply voltages)	At U_s = 24 ... 30 V	6 A
	At U_s = 48 ... 60 V	6 A
	At U_s = 110 ... 125 V DC/ 110 ... 127 V AC	2 A
	At U_s = 220 ... 250 V DC/ 208 ... 240 V AC	2 A

Motor

		3WL11 – 3WL13
Primary operating range		
Primary operating range		0.85 ... 1.1 × U_s
Extended operating range for battery operation	At 24 V DC, 48 V DC 60 V DC, 110 V DC 220 V DC	0.7 ... 1.26 × U_s
Operation		
Power consumption of motor	AC/DC	24/30 V DC, 110 W; 48/60 V DC, 120 W; 110 ... 127 V AC/110 ... 125 V DC, 150 W; 200 ... 240 V AC/220 ... 250 V DC, 130 W
Time required to charge the spring energy store at 1 × U_s		≤10 s
Short-circuit protection		
Smallest permissible DIAZED fuse (operational class gL)/ automatic circuit breaker with C characteristic; motor and closing coil for the same rated control supply voltages		6 A TDz (slow)/2 A
Smallest permissible DIAZED fuse (operational class gL)/ automatic circuit breaker with C characteristic (for different rated control supply voltages)	At U_s = 24 ... 30 V	6 A
	At U_s = 48 ... 60 V	6 A
	At U_s = 110 ... 125 V DC/ 110 ... 127 V AC	2 A
	At U_s = 220 ... 250 V DC/ 208 ... 240 V AC	2 A

Signals of the electronic trip unit

	3WL11 – 3WL13
Signals of the electronic trip unit	
Measuring accuracy of the electronic trip unit	Protection functions acc. to EN 60947; current indication ≤10%; metering function for base quantities ≤1%; metering function for derived quantities ≤4%

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Accessory options

Further technical specifications

Undervoltage releases UVR (F3) and UVR-t_d (F4)

		3WL11 – 3WL13
Primary operating range		
Response values	Pickup	≥0.85 × U_s (circuit breaker can be closed)
	Dropout	0.35 ... 0.7 × U_s (circuit breaker is tripped)
Primary operating range		0.85 ... 1.1 × U_s
Extended operating range for battery operation	At 24 V DC, 30 V DC, 48 V DC, 110 V DC, 220 V DC	0.85 ... 1.26 × U_s
Rated voltage		
Rated control supply voltage U_s	Instantaneous 50/60 Hz AC	110 ... 127 V, 208 ... 240 V, 380 ... 415 V
	Instantaneous DC	24 V, 30 V, 48 V, 60 V, 110 ... 125 V, 220 ... 250 V [1]
	Delayed 50/60 Hz AC	110 ... 127 V, 208 ... 240 V, 380 ... 415 V
	Delayed DC	48 V, 110 ... 125 V, 220 ... 250 V
Operation		
Power consumption (pickup/uninterrupted duty)	AC	20/5 VA
	DC	20/5 W
Opening time of the circuit breaker		
Opening time of the circuit breaker at U_s = 0		200 ms
Version UVR (F3)	Instantaneous	73 ms
	With delay	200 ms
Version UVR-t_d (F8)	With delay, t_d = 0.2 to 3.2 s	0.2 ... 3.2 s
	Reset through additional NC contact – direct tripping	≤100 ms
Short-circuit protection		
Smallest permissible DIAZED fuse (operational class gL)/ miniature circuit breaker with C characteristic		1 A TDz (slow) / 1 A

Shunt trip (ST) (F1, F2)

		3WL11 – 3WL13		
Primary operating range				
Version		For continuous command (100% OP), locks out on momentary-contact commands	5% OP	With spring energy store consisting of shunt trip and capacitor storage device
Response values	Pickup	>0.7 × U_s (circuit breaker is tripped)	>0.7 × U_s (circuit breaker is tripped)	–
Primary operating range		0.7 ... 1.1 × U_s	0.7 ... 1.1 × U_s	0.85 ... 1.1 × U_s
Extended operating range for battery operation	At 24 V DC, 48 V DC 60 V DC, 110 V DC 220 V DC	0.7 ... 1.26 × U_s	0.7 ... 1.26 × U_s	–
Rated voltage				
Rated control supply voltage U_s	50/60 Hz AC	110 ... 127 V, 208 ... 240 V	110 ... 127 V, 208 ... 240 V	110 V, 230 V
	DC	24 V, 30 V, 48 V, 60 V, 110 ... 125 V, 220 ... 250 V	24 V, 48 V, 110 ... 125 V, 220 ... 250 V	110 V, 220 V
Operation				
Power consumption	AC/DC	15 VA/15 W	15 VA/15 W	1 VA/1 W
Min. command duration at U_s		60 ms	25 ms	–
Storage time at Us/$_s$/ Recharging time at U_s		–	–	max. 5 min/ min. 5 s
Opening time of the circuit breaker				
Opening time of the circuit breaker at U_s = 100%	At AC/DC	80 ms	50 ms	80 ms
Short-circuit protection				
Smallest permissible DIAZED fuse (operational class gL)/ automatic circuit breaker with C characteristic		1 A TDz (slow)/1 A		

[1] 24 V and 30 V only with undervoltage release UVR (F3)

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Remote reset magnet for mechanical tripped indicator (F7)

		3WL11 – 3WL13
Primary operating range		
Primary operating range		0.85 ... 1.1 × U_s
Extended operating range for battery operation	At 24 V DC, 48 V DC 110 V DC 220 V DC	0.7 ... 1.26 × U_s
Operation		
Power consumption	AC/DC	50 VA/50 W
Min. command duration at U_s for the remote reset magnet		60 ms
Short-circuit protection		
Smallest permissible DIAZED fuse (operational class gL)/ automatic circuit breaker with C characteristic		2 A TDz (slow)/1 A at 24 V DC and 48 V DC, 1 A TDz (slow)/1 A at 110 V and 208 ... 250 V

Contact position-driven auxiliary switches (S1, S2, S3, S4, S7, S8)

		3WL11 – 3WL13			
Rated voltage					
Rated insulation voltage U_i	AC/DC	500 V			
Rated operational voltage U_e	AC/DC	500 V			
Rated impulse withstand voltage U_{imp}		4 kV			
Contact reliability		From 1 mA at 5 V DC			
Breaking capacity					
Alternating current 50/60 Hz	Rated operational voltage U_e	24 ... 230 V		380 V, 400 V	
	Rated operational current I_e/AC-12	10 A		10 A	
	Rated operational current I_e/AC-15	4 A		3 A	
Direct current	Rated operational voltage U_e	24 V	48 V	110 V	220 V
	Rated operational current I_e/DC-12	10 A	8 A	3.5 A	1 A
	Rated operational current I_e/DC-13	8 A	4 A	1.2 A	0.4 A
Short-circuit protection					
Largest permissible DIAZED fuse (operational class gL)		10 A TDz, 10 A Dz			
Largest permissible miniature circuit breaker with C characteristic		10 A			

Ready-to-close signaling switches (S20) (acc. to DIN VDE 0630)

		3WL11 – 3WL13	
Breaking capacity			
Alternating current 50/60 Hz	Rated operational voltage U_e	250 V	
	Rated operational current I_e	8 A	
Direct current	Rated operational voltage U_e	125 V	250 V
	Rated operational current I_e	0.4 A	0.2 A
	Contact reliability	From 1 mA at 5 V DC	
Short-circuit protection			
Largest permissible DIAZED fuse (operational class gL)		2 A Dz (quick)	

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Accessory options

Further technical specifications

Tripped signaling switches (S24) and signaling switches for auxiliary releases (S22, S23) (acc. to DIN VDE 0630)

		3WL11 – 3WL13		
Breaking capacity				
Alternating current 50/60 Hz	Rated operational voltage U_e	250 V		
	Rated operational current I_e/AC-12	8 A		
Direct current	Rated operational voltage U_e	24 V	125 V	250 V
	Rated operational current I_e/DC-12	6 A	0.4 A	0.2 A
	Contact reliability	From 1 mA at 5 V DC		
Short-circuit protection				
Largest permissible DIAZED fuse (operational class gL)		6 A Dz (quick)		
Tripped signaling switches				
Signal duration after tripping		Until manual or electrical remote reset (option)		

Position signaling switches on guide frame

		3WL11 – 3WL13		
Type of contacts				
Message	"Circuit breaker in connected position"	3 CO	or	1 CO
	"Circuit breaker in test position"	2 CO	or	1 CO
	"Circuit breaker in disconnected position"	1 CO	or	1 CO
Contact reliability (valid from April 1, 2020)		From 1 mA at 5 V DC		
Rated voltage				
Rated insulation voltage U_i	50/60 Hz AC	440 V		
	DC	250 V		
Rated operational voltage U_e		250 V		
Rated impulse withstand voltage U_{imp}		4 kV		
Breaking capacity				
Rated operational current I_e	I_e/AC-12	24 V 10 A, 110/127 V 10 A, 220/240 V 10 A, 320/440 V 10 A		
	I_e/AC-15	220/240 V 4 A, 320/440 V 3 A		
	I_e/DC-12	24 V 10 A, 48 V 2.5 A, 220/240 V 0.2 A		
	I_e/DC-13	24 V 3.0 A, 220/240 V 0.1 A		
	A 300 (AC)	120 V 6 A, 240 V 3 A		
	R 300 (DC)	125 V 0.22 A, 250 V 0.11 A		
Short-circuit protection				
Largest permissible DIAZED fuse (operational class gL)		8 A TDz (slow)		
Largest permissible automatic circuit breaker with C characteristic		8 A TDz (slow)		

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Guide frames for AC

The structure shown below is intended as an overview of each position and its meaning.
For a complete and valid configuration of your Guide frame, please use our online configurator at
www.siemens.com/lowvoltage/3wl-configurator

	5	6	7	8	9	10	11	12	13	14	15	16
3WL9	2	1							–			1

		SZ 1	SZ 2	SZ 3	
Size (SZ)	1				1
	2				2
	3				3
Max. rated current I_n	1000 A [6]	■	–	–	1
	1600 A [6]	■	–	–	2
	2000 A [6]	■	■	–	3
	2500 A [6]	–	■	–	4
	3200 A	–	■	–	5
	4000 A [6]	–	■	■	6
	5000 A	–	–	■	7
	6300 A	–	–	■	8
Number of poles	3-pole				F
	4-pole				G
Main connection	Front, single hole	■ [1]	■ [2]	■ [3]	A
	Front, double hole	■	■ [2]	■ [3]	B
	Horizontal	■	■ [2]	■ [4]	C
	Vertical	■	■	■	D
	Connecting flange	■	■ [2]	■ [3]	E

Breaking capacity $I_{cu} = I_{cs}$	N,	55 kA	■	–	–	N
	S,	66 kA	■	–	–	S
	H,	85 kA	■ [5]	–	–	H
	N, S and H	≤100 kA	–	■	■	H
	C	130 kA	–	■	–	C
	C	150 kA	–	–	■	C

[1] Not available for rated circuit breaker current 2000 A and breaking capacity H
[2] Not available for rated circuit breaker current 4000 A and breaking capacity C
[3] Not available for rated circuit breaker current 5000 A+6300A+breaking capacity C
[4] Not available for rated circuit breaker current 6300 A
[5] Not available for rated circuit breaker current 1000 A + 1600 A
[6] Not available for breaking capacity C

Options

	5	6	7	8	9	10	11	12	13	14	15	16
3WL9	2	1							–			1

Number of auxiliary supply connectors	Without [2]			0	
	1 connector			1	
	2 connectors			2	
	3 connectors			3	
	4 connectors			4	
Type of auxiliary circuit connections	Without [2]				0
	With screw terminals (SIGUT, standard)				1
	With screwless terminals (tension spring)				2
Position signaling switches	Without				0
	1 CO | 1 CO | 1 CO (connected | test | isolated position)				1
	3 CO | 2 CO | 1 CO (connected | test | isolated position)				2
Shutters	Without				A
	With shutter, 2-part, lockable				B

[8] Can only be selected if the number of the auxiliary supply connector is zero.

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Guide frames for DC

**The structure shown below is intended as an overview of each position and its meaning.
For a complete and valid configuration of your Guide frame, please use our online configurator at
www.siemens.com/lowvoltage/3wl-configurator**

	5	6	7	8	9	10	11	12	13	14	15	16
3WL9	2	1	2	–					–		0	1

Max. rated current I_n	2000 A	3
	4000 A	6
Number of poles	3-pole	H
	4-pole	J
Main connection	Front, single hole [1]	A
	Front, double hole [1]	B
	Horizontal	C
	Vertical	D
	Connecting flange	E

[1] Not available for rated circuit breaker current 4000 A

Optionen

	5	6	7	8	9	10	11	12	13	14	15	16
3WL9	2	1	2	–					–		0	1

Number of auxiliary supply connectors	Without	0
	1 connector	1
	2 connectors	2
	3 connectors	3
	4 connectors	4
Type of auxiliary circuit connections	Without [2]	0
	With screw terminals (SIGUT, standard)	1
	With screwless terminals (tension spring)	2
Position signaling switches	Without	0
	1 CO | 1 CO | 1 CO (connected | test | isolated position)	1
	3 CO | 2 CO | 1 CO (connected | test | isolated position)	2
Shutters	Without	A
	With shutter, 2-part, lockable	B

[2] Can only be selected if the number of the auxiliary supply connector is zero.

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Accessories and spare parts

Accessories for electronic trip units ETU

Protective devices with device holder and optional metering function



- For replacement in existing circuit breakers, please specify the circuit breaker ID No. when ordering.

Type	With protection function	Metering function	Article No.
ETU15B	LI	Without	3WL9311-5AA00-0AA2
ETU25B	LSI	Without	3WL9312-5AA00-0AA2
ETU27B	LSING	Without	3WL9312-7AA00-0AA2
ETU45B (without display)	LSIN(G)	Without	3WL9314-5AA00-0AA2
		With metering function Plus	3WL9314-5AA30-0AA2
ETU76B	LSIN(G)	Without	3WL9317-6AA00-0AA2
		With metering function Plus	3WL9317-6AA30-0AA2

Rating plugs


NSE0_00992b

- With the rating plug selected, the maximum rated current $I_{n\,max}$ of the circuit breaker must not be exceeded. The following applies: $I_n \leq I_{n\,max.}$.

Size	Rated current I_n	Article No.
1, 2	250 A	3WL9111-0AA51-0AA0
	315 A	3WL9111-0AA52-0AA0
	400 A	3WL9111-0AA53-0AA0
	500 A	3WL9111-0AA54-0AA0
	630 A	3WL9111-0AA55-0AA0
	800 A	3WL9111-0AA56-0AA0
	1000 A	3WL9111-0AA57-0AA0
1, 2, 3	1250 A	3WL9111-0AA58-0AA0
	1600 A	3WL9111-0AA61-0AA0
	2000 A	3WL9111-0AA62-0AA0
2, 3	2500 A	3WL9111-0AA63-0AA0
	3200 A	3WL9111-0AA64-0AA0
	4000 A	3WL9111-0AA65-0AA0
3	5000 A	3WL9111-0AA66-0AA0
	6300 A	3WL9111-0AA67-0AA0

Ground-fault modules


NSE0_01027a

- Alarm and tripping
- For direct metering of the ground-fault current, e.g. in the star point of the transformer, a 1200 A/1 A current transformer, class 1, is required. The internal load of the 3WL circuit breaker is 0.11 Ω. If the ground-fault current is to be determined using the vectorial sum of the phases, a transformer must be installed in the neutral conductor.

Type	Accessory for	Article No.
GFM AT 45B	ETU45B	3WL9111-0AT53-0AA0
GFM AT 55B – 76B	ETU76B	3WL9111-0AT56-0AA0

Display


NSE0_01609

Accessory for	Version	Article No.
ETU45B	4-line	3WL9111-0AT81-0AA0

Internal current transformers, for N conductor including wiring kit

ETU Release 2	Size	Article No.
–	1	3WL9111-0AA11-0AA0
	2	3WL9111-0AA12-0AA0
	3	3WL9111-0AA13-0AA0
✓	1	3WL9111-0AA14-0AA0
	2	3WL9111-0AA15-0AA0
	3	3WL9111-0AA16-0AA0

External current transformers for N conductor


NSE0_00990a


NSE0_00991a

Copper connection pieces	Size	Article No.
–	1	3WL9111-0AA21-0AA0
	2	3WL9111-0AA22-0AA0
	3	3WL9111-0AA23-0AA0
✓	1	3WL9111-0AA31-0AA0
	2	3WL9111-0AA32-0AA0
	3	3WL9111-0AA33-0AA0

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Accessories and spare parts

Accessories for electronic trip units ETU

EMC filter

- Common-mode interference suppressor filters (e.g. in IT networks, caused by frequency converters)
- Insertion loss (asymmetric) in the range 40 kHz to 10 MHz >40 dB.

Variants	Article No.
Only for ETU Release 2	3WL9111-0AK34-0AA0

Sealable and lockable covers

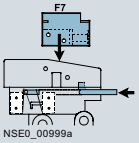


Accessory for	Article No.
ETU15B to ETU45B	3WL9111-0AT45-0AA0
ETU76	3WL9111-0AT46-0AA0

Automatic reset of the reclosing lockout

Version	Article No.
Spare part for option K01	3WL9111-0AK21-0AA0

Remote reset magnets



- For mechanical tripped indicator
- Spare part for options K10 to K13
- **Note:** Automatic reset of the reclosing lockout 3WL9111-0AK21-0AA0 is also required

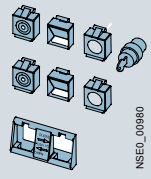
Voltage	Article No.
24 V DC	3WL9111-0AK03-0AA0
48 V DC	3WL9111-0AK04-0AA0
120 V AC / 125 V DC	3WL9111-0AK05-0AA0
208 ... 250 V AC / 208 ... 250 V DC	3WL9111-0AK06-0AA0

Retrofittable internal wiring

Purpose	Male connector	Accessory for	Article No.
Internal CubicleBUS wiring for connection to terminal X8	Without male connector for retrofitting the communication	ETU45B and ETU76B	3WL9111-0AK30-0AA0
For connection of the external N and G transformers to terminal X8	Without male connector	Not for ETU Release 2	3WL9111-0AK31-0AA0
		ETU Release 2	3WL9111-0AK33-0AA0

Locking devices and interlocks

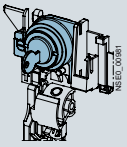
Padlockable protective cover ON / OFF



- Consisting of two transparent covers each for sealing or for attaching padlocks (padlocks not included in scope of supply)
- Cover with 6.35 mm hole (for tool actuation)
- Lock mount for safety lock for key operation

Version	Article No.
Without safety lock	3WL9111-0BA21-0AA0
Made by CES	3WL9111-0BA22-0AA0
Made by IKON	3WL9111-0BA24-0AA0

Locking devices against unauthorized closing, in the operator panels



- The disconnector unit fulfills the requirements for main circuit breakers acc. to EN 60204-1
- Spare part for options S01 to S09

Variant	Scope of supply	Article No.
Assembly kit FORTRESS or Castell	Without locks, cylinders or keys	3WL9111-0BA31-0AA0
Made by RONIS	Locks, cylinders and keys included	3WL9111-0BA33-0AA0
Made by KIRK-Key	Without locks, cylinders or keys	3WL9111-0BA34-0AA0
Made by PROFALUX	Locks, cylinders and keys included	3WL9111-0BA35-0AA0
Made by CES	Locks, cylinders and keys included	3WL9111-0BA36-0AA0
Made by IKON	Locks, cylinders and keys included	3WL9111-0BA38-0AA0
Assembly kit for padlocks	Without padlock	3WL9111-0BA41-0AA0

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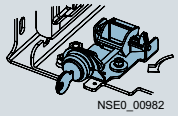
Locking devices and interlocks

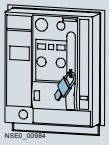
Locking devices against unauthorized closing, for withdrawable circuit breakers


NSE0_00982

- The disconnector unit fulfills the requirements for main circuit breakers acc. to EN 60204-1
- Consisting of lock in the guide frame, active in connected position, function is retained when circuit breaker is replaced
- Spare part for option R60, R61, R68

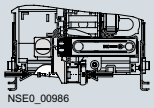
Variant	Scope of supply	Article No.
Made by CES	Locks, cylinders and keys included	3WL9111-0BA51-0AA0
Made by IKON	Locks, cylinders and keys included	3WL9111-0BA53-0AA0
Made by KIRK-Key [1]	Without locks, cylinders or keys	3WL9111-0BA57-0AA0
Made by RONIS	Locks, cylinders and keys included	3WL9111-0BA58-0AA0
Made by PROFALUX	Locks, cylinders and keys included	3WL9111-0BA50-0AA0

Locking devices for operating mechanism handle with padlock


NSE0_00984

Version	Scope of supply	Article No.
Spare part for S33	Without padlock	3WL9111-0BA71-0AA0

Locking device against movement of the withdrawable circuit breaker


NSE0_00986

- Safety lock for mounting onto the circuit breaker
- Spare part for option S71, S75, S76

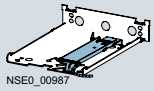
Variant	Scope of supply	Article No.
Made by CES	Locks, cylinders and keys included	3WL9111-0BA73-0AA0
Made by IKON	Locks, cylinders and keys included	3WL9111-0BA75-0AA0
Made by PROFALUX	Locks, cylinders and keys included	3WL9111-0BA76-0AA0
Made by RONIS	Locks, cylinders and keys included	3WL9111-0BA77-0AA0
Made by KIRK-Key [1]	Without locks, cylinders or keys	3WL9111-0BA80-0AA0

Interlocking systems

- 2 of the same keys for 3 circuit breakers
- Locking device in OFF position
- Lock in the operator panel
- A maximum of 2 circuit breakers can be switched on

Variant	Article No.
Made by CES	3WL9111-0BA43-0AA0

Locking devices to prevent movement of the withdrawable circuit breakers in disconnected position


NSE0_00987

- Consisting of Bowden cable and lock in the cabinet door on the circuit breaker
- Spare part for option R81, R85, R86
- **Note:** Not possible in combination with "Locking mechanism to prevent opening of the cabinet door" (order code "R30") or "Locking mechanism to prevent movement with the cabinet door open" (order code "R50")

Variant	Article No.
Made by CES	3WL9111-0BA81-0AA0
Made by IKON	3WL9111-0BA83-0AA0
Made by PROFALUX	3WL9111-0BA85-0AA0
Made by RONIS	3WL9111-0BA86-0AA0

Locking devices to prevent opening of the cabinet door in ON position


NSE0_00988

- Fixed-mounted
- Defeatable
- **Note:** Not possible in combination with "Locking mechanism to prevent movement of the withdrawable circuit breakers in disconnected position" (order codes "R81", "R85" or "R86").

Version	Article No.
Spare part for option S30	3WL9111-0BB12-0AA0

[1] Locks, cylinders and keys must be ordered from the manufacturer.

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Accessories and spare parts

Locking devices and interlocks

Locking devices to prevent opening of the cabinet door

- Guide frames
- Defeatable
- **Note:** Not possible in combination with "Locking mechanism to prevent movement of the withdrawable circuit breakers in disconnected position" (order codes "R81", "R85" or "R86").

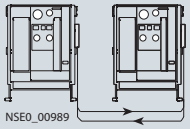
Version	Article No.
Spare part for option R30	3WL9111-0BB13-0AA0

Locking devices to prevent movement with the cabinet door open

- Guide frames
- **Note:** Not possible in combination with "Locking mechanism to prevent movement of the withdrawable circuit breakers in disconnected position" (order codes "R81", "R85" or "R86").

Version	Article No.
Spare part for option R50	3WL9111-0BB15-0AA0

Mutual mechanical interlockings



- With Bowden cable 2000 mm (one required for each circuit breaker)

Type	When ordered separately	Spare part for	Article No.
Fixed-mounted circuit breaker	–	Option S55	3WL9111-0BB21-0AA0
Module for withdrawable circuit breakers with guide frame	–	Option R55	3WL9111-0BB24-0AA0
Module for guide frame	✓	Option R56	3WL9111-0BB22-0AA0
Module for withdrawable circuit breaker	✓	Option R57	3WL9111-0BB23-0AA0
Adapter for size 3 withdrawable circuit breaker	✓	–	3WL9111-0BB30-0AA0

Couplings on the circuit breaker (with ring) for mutual interlocking



- Can be used in all circuit breakers

Article No.
3WL9112-8AH47-0AA0

Bowden cables

Length	Article No.
2000 mm	3WL9111-0BB45-0AA0
3000 mm	3WL9111-0BB46-0AA0
4500 mm	3WL9111-0BB47-0AA0

Test devices

Manual tester, Release 2 for electronic trip units ETU15B to ETU76B



- For testing the electronic trip unit functions of all 3WL ETUs (Release 1 and Release 2)

Article No.
3WL9111-0AT32-0AA0

Function test unit

- For testing the tripping characteristics for electronic trip units ETU15B to ETU76B (Release 1 and Release 2)

Article No.
3WL9111-0AT44-0AA0

TD400 Kit IEC

- Commissioning /Service Tool for IEC 3WL (ETU Release 2) and 3VA
- With adapter, cable and case

Article No.
3VW9011-0AT40

TD400 adapter (spare part)

Version	Article No.
for 3VA	3VW9011-0AT43
for 3WL ETU Release 1	3VW9011-0AT44
for 3WL ETU Release 2	3VW9011-0AT45

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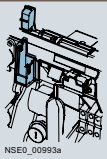
Indicators and control elements

Ready-to-close signaling switches (S20)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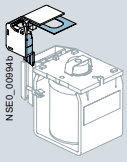
Version	Contacts	Article No.
Spare part for option C22	1 NO contact	3WL9111-0AH01-0AA0

Signaling switch (S22 or S23).


NSE0_00994b

- Not possible with communication port, order code "F02", "F12" or "F35"
- Auxiliary supply connection X7 required for circuit breakers or guide frames. If this is not already available, please order additionally

Version	Contacts	Article No.
Spare part for options C26 to C27	1st or 2nd auxiliary release	3WL9111-0AH02-0AA0

1st tripped signaling switch (S24)

- Not possible with communication port, order code "F02", "F12" or "F35"
- Auxiliary supply connection X7 required for circuit breakers or guide frames. If this is not already available, please order additionally

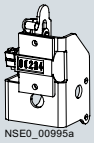
Version	Contacts	Article No.
Spare part for option K07	1 CO contact	3WL9111-0AH14-0AA0

2nd tripped signaling switch (S25)

- Not possible with communication port, order code "F02", "F12" or "F35"
- Auxiliary supply connection X7 required for circuit breakers or guide frames. If this is not already available, please order additionally
- Can only be used in combination with 1st tripped signaling switch

Version	Contacts	Article No.
Spare part for option K06	1 NO contact	3WL9111-0AH17-0AA0

Operating cycle counters


NSE0_00995a

- Only in conjunction with motorized operating mechanism.

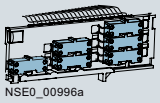
Variant	Version	Article No.
Spare part for option C01	Mechanical	3WL9111-0AH07-0AA0

Spring charged signaling switch

- Not possible with communication port, order code "F02", "F12" or "F35".
- Auxiliary supply connection X7 required for circuit breakers or guide frames. If this is not already available, please order additionally

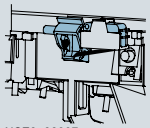
Version	Contacts	Article No.
Spare part for option C20	1 NO contact	3WL9111-0AH08-0AA0

Position signaling switches for guide frames


NSE0_00996a

Version	Contacts	Article No.
Spare part for options R15 to R16	1st block (3 CO contacts)	3WL9111-0AH11-0AA0
	2nd block (6 CO contacts)	3WL9111-0AH12-0AA0

Electrical ON button (S10) for operator panel


NSE0_00997a

- Not possible with communication port, order code "F02", "F12" or "F35"
- Not possible with motor shutdown switch
- Button + wiring (Auxiliary supply connection X7 required for circuit breakers or guide frames. If this is not already available, please order additionally)
- **Note:** Possible only for circuit breakers with closing coil.

Version	Variant	Article No.
Spare part for options C11 to C12	With sealing cap C11	3WL9111-0AJ02-0AA0
	With CES assembly kit C12	3WL9111-0AJ03-0AA0
	With IKON assembly kit	3WL9111-0AJ05-0AA0

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Accessories and spare parts

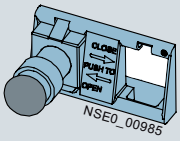
Indicators and control elements

Motor cutout switch (S12)

- Mounting onto operator panel
- Not possible with electrical ON button

Version	Article No.
Spare part for option S25	3WL9111-0AJ06-0AA0

EMERGENCY-OFF pushbuttons

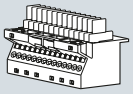


- Mushroom pushbutton instead of the mechanical OFF pushbutton

Variant	Article No.
Spare part for option S24	3WL9111-0BA72-0AA0

Auxiliary conductor connections

Male connectors for circuit breakers ❶



Article No.
3WL9111-0AB01-0AA0

Extension for male connector

- Male connector must be ordered separately

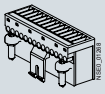
Version	Article No.
1000 V	3WL9111-0AB02-0AA0

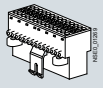
Male connectors and extension

Version	Article No.
1000 V	3WL9111-0AB10-0AA0

Auxiliary supply connection for circuit breakers or guide frames ❷

Version	Article No.
Screw connection (SIGUT)	3WL9111-0AB03-0AA0
Screwless connection (tension spring)	3WL9111-0AB04-0AA0





Coding kits ❸



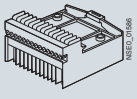
Version	Article No.
For fixed-mounted X5 to X8	3WL9111-0AB07-0AA0

Sliding contact modules for guide frames ❹



Article No.
3WL9111-0AB08-0AA0

One-part sliding contact modules for guide frames ❺



Version	Article No.
Screw terminals (SIGUT)	3WL9111-0AB18-0AA0

Blanking blocks for circuit breakers

Article No.
3WL9111-0AB12-0AA0

For a complete auxiliary current connection you must order:
Fixed-mounted version: ❶ + ❷ + ❸
Withdrawable version: ❶ + ❹ + ❷ and ❶ + ❺

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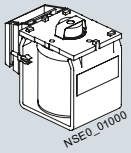
Auxiliary releases

Closing coils / shunt trips



Version	Voltage	Article No.
100% OP	24 V DC	3WL9111-0AD01-0AA0
	30 V DC	3WL9111-0AD02-0AA0
	48 V DC	3WL9111-0AD03-0AA0
	60 V DC	3WL9111-0AD04-0AA0
	110 ... 125 V DC/110 ... 127 V AC	3WL9111-0AD05-0AA0
	220 ... 250 V DC/208 ... 240 V AC	3WL9111-0AD06-0AA0
5% OP Switching time 50 ms (standard >80 ms).	24 V DC	3WL9111-0AD11-0AA0
	48 V DC	3WL9111-0AD12-0AA0
	110 ... 125 V DC/110 ... 127 V AC	3WL9111-0AD13-0AA0
	220 ... 250 V DC/208 ... 240 V AC	3WL9111-0AD14-0AA0

Undervoltage release

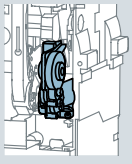




Version	Voltage	Article No.
Instantaneous	24 V DC	3WL9111-0AE01-0AA0
	30 V DC	3WL9111-0AE02-0AA0
	48 V DC	3WL9111-0AE03-0AA0
	60 V DC	3WL9111-0AE07-0AA0
	110 ... 125 V DC/110 ... 127 V AC	3WL9111-0AE04-0AA0
	220 ... 250 V DC/208 ... 240 V AC	3WL9111-0AE05-0AA0
	380 ... 415 V AC	3WL9111-0AE06-0AA0
Delayed	48 V DC	3WL9111-0AE11-0AA0
	110 ... 125 V DC/110 ... 127 V AC	3WL9111-0AE12-0AA0
	220 ... 250 V DC/208 ... 240 V AC	3WL9111-0AE13-0AA0
	380 ... 415 V AC	3WL9111-0AE14-0AA0

Operating mechanism

Motorized operating mechanisms

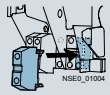


- Auxiliary supply connection X5 required for circuit breakers or guide frames.
  If this is not already available, please order additionally

Voltage	Article No.
24 ... 30 V DC	3WL9111-0AF01-0AA0
48 ... 60 V DC	3WL9111-0AF02-0AA0
110 ... 125 V DC/110 ... 127 V AC	3WL9111-0AF03-0AA0
220 ... 250 V DC/208 ... 240 V AC	3WL9111-0AF04-0AA0

Auxiliary contacts

Auxiliary switch blocks



Contacts	Article No.
2 NO contacts + 2 NC contacts	3WL9111-0AG01-0AA0
2 NO contacts	3WL9111-0AG02-0AA0
1 NO contact + 1 NC contact	3WL9111-0AG03-0AA0

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Accessories and spare parts

Door sealing frames, hoods, shutters

Door sealing frames



Version	Article No.
Spare part for option T40	3WL9111-0AP01-0AA0

Protective cover IP55



- Cannot be used in conjunction with door sealing frames
- Hood removable and can be opened on both sides

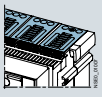
Article No.
3WL9111-0AP02-0AA0

Shutters

Version	Number of poles	Size	Breaking capacity	Article No.
Spare part for option R21	3-pole	1	N, S, H	3WL9111-0AP04-0AA0
		2	N, S, H	3WL9111-0AP06-0AA0
			C	3WL9111-0AP43-0AA0
		3	H, C	3WL9111-0AP07-0AA0
	4-pole	1	N, S, H	3WL9111-0AP08-0AA0
		2	N, S, H	3WL9111-0AP11-0AA0
			C	3WL9111-0AP44-0AA0
		3	H, C	3WL9111-0AP12-0AA0

Arc chute

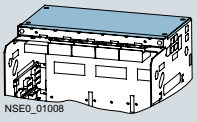
Arc chute



Voltage	Size	Breaking capacity	Article No.
690 V	1	N, S, H	3WL9111-0AS01-0AA0
	2	N, S, H	3WL9111-0AS02-0AA0
		C	3WL9111-0AS10-0AA0
	3	H, C	3WL9111-0AS03-0AA0
1000 V / 1150 V	2	H, C	3WL9111-0AS05-0AA0
	3	H, C	3WL9111-0AS06-0AA0

Arc chute covers

- Parts kit for guide frame
- Spare part for option R10
- Not available for
  - 1000 V version (order code "A05"),
  - 1150 V version (order code "A15")
  - DC version,
  - 4000 A size 2,
  - Circuit breakers with very high breaking capacity C.



Number of poles	Size	Article No.
3-pole	1	3WL9111-0AS32-0AA0
	2	3WL9111-0AS36-0AA0
	3	3WL9111-0AS38-0AA0
4-pole	1	3WL9111-0AS42-0AA0
	2	3WL9111-0AS44-0AA0
	3	3WL9111-0AS46-0AA0

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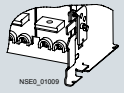
Coding for withdrawable version

Coding for withdrawable version

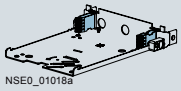


- By customer, for 36 coding variants

Size	Article No.
1, 2	3WL9111-0AR12-0AA0
3	3WL9111-0AR13-0AA0

Grounding connections

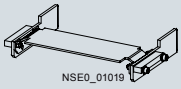
Grounding connection between the guide frame and the withdrawable circuit breaker



- Order 2× for 30 kA ground short-circuit current
- Contacting modules for guide frame

Size	Article No.
1 and 2 [1]	3WL9111-0BA01-0AA0
3	3WL9111-0BA02-0AA0

Contacting modules for withdrawable circuit breakers



Number of poles	Size	Article No.
3-pole	1	3WL9111-0BA05-0AA0
	2 [1]	3WL9111-0BA06-0AA0
	3	3WL9111-0BA07-0AA0
4-pole	1	3WL9111-0BA08-0AA0
	2 [1]	3WL9111-0BA04-0AA0
	3	3WL9111-0BA10-0AA0

[1] Cannot be used for size 2 with very high breaking capacity C and size 2, 4000 A.

Support brackets

Support brackets



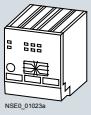
- For mounting fixed-mounted circuit breakers on vertical plane
- Only for sizes 1 and 2 (1 set = 2 units)

Article No.
3WL9111-0BB50-0AA0

Modules of the CubicleBUS

- Each modules of the **Cubicle**BUS is supplied with a 0.2 m pre-assembled cable to connect the modules with each other. A longer pre-assembled cable is required for connection to the circuit breaker.
- All communication components, modules of the **Cubicle**BUS and metering functions are available for the electronic trip units ETU45B and ETU76B.

CubicleBUS modules



Type	Article No.
Digital output modules with rotary coding switch, relay outputs	3WL9111-0AT26-0AA0
Digital output modules, configurable, relay outputs	3WL9111-0AT20-0AA0
Digital input module	3WL9111-0AT27-0AA0
Analog output module	3WL9111-0AT23-0AA0
ZSI module	3WL9111-0AT21-0AA0

Preassembled cables for Modules of the CubicleBUS

For connection to 3WL	Length	Article No.
With COM15/COM16/COM35	0.5 m	3WL9111-0BC04-0AA0
	1 m	3WL9111-0BC02-0AA0
	2 m	3WL9111-0BC03-0AA0
Without COM15/COM16/COM35	2 m	3WL9111-0BC05-0AA0

Voltage transformers

- Required for 3WL circuit breakers with metering function Plus, if no direct voltage tap is available.
- 380 ... 690 V/100 V, class 0.5

Number of poles	Metering function	Article No.
3-pole	With metering function Plus	3WL9111-0BB68-0AA0

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Accessories and spare parts

Retrofitting and spare parts

- For retrofitting the COM15, COM16 or COM35 communication modules in withdrawable 3WL circuit breakers with Z options A05 (1000 V AC), A15 (1150 V AC) or A16 (690 V + 20%), the following additional assembly kits are required: 3WL9111-0AT62-0AA0 for circuit breakers size 1 or 3WL9111-0AT63-0AA0 for circuit breakers size 2/3

COM35 PROFINET IO / Modbus TCP modules new



Version	Article No.
For electronic trip units ETU45B and ETU76B	3WL9111-0AT65-0AA0

PROFINET IO / Modbus TCP retrofit kits

- Retrofit kit for the PROFINET IO / Modbus TCP communication including COM35, BSS and set of cables for all 3WL air circuit breakers with ETU45B and ETU76B electronic trip units

Article No.
3WL9111-0AT66-0AA0

PROFIBUS retrofit kits

- Retrofit kit for the PROFIBUS communication including COM15, BSS and set of cables for all 3WL air circuit breakers with ETU45B and ETU76B electronic trip units

Article No.
3WL9111-0AT12-0AA0

COM15 PROFIBUS modules



Version	Article No.
For electronic trip units ETU45B and ETU76B	3WL9111-0AT15-0AA0

COM16 Modbus RTU modules

Version	Article No.
For electronic trip units ETU45B and ETU76B	3WL9111-0AT17-0AA0

Modbus RTU retrofit kits IEC

- Retrofit kit for the Modbus communication including COM16, BSS and set of cables for all 3WL air circuit breakers with ETU45B and ETU76B electronic trip units

Article No.
3WL9111-0AT18-0AA0

Additional parts for retrofitting the COM15/COM16/COM35 communication modules

- In withdrawable 3WL circuit breakers with Z options:
  - A05 (1000 V AC) or
  - A15 (1150 V AC) or
  - A16 (690 V + 20%)

Size	Article No.
1	3WL9111-0AT62-0AA0
2, 3	3WL9111-0AT63-0AA0

Breaker status sensors (BSS)



Version	Article No.
• For acquisition via communication of the circuit breaker states ON / OFF / tripped • For electronic trip units ETU45B and ETU76B	3WL9111-0AT16-0AA0

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Interfaces

Interface to the IEC 61850

- The SICAM A8000 as an intelligent data concentrator ensures the connection of the circuit breakers from the SENTRON portfolio via the MODBUS TCP/IP protocol and the forwarding of the data via communication protocols (such as IEC61850,IEC60870-5-104,IEC60870-5-101, MODBUS and DNP) to higher-level systems.





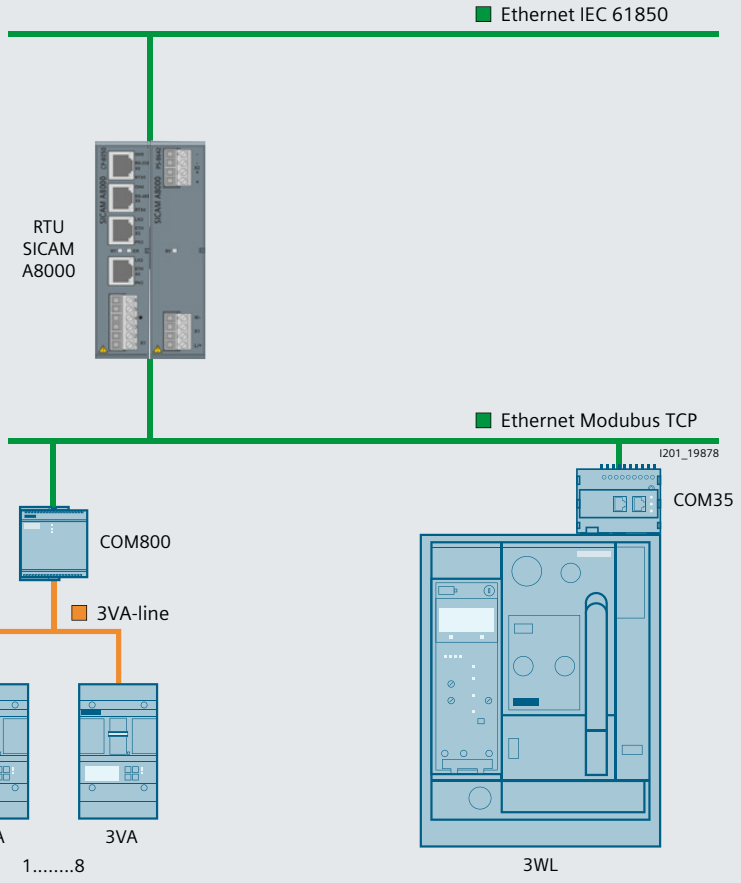
Type	Operating voltage	Article No.
SICAM CP-8021 [1]	–	6MF28021AA00
SICAM CP-8050 [2]	–	6MF2805-0AA00 new
SICAM PS-8620	24 ... 60 V DC (12 W)	6MF28620AA00
SICAM PS-8622	110 ... 220 V DC (12 W)	6MF28622AA00

[1] Designed for maximum data volumes of 20 devices each with 50 data points

[2] Dimensioned for device quantities of 3× 3WL and 8× 3VA

You will find further information at:
www.siemens.com/sicam-a8000

For the SICAM CP-8021 and SICAM CP-8050, predefined modules were created to reduce commissioning work to a minimum. The modules can be obtained free of charge from the following link.
https://support.industry.siemens.com/cs/ww/de/ps/24618/ae



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Accessories and spare parts

Storage devices

Capacitor storage devices

- For shunt trips
- Storage time 5 min
- Also suitable for 3VL, 3VA and 3WN circuit breakers
- **Note:** Rated control supply voltage must match the rated control supply voltage of the shunt trip.

Rated control supply voltage/rated operational voltage		Article No.
50/60 Hz AC	DC	
220 ... 240 V	220 ... 250 V	3WL9111-0BA14-0AA0

Spare parts new

Metering function Plus for retrofitting

- As spare part or for retrofitting the metering function Plus with an external voltage transformer
  - For ETU45B or ETU76B Release 2
  - Voltage transformer required
  - Voltage converter required
  - A measuring accuracy of 3% is achieved if retrofitted.

	Article No.
	3WL9111-0AT05-0AA0

Voltage converter

Version	Article No.
As spare part or for retrofitting the metering function Plus	3WL9111-0AT06-0AA0

Components for conversion of an existing internal voltage tap [2)]

- Conversion requires 3 components for 3-pole 3WL
- Conversion requires 4 components for 4-pole 3WL
- Conversion of a metering function (Z option A05) is not possible.

Conversion of internal voltage tap to main contact	Size	Article No.
From bottom to top	1	3WL9111-0AT71-0AA0
	2	3WL9111-0AT72-0AA0
	3	3WL9111-0AT73-0AA0
From top to bottom	1	3WL9111-0AT74-0AA0
	2	3WL9111-0AT75-0AA0
	3	3WL9111-0AT76-0AA0

Transformers (without iron core), Rogowski coil only (instrument transformer for the protection function)

- Used in converter applications with high harmonic components;
  can only be used with ETU45B or ETU76B
  - External 24 V DC supply required
  - Undervoltage release required (e.g. 3WL9111-0AE01-0AA0)
- As retrofit kit or as spare part. With new circuit breakers, please use the Z option K60
- **Scope of supply:**
  - Transformer
  - Warning signs
  - Manual

Number of poles	Size	Article No.
3-pole	1	3WL9111-0AA42-0AA0
	2	3WL9111-0AA43-0AA0
	3	3WL9111-0AA44-0AA0
4-pole	1	3WL9111-0AA45-0AA0
	2	3WL9111-0AA46-0AA0
	3	3WL9111-0AA47-0AA0

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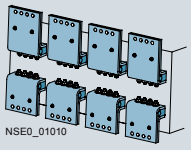
Main conductor connections, fixed-mounted versions (essential accessory)

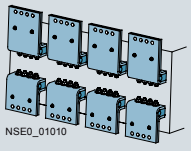
Front-accessible main connections, single hole at top



- Not for 3WL1 size 1 with high breaking capacity H

Size	Rated current I_n	Article No.
1	≤1000 A	3WL9111-0AL01-0AA0
	1250 ... 1600 A	3WL9111-0AL02-0AA0
2 [4]	≤2000 A	3WL9111-0AL03-0AA0
	≤2500 A	3WL9111-0AL04-0AA0
	≤3200 A	3WL9111-0AL05-0AA0
3	≤4000 A	3WL9111-0AL06-0AA0

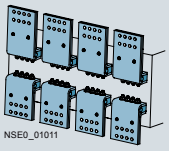
Front-accessible main connections, single hole at bottom



- Not for 3WL1 size 1 with high breaking capacity H

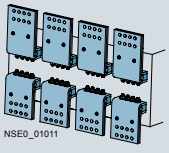
Size	Rated current I_n	Article No.
1	≤1000 A	3WL9111-0AL51-0AA0
	1250 ... 1600 A	3WL9111-0AL52-0AA0
2 [4]	≤2000 A	3WL9111-0AL53-0AA0
	≤2500 A	3WL9111-0AL54-0AA0
	≤3200 A	3WL9111-0AL55-0AA0
3	≤4000 A	3WL9111-0AL56-0AA0

Front-accessible main connections according to DIN 43673, double hole at top



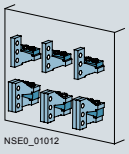
Size	Rated current I_n	Article No.
1	≤1000 A [1]	3WL9111-0AL07-0AA0
	1250 ... 2000 A [5]	3WL9111-0AL08-0AA0
2 [4]	≤2000 A	3WL9111-0AL11-0AA0
	≤2500 A	3WL9111-0AL12-0AA0
	≤3200 A	3WL9111-0AL13-0AA0
3	≤4000 A	3WL9111-0AL14-0AA0

Front-accessible main connections according to DIN 43673, double hole at bottom



Size	Rated current I_n	Article No.
1	≤1000 A [1]	3WL9111-0AL57-0AA0
	1250 ... 2000 A [5]	3WL9111-0AL58-0AA0
2 [4]	≤2000 A	3WL9111-0AL61-0AA0
	≤ 2500 A	3WL9111-0AL62-0AA0
	≤3200 A	3WL9111-0AL63-0AA0
3	≤4000 A	3WL9111-0AL64-0AA0

Rear vertical main connections



Size	Rated current I_n	Article No.
1 [2]	≤2000 A	3WL9111-0AM01-0AA0
2 [3]	≤3200 A	3WL9111-0AM02-0AA0
3	≤6300 A	3WL9111-0AM03-0AA0

[1] Nor for 3WL1 size 1 with high breaking capacity H
[2] In the case of vertical connection size 1 with breaking capacity N and S, up to 1000 A one 3WL9 111-0AM01-0AA0 vertical connection is required, up to 2000 A or with breaking capacity H two 3WL9 111-0AM01-0AA0 vertical connections are required.
[3] In the case of vertical connection size 2, up to 2500 A one 3WL9 111-0AM02-0AA0 vertical connection is required, up to 3200 A two 3WL9 111-0AM02-0AA0 vertical connections are required.
[4] Not for circuit breakers with very high breaking capacity C.
[5] Can be used for size 1 with H breaking capacity of 630 A ... 2000 A.

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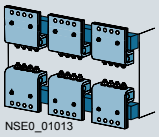
Accessories and spare parts

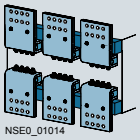
Main conductor connections, withdrawable versions (essential accessory)

Front-accessible main connections, single hole at top or at bottom [1) 2)]


NSE0_01013

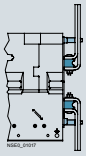
Size	Rated current I_n	Article No.
1	≤1000 A	3WL9111-0AN01-0AA0
	1250 ... 1600 A	3WL9111-0AN02-0AA0
2 [3)]	≤2000 A	3WL9111-0AN03-0AA0
	≤2500 A	3WL9111-0AN04-0AA0
	≤3200 A	3WL9111-0AN05-0AA0
3	≤4000 A	3WL9111-0AN06-0AA0

Front-accessible main circuit connections, according to DIN 43673, double hole at top or at bottom [1)]


NSE0_01014

Size	Rated current I_n	Article No.
1	≤1000 A [2)]	3WL9111-0AN07-0AA0
	1250 ... 2000 A [5)]	3WL9111-0AN08-0AA0
2 [3)]	≤2000 A	3WL9111-0AN11-0AA0
	≤2500 A	3WL9111-0AN12-0AA0
	≤3200 A	3WL9111-0AN13-0AA0
3	≤4000 A	3WL9111-0AN14-0AA0

Supports for front and DIN connecting bars



Number of poles	Size	Article No.
3-pole for 3 bars	1	3WL9111-0AN41-0AA0
	2	3WL9111-0AN42-0AA0
	3	3WL9111-0AN43-0AA0
4-pole for 4 bars	1	3WL9111-0AN44-0AA0
	2	3WL9111-0AN45-0AA0
	3	3WL9111-0AN46-0AA0

Rear vertical main connections

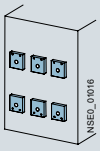

NSE0_01015

Size	Rated current I_n	Terminal pieces	Article No.
1	≤1000 A [2)]		3WL9111-0AN15-0AA0
	1250 ... 2000 A [5)]		3WL9111-0AN16-0AA0
2	≤2000 A [3)]		3WL9111-0AN17-0AA0
	≤2500 A [3)]		3WL9111-0AN18-0AA0
	≤3200 A [3)]		3WL9111-0AN21-0AA0
	1600 ... 3200 A [4)]		3WL9111-0AN38-0AA0
3	≤5000 A		3WL9111-0AN22-0AA0
	≤6300 A	3 units for 3-pole switches	3WL9111-0AN23-0AA0
	≤6300 A, top	4 units for 4-pole switches	3WL9111-0AN20-0AA0
	≤6300 A, bottom	4 units for 4-pole switches	3WL9111-0AN10-0AA0

Rear horizontal main connections

Size	Rated current I_n	Article No.
1	≤1000 A [2)]	3WL9111-0AN32-0AA0
	1250 ... 2000 A [5)]	3WL9111-0AN33-0AA0
2	≤2000 A [3)]	3WL9111-0AN34-0AA0
	≤2500 A [3)]	3WL9111-0AN35-0AA0
	≤3200 A [3)]	3WL9111-0AN36-0AA0
	1600 ... 3200 A [4)]	3WL9111-0AN47-0AA0
3	≤5000 A	3WL9111-0AN37-0AA0

Connecting flange


NSE0_01016

Size	Rated current I_n	Article No.
1	≤1000 A [2)]	3WL9111-0AN24-0AA0
	1250 ... 2000 A [5)]	3WL9111-0AN25-0AA0
2 [3)]	≤2000 A	3WL9111-0AN26-0AA0
	≤2500 A	3WL9111-0AN27-0AA0
	≤3200 A	3WL9111-0AN28-0AA0
3	≤4000 A	3WL9111-0AN31-0AA0

1) When using front-accessible main connections (withdrawable circuit breakers) supports are required.
2) Not for 3WL1 size 1 with high breaking capacity H
3) Not for circuit breakers with very high breaking capacity C.
4) Only for circuit breakers with very high breaking capacity C.
5) Can be used for size 1 with H breaking capacity of 630 A ... 2000 A.

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Conversion kit

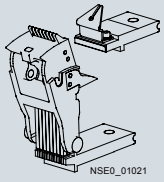
Conversion kit for converting fixed-mounted circuit breakers into withdrawable circuit breakers

- Guide frames and sliding contact modules must be ordered separately.
- Conversion from fixed-mounted to withdrawable is not possible for 3WL1 circuit breakers with very high breaking capacity C

Number of poles	Size	Article No.
3-pole	1	3WL9111-0BC11-0AA0
	2	3WL9111-0BC12-0AA0
	3	3WL9111-0BC13-0AA0
4-pole	1	3WL9111-0BC14-0AA0
	2	3WL9111-0BC15-0AA0
	3	3WL9111-0BC16-0AA0

Main contact elements

Main contact elements [2) 4)]



- **Notes:**
  - The circuit breaker ID No. must be specified when ordering [3)]
  - Specified for each connection
    (depending on the number of poles on the circuit breaker, order 3 or 4 units)
  - Article No. is automatically adapted to the circuit breaker ID No.

Size	Rated current I_n	Article No.
1	≤1600 A [1)]	3WL9111-0AM90 L1Y
2	≤2500 A	3WL9111-0AM91 L1Y
	≤4000 A	3WL9111-0AM92 L1Y
3	≤6300 A	3WL9111-0AM93 L1Y

1) Not for circuit breakers with very high breaking capacity C.
2) Replacement of the main contact elements for 3WL1 circuit breakers with very high breaking capacity C is only possible at the factory.
3) Please specify the circuit breaker ID No. in plain text when ordering.
1) Not for size 1 circuit breakers with breaking capacity H and circuit breakers with I_n=2000A.

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3WL10 system overview

IEC AC ..

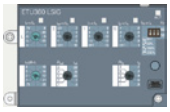
For a complete and valid configuration of your air circuit breaker, please use our online configurator at www.siemens.com/lowvoltage/3wl10-configurator

Switching devices



Size 0

Trip units



Electronic trip units ETU (LI, LSI, LSIG)



Electronic trip units ETU (LSI, LSIG)

Accessories



Communi-cation and I/O modules



Rating plugs



Breaker Connect modules



Metering function (Basic/ Advanced)



External ground fault transformers

Main conductor connections



Fixed-mounted, withdrawable versions



Rear vertical/horizontal connections



Front connections



Front connections, extended



Terminals for CU/AL cable connection

Motors



Spring charging motor

Accessories



Remote reset magnets



Mechanical operating cycles counters

Note:
You will find a detailed range of accessories in the Accessories and spare parts section.

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Auxiliary releases / closing coils



Shunt trips, undervoltage releases



Closing coils

Auxiliary switches and signaling switches

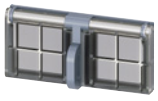


Auxiliary, alarm, and signaling switches



Position signaling switches

Interlocking



Interlocking sets



Locking devices



Locking mechanisms



Door sealing frames



Protective covers

Note:
You will find a detailed range of accessories in the Accessories and spare parts section.

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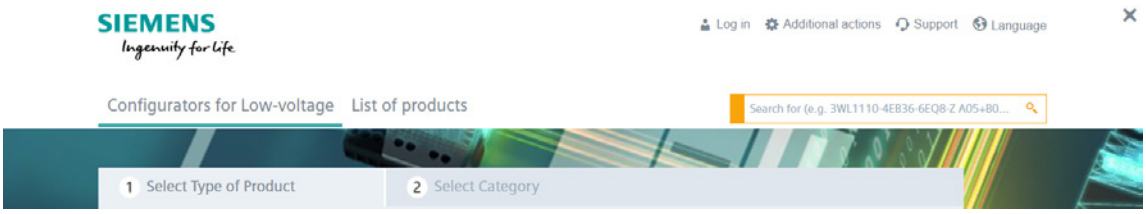
Online configurator highlights

www.siemens.com/lowvoltage/configurators

Search function with global direct input

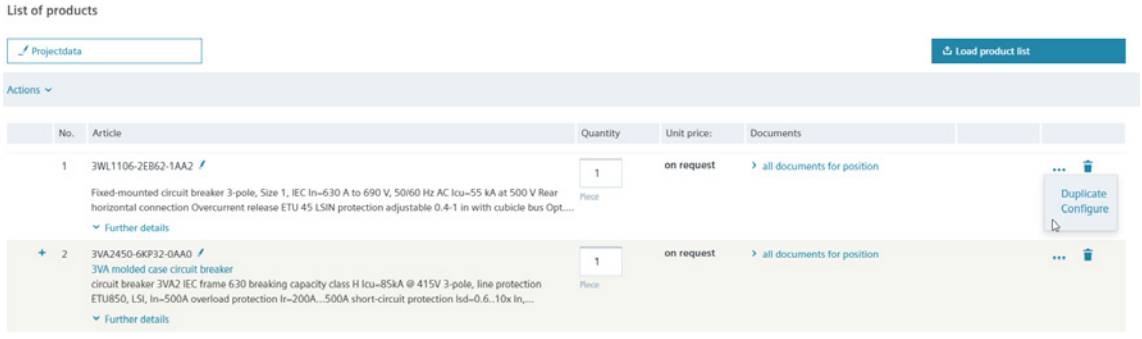
Searches for specific terms and jumps to MLFB based on input to the correct configurator



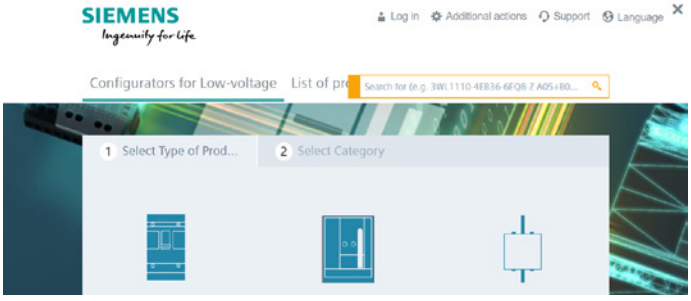
Product list stores multiple configurations and can transfer them collectively to the shopping cart



Recall of completed configurations for modification or additional configuration



Responsive Design



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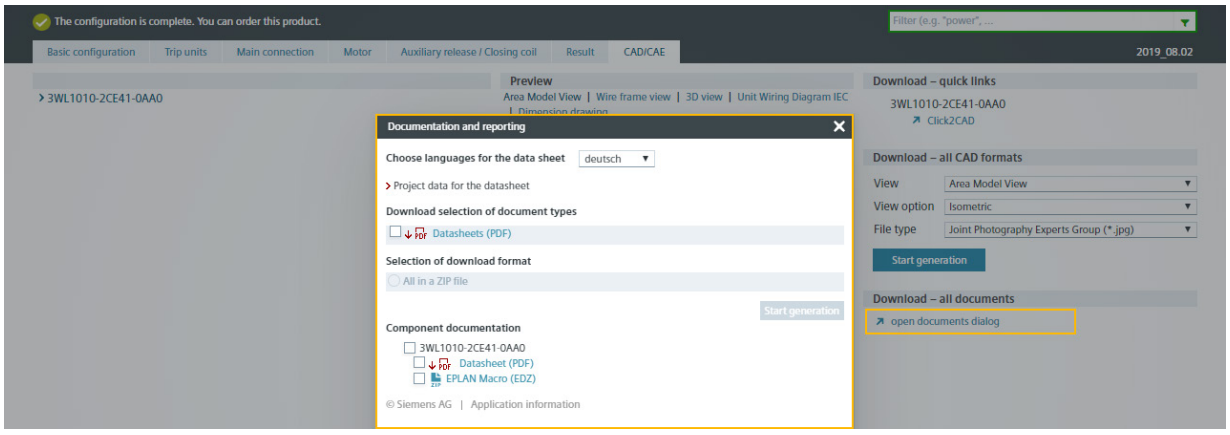
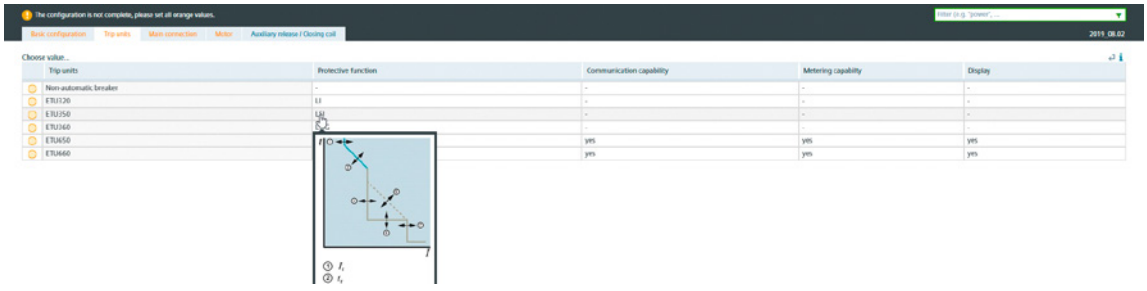
www.siemens.com/lowvoltage/3wl10-configurator

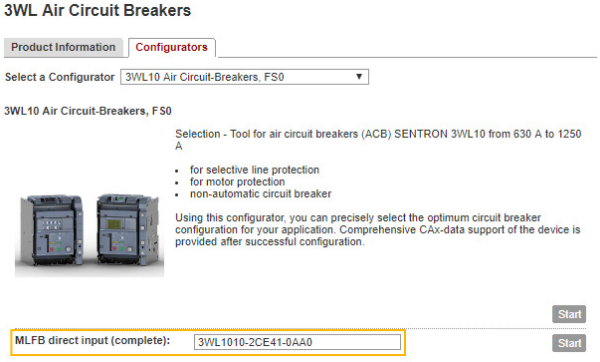
Download an ePlan Selector for 3WL10



Mouseover display of characteristic curves to show the protection function



Direct entry of an already known Article No. or parts of an Article No.



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Structure of the article numbers

Basic configuration

**The structure shown below is intended as an overview of each position and its meaning.
For a complete and valid configuration of your air circuit breaker, please use our online configurator at
www.siemens.com/lowvoltage/3wl10-configurator**

1

	6	7		8	9	10	11	12		13	14	15	16
3WL10			–						–				

Basic unit and ETU

Max. rated current I_n	630 A					0	6			
	800 A					0	8			
	1000 A					1	0			
	1250 A					1	2			
Short-circuit breaking capacity I_{cu} at 415 V	B	Basic (42 kA)						1		
	N	ECO (55 kA)						2		
	S	Standard (66 kA)						3		
Non-automatic air circuit breakers	Without metering function, without a communication link	Without trip unit					A	A		
Circuit breakers, ETU 3-series	Without metering function, without a communication link	With trip unit	ETU320 LI	(N) [1]			A	B		
			ETU350 LSI	(N) [1]			A	C		
			ETU360 LSIG	(N) [1]			A	D		
Circuit breakers, ETU 6-series		With trip unit	ETU650 (LSI)					E		
			ETU660 (LSIG)					F		
	Without a communication link	Without metering function					A			
	With a communication link	Without metering function					B			
		Metering function Basic	Voltage tap on bottom				C			
			Voltage tap on top				D			
		Metering function Advanced	Voltage tap on bottom				E			
			Voltage tap on top				F			

[1] Neutral conductor protection for 3-pole breakers with an external neutral conductor transformer or 4-pole breakers

Number of poles	Fixed-mounted versions	3-pole		0
		4-pole	Neutral left	1
			Neutral right	2
	Withdrawable	3-pole		3
		4-pole	Neutral left	4
			Neutral right	5

Connection [2]

Installation type	Withdrawable	Without frame	0
		Rear vertical connection	1
		Rear horizontal connection	2
		Adapter for compression lug connection (rear)	4
		Front-accessible, extended terminal for main circuit connection	5
	Fixed-mounted versions	Rear vertical connection	1
		Rear horizontal connection	2
		Front terminal for main circuit connection	3
		Circular conductor terminals (front)	4
		Front-accessible, extended terminal for main circuit connection	5

[2] Broadened connections available as accessories.

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3WL10 | 6 | 7 | – | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 |

Motor

Operating mechanisms	Manual operating mechanism		0
	Spring charging motor	24 ... 30 V AC/DC	1
		48 ... 60 V AC/DC	2
		110 V AC/DC	3
		230 V AC/DC	4

Auxiliary releases, closing coils

Closing coil (CC), remote reset magnet (RR)	Without closing coil, without remote reset magnet		A
	Closing coils (CC)	24 V AC/DC	B
		30 V AC/DC	C
		48 V AC/DC	D
		60 V AC/DC	E
		110 ... 120 V AC/DC	F
		120 ... 127 V AC/DC	G
		220 ... 240 V AC/DC	H
		240 ... 250 V AC/DC	J
	Closing coil (CC) and additionally a remote reset magnet (RR)	24 V AC/DC	K
		110 V AC/DC	L
		220 V AC/DC	M
2nd auxiliary release	Without 2nd auxiliary release		A
	With undervoltage release (UVR)	24 V AC/DC	B
		30 V AC/DC	C
		48 V AC/DC	D
		60 V AC/DC	E
		110 ... 120 V AC/DC	F
		120 ... 127 V AC/DC	G
		220 ... 240 V AC/DC	H
		240 ... 250 V AC/DC	J
		380 ... 400 V AC/DC	K
		415 ... 440 V AC/DC	L
	With undervoltage release (UVR), delayable with external time-delay device; Scope of supply: UVR + time-delay device	24 ... 30 V AC/DC	M
		110 ... 127 V AC/DC	N
		220 ... 250 V AC/DC	P
	With 2nd shunt trip (ST2)	24 V AC/DC	Q
		30 V AC/DC	R
		48 V AC/DC	S
		60 V AC/DC	T
		110 ... 120 V AC/DC	U
		120 ... 127 V AC/DC	V
		220 ... 240 V AC/DC	W
		240 ... 250 V AC/DC	X
1st auxiliary release	Without 1st auxiliary release		0
	Shunt trip (ST)	24 V AC/DC	1
		30 V AC/DC	2
		48 V AC/DC	3
		60 V AC/DC	4
		110 ... 120 V AC/DC	5
		120 ... 127 V AC/DC	6
		220 ... 240 V AC/DC	7
		240 ... 250 V AC/DC	8

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Accessory options

For a complete and valid configuration of your air circuit breaker, please use our online configurator at www.siemens.com/lowvoltage/3wl10-configurator

To specify the options, add "-Z" to the complete Article No. and indicate the appropriate order code(s).

3WL....-.....-.... -Z

Accessories for basic configuration

Mounting options for fixed mounting

- In the basic configuration, the fixed-mounted circuit breaker is mounted onto the rear panel; floor mounting is an option; in addition, the device must be modified if it is to be extended with functionalities such as external auxiliary switches or mechanical interlocks.[1)]

			Order code		
Mounting options for fixed mounting [1)]	Floor mounting	Mounting support standard	A	0	7
		Mounting support extended [2)]	S	5	6
	Rear panel mounting onto mounting plate	Side wall extended [2)]	S	5	7

Accessories for electronic trip units ETU

Rating plugs

- As standard, the electronic trip units are equipped with a rating plug for setting the rated current In, which is equal to the maximum rated circuit breaker current (<$I_{n\ max}$). The rated current of the selected rating plug must be less than or equal to $I_{n\ max}$.
- To downrate the circuit breaker, the rated current of less than $I_{n\ max}$ is selected for the rating plug by means of a Z option.
- Other functions can also be activated using rating plugs (L = OFF or Rc protection).

				Order code		
Rating plug	For setting the rated current I_n	For all ETU	400 A	B	0	4
			630 A	B	0	6
			800 A	B	0	8
			1000 A	B	1	0
	For setting the rated current I_n, with overload protection L = OFF	For ETU 6-series	400 A	L	0	4
			630 A	L	0	6
			800 A	L	0	8
			1000 A	L	1	0
			1250 A	L	1	2
	For setting the rated current I_n, For enabling of the residual current protection function. The residual current function is only possible with the MF Advanced metering function.	For ETU660 only	400 A	G	0	4
			630 A	G	0	6
			800 A	G	0	8
			1250 A	G	1	2

Communication modules

- No more than two different communication modules can be used at the same time.
- When using an IOM040 digital I/O module (Z option K56), only one communication module can be used.

			Order code		
Communication modules	COM040	PROFIBUS	F	0	2
	COM041	PROFINET	F	0	3
	COM043	Modbus TCP	F	1	1
	COM042	Modbus RTU	F	1	2

Breaker Connect modules

- When a circuit breaker with a communications interface is ordered, a Breaker Connect module for external 24 V DC power supply of the electronic components is also supplied ready installed.
- By means of this Z option, the Breaker Connect module for 24 V DC is replaced by a Breaker Connect module for 110 ... 240 V AC/DC.

		Order code		
Breaker Connect modules	110 ... 240 V AC/DC	F	2	6

I/O modules internal

			Order code		
I/O modules internal	Digital I/O module IOM040	2 inputs, 2 outputs	K	5	6

[1)] These functionalities can be applied directly to the frame of the withdrawable circuit breaker, without any modification of the side wall.
[2)] Not possible in connection with or as an alternative to the mounting support, standard (A07)

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To specify the options, add "-Z" to the complete Article No. and indicate the appropriate order code(s).

3WL....-.....-.... -Z

				Order code		
Accessories for the motor						
Mechanical operating cycles counter, 5-digit				C	0	1
Auxiliary switches and signaling switches						
• Auxiliary and signaling switches for currents >100 mA and up to 400 V AC are installed as standard. • For currents <100 mA for PLC connections, these auxiliary and signaling switches can be replaced. • The auxiliary/signaling switches for 24 V DC digital signals are designed for a – minimum load above 1 mA at 5 V DC and a – maximum breaking capacity of 100 mA at 24 V DC.						
Position signaling switches for guide frames [1]		2 CO | 2 CO | 2 CO (connected | test | disconnected position)		K	5	5
Signaling switches	Ready-to-close signaling switches		1 CO digital, 24 V DC	K	5	0
	Tripped signaling switches (S24)		1 CO digital, 24 V DC	K	5	3
	Spring charged signaling switches (S21)		1 CO digital, 24 V DC	K	5	4
Auxiliary switches	ON / OFF AUX	4 CO digital, 24 V DC		K	5	1
		2 CO 400 V AC + 2 CO digital, 24 V DC		K	5	2
Locking, blocking and interlocking						
Locking devices [1]	To prevent movement of withdrawable circuit breaker	Cylinder lock	Made by RONIS	R	7	8
		For no more than 3 padlocks, 8 mm		R	6	5
Locking mechanisms	To prevent movement to disconnected position			R	7	9
Locking devices	To prevent unauthorized activation in the operator panel (safe OFF)	Cylinder lock, made by RONIS		S	0	8
		For no more than 3 padlocks, plastic 4 mm		S	2	2
		For no more than 1 padlock, metal 7 mm		S	2	3
		For no more than 2 padlocks, metal 8 mm		S	0	7
Interlocking sets	For mechanical ON and/or OFF on the operator panel	For no more than 3 padlocks, plastic 4 mm		S	4	2
		For no more than 1 padlock, metal 7 mm		S	4	3
		For no more than 2 padlocks, metal 8 mm		S	4	4
Protective covers	For mechanical ON/OFF, not lockable			S	4	1
Door sealing frame IP30	IP3x			T	3	0

[1] Can be used not only when guide frame is ordered separately, but also with complete order (breaker + guide frame).

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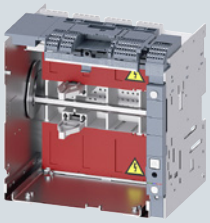
Guide frames

Guide frames for ordering separately without circuit breakers



- Guide frames without breakers up to 1250 A
- **Note:** All CB bus modules for communication COM04x / IOM300 / Breaker Connect module, as well as COMPSS signaling switches are configured without frames in the withdrawable circuit breaker and defined there by means of Z options, and are included with the switching device. The PSS standard is always included in the frame and can be changed to an electronics-capable signal by means of a Z option.

Number of poles	Connection type	Article No.
3-pole	Rear vertical	3VW8112-0AA01
	Rear horizontal	3VW8112-0AB01
	4× 240 mm² Cu/Al cable connection, for compression lugs	3VW8112-0AD01
	Front connection bars, extended	3VW8112-0AE01
4-pole	Rear vertical	3VW8112-0BA01
	Rear horizontal	3VW8112-0BB01
	4× 240 mm² Cu/Al cable connection, for compression lugs	3VW8112-0BD01
	Front connection bars, extended	3VW8112-0BE01

To specify the options, add "-Z" to the complete Article No. and indicate the appropriate order code(s).

3VW8....-.....-.... -Z

			Order code		
Locking, blocking and interlocking					
Locking devices	To prevent movement of withdrawable circuit breaker	Cylinder lock, made by RONIS	R	7	8
		For no more than 3 padlocks, 8 mm	R	6	5
Locking mechanisms	To prevent movement to disconnected position (only in combination with R78 or R65)		R	7	9
Auxiliary/signaling switches					
Position signaling switch PSS for guide frame	For 24 V DC digital signals, for minimum currents	2 CO | 2 CO | 2 CO (connected | test | disconnected position)	K	5	5

Auxiliary and signaling switches for currents >100 mA and up to 400 V AC are installed as standard.
For currents <100 mA for PLC connections, these auxiliary and signaling switches can be modified.
The auxiliary/signaling switches for 24 V DC digital signals are designed for

- a minimal load from 1 mA at 5 V DC and
- a maximum breaking capacity of 100 mA at 24 V DC.

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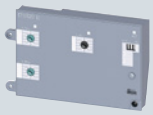
Electronic trip units ETU and accessories

Electronic trip units (ETU)





Version	With communications / metering function / enhanced protection functions	Type	Protective function	Article No.
With rotary coding switches	No	ETU320	LIN	3VW9011-5AA00
		ETU350	LSIN	3VW9012-5AA00
		ETU360	LSING	3VW9012-7AA00
With display	Yes	ETU650	LSIN	3VW9017-5AA00
		ETU660	LSING	3VW9017-7AA00

Metering functions for ETU650 or ETU660



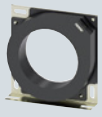
Description	Protective function / version	Arrangement	Article No.
Metering function	MF Basic	–	3VW9011-0AT01
	MF Advanced	–	3VW9011-0AT04
Set of cables for voltage tap for MF	For 4-pole circuit breakers with neutral right	Top or bottom	3VW9011-0AT08
	For 4-pole circuit breakers with neutral left	Top	3VW9011-0AT75
		Bottom	3VW9011-0AT76
	For 3-pole circuit breakers	Top	3VW9011-0AT72
		Bottom	3VW9011-0AT73

External current transformers for N conductor



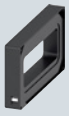
Accessory for	Purpose	Article No.
ETU320, ETU350, ETU360, ETU650, ETU660	For 3-pole circuit breakers only	3VW9011-0AA30

External current transformers for grounded transformer star point



Accessory for	G_{ret} (ground return)	Article No.
ETU660	100 A	3VW9011-0GF30
	250 A	3VW9011-0GF31

Summation current transformers external Rc-CT for residual current measurement



- Only with MF Advanced metering function and Rc rating plug

Accessory for	Purpose	Article No.
ETU660	For external residual current measurement	3VW9011-0RC30

Remote reset magnets RR for the circuit breakers including tripped signal



- Remote reset magnet (RR) for resetting the circuit breaker after tripping as a result of overcurrent conditions

Accessory for	Voltage	Article No.
ETU320, ETU350, ETU360, ETU650, ETU660	24 V DC	3VW9011-0AK03
	110 V AC/DC	3VW9011-0AK05
	250 V AC/DC	3VW9011-0AK06

Replacement batteries for electronic trip units ETU



Accessory for	Article No.
ETU320, ETU350, ETU360, ETU650, ETU660	3VW9011-0AT38

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Electronic trip units ETU and accessories

Rated current module / rating plug



- Only one module is possible per circuit breaker

Accessory for	Version	Rated current I_n	Article No.
ETU320, ETU350, ETU360, ETU650, ETU660	Rating plugs for setting (< $I_{n\ max}$) the rated current I_n	400 A	3VW9011-0AA53
		630 A	3VW9011-0AA55
		800 A	3VW9011-0AA56
		1000 A	3VW9011-0AA57
		1250 A	3VW9011-0AA58
ETU 6-series	Rating plugs without overload protection (L = OFF) and for setting (< $I_{n\ max}$) the rated current I_n	400 A	3VW9011-0LF53
		630 A	3VW9011-0LF55
		800 A	3VW9011-0LF56
		1000 A	3VW9011-0LF57
		1250 A	3VW9011-0LF58
ETU660	Rating plug Rc for ETU660, for enabling the residual current protection function and setting (< $I_{n\ max}$) of the rated current I_n. The residual current function is only possible with the MF Advanced metering function.	400 A	3VW9011-0RC53
		630 A	3VW9011-0RC55
		800 A	3VW9011-0RC56
		1250 A	3VW9011-0RC58

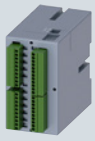
CB bus modules - communication modules



- Contains the communication module
- No more than two different communication modules can be used at the same time
- When using a digital I/O module IOM040 (Z option K56) only one communication module can be used
- Can only be used with ETUs of the 6-series and a Breaker Connect module for connection to the circuit breaker. This can also be configured directly on the device by means of a Z option if the communications interface to the ETU 6-series is selected

Communication modules	Protocol	Article No.
COM040	PROFIBUS	3VW9011-0AT15
COM041	PROFINET	3VW9011-0AT14
COM043	Modbus TCP	3VW9011-0AT16
COM042	Modbus RTU	3VW9011-0AT17

CB bus modules - I/O modules external IOM300



- For snapping onto standard mounting rail

Accessory for	Maximum switching current per contact	Inputs	Outputs	Article No.
ETU 6-series	• 2 A at ≤ DC 30 V • 0.8 A at 50 V DC • 0.2 A at 150 V DC • 4 A at 250 V AC	11	10	3VW9011-0AT20

CB bus modules - I/O modules internal IOM040



- When using a digital I/O module IOM040, only one communication module can be used

Accessory for	Maximum switching current per contact	Inputs	Outputs	Article No.
ETU 6-series	• 2 A at ≤ DC 30 V • 0.8 A at 50 V DC • 0.2 A at 150 V DC • 4 A at 250 V AC	2	2	3VW9011-0AT30

Actuator module COM ACT



- For switching the circuit breaker on/off remotely via communication
- Actuation of the closing coil (CC) and the 1st shunt trip (ST)
- Can only be used in combination with a communication module, spring charging motor, closing coil and 1st shunt trip
- Automatically included if the communications interface of the ETU 6-series is selected in the basic circuit breaker configuration

Accessory for	Article No.
ETU 6-series	3VW9011-0AT10

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Breaker Connect modules



- For the external power supply for the electronics components

Voltage	Article No.
110 ... 240 V AC/DC	3VW9011-0AT06
24 ... 48 V DC	3VW9011-0AT07

Auxiliary contact signaling switch for communications interface



- Auxiliary contacts for signaling the readiness to close or for position signaling switches of the withdrawable positions.
- Can only be used in combination with communication module.
- Can be combined with standard position signaling switches or ready-to-close signaling contacts.
- **Note:** Both signaling switches are automatically included in the basic circuit breaker if the communications interface of the ETU 6-series is selected (COM PSS only with withdrawable versions).

Function	Article No.
Ready-to-close signaling switch for communication COM RTC	3VW9011-0AT11
Position signaling switch COM PSS (for withdrawable breakers only)	3VW9011-0AT12

Test devices and Breaker Data Adapters



- Can be used for all ETU 3-series and 6-series

Function	Type	Article No.
Test device • For the trip test via ETU and tripping solenoid including release • The ETU and the tripping solenoids are activated by means of a battery built into the test device. • On activation in the ETU 6-series, the parameters can be configured on the display	TD310	3VW9011-0AT32
Breaker Data Adapter • As gateway for parameterization of the ETU with SENTRON powerconfig • For generation of a report of the set parameters with powerservice	TD410	3VW9011-0AT34
Test devices and Breaker Data Adapters • As gateway for parameterization of the ETU with SENTRON powerconfig – Testing a tripping operation using SENTRON powerconfig • For use with the powerservice software – Testing of the basic protection functions LSING – Testing of the enhanced protection functions – Test data storage – Readout of ETU buffer – Generation of a report of the set parameters	TD420	3VW9011-0AT33

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Accessories and spare parts

Accessories for connection

Front terminals for main circuit connections acc. to IEC 60947-2







- To be ordered separately for top and bottom

Fixing	Version	Mounted onto	Number of poles / quantity	Article No.
Fixed-mounted	Front terminals for main circuit connection		3-pole / 3 units	3VW9011-0AL01
			4-pole / 4 units	3VW9011-0AL02
	Extended main terminals, including insulating plate and phase barriers, standard	Front terminals for main circuit connection	3-pole / 3 units	3VW9011-0AL77
			4-pole / 4 units	3VW9011-0AL78
	Broadened main terminals, including insulating plate and extended phase barriers	Front terminals for main circuit connection, top	3-pole / 3 units	3VW9011-0AL73
		Front terminals for main circuit connection, bottom	3-pole / 3 units	3VW9011-0AL75
		Front terminals for main circuit connection, top, bottom	4-pole / 4 units	3VW9011-0AL74
Withdrawable	Front-accessible terminals for main circuit connection	Flange of the guide frame	3-pole / 3 units	3VW9011-0AN01
			4-pole / 4 units	3VW9011-0AN02
	Broadened main circuit connections	Front-accessible terminals for main circuit connection	3-pole / 3 units	3VW9011-0AN73
			4-pole / 4 units	3VW9011-0AN74

Rear terminals for main circuit connections acc. to IEC 60947-2





- To be ordered separately for top and bottom

Fixing	Version	Mounted onto	Number of poles / quantity	Article No.
Fixed-mounted	Rear terminals for main circuit connection; rotatable for horizontal / vertical connection, including terminal cover		3-pole / 3 units	3VW9011-0AL32
			4-pole / 4 units	3VW9011-0AL33
Withdrawable	Rear terminals for main circuit connection; rotatable for horizontal / vertical connection, including terminal cover		3-pole / 3 units	3VW9011-0AN32
			4-pole / 4 units	3VW9011-0AN33
	Broadened main circuit connections	Rear horizontal main connections	3-pole / 3 units	3VW9011-0AN75
			4-pole / 4 units	3VW9011-0AN76

Cu-/Al cable connections




- To be ordered separately for top and bottom

Fixing	Version	Mounted onto	Number of poles / quantity	Article No.
Fixed-mounted	Circular conductor terminals 4 × 240 mm² for front cable connection, including insulating plate and high, extended terminal cover	Front terminals for main circuit connection	3-pole / 3 units	3VW9011-0AL71
			4-pole / 4 units	3VW9011-0AL72
Withdrawable	Set of circular conductor connection pieces 4 × 240 mm² for compression lugs, rear cable connection	Rear vertical main connections	3-pole / 3 units	3VW9011-0AN71
			4-pole / 4 units	3VW9011-0AN72

Auxiliary supply connectors in push-in version



- Auxiliary conductor terminal in push-in version for upgrading fixed-mounted breakers and guide frames.
- The device is always fitted at the factory with the exact number of auxiliary conductor terminals required.

Version	Article No.
Push-in	3VW9011-0AB11

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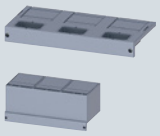
Accessories for connection

Terminal covers for fixed circuit breakers



- Finger-proof for front main circuit connection for fixed-mounting
- Necessary isolation measures are always supplied with the corresponding connection technology and do not need to be ordered separately.

Version	Number of poles / quantity	Article No.
Standard	3-pole / 2 units	3VW9723-0WD30
	4-pole / 2 units	3VW9724-0WD40
Extended	3-pole / 2 units	3VW9723-0WF30
	4-pole / 2 units	3VW9724-0WF40

Phase barriers for fixed breakers



- Necessary isolation measures are always supplied with the corresponding connection technology and do not need to be ordered separately.
- For operating voltages >440 V AC the use of phase barriers is mandatory; up to 440 V AC their use is optional.

Height	Number of poles / quantity	Article No.
100 mm (Standard)	3-pole / 4 units	3VW9723-0WA00
	4-pole / 6 units	3VW9724-0WA10
200 mm (extended)	3-pole / 4 units	3VW9723-0WA01
	4-pole / 6 units	3VW9724-0WA11

Support for mounting the fixed-mounted breaker on the floor

- For fixed-mounted versions

Version	Purpose	Article No.
Mounting support standard (circuit breaker feet) (= Z option A07)		3VW9011-0BB51
Mounting support extended (circuit breaker feet), including mechanical transmission of switch position on circuit breaker side panel (= Z option S56)	• Fixation for external auxiliary switches AUX 15 W (3VW9011-0AG15) • Locking mechanism for control cabinet door, direct (for 3VW9011-0BB10) • Locking mechanism for control cabinet door, Bowden cable (for 3VW9011-0BB16) • Mutual mechanical interlockings for 3WL/3VA (for 3VW9011-0BB21)	3VW9011-0BB52

Extension kit for modification of the side wall of the fixed-mounted breaker



- For fixed-mounted versions
- Rear wall fixing on mounting plate
- For modification for mechanical transmission of switch position on circuit breaker side panel (= Z option S57)

Version	Purpose	Article No.
Extension kit for side wall	• Fixation for external auxiliary switches AUX 15 W (3VW9011-0AG15) • Locking mechanism for control cabinet door, direct (for 3VW9011-0BB10) • Locking mechanism for control cabinet door, Bowden cable (for 3VW9011-0BB16) • Mutual mechanical interlockings for 3WL/3VA (for 3VW9011-0BB21)	3VW9011-0BB53

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Accessories and spare parts

Motor

Spring charging motor (MO)



Description	Voltage	Article No.
For automatic charging of the stored-energy operating mechanism	24 ... 30 V AC/DC	3VW9011-0AF01
	48 ... 60 V AC/DC	3VW9011-0AF02
	100 ... 130 V AC/DC	3VW9011-0AF03
	220 ... 250 V AC/DC	3VW9011-0AF04

Mechanical operating cycles counters



Description	Version	Article No.
In combination with a spring charging motor	5 digits	3VW9011-0AH07

Auxiliary releases, closing coils

Closing coils CC / shunt trips ST



Voltage	Article No.
24 V AC/DC	3VW9011-0AD01
30 V AC/DC	3VW9011-0AD02
48 V AC/DC	3VW9011-0AD03
60 V AC/DC	3VW9011-0AD04
110 ... 120 V AC/DC	3VW9011-0AD05
120 ... 127 V AC/DC	3VW9011-0AD06
220 ... 240 V AC/DC	3VW9011-0AD07
240 ... 250 V AC/DC	3VW9011-0AD08
380 ... 400 V AC	3VW9011-0AD17
415 ... 440 V AC	3VW9011-0AD18

TD320 function test unit for closing coil / shunt trip



- The TD320 test unit allows the operational availability and functions of the closing coils and shunt trips with a rated operational voltage between 24 V and 250 V (AC and DC) to be tested
- The operational availability test is performed cyclically at intervals of 30 seconds
- The unit has visual indicators in the form of LEDs on the front in order to display the following states:
  - LED POWER ON LIT: Correct function of the YO/YC test unit
  - LED DEACTIVATION LIT: Power supply failure, wire break
  - LED SHORT-CIRCUIT LIT: Winding short-circuit
  - LED DEACTIVATION and SHORT-CIRCUIT FLASHING: Incorrect power supply
  - LED DEACTIVATION and SHORT-CIRCUIT OFF: Closing coil / shunt trip OK

Version	Article No.
For all closing coils / shunt trips	3VW9011-0AT31

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Auxiliary releases, closing coils

Auxiliary/signaling switches



- The auxiliary/signaling switches for 24 V DC digital signals are designed for a
  - minimum load above 1 mA at 5 V DC and a
  - maximum breaking capacity of 100 mA at 24 V DC
- For external auxiliary switches ON/OFF AUX 15 CO, a 3VW9011-0AG1x fixation must be ordered in addition, and for fixed-mounted breakers a 3VW9011-0BB5x side wall modification

Type	Contacts	Article No.
Ready-to-close signal RTC	1 CO standard	3VW9011-0AH01
	1 CO digital	3VW9011-0AH02
Auxiliary switch ON/OFF AUX	4 CO standard	3VW9011-0AG01
	4 CO digital	3VW9011-0AG02
	2 CO standard + 2 CO digital	3VW9011-0AG03
External auxiliary switch ON/OFF AUX	15 CO standard	3VW9011-0AG05
	15 CO digital	3VW9011-0AG06
Tripped signaling switch S24	1 CO standard	3VW9011-0AH14
	1 CO digital	3VW9011-0AH15
Spring charged signaling switch S21	1 CO standard	3VW9011-0AH10
	1 CO digital	3VW9011-0AH08
Position signaling switch PSS (for withdrawable devices)	2 CO | 2 CO | 2 CO (connected | test | disconnected position) standard	3VW9011-0AH11
	2 CO | 2 CO | 2 CO (connected | test | disconnected position) digital	3VW9011-0AH12

Fixing for external auxiliary switches AUX 15 CO



- External auxiliary switches ON/OFF AUX 15 CO must be ordered separately.

Version	Article No.
For fixed-mounted circuit breakers with rear panel or floor mounting (in combination with Z option S56 or S57)	3VW9011-0AG15
For guide frames	3VW9011-0AG17

Undervoltage releases UVR



Voltage	Article No.
24 V AC/DC	3VW9011-0AE01
30 V AC/DC	3VW9011-0AE02
48 V AC/DC	3VW9011-0AE03
60 V AC/DC	3VW9011-0AE04
110 ... 120 V AC/DC	3VW9011-0AE05
120 ... 127 V AC/DC	3VW9011-0AE06
220 ... 240 V AC/DC	3VW9011-0AE07
240 ... 250 V AC/DC	3VW9011-0AE08
380 ... 400 V AC	3VW9011-0AE17
415 ... 440 V AC	3VW9011-0AE18

External time-delay device for undervoltage release



- With adjustable delay time from 0.5 to 3 s.
- Suitable for mounting onto DIN rail.

Voltage	Article No.
24 ... 30 V AC/DC	3VW9011-0AE10
48 V AC/DC	3VW9011-0AE11
60 V AC/DC	3VW9011-0AE15
110 ... 127 V AC/DC	3VW9011-0AE12
220 ... 250 V AC/DC	3VW9011-0AE13

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Accessories and spare parts

Interlocking

Locking devices to prevent movement of the withdrawable circuit breakers



Version	Article No.
RONIS cylinder lock (replacement for R78)	3VW9011-0BA80
Padlock 8 mm (replacement for R65), for no more than 3 padlocks	3VW9011-0BA87

Locking mechanisms to prevent movement of the withdrawable circuit breakers in disconnected position



- Only possible as a supplement in conjunction with R78 (3VW9011-0BA80) and/or R65 (3VW9011-0BA87)

Description	Article No.
Locking mechanism (replacement for R79)	3VW9011-0BA84

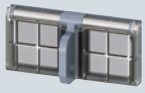
Locking devices in OFF position



- For fixed-mounted versions and withdrawable versions
- To prevent unauthorized activation in the operator panel (safe OFF)
- The disconnector unit fulfills the conditions for a supply disconnecting (isolating) device acc. to EN 60204-1

Description	Artikel-Nr.
Cylinder lock, made by RONIS (replacement for S08)	3VW9011-0BA33

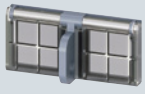
Locking devices in OFF position



- For fixed-mounted versions and withdrawable versions
- To prevent unauthorized activation in the operator panel (safe OFF)
- The disconnector unit fulfills the conditions for a supply disconnecting (isolating) device acc. to EN 60204-1

Description	Version	
Padlock 4 mm (replacement for S22)	Plastic for no more than 3 padlocks	3VW9011-0BA41
Padlock 7 mm (replacement for S23)	Metal for no more than 1 padlock	3VW9011-0BA42
Padlock 8 mm (replacement for S07)	Metal for no more than 2 padlocks	3VW9011-0BA44

Padlockable protective cover ON/OFF on the operator panel



Description	Version	Article No.
Padlock 4 mm (replacement for S42)	Plastic for no more than 3 locks	3VW9011-0BA22
Padlock 7 mm (replacement for S43)	Metal for no more than 1 lock	3VW9011-0BA23
Padlock 8 mm (replacement for S44)	Metal for no more than 2 locks	3VW9011-0BA24

Protective cover for mechanical ON/OFF



- Mechanical ON/OFF to protect against unintentional actuation on the operator panel
- Not lockable

Description	Article No.
Not lockable (replacement for S41)	3VW9011-0BA21

Mutual mechanical interlockings



- Mutual mechanical interlocking for 3WL / 3VA with Bowden cable 2 m

Fixing	Mounting	Article No.
Fixed-mounted	Rear panel or floor mounting	3VW9011-0BB21
Withdrawable	Mounting onto guide frame	3VW9011-0BB22

Bowden cable, separate

- One required for each circuit breaker

Variant	Article No.
1000 mm	3VW9011-0BB23
2000 mm	3WL9111-0BB45-0AA0
3000 mm	3WL9111-0BB46-0AA0

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Interlocking

Locking mechanisms to prevent opening of the control cabinet doors in ON position



- To prevent opening of the cabinet door in ON position
- It additionally prevents the circuit breaker from being closed when the control cabinet door is open

Fixing	Version	Article No.
Fixed mounting onto side panel or floor	Direct fixed interlocking	3VW9011-0BB10
	Locking with Bowden cable	3VW9011-0BB16
Withdrawable	Direct fixed interlocking	3VW9011-0BB14
	Locking with Bowden cable	3VW9011-0BB18

Door sealing frame IP30



- Can be used up to IP3x degree of protection

Version	Befestigung	Version	Article No.
Replacement part for Z option T30.	Fixed-mounted	IP3x	3VW9011-0AP01
	Withdrawable	IP3x	3VW9011-0AP02

Protective cover IP54



- Protective cover / hood IP54 lockable for fixed-mounted breakers and withdrawable breakers
- For implementing degrees of protection IP4x and IP54 when installing in switchboard door.
- Cannot be combined with IP30 door sealing frame and door mounted rotary operator.

Version	Version	Article No.
Lock with unique key	IP54	3VW9011-0AP03
Lock with standard key	IP54	3VW9011-0AP13

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Requirements for cost- and energy-efficient operation of electrical power distribution are on the increase. Whether in industrial plants, in infrastructure or in buildings: As a modular, highly adaptable system, the 3VA series of molded case circuit breakers ensures fully reliable protection of personnel and plant, and supports every process phase – from planning to operation of electrical power distribution.

Comprehensively certified. Deployable worldwide.

3VA molded case circuit breakers are available in various ranges with IEC approval; other ranges are available that comply with standard IEC 60947 and standard UL 489. The system is therefore ideally suited for mechanical engineering companies and switchgear manufacturers. The full range of functionalities of molded case circuit breakers can be used for plant and equipment operating in Europe and North America, with absolute standards compliance assured.

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Molded Case Circuit Breakers



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A multitude of additional information ...

Information + ordering

All the important things at a glance

Information to get you started

For information about molded case circuit breakers, please visit our website
www.siemens.com/3VA

Contact persons in your region

We are there when you need us

You can find your local contacts at
www.siemens.com/lowvoltage/contact

Your product in detail

The Siemens Industry Online Support portal provides comprehensive information
www.siemens.com/lowvoltage/product-support

- Technical basic information – 3VA molded case circuit breakers (109766672)

The relevant tender specifications can be found at
www.siemens.com/lowvoltage/tenderspecifications

Use our conversion tool for quick and easy conversion to Siemens products www.siemens.com/conversion-tool

Our video range

Siemens YouTube channel

- 3VA molded case circuit breakers (general)
  bit.ly/2xNxlFA

Everything you need for your order

Refer to the Industry Mall for an overview of your products

- Molded case circuit breakers sie.ag/2mmLcAk

Direct forwarding to the individual products in the Industry Mall by clicking on the Article No. in the catalog or by entering this web address incl. Article No.
www.siemens.com/product?Article No.

Configurators

Exactly the right circuit breaker for your application

The configurator reduces the time and effort required in the planning and ordering process, and allows for individual adaptations. Configure your 3VA molded case circuit breaker at
www.siemens.com/lowvoltage/3va-configurator
www.siemens.com/lowvoltage/3va27-configurator

For your configured 3VA molded case circuit breaker, you can additionally find

- 3D views
- CAD data
- Unit wiring diagrams
- Dimension drawings

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… can be found in our online services

Commissioning + operation

Configuration software

SENTRON powerconfig

The combined commissioning and service tool for communication-capable measuring devices and circuit breakers from the SENTRON portfolio.
www.siemens.com/powerconfig

Free download SENTRON powerconfig mobile via:
App Store and Play Store

Your product in detail

The Siemens Industry Online Support portal provides detailed technical information
www.siemens.com/lowvoltage/product-support

- Operating instructions
- Characteristic curves
- Certificates

Engineering data for CAD or CAE systems are available in the CAx Download Manager at
www.siemens.com/lowvoltage/cax

Training and tutorials

Our training courses can be found at
www.siemens.com/sitrain-lowvoltage

- Protection systems in low-voltage power distribution (WT-LVAPS)
- 3VA molded case circuit breaker (WT-LVA3VA)
- Communication with SENTRON components (LV-COM)
- Project planning and selection of SENTRON circuit breakers (LV-CBPROJ)

Manuals

Manuals are available for downloading in Siemens Industry Online Support at
www.siemens.com/lowvoltage/manuals

- Configuration manual – 3VA selectivity (109743975)
- Communication manual – 3VA molded case circuit breakers with IEC and UL certification (98746267)
- Equipment manual – 3VA molded case circuit breakers with IEC certificate (90318775)
- Equipment manual – 3VA27 molded case circuit breakers & 3WL10 air circuit breakers (109753821)
- Communication manual – 3WL10 air circuit breakers & 3VA27 molded case circuit breakers (109760220)

The fast track to the experts

Competent expert advice on technical questions with a wide range of demand-optimized services for all our products and systems.

Assistance with technical queries is provided at
www.siemens.com/lowvoltage/support-request

We offer a comprehensive portfolio of services.
You can find your local contacts at
www.siemens.com/lowvoltage/contact

You can find further information on services at
www.siemens.com/service-catalog

Technical overview – Molded case circuit breakers

The fast way to get you to our online services

This page provides you with comprehensive information and links on molded case circuit breakers

www.siemens.com/lowvoltage/product-support (109767421)

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Molded case circuit breakers for all applications



3VA10 ... 3VA15 molded case circuit breakers

Setting standards for standard applications

The 3VA1 molded case circuit breaker is ideally suited for your standard applications in infrastructure and industrial facilities. It is equipped with a thermal-magnetic trip unit, and offers reliable protection for plants and generators.

With its compact dimensions and depth of just 70 mm, the 3VA1 molded case circuit breaker can even fit into locations where space is limited. Thanks to its cover size of 45 mm, it is also ideally suited for use in distribution boards up to 250 A.

Special features

- Compact design
- AC/DC applications
- No derating up to +50 °C
- Optimized for distribution boards (45 mm cover size)
- Universal platform of accessories
- 1, 2, 3 or 4-pole versions

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3VA20 ... 3VA26 molded case circuit breakers

The power to deliver in demanding applications

If you are looking for a solution that lets you handle your most technically demanding projects in industrial and infrastructure applications with ease, the 3VA2 molded case circuit breaker has the special capabilities you need. It combines high breaking capacity, a range of electronic trip units (ETUs), very good selectivity properties, and various additional functionalities.

Special features

- Very good selective protection response
- AC applications
- No derating up to +50 °C
- Integrated metering function
- Connection to a communication system
- Rated current range of 25 to 1250 A



3VA27 molded case circuit breaker

Depending on the application, the 3VA27 molded case circuit breaker handles line/motor and starter protection for low-voltage electrical power distribution, and supplements the existing IEC portfolio with a rated current of 1600 A.

Special features

- Choice between two ranges of electronic trip units with a number of equipment versions
- Variable and versatile connections
- Connection to a communication system
- Can be used as a platform circuit breaker with the 3WL10 ACB, with an extensive range of common accessories
- Rated current range of 800 to 1600 A

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Switching devices and accessories



Protective functions	3VA10	3VA11	3VA12	3VA13	3VA14	3VA15
Size	100 A	160 A	250 A	400 A	630 A	1000 A
Switch disconnectors						
No protection	–	■	■	■	■	–
Thermal-magnetic						
Line protection	■	■	■	■	■	■
Starter protection	–	■	■	■	■	■
Electronic						
Line protection	–	–	–	–	–	–
Line and generator protection	–	–	–	–	–	–
Line and generator protection, with display	–	–	–	–	–	–
Line and generator protection, with display, with metering function	–	–	–	–	–	–
Motor protection	–	–	–	–	–	–
Motor protection, with display	–	–	–	–	–	–
Motor protection, with display, with metering function	–	–	–	–	–	–
Starter protection	–	–	–	–	–	–

Accessories

Size	100 A	160 A	250 A	400 A	630 A	1000 A
Accessories						
Auxiliary switches and signaling switches	■	■	■	■	■	■
Auxiliary releases	■	■	■	■	■	■
Connection technology	■	■	■	■	■	■
Plug-in version	–	■	■	■	■	–
Draw-out version	–	–	■	■	■	–
Front rotary operator	■	■	■	■	■	■
Door mounted rotary operator	■	■	■	■	■	■
Side wall mounted rotary operator	■	■	■	■	■	–
MO310 motor operator (mounted onto the side)	–	■		–	–	–
MO320 motor operator (mounted onto the front)	–	■	■	■	■	–
Motor operator with SEO520 stored energy operator	–	–	–	–	–	–
Motor operator (MO), integrable	–	–	–	–	–	–
Locking, blocking and interlocking	■	■	■	■	■	■
Residual current device (mounted onto the side)	–	■	■	–	–	–
Residual current device (mounted underneath)	–	■	■	–	–	–
Communications interface	–	–	–	–	–	–
EFB300	–	–	–	–	–	–
Testing and commissioning devices	–	–	–	–	–	–
Cover frame	■	■	■	■	■	■
DIN rail adapter	■	■	–	–	–	–
Busbar adapter	■	■	■	■	■	–

■ Available – Not available/not present

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3VA20	3VA21	3VA22	3VA23	3VA24	3VA25	3VA26 new	3VA27
100 A	160 A	250 A	400 A	630 A	1000 A	1250 A	1600 A
–	–	–	–	–	–	–	■
–	–	–	–	–	–	–	–
–	–	–	–	–	–	–	–
■	■	■	■	■	■	■	■
■	■	■	■	■	■	■	■
■	■	■	■	■	■	■	■
■	■	■	■	■	■	■	■
–	■	■	■	■	■	–	■
–	■	■	■	■	■	–	■
–	■	■	■	■	■	–	■
–	■	■	■	■	■	–	■

100 A	160 A	250 A	400 A	630 A	1000 A	1250 A	1600 A
■	■	■	■	■	■	■	■
■	■	■	■	■	■	■	■
■	■	■	■	■	■	■	■
■	■	■	■	■	–	–	–
■	■	■	■	■	–	–	■
■	■	■	■	■	■	■	■
■	■	■	■	■	■	■	■
■	■	■	■	■	–	–	–
–	–	–	–	–	–	–	–
■	■	■	■	■	–	–	–
■	■	■	–	–	–	–	–
–	–	–	–	–	–	–	■
■	■	■	■	■	■	■	■
–	–	–	–	–	–	–	–
■	■	■	■	■	–	–	–
■	■	■	■	■	■	■	■
■	■	■	■	■	■	■	■
■	■	■	■	■	■	■	■
–	–	–	–	–	–	–	–
■	■	■	■	■	–	–	–

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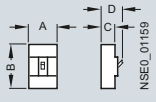
3VA1 switching devices up to 1000 A

Technical data





			3VA10			3VA11			3VA11		
Electrical characteristics according to IEC 60947-2											
Number of poles			3-/4-pole			1-pole			2-pole		
Size		A	100			160			160		
Rated operational current I_n at 50 °C ambient temperature		A	16 ... 100			16 ... 160			16 ... 160		
Rated operational voltage U_e 50/60 Hz AC		V	690			415			415		
Rated insulation voltage U_i		V	800			500			500		
Rated impulse withstand voltage U_{pulse}		kV	8			8			8		
Use in IT networks		V	■			■			■		
Frequency		Hz	0 ... 400			0 ... 400			0 ... 400		
Breaking capacity (line protection)			**B**	**N**	**S**	**N**	**S**	**M**	**N**	**S**	**M**
Rated ultimate short-circuit breaking capacity I_{cu}											
50/60 Hz AC	220 ... 240 V	kA	25	36	55	25	36	55	36	55	85
	380 ... 415 V	kA	16	25	36	5	6	6	25	36	55
	440 V	kA	8	16	25	–	–	–	–	–	–
	500 V	kA	5	5	7	–	–	–	–	–	–
	690 V	kA	5	5	7	–	–	–	–	–	–
DC [1]	125 V	kA	16	25	30	16	25	30	16	25	30
	250 V	kA	25	36	55	–	–	–	36	55	85
	500 V	kA	25	36	55	–	–	–	–	–	–
	600 V	kA	8	16	25	–	–	–	–	–	–
	750 V	kA	–	–	–	–	–	–	–	–	–
	1000 V [2]	kA	–	–	–	–	–	–	–	–	–
Rated operational short-circuit breaking capacity I_{cs}											
50/60 Hz AC	220 ... 240 V	kA	25	36	55	25	35	55	36	55	85
	380 ... 415 V	kA	16	25	36	5	6	6	25	36	55
	440 V	kA	8	16	25	–	–	–	–	–	–
	500 V	kA	5	5	5	–	–	–	–	–	–
	690 V	kA	5	5	5	–	–	–	–	–	–
DC	125 V	kA	16	25	30	16	25	30	16	25	30
	250 V	kA	25	36	55	–	–	–	36	55	85
	500 V	kA	25	36	55	–	–	–	–	–	–
	600 V	kA	8	16	25	–	–	–	–	–	–
	750 V	kA	–	–	–	–	–	–	–	–	–
	1000 V [2]	kA	–	–	–	–	–	–	–	–	–
Dimensions											
	A	mm	76.2 (3P) | 101.6 (4P)			25.4			50.8		
	B	mm	130			130			130		
	C	mm	70			70			70		
	D	mm	88			88			88		

[1] For detailed data on DC breaking capacity, number of interrupter poles and circuit diagrams, see FAQ www.siemens.com/lowvoltage/product-support (109779932)
[2] For I_n = 630 A / 800 A

■ Available – Not available/not present

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3VA11				3VA12			3VA13				3VA14				3VA15		
3-/4-pole				3-/4-pole			3-/4-pole				3-/4-pole				3-/4-pole		
160				250			400				630				1000		
16 ... 160				160 ... 250			320 ... 400				500 ... 630				630 ... 1000		
690				690			690				690				690		
800				800			800				800				800		
8				8			8				8				8		
■				■			■				■				≤500		
0 ... 400				0 ... 400			0 ... 400				0 ... 400				0 ... 400		
N	S	M	H	S	M	H	S	M	H	C	S	M	H	C	M	H	C
36	55	85	100	55	85	100	55	85	100	200	55	85	100	200	85	110	200
25	36	55	70	36	55	70	36	55	70	110	36	55	70	110	55	70	110
16	25	36	55	25	36	36	36	55	70	110	36	55	70	110	55	70	110
7	7	10	10	10	15	15	25	36	55	70	25	36	55	70	36	55	70
7	7	10	10	7	10	10	7	7	10	10	7	7	10	10	25	35	35
16	25	30	30	55	85	100	8	16	25	25	8	16	25	25	–	–	–
36	55	85	100	55	85	100	8	16	25	25	8	16	25	25	35	50	100
36	55	85	100	55	85	100	8	16	25	25	8	16	25	25	35	50	100
16	25	36	55	25	36	55	8	16	25	25	8	16	25	25	–	–	–
–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	35	50	100
–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	25	35	50
36	55	85	100	55	85	100	55	85	100	200	55	85	100	200	85	110	150
25	36	55	70	36	55	70	36	55	70	110	36	55	70	110	55	70	110
16	25	36	40	25	36	36	36	55	70	110	36	55	70	110	55	70	70
5	5	5	5	10	10	10	25	36	55	70	25	36	55	70	36	55	65
5	5	5	5	5	5	5	5	5	6	6	5	5	6	6	19	19	19
16	25	30	30	55	85	100	8	16	25	25	8	16	25	25	–	–	–
36	55	85	100	55	85	100	8	16	25	25	8	16	25	25	35	50	100
36	55	85	100	55	85	100	8	16	25	25	8	16	25	25	35	50	100
16	25	36	55	25	36	55	8	16	25	25	8	16	25	25	–	–	–
–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	35	50	100
–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	25	35	50
76.2 (3P) | 101.6 (4P)				105 (3P) | 140 (4P)			138 (3P) | 184 (4P)				138 (3P) | 184 (4P)				210 (3P) | 280 (4P)		
130				158			248				248				320		
70				70			110				110				120		
88				88			137				137				253		

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3VA1 switching devices up to 1000 A

Application





			3VA10	3VA11	3VA11
Electrical characteristics according to IEC 60947-2					
Number of poles			3-/4-pole	1-pole	2-pole
Size		A	100	160	160
Rated current I_n at 50 °C ambient temperature		A	16 ... 100	16 ... 160	16 ... 160
3VA1 molded case circuit breakers for line protection, standard applications (IEC 60947-2)					
Service life/endurance (switching cycles)					
Mechanical (NO contact – NC contact)			20000	20000	20000
Electrical	380 ... 415 V	I_n	9000	9000	9000
		$I_n/2$	15000	15000	15000
	690 V		6300	6300	6300
Trip Units					
TM210	FTFM		■	■	■
TM220	ATFM		–	–	–
TM240	ATAM		–	–	–
3VA1 molded case circuit breakers for starter protection (IEC 60947-4-1 standards and specifications acc. to AC-1)					
Rated current I_n at 50 °C ambient temperature		A	–	–	–
Service life/endurance (switching cycles)					
Mechanical (NO contact – NC contact)			–	–	–
Electrical	380 ... 415 V		–	–	–
Trip Units					
TM120M	AM		–	–	–
Switch disconnectors (IEC 60947-3)					
Electrical characteristics according to IEC 60947-3					
Rated uninterrupted current I_u at 50 °C ambient temperature		A	–	–	–
Rated operational voltage U_e 50/60 Hz AC		V	–	–	–
Rated operational voltage U_e DC		V	–	–	–
Rated conditional short-circuit current I_q with upstream 3VA1 circuit breaker		kA	–	–	–
Permissible rated short-time current I_{cw} (1 s)		kA	–	–	–

■ Available – Not available/not present * On request

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3VA11	3VA12	3VA13	3VA14	3VA15
3-/4-pole	3-/4-pole	3-/4-pole	3-/4-pole	3-/4-pole
160	250	400	630	1000
16 ... 160	160 ... 250	320 ... 400	500 ... 630	630 ... 1000
20000	20000	20000	20000	10000
9000	8000	6000	4000	4600
15000	14000	12000	8000	7000
6300	5400	4200	3000	3200
■	–	–	–	–
■	–	–	–	–
■	■	■	■	■
32 ... 125	160, 200	250	400 ... 500	630 ... 800
20000	20000	20000	20000	10000
9000	8000	6000	4000	4600
■	■	■	■	■
63 ... 160	250	400	630 (3P), 500 (4P)	–
690	690	690	690	–
500 (3P), 600 (4P)	500 (3P), 600 (4P)	500 (3P), 600 (4P)	500 (3P), 600 (4P)	–
70 at 415 V	70 at 415 V	*	*	–
2	3	6	7.6 (3P), 6 (4P)	–

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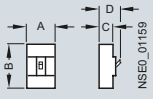
3VA2 switching devices up to 1600 A

Technical data





			3VA20				3VA21					3VA22				
Electrical characteristics according to IEC 60947-2																
Number of poles			3-/4-pole				3-/4-pole					3-/4-pole				
Size		A	100				160					250				
Rated current I_n at 50 °C ambient temperature		A	25 ... 100				25 ... 160					160 ... 250				
Rated operational voltage U_e 50/60 Hz AC		V	690				690					690				
Rated insulation voltage U_i		V	800				800					800				
Rated impulse withstand voltage U_{pulse}		kV	8				8					8				
Use in IT networks		V	■				■					■				
Frequency		Hz	50/60				50/60					50/60				
Breaking capacity			**M**	**H**	**C**	**L**	**M**	**H**	**C**	**L**	**E**	**M**	**H**	**C**	**L**	**E**
Rated ultimate short-circuit breaking capacity I_{cu}																
50/60 Hz AC	220 ... 240 V	kA	85	110	150	200	85	110	150	200	–	85	110	150	200	–
	380 ... 415 V	kA	55	85	110	150	55	85	110	150	200	55	85	110	150	200
	440 V	kA	55	85	110	150	55	85	110	150	–	55	85	110	150	–
	500 V	kA	36	55	85	100	36	55	85	100	–	36	55	85	100	–
	690 V	kA	2	2	2	25	2.5	2.5	2.5	25	85	3	3	3	25	85
DC	125 V (1 switching pole)	kA	–	–	–	–	–	–	–	–	–	–	–	–	–	–
	250 V (2 switching poles)	kA	–	–	–	–	–	–	–	–	–	–	–	–	–	–
	500 V (3 switching poles)	kA	–	–	–	–	–	–	–	–	–	–	–	–	–	–
	600 V (4 switching poles)	kA	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Rated service short-circuit breaking capacity I_{cs}																
50/60 Hz AC	220 ... 240 V	kA	85	110	150	200	85	110	150	200	–	85	110	150	200	–
	380 ... 415 V	kA	55	85	110	150	55	85	110	150	200	55	85	110	150	200
	440 V	kA	55	85	110	150	55	85	110	150	–	55	85	110	150	–
	500 V	kA	36	55	85	100	36	55	85	100	–	36	55	85	100	–
	690 V	kA	2	2	2	18	2.5	2.5	2.5	18	65	3	3	3	18	65
DC	125 V (1 switching pole)	kA	–	–	–	–	–	–	–	–	–	–	–	–	–	–
	250 V (2 switching poles)	kA	–	–	–	–	–	–	–	–	–	–	–	–	–	–
	500 V (3 switching poles)	kA	–	–	–	–	–	–	–	–	–	–	–	–	–	–
	600 V (4 switching poles)	kA	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Dimensions																
	A	mm	105 (3P) | 140 (4P)				105 (3P) | 140 (4P)					105 (3P) | 140 (4P)				
	B	mm	181				181					181				
	C	mm	86				86					86				
	D	mm	107				107					107				

■ Available – Not available/not present

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3VA23					3VA24					3VA25			3VA26 new			3VA27		
3-/4-pole					3-/4-pole					3-/4-pole			3-/4-pole			3-/4-pole		
400					630					1000			1250			1600		
250 ... 400					400 ... 630					630 ... 1000			1250			800 ... 1600		
690					690					690			690			690		
800					800					800			800			1000		
8					8					8			8			8		
■					■					≤500			≤500			■		
50/60					50/60					50/60			50/60			50/60		
M	**H**	**C**	**L**	**E**	**M**	**H**	**C**	**L**	**E**	**M**	**H**	**C**	**M**	**H**	**C**	**M**	**H**	**C**
85	110	150	200	–	85	110	150	200	–	85	110	200	85	110	200	100	150	200
55	85	110	150	200	55	85	110	150	200	55	85	110	55	85	110	55	85	110
55	85	110	–	–	55	85	110	–	–	55	85	110	55	85	110	55	85	100
36	55	85	–	–	36	55	85	–	–	36	55	85	36	55	85	36	55	85
5	5	5	25	85	6	6	6	25	85	25	35	35	25	35	35	25	36	50
–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
85	110	150	200	–	85	110	150	200	–	85	110	150	85	110	150	100	150	200
55	85	110	150	200	55	85	110	150	200	55	85	85	55	85	85	55	85	110
55	85	110	–	–	55	85	110	–	–	55	70	70	55	70	70	55	85	100
36	55	65	–	–	36	55	85	–	–	36	55	65	36	55	65	36	55	63
5	5	5	18	65	6	6	6	18	65	19	19	19	19	19	19	25	36	36
–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
138 (3P) | 184 (4P)					138 (3P) | 184 (4P)					210 (3P) | 280 (4P)			210 (3P) | 280 (4P)			210 (3P) | 280 (4P)		
248					248					320			320			291		
110					110					120			120			171 (toggle operating mechanism) | 183 (stored energy operating mechanism)		
137					137					253			253			225		

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3VA2 switching devices up to 1600 A

Application





			3VA20	3VA21	3VA22
Electrical characteristics according to IEC 60947-2					
Number of poles			3-/4-pole	3-/4-pole	3-/4-pole
Size		A	100	160	250
Rated current I_n at 50 °C ambient temperature		A	25 ... 100	25 ... 160	160 ... 250
Service life/endurance (switching cycles)					
Mechanical (NO contact – NC contact)			25000	25000	25000
Electrical	380 ... 415 V	I_n	15000	14000	12000
		$I_n/2$	20000	20000	17000
	690 V		10500	9800	8400
Trip units					
ETU320	LI		■	■	■
ETU330	LIG		■	■	■
ETU340	ELISA LI		–	■	■
ETU350	LSI		■	■	■
ETU550/ETU850	LSI		■	■	■
ETU560/ETU860	LSIG		■	■	■
ETU650	LSI		–	–	–
ETU360	LSIG		–	–	–
ETU660	LSIG		–	–	–
3VA2 molded case circuit breakers for motor/starter protection (IEC 60947-4-1 standards and specifications acc. to AC-1)					
Rated current I_n at 50 °C ambient temperature		A	–	25 ... 100	160 ... 200
Service life/endurance (switching cycles)					
Mechanical (NO contact – NC contact)			–	25000	25000
Electrical	380 ... 415 V		–	14000	12000
Trip units					
ETU310M	I		–	■	■
ETU350M	LSI		–	■	■
ETU550M	LSI		–	■	■
ETU860M	LSIG		–	■	■
ETU320	LI		–	–	–
ETU350	LSI		–	–	–
ETU360	LSIG		–	–	–
ETU650	LSIG		–	–	–
ETU660	LSIG		–	–	–

■ Available – Not available/not present

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3VA23	3VA24	3VA25	3VA26 new	3VA27
3-/4-pole	3-/4-pole	3-/4-pole	3-/4-pole	3-/4-pole
400	630	1000	1250	1600
250 ... 400	400 ... 630	630 ... 1000	1250	800 ... 1600
20000	20000	10000	10000	10000
6000	5000	4600	4600	2000
12000	10000	7000	7000	–
4200	3500	3200	3200	–
■	■	■	■	■
■	■	■	■	–
■	■	■	■	–
■	■	■	■	■
■	■	■	■	–
■	■	■	■	–
–	–	–	–	■
–	–	–	–	■
–	–	–	–	■
250	400 ... 500	630 ... 800	–	800 ... 1600
20000	20000	10000	–	10000
6000	5000 (400 A) 3000 (500 A)	4600	–	2000
■	■	–	–	–
■	■	■	–	–
■	■	■	–	–
■	■	■	–	–
–	–	–	–	■
–	–	–	–	■
–	–	–	–	■
–	–	–	–	■
–	–	–	–	■

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Trip units

Protection system for 3VA molded case circuit breakers up to 1000 A

Trip units	Thermal-magnetic	Electronic	Electronic with display	Electronic with display and metering function
				
	TM 2-series	**ETU 3-series**	**ETU 5-series**	**ETU 8-series**
Protection function				
Line protection	TM210, TM220, TM240	ETU320, ETU330, ETU340, ETU350	ETU550, ETU560	ETU850, ETU860
Starter protection	TM120M	ETU310M	–	–
Motor protection	–	ETU350M	ETU550M	ETU860M
Integrated functions				
Parameterizing	Setting and reading the parameters • Current values	Setting and reading the parameters • Current values • Delay times	Setting and reading the parameters • Via display and communication • Fine setting of the parameters • Reading the measured values	Setting and reading the parameters • Via display and communication • Fine setting of the parameters • Reading the measured values
Status display	–	Indicating the ETU status via LEDs	Indicating the ETU status via LEDs	Indicating the ETU status via LEDs
Interface	–	Interface for test devices	Interface for test devices	Interface for test devices
Metering function	–	–	–	Metering function integrated
Optional expansions				
24 V module	–	–	 24 V module for continuous power supply (also without primary current through the molded case circuit breaker)	 24 V module for continuous power supply (also without primary current through the molded case circuit breaker)
External function box	–	 EFB300 external function box for connection to the ETU	 EFB300 external function box for connection to the ETU	 EFB300 external function box for connection to the ETU
Communication module	–	–	 COM060 communication module	 COM060 communication module
Breaker data server	–	–	 COM800/COM100 breaker data server with interface to • PROFIBUS • PROFINET • Modbus RTU • Ethernet (Modbus TCP)	 COM800/COM100 breaker data server with interface to • PROFIBUS • PROFINET • Modbus RTU • Ethernet (Modbus TCP)
External display	–	–	 DSP800 external display for installing in the cubicle door	 DSP800 external display for installing in the cubicle door
Test device	–	 TD300/TD400/TD500 test device	 TD300/TD400/TD500 test device	 TD300/TD400/TD500 test device

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Protection functions of the 3VA1 with thermal-magnetic trip unit

	TM120M AM	**TM210** FTFM	**TM220** ATFM	**TM240** ATAM
Protections				
Starter protection	■	–	–	–
Line protection	–	■	■	■
Version available with				
1-pole and 2-pole breakers	–	■	–	–
3-pole breaker	■	■	■	■
4-pole breaker	–	■	■	■
Available protection parameters				
I_r adjustable	–	–	■	■
I_i adjustable	■	–	–	■
I_r fixed	–	■	–	–
I_i fixed	–	■	■	–
I_N [1]	–	■	■	■

[1] 3VA10 only without N protection
3VA11, 3VA12, 3VA13, 3VA14 without, 50% or 100% N protection
50% N protection from I_n ≥100 A

Protection functions of the 3VA2 with electronic trip unit

	ETU310M I	**ETU320** LI	**ETU330** LIG	**ETU340** ELISA®	**ETU350** LSI	**ETU350M** LSI	**ETU550** LSI	**ETU550M** LSI	**ETU560** LSIG	**ETU850** LSI	**ETU860** LSIG	**ETU860M** LSIG
Protection												
Starter protection	■	–	–	–	–	–	–	–	–	–	–	–
Motor protection	–	–	–	–	–	■	–	■	–	–	–	■
Line protection	–	■	■	■	■	–	■	–	■	■	■	–
Generator protection	–	■	■	–	■	–	■	–	■	■	■	–
Version available with												
3-pole without external neutral conductor transformer	■	■	■	■	■	■	–	■	–	–	–	■
3-pole with external neutral conductor transformer	–	–	–	–	–	–	■	–	■	■	■	–
4-pole with protected neutral conductor transformer	–	■	■	■	■	–	■	–	■	■	■	–
Available protection parameters												
Characteristic in L range	I^2t	I^2t	I^2t	I^4t	I^2t	I^2t	I^2t	I^2t	I^2t	I^2t	I^2t	I^2t
I_r	–	■	■	■	■	■	■	■	■	■	■	■
t_r at 6 × I_r	–	■	■	–	■	–	■	–	■	■	■	–
t_c	–	–	–	–	–	■	–	■	–	–	–	■
t_p	–	–	–	–	–	–	–	■	–	–	–	■
Thermal image	■	■	■	■	■	■	■	■	■	■	■	■
Thermal image can be switched on/off	–	–	–	–	–	–	■	–	■	■	■	–
I_{sd}	–	–	–	–	■	■	■	■	■	■	■	■
t_{sd} at 8 × I_r	–	–	–	–	■	■	■	■	■	■	■	■
Characteristic in S range: I^2t_{sd}	–	–	–	–	■	–	■	–	■	■	■	–
Characteristic in S range: selectable I^2t_{sd} / t_{sd}	–	–	–	–	–	–	■	–	■	■	■	–
I_i	■	■	■	■	■	■	■	■	■	■	■	■
I_N [1]	–	■	■	■	■	–	■	–	■	■	■	–
I_g	–	–	■	–	–	–	–	–	■	–	■	■
t_g at 2 × I_g	–	–	■	–	–	–	–	–	■	–	■	■
Characteristic in G range: I^2t_g	–	–	–	–	–	–	–	–	■	–	■	■
Characteristic in G range: selectable I^2t_g / t_g	–	–	–	–	–	–	–	–	■	–	■	■
Ground-fault alarm function	–	–	–	–	–	–	–	–	■	–	■	■
Blocking protection	–	–	–	–	–	–	–	–	–	–	–	■
ZSI in combination with an EFB external function box	–	■	■	■	■	■	■	■	■	■	■	■

[1] Available in a version with external current transformer for N conductor or 4-pole breaker

Available for:
- Circuit breakers with ETU (4-pole)
- Circuit breakers with ETU5/ETU8 3-pole with external neutral conductor transformer or 4-pole

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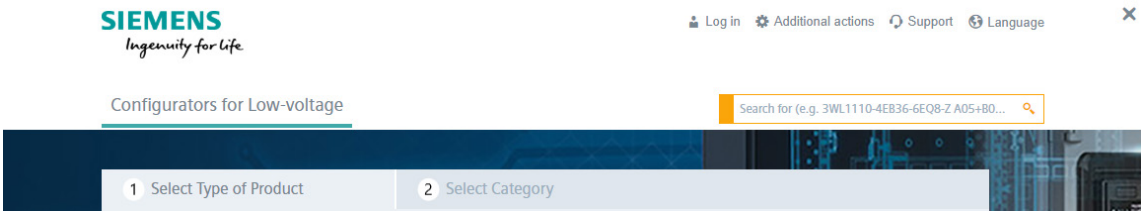
Online configurator highlights

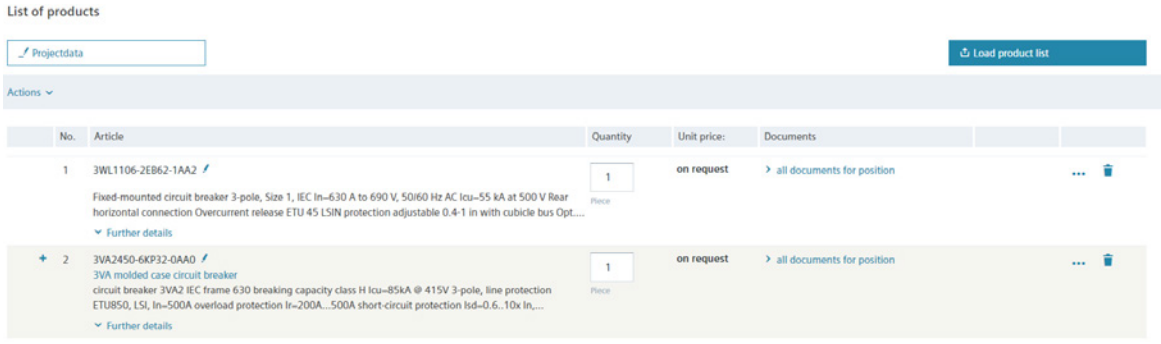
www.siemens.com/lowvoltage/configurators

Search function with global direct input

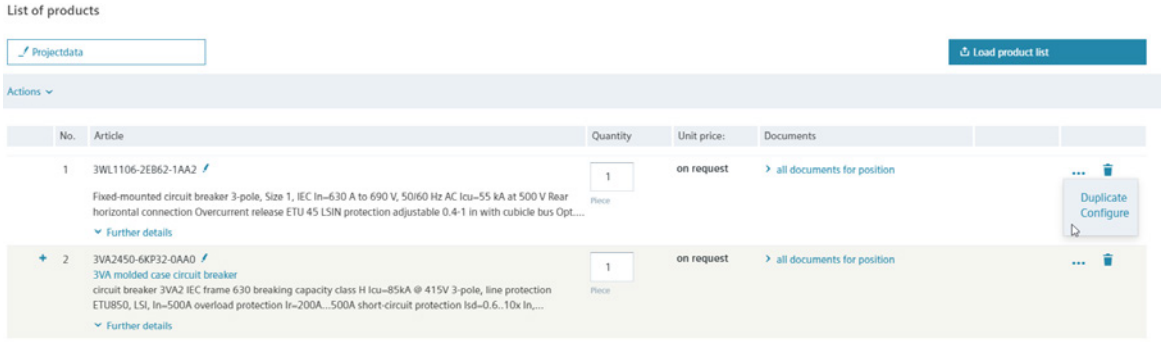
Searches for specific terms and jumps to MLFB based on input to the correct configurator



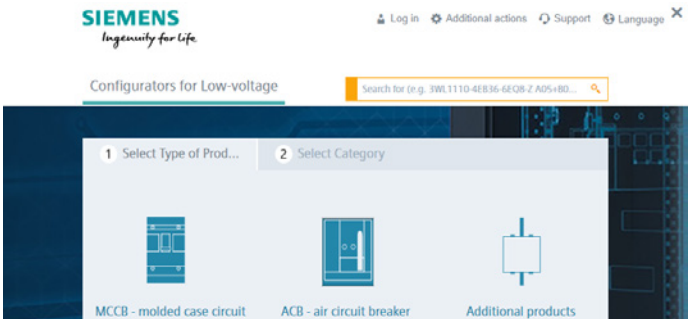
Product list stores multiple configurations and can transfer them collectively to the shopping cart



Recall of completed configurations for modification or additional configuration



Responsive Design



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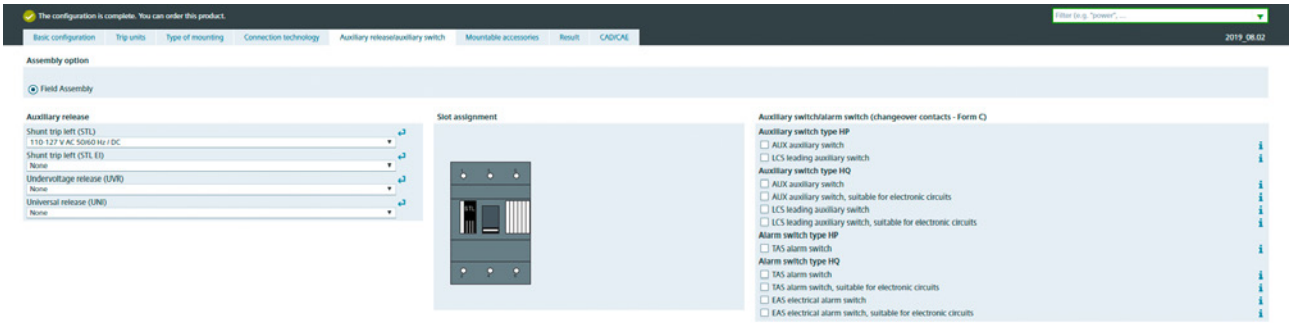
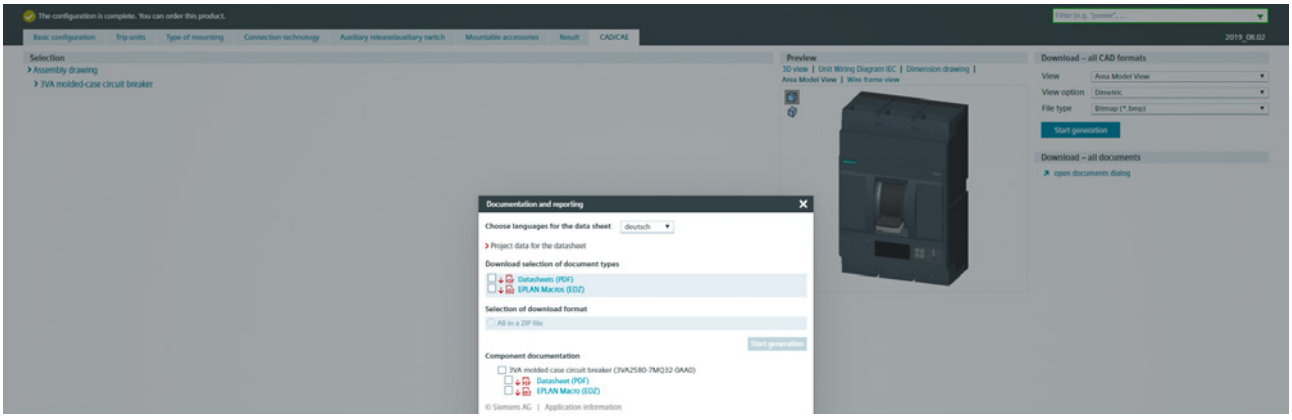
www.siemens.com/lowvoltage/3va-configurator and www.siemens.com/lowvoltage/3va27-configurator

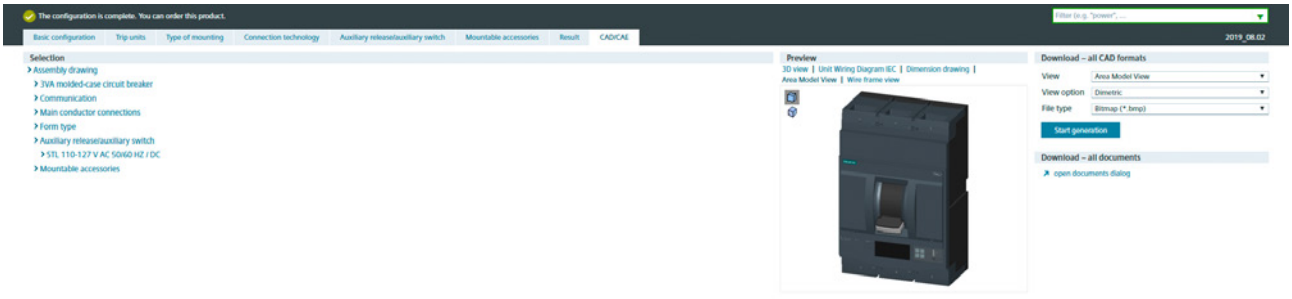
Visualization of the internally mountable accessories (slot assignment)



Download of the individual edz files for 3VA



Automatic generation of the 3D model, 2D dimension drawing and the internal circuit diagram according to IEC



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System overview

For a complete and valid configuration of your molded case circuit breaker, please use our online configurator at www.siemens.com/lowvoltage/3va-configurator

Switching devices



3VA1 for standard applications

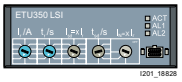


3VA2 for selective applications

Trip units



Thermal-magnetic trip unit (TMTU)



Electronic trip unit (ETU)



Electronic trip unit (ETU) with display, and optionally with metering function

Trip unit accessories



24 V module



Communication module



Breaker data server



External display



Test device

Installation type



Fixed-mounted



Draw-out unit, complete kit



Plug-in unit, complete kit

Supplementary accessories



Auxiliary circuit connector



Door feedthrough



Position signaling switch



Cylinder lock adapter



Crank

Main conductor connection



Front bus connectors extended



Front bus connectors offset



Circular conductor terminal



Box terminal



Nut keeper units, right-angled

Connection accessories



Insulation accessories

Note:
You will find a detailed range of accessories in the Accessories and spare parts section.

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Auxiliary releases/auxiliary switches


Shunt trip


Universal release


Undervoltage release


Auxiliary switch

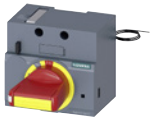

Tripped signaling switch


Leading changeover switch LCS


Electrical alarm switches EAS


Short circuit alarm switch SAS

Mountable accessories


Manual operator


Motorized operating mechanism


Residual current device

Additional circuit breaker accessories

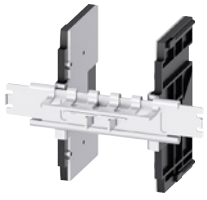

Cover frame


Adapter for DIN rails


Locking device


Cylinder lock

Mechanical interlocks


Sliding bar interlock


Interlocking with rod


Handle interlock using a Bowden cable

Note:
You will find a detailed range of accessories in the Accessories and spare parts section.

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Structure of the article numbers

Basic configuration for line and generator protection

The structure shown below is intended as an overview of each position and its meaning. For a complete and valid configuration of your molded case circuit breaker, please use our online configurator at www.siemens.com/lowvoltage/3va-configurator

			4	5	6	7	8	9	10	11	12
			3VA				–				– 0AA0
Trip units	Thermal-magnetic		1								
	Electronic		2								
			3VA10	3VA11	3VA12	3VA13	3VA14	3VA15	3VA20	3VA21	3VA22	3VA23	3VA24	3VA25	3VA26				
Size (SZ)	100 A		■	–	–	–	–	–	■	–	–	–	–	–	–	0			
	160 A		–	■	–	–	–	–	–	■	–	–	–	–	–	1			
	250 A		–	–	■	–	–	–	–	–	■	–	–	–	–	2			
	400 A		–	–	–	■	–	–	–	–	–	■	–	–	–	3			
	630 A		–	–	–	–	■	–	–	–	–	–	■	–	–	4			
	1000 A		–	–	–	–	–	■	–	–	–	–	–	■	–	5			
	1250 A		–	–	–	–	–	–	–	–	–	–	–	–	■	6			
Max. rated current I_n	Line protection	16 A	■	■	–	–	–	–	–	–	–	–	–	–	–		9	6	
		20 A	■	■	–	–	–	–	–	–	–	–	–	–	–		2	0	
		25 A	■	■	–	–	–	–	■	■	–	–	–	–	–		2	5	
		32 A	■	■	–	–	–	–	–	–	–	–	–	–	–		3	2	
		40 A	■	■	–	–	–	–	■	■	–	–	–	–	–		4	0	
		50 A	■	■	–	–	–	–	–	–	–	–	–	–	–		5	0	
		63 A	■	■	–	–	–	–	■	■	–	–	–	–	–		6	3	
		80 A	■	■	–	–	–	–	–	–	–	–	–	–	–		8	0	
		100 A	■	■	–	–	–	–	■	■	–	–	–	–	–		1	0	
		125 A	–	■	–	–	–	–	–	–	–	–	–	–	–		1	2	
		160 A	–	■	■		–	–	–	■	■	–	–	–	–		1	6	
		200 A	–	–	■	–	–	–	–	–	–	–	–	–	–		2	0	
		250 A	–	–	■	–	–	–	–	–	■	■	–	–	–		2	5	
		320 A	–	–	–	■	–	–	–	–	–	–	–	–	–		3	2	
		400 A	–	–	–	■	–	–	–	–	–	■	■	–	–		4	0	
		500 A	–	–	–	–	■	–	–	–	–	–	■*	–	–		5	0	
		630 A	–	–	–	–	■	■	–	–	–	–	■	■	–		6	3	
		800 A	–	–	–	–	–	■	–	–	–	–	–	■	–		8	0	
		1000 A	–	–	–	–	–	■	–	–	–	–	–	■	–		1	0	
		1250 A	–	–	–	–	–	–	–	–	–	–	–	–	■		1	2	
	Generator protection	25 A	–	–	–	–	–	–	■	■	–	–	–	–	–		2	5	
		40 A	–	–	–	–	–	–	■	■	–	–	–	–	–		4	0	
		63 A	–	–	–	–	–	–	■	■	–	–	–	–	–		6	3	
		100 A	–	–	–	–	–	–	■	■	–	–	–	–	–		1	0	
		160 A	–	–	–	–	–	–	–	■	■	–	–	–	–		1	6	
		250 A	–	–	–	–	–	–	–	–	■	■	–	–	–		2	5	
		400 A	–	–	–	–	–	–	–	–	–	■	■	–	–		4	0	
		500 A	–	–	–	–	–	–	–	–	–	–	■*	–	–		5	0	
		630 A	–	–	–	–	–	–	–	–	–	–	■	■	–		6	3	
		800 A	–	–	–	–	–	–	–	–	–	–	–	■	–		8	0	
		1000 A	–	–	–	–	–	–	–	–	–	–	–	■	–		1	0	
		1250 A	–	–	–	–	–	–	–	–	–	–	–	–	■		1	2	
	Switch disconnector	63 A	–	■	–	–	–	–	–	–	–	–	–	–	–		6	3	
		100 A	–	■	–	–	–	–	–	–	–	–	–	–	–		1	0	
		125 A	–	■	–	–	–	–	–	–	–	–	–	–	–		1	2	
		160 A	–	■	–	–	–	–	–	–	–	–	–	–	–		1	6	
		250 A	–	–	■	–	–	–	–	–	–	–	–	–	–		2	5	
		400 A	–	–	–	■	–	–	–	–	–	–	–	–	–		4	0	
		500 A	–	–	–	–	■	–	–	–	–	–	–	–	–		5	0	
		630 A	–	–	–	–	■	–	–	–	–	–	–	–	–		6	3	

* With ETU 5-series and 8-series, utilization category B only

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3VA 4 5 6 7 – 8 9 10 11 12 – 0AA0

			3VA10	3VA11	3VA12	3VA13	3VA14	3VA15	3VA20	3VA21	3VA22	3VA23	3VA24	3VA25	3VA26			8	9	10	11	12
Short-circuit breaking capacity $I_{cu} = I_{cs}$ at 415 V	Without overload protection		–	■	–	■	–	■	–	–	–	–	–	–	–			1				
	Without short-circuit protection		–	■	■	■	■	–	–	–	–	–	–	–	–			1				
	16 kA		■	–	–	–	–	–	–	–	–	–	–	–	–			2				
	25 kA		■	■	–	–	–	–	–	–	–	–	–	–	–			3				
	36 kA		■	■	■	■	■	–	–	–	–	–	–	–	–			4				
	55 kA		–	■	■	■	■	■	■	■	■	■	■	■	■			5				
	70 kA		–	■	■	■	■	■	–	–	–	–	–	–	–			6				
	85 kA		–	–	–	–	–	–	■	■	■	■	■	■	■			6				
	110 kA		–	–	–	■	■	■	■	■	■	■	■	■	■			7				
	150 kA		–	–	–	–	–	–	■	■	■	■	■	–	–			8				
	200 kA [1]		–	–	–	–	–	–	–	■	■	■	■	–	–			0				
Protection function thermal-magnetic	No protection		–	■	■	■	■	–	–	–	–	–	–	–	–	SD100	–			A		
	Line protection		■	■	–	–	–	–	–	–	–	–	–	–	–	TM210	FTFM			D		
			–	■	–	–	–	–	–	–	–	–	–	–	–	TM220	ATFM			E		
			–	■	■	■	■	■	–	–	–	–	–	–	–	TM240	ATAM			F		
Protection function thermal-magnetic, neutral conductor protection	No protection																		A			
	Line protection	Without neutral conductor protection																	E			
		50% neutral conductor protection																	F			
		100% neutral conductor protection																	G			
Protection function electronic	Line protection		–	–	–	–	–	–	■	■	■	■	■	■	■	ETU320	LI	(N) [2]	H	L		
			–	–	–	–	–	–	■	■	■	■	■	■	■	ETU330	LIG	(N) [2]	H	M		
			–	–	–	–	–	–	■	■	■	■	■	■	■	ETU340	ELISA LI	(N) [2]	H	K		
	Line and generator protection		–	–	–	–	–	–	■	■	■	■	■	■	■	ETU350	LSI	(N) [2]	H	N		
	Line and generator protection, with display		–	–	–	–	–	–	■	■	■	■	■	■	■	ETU550	LSI	(N) [3]	J	P		
			–	–	–	–	–	–	■	■	■	■	■	–	–	ETU560	LSIG	(N) [3]	J	Q		
	Line and generator protection, with display, with metering function		–	–	–	–	–	–	■	■	■	■	■	–	–	ETU850	LSI	(N) [3]	K	P		
			–	–	–	–	–	–	■	■	■	■	■	■	■	ETU860	LSIG	(N) [3]	K	Q		
Number of poles	1-pole	Line protection	–	■*	–	–	–	–	–	–	–	–	–	–	–						1	
	2-pole	Line protection	–	■*	–	–	–	–	–	–	–	–	–	–	–						2	
	3-pole	Line protection	■	■	■	■	■	■	■	■	■	■	■	■	■						3	
		Generator protection	–	–	–	–	–	–	■	■	■	■	■	■	■						3	
	4-pole	Line protection	■	■	■	■	■	■	■	■	■	■	■	■	■						4	
		Generator protection	–	–	–	–	–	–	■	■	■	■	■	■	■						4	
Connection technology	Nut keeper kit	Line protection	■	■	■	■	■	■	■	■	■	■	■	■	■							2
		Generator protection	–	–	–	–	–	–	■	■	■	■	■	■	■							2
	Box terminal	Line protection	■	■	–	–	–	–	■	■	–	–	–	–	–							6
		Generator protection	–	–	–	–	–	–	■	■	–	–	–	–	–							6

[1] Available for 3 and 8-series ETUs

[2] Neutral conductor protection for 4-pole breakers

[3] Neutral conductor protection for 3-pole breakers with an external neutral conductor transformer or for 4-pole breakers

* For TM210 only

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Structure of the article numbers

Basic configuration for starter and motor protection

**The structure shown below is intended as an overview of each position and its meaning.
For a complete and valid configuration of your molded case circuit breaker, please use our online configurator at www.siemens.com/lowvoltage/3va-configurator**

			3VA11	3VA12	3VA13	3VA14	3VA15	3VA21	3VA22	3VA23	3VA24	3VA25	4	5	6	7	8	9	10	11	12
	3VA																				– 0AA0
Trip units	Thermal-magnetic												1								
	Electronic												2								
Size (SZ)	160 A		■	–	–	–	–	■	–	–	–	–		1							
	250 A		–	■	–	–	–	–	■	–	–	–		2							
	400 A		–	–	■	–	–	–	–	■	–	–		3							
	630 A		–	–	–	■	–	–	–	–	■	–		4							
	1000 A		–	–	–	–	■	–	–	–	–	■		5							
Max. rated current I_n	Starter protection	1 A	■	–	–	–	–	–	–	–	–	–			8	1					
		2 A	■	–	–	–	–	–	–	–	–	–			0	2					
		4 A	■	–	–	–	–	–	–	–	–	–			0	4					
		8 A	■	–	–	–	–	–	–	–	–	–			0	8					
		12.5 A	■	–	–	–	–	–	–	–	–	–			9	2					
		20 A	■	–	–	–	–	–	–	–	–	–			2	0					
		25 A	–	–	–	–	–	■	–	–	–	–			2	5					
		32 A	■	–	–	–	–	–	–	–	–	–			3	2					
		40 A	■	–	–	–	–	■	–	–	–	–			4	0					
		50 A	■	–	–	–	–	–	–	–	–	–			5	0					
		63 A	■	–	–	–	–	■	–	–	–	–			6	3					
		80 A	■	–	–	–	–	–	–	–	–	–			8	0					
		100 A	■	–	–	–	–	■	–	–	–	–			1	0					
		125 A	■	–	–	–	–	–	–	–	–	–			1	2					
		160 A	–	■	–	–	–	–	■	–	–	–			1	6					
		200 A	–	■	–	–	–	–	■	–	–	–			2	0					
		250 A	–	–	■	–	–	–	–	■	–	–			2	5					
		320 A	–	–	■	–	–	–	–	–	–	–			3	2					
		400 A	–	–	–	■	–	–	–	–	■	–			4	0					
		500 A	–	–	–	■	–	–	–	–	■	–			5	0					
		630 A	–	–	–	–	■	–	–	–	–	–			6	3					
		800 A	–	–	–	–	■	–	–	–	–	–			8	0					
	Motor protection	25 A	–	–	–	–	–	■	–	–	–	–			2	5					
		40 A	–	–	–	–	–	■	–	–	–	–			4	0					
		63 A	–	–	–	–	–	■	–	–	–	–			6	3					
		100 A	–	–	–	–	–	■	–	–	–	–			1	0					
		160 A	–	–	–	–	–	–	■	–	–	–			1	6					
		200 A	–	–	–	–	–	–	■	–	–	–			2	0					
		250 A	–	–	–	–	–	–	–	■	–	–			2	5					
		400 A	–	–	–	–	–	–	–	–	■	–			4	0					
		500 A	–	–	–	–	–	–	–	–	■	–			5	0					
		630 A	–	–	–	–	–	–	–	–	–	■			6	3					
		800 A	–	–	–	–	–	–	–	–	–	■			8	0					
Short-circuit breaking capacity $I_{cu} = I_{cs}$ at 415 V	55 kA		■	■	■	■	■	■	■	■	■	■					5				
	70 kA		■	■	■	■	■	–	–	–	–	–					6				
	85 kA		–	–	–	–	–	■	■	■	■	■					6				
	110 kA		–	–	■	■	■	■	■	■	■	■					7				
	200 kA		–	–	–	–	–	■	■	■	■	–					0				

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			3VA11	3VA12	3VA13	3VA14	3VA15	3VA21	3VA22	3VA23	3VA24	3VA25				9	10	11	12
Protection function thermal-magnetic	Starter protection		■	–	–	–	–	–	–	–	–	–		TM110M	FM	M	G		
			■	■	■	■	■	–	–	–	–	–		TM120M	AM	M	H		
Protection function electronic	Motor protection		–	–	–	–	–	■	■	■	■	■		ETU350M	LSI	M	N		
	Motor protection, with display		–	–	–	–	–	■	■	■	■	■		ETU550M	LSI	M	P		
	Motor protection, with display, with metering function		–	–	–	–	–	■	■	■	■	■		ETU860M	LSIG	M	Q		
	Starter protection		–	–	–	–	–	■	■	■	■	–		ETU310M	I	M	S		
Number of poles	3-pole	Starter protection	■	■	■	■	■	■	■	■	■	–						3	
		Motor protection	–	–	–	–	–	■	■	■	■	■						3	
Connection technology	Nut keeper kit	Starter protection	■	■	■	■	■	■	■	■	■	–							2
		Motor protection	–	–	–	–	–	■	■	■	■	■							2
	Box terminal	Starter protection	■	–	–	–	–	■	–	–	–	–							6
		Motor protection	–	–	–	–	–	■	–	–	–	–							6

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Internal accessories

Auxiliary switches and alarm switches

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Auxiliary switches AUX

- Used to signal the position of the main contacts of the molded case circuit breaker
- The contacts of the auxiliary switch and the molded case circuit breaker close in unison



Type	Width	I_e	U_e AC/DC	Version	3VA10	3VA11	3VA12 3VA13 3VA14	3VA15	3VA20 3VA21 3VA22 3VA23 3VA24 3VA25 3VA26
HQ	7 mm (1 slot)	6 A	240 V/250 V	Standard			3VA9988-0AA12		
		<1 A	24 V/24 V	Electronic-compatible			3VA9988-0AA13		
HP	14 mm (2 slots)	10 A	600 V/250 V	Standard	–	3VA9988-0AA11			

Leading changeover switches LCS

- Used for load shedding, for example
- Signal the opening of the main contacts with a lead time of 20 ms in advance of circuit breaker trips



Type	Width	I_e	U_e AC/DC	Version	3VA10	3VA11	3VA12 3VA13 3VA14	3VA15	3VA20 3VA21 3VA22 3VA23 3VA24 3VA25 3VA26
HQ	7 mm (1 slot)	6 A	240 V/250 V	Standard	–	3VA9988-0AA22			
		<1 A	24 V/24 V	Electronic-compatible	–	3VA9988-0AA23			
HP	14 mm (2 slots)	10 A	600 V/250 V	Standard	–	3VA9988-0AA21			

Trip alarm switches TAS

- Signal every circuit breaker tripping operation
- Are actuated whenever the molded case circuit breaker switches to the TRIP position



Type	Width	I_e	U_e AC/DC	Version	3VA10	3VA11	3VA12 3VA13 3VA14	3VA15	3VA20 3VA21 3VA22 3VA23 3VA24 3VA25 3VA26
HQ	7 mm (1 slot)	6 A	240 V/250 V	Standard			3VA9988-0AB12		
		<1 A	24 V/24 V	Electronic-compatible			3VA9988-0AB13		
HP	14 mm (2 slots)	10 A	600 V/250 V	Standard	–	3VA9988-0AB11			

Short circuit alarm switches SAS

- Signal tripping operations only if they have been initiated by a short circuit
- The tripping operation must be reset by deliberate acknowledgement of the fault before the molded case circuit breaker can be switched to ON again



Type	Width	I_e	U_e AC/DC	Version	3VA10	3VA11	3VA12 3VA13 3VA14	3VA15	3VA20 3VA21 3VA22 3VA23 3VA24 3VA25 3VA26
HQ	7 mm (1 slot)	6 A	240 V/250 V	Standard	3VA9988-0AB32	3VA9988-0AB32	3VA9988-0AB34	–	–
		<1 A	24 V/24 V	Electronic-compatible	3VA9988-0AB33	3VA9988-0AB33	3VA9988-0AB35	–	–

Electrical alarm switches EAS

- Are actuated as soon as the main contacts of the molded case circuit breaker open in the event that the breaker is tripped by the ETU



Type	Width	I_e	U_e AC/DC	Version	3VA10	3VA11	3VA12 3VA13 3VA14	3VA15	3VA20 3VA21 3VA22 3VA23 3VA24 3VA25 3VA26
HQ	7 mm (1 slot)	6 A	240 V/250 V	Standard	–	–	–	–	3VA9988-0AB22
		<1 A	24 V/24 V	Electronic-compatible	–	–	–	–	3VA9988-0AB23

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Auxiliary releases

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			3VA10 3VA11 3VA12 3VA13 3VA14 3VA15	3VA20 3VA21 3VA22 3VA23 3VA24	3VA25 3VA26
Shunt trips left STL					
• Used for remote-controlled tripping of the molded case circuit breaker • Have particularly low power consumption • Especially suitable for electrical interlocking in the EI variant [1]					
	**Version**	**U_e 50/60 Hz AC**	**U_e DC**		
	Standard	–	12 V	3VA9988-0BL10	
		24 V	24 ... 30 V	3VA9988-0BL30	
		48 ... 60 V	48 ... 60 V	3VA9988-0BL31	
		110 ... 127 V	110 ... 127 V	3VA9988-0BL32	
		208 ... 277 V	220 ... 250 V	3VA9988-0BL33	
		380 ... 600 V	–	3VA9988-0BL20	
	Electrical (EI)	–	24 V	3VA9988-0BM10	
Shunt trips flexible STF					
• Used for remote-controlled tripping of the molded case circuit breaker • Flexible installation					
	**U_e 50/60 Hz AC**	**U_e DC**			
	24 V	–	–	3VA9988-0BA20	–
	48 ... 60 V	–	–	3VA9988-0BA21	–
	110 ... 127 V	–	–	3VA9988-0BA22	–
	208 ... 277 V	–	–	3VA9988-0BA23	–
	380 ... 500 V	–	–	3VA9988-0BA24	–
	600 V	–	–	3VA9988-0BA25	–
Universal releases UNI					
• Combination of shunt trip and undervoltage release					
	**U_e 50/60 Hz AC**	**U_e DC**			
	–	12 V	3VA9908-0BD11		
		24 V	3VA9908-0BD12		
		48 V	3VA9908-0BD13		
Undervoltage releases UVR					
	• Trip the molded case circuit breaker in the event that the rated voltage of a monitored circuit drops below a minimum permissible limit or fails altogether				
	U_e 50/60 Hz AC	**U_e DC**			
	–	12 V	3VA9908-0BB10		
	–	24 V	3VA9908-0BB11		
	–	48 V	3VA9908-0BB12		
	–	60 V	3VA9908-0BB13		
	–	125 ... 127 V	3VA9908-0BB14		
	–	220 ... 230 V	3VA9908-0BB15		
	–	250 V	3VA9908-0BB16		
	24 V	–	3VA9908-0BB20		
	48 V	–	3VA9908-0BB21		
	60 V	–	3VA9908-0BB22		
	110 V	–	3VA9908-0BB23		
	120 ... 127 V	–	3VA9908-0BB24		
	208 ... 230 V	–	3VA9908-0BB25		
	380 ... 400 V	–	3VA9908-0BB26		
	440 ... 480 V	–	3VA9908-0BB27		
Time-delay devices for undervoltage releases					
	**U_e 50/60 Hz AC**	**U_e DC**			
	110 V	110 V	3VA9988-0BF21		
	230 V	230 V	3VA9988-0BF22		
	–	24 V	3VA9988-0BF23		

[1] In combination with TAS and AUX. For circuit diagrams, see the Operating Instructions

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Manual operators

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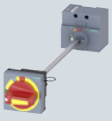
				3VA10 3VA11	3VA12	3VA20 3VA21 3VA22	3VA13 3VA14 3VA23 3VA24	3VA15 3VA25 3VA26
Front mounted rotary operators								
	• Handle • For IEC • Degree of protection IP30 • For 3-pole and 4-pole breakers							
	Version	**Illumination kit**	**Door interlock**					
	Standard (gray)	Without	Without	3VA9157-0EK11	3VA9257-0EK11	3VA9267-0EK11	3VA9467-0EK11	3VA9687-0EK11
			With	3VA9157-0EK21	3VA9257-0EK21	3VA9267-0EK21	3VA9467-0EK21	3VA9687-0EK21
		With	Without	3VA9157-0EK13	3VA9257-0EK13	3VA9267-0EK13	3VA9467-0EK13	–
			With	3VA9157-0EK23	3VA9257-0EK23	3VA9267-0EK23	3VA9467-0EK23	–
	EMERGENCY-OFF (red/yellow)	Without	Without	3VA9157-0EK15	3VA9257-0EK15	3VA9267-0EK15	3VA9467-0EK15	3VA9687-0EK15
			With	3VA9157-0EK25	3VA9257-0EK25	3VA9267-0EK25	3VA9467-0EK25	3VA9687-0EK25
		With	Without	3VA9157-0EK17	3VA9257-0EK17	3VA9267-0EK17	3VA9467-0EK17	–
			With	3VA9157-0EK27	3VA9257-0EK27	3VA9267-0EK27	3VA9467-0EK27	–
Door mounted rotary operators with tolerance compensation								
	• Shaft 300 mm (325 mm for 3VA15/3VA25) • With mounting tolerance compensation • Handle with masking plate 75 × 75 mm (100 × 100 mm for 3VA15/3VA25) • Degree of protection IP65 • For 3-pole and 4-pole breakers							
	Version	**Illumination kit**	**Door interlock**					
	Standard (gray)	Without	With	3VA9157-0FK21	3VA9257-0FK21	3VA9267-0FK21	3VA9467-0FK21	3VA9687-0FK21
		With	With	3VA9157-0FK23	3VA9257-0FK23	3VA9267-0FK23	3VA9467-0FK23	3VA9687-0FK23 new
	EMERGENCY-OFF (red/yellow)	Without	With	3VA9157-0FK25	3VA9257-0FK25	3VA9267-0FK25	3VA9467-0FK25	3VA9687-0FK25
		With	With	3VA9157-0FK27	3VA9257-0FK27	3VA9267-0FK27	3VA9467-0FK27	3VA9687-0FK27 new
Door mounted rotary operators without tolerance compensation								
	• Shaft 300 mm (325 mm for 3VA15/3VA25) • Handle with masking plate 75 × 75 mm (100 × 100 mm for 3VA15/3VA25) • Degree of protection IP65 • For 3-pole and 4-pole breakers							
	Version	**Illumination kit**	**Door interlock**					
	Standard (gray)	Without	With	3VA9157-0FK61	3VA9257-0FK61	3VA9267-0FK61	3VA9467-0FK61	3VA9687-0FK61
Door mounted rotary operators without handle								
	• For IEC • Degree of protection IP30 • For 3-pole and 4-pole breakers							
	Version	**Illumination kit**	**Door interlock**					
	With shaft stub (gray)	–	Without	3VA9157-0GK00	3VA9257-0GK00	3VA9267-0GK00	3VA9467-0GK00	3VA9687-0GK00

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Side wall mounted rotary operators



- Rotary operator with shaft 300 mm
- Handle with masking plate 75 × 75 mm
- Degree of protection IP65
- For 3-pole and 4-pole breakers

Version	Mounting bracket	Illumination kit	3VA10 3VA11	3VA12	3VA20 3VA21 3VA22	3VA13 3VA14 3VA23 3VA24	3VA15 3VA25 3VA26
Standard (gray)	Without	Without	3VA9157-0PK11	3VA9257-0PK11	3VA9267-0PK11	3VA9467-0PK11	–
		With	3VA9157-0PK13	3VA9257-0PK13	3VA9267-0PK13	3VA9467-0PK13	–
EMERGENCY-OFF (red/yellow)	Without	Without	3VA9157-0PK15	3VA9257-0PK15	3VA9267-0PK15	3VA9467-0PK15	–
		With	3VA9157-0PK17	3VA9257-0PK17	3VA9267-0PK17	3VA9467-0PK17	–

Side wall mounted rotary operators with mounting plates



- Rotary operator with short shaft and mounting plate for mounting directly on the side wall
- Handle with masking plate 75 × 75 mm
- Degree of protection IP65
- For 3-pole and 4-pole breakers

Version	Mounting bracket	Illumination kit	3VA10 3VA11	3VA12	3VA20 3VA21 3VA22	3VA13 3VA14 3VA23 3VA24	3VA15 3VA25 3VA26
Standard (gray)	With	Without	3VA9157-0PK51	3VA9257-0PK51	3VA9267-0PK51	–	–
		With	3VA9157-0PK53	3VA9257-0PK53	3VA9267-0PK53	–	–
EMERGENCY-OFF (red/yellow)	With	Without	3VA9157-0PK55	3VA9257-0PK55	3VA9267-0PK55	–	–
		With	3VA9157-0PK57	3VA9257-0PK57	3VA9267-0PK57	–	–

Extended DIN rails for N/PE terminals



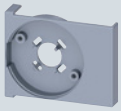
Version	Rated current	3VA10 3VA11	3VA12	3VA20 3VA21 3VA22	3VA13 3VA14 3VA23 3VA24	3VA15 3VA25 3VA26
For mounting plate	≤250 A	3VA9987-0GL30	3VA9987-0GL30	3VA9987-0GL30	–	–

Auxiliary switch modules for rotary operating mechanisms



Version	3VA10 3VA11	3VA12	3VA20 3VA21 3VA22	3VA13 3VA14 3VA23 3VA24	3VA15 3VA25 3VA26
2× leading to "ON"	3VA9257-0GX10	3VA9257-0GX10	3VA9467-0GX10	3VA9467-0GX10	–
2× leading to "ON" and 1× leading to "OFF"	–	–	3VA9467-0GX20	3VA9467-0GX20	–

Mounting adapters for side wall mounted rotary operators



Version	3VA10 3VA11	3VA12	3VA20 3VA21 3VA22	3VA13 3VA14 3VA23 3VA24	3VA15 3VA25 3VA26
Necessary accessories for 3VA side wall mounted rotary operators, if 3VA9...-0GX.0 auxiliary switch modules are used	3VA9257-0GX01	3VA9257-0GX01	3VA9467-0GX01	–	–

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Manual operators

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		3VA10 3VA11	3VA12	3VA20 3VA21 3VA22	3VA13 3VA14 3VA23 3VA24	3VA15 3VA25 3VA26
Supplementary handles for door mounted rotary operators						
 • For operation when cabinet door is open						
Version						
Standard (gray)		3VA9287-0GC01	3VA9287-0GC01	3VA9487-0GC01	3VA9487-0GC11	3VA9687-0GC01
EMERGENCY-OFF (red/yellow)		3VA9287-0GC05	3VA9287-0GC05	3VA9487-0GC05	3VA9487-0GC15	3VA9687-0GC05
Handles						
 • With masking plate						
Version	**Tolerance compensation**					
Standard (gray)	With		8UD1721-0AB21		8UD1731-0AB21	8UD1741-0AB21
	Without		8UD1721-0AB11		8UD1731-0AB11	8UD1741-0AB11
EMERGENCY-OFF (red/yellow)	With		8UD1721-0AB25		8UD1731-0AB25	8UD1741-0AB25
	Without		8UD1721-0AB15		8UD1731-0AB15	8UD1741-0AB15
Handle extensions						
 • **Note:** The handle extension is already included in the scope of supply of the breakers.						
		–	–	–	3VA9487-0SC10	3VA9987-0SC10
Shafts						
 **Variant**	**Length**					
8 × 8 mm	300 mm		8UD1900-2WA00			–
	600 mm		8UD1900-2WB00			–
12 × 12 mm	300 mm	–	–	–	–	8UD1900-4WA00
	600 mm	–	–	–	–	8UD1900-4WB00
Adapters for shafts						
Variant	**Purpose**					
 8 × 8 mm	With door mounted rotary operator and side wall mounted rotary operator		8UD1900-2DA00			–
 12 × 12 mm	For door mounted rotary operator	–	–	–	–	8UD1900-4DA00
Door couplings						
Variant						
 8 × 8 mm			8UD1900-2HA00			–
 12 × 12 mm		–	–	–	–	8UD1900-4HA00

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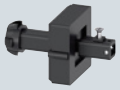
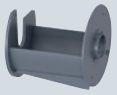
	3VA10 3VA11	3VA12	3VA20 3VA21 3VA22	3VA13 3VA14 3VA23 3VA24	3VA15 3VA25 3VA26
Mounting tolerance compensations					
Variant					
 8 × 8 mm	8UD1900-2GA00				–
 12 × 12 mm	–	–	–	–	8UD1900-4GA00
Fixing brackets for shafts					
	3VA9287-0GA80		3VA9487-0GA80		3VA9687-0GA80
Variable depth adapters					
Variant					
 8 × 8 mm	3VA9487-0GB10				–

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Manual operators

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		3VA10 3VA11 3VA12	3VA13 3VA14	3VA15	3VA20 3VA21 3VA22 3VA23 3VA24	3VA25 3VA26
Labeling plates for manual operators						
				3VA9087-0SX10		
Illumination kits for manual operators						
	• 24 V DC voltage					
Version	**Rated current**					
Front rotary operator	100 ... 250 A	8UD1900-0KA10	–	–	–	–
	100 ... 630 A	–	8UD1900-0KA20	–	8UD1900-0KA20	–
	630 ... 1000 A	–	–	8UD1900-0KA30	–	8UD1900-0KA30
Door mounted rotary operator and side wall mounted rotary operator	100 ... 630 A	8UD1900-0KA20	8UD1900-0KA20	8UD1900-0KA20	8UD1900-0KA20	–
	630 ... 1000 A	–	–	–	–	8UD1900-0KA30
Cylinder locks (type Kaba), standard masking plates						
						
Purpose	**Key**					
For door mounted rotary operator and side wall mounted rotary operator (in the masking plate)	1	8UD1900-0MB01	8UD1900-0MB01	–	8UD1900-0MB01	–
	2	8UD1900-0NB01	8UD1900-0NB01	–	8UD1900-0NB01	–
	3	8UD1900-0PB01	8UD1900-0PB01	–	8UD1900-0PB01	–
	4	8UD1900-0QB01	8UD1900-0QB01	–	8UD1900-0QB01	–
Cylinder locks (type Kaba), EMERGENCY-OFF masking plates						
						
Purpose	**Key**					
For door mounted rotary operator and side wall mounted rotary operator (in the masking plate)	1	8UD1900-0MB05	8UD1900-0MB05	–	8UD1900-0MB05	–
	2	8UD1900-0NB05	8UD1900-0NB05	–	8UD1900-0NB05	–
	3	8UD1900-0PB05	8UD1900-0PB05	–	8UD1900-0PB05	–
	4	8UD1900-0QB05	8UD1900-0QB05	–	8UD1900-0QB05	–
Cylinder locks (type RONIS)						
	• Includes a lock with 2 keys • For locking or interlocking • For installation in all rotary operators • For mounting in the adapter kit for the accessories compartment • Note: The cylinder lock adapter for rotary operators is also needed for locking or interlocking circuit breakers via rotary operators					
Key						
1				3VA9980-0VL10		
3				3VA9980-0VL30		
4				3VA9980-0VL40		
Cylinder lock adapters for rotary operators						
	• To mount the cylinder lock in the rotary operator (also possible with door mounted rotary operator and side wall mounted rotary operator)					
Rated current						
100 ... 630 A		3VA9980-0LF20	3VA9980-0LF20	–	3VA9980-0LF20	–
1000 A		–	–	3VA9680-0LF20	–	3VA9680-0LF20

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Motor operators

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Side mounted motor operators (MO310)



- Cover size 45 mm

Addressable via control signals	Isolating features in accordance with IEC/EN 60947-1	Make time, typically for 3VA1	Make time, typically for 3VA2	Break time, typically for 3VA1	Break time, typically for 3VA2	Rated operational power
■	■	<300 ms	–	<300 ms	–	250 W, max. 500 W (60 ms)

Motor operators without stored energy operators (MO320)



Addressable via control signals	Isolating features in accordance with IEC/EN 60947-1	Make time, typically for 3VA1	Make time, typically for 3VA2	Break time, typically for 3VA1	Break time, typically for 3VA2	Rated operational power
■	■	<800 ms (160 A, 250A)	<1000 ms (250 A), <1700 ms (630 A)	<800 ms (160 A, 250A)	<1000 ms (250 A), <1400 ms (630 A)	250 W, max. 500 W (60 ms)

Motor operators with stored energy operators (SEO520)

- Synchronizable remote operating mechanism with optional communication link
- Has two spring assemblies that are used to switch the 3VA2 molded case circuit breaker on and off quickly. This new principle in the MCCB area ensures fast, reliable and easily controllable switching sequences, especially in load transfer switching applications.
- The connection with the COM060 communication module, via a plug-in connection, integrates the SEO520 into the communication environment of the 3VA molded case circuit breakers and ensures that the molded case circuit breaker can also be switched via the supported communication networks and the SENTRON powerconfig and SENTRON powermanager software packages.
- **Note:** On account of the fast switching times, the SEO520 cannot be used with a leading changeover switch LCS.



Addressable via control signals	Isolating features in accordance with IEC/EN 60947-1	Make time, typically for 3VA1	Make time, typically for 3VA2	Break time, typically for 3VA1	Break time, typically for 3VA2	Rated operational power
■	■	–	<80 ms	–	<80 ms	300 W, max. 500 W (60 ms)

Mechanical operating cycles counters (for installation in the SEO520)



Mounting	Article No.
For installation in the SEO520	3VA9987-0HX10

Cylinder lock adapters for SEO520



Mounting	Article No.
For installation of cylinder locks in the SEO520	3VA9980-0LF30

Cylinder locks (type RONIS)



- Includes a lock with 2 keys
- For locking the operating mode (Manual/Auto/Lock) of the SEO520

Key	Article No.
1	3VA9980-0VL10
3	3VA9980-0VL30
4	3VA9980-0VL40

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		3VA11	3VA12	3VA20 3VA21 3VA22	3VA13 3VA14 3VA23 3VA24
Rated control supply voltage	**With communication**				
42 ... 60 V AC, 24 ... 60 V DC	–	3VA9117-0HB10	–	–	–
110 ... 230 V AC, 110 ... 250 V DC	–	3VA9117-0HB20	–	–	–
Rated control supply voltage	**With communication**				
24 ... 60 V DC	–	3VA9157-0HA10	3VA9257-0HA10	3VA9267-0HA10	3VA9467-0HA10
110 ... 230 V AC, 110 ... 250 V DC	–	3VA9157-0HA20	3VA9257-0HA20	3VA9267-0HA20	3VA9467-0HA20
Rated control supply voltage	**With communication**				
24 V DC	–	–	–	3VA9267-0HC10	–
42 ... 60 V AC/DC	–	–	–	3VA9267-0HC20	–
110 ... 230 V AC, 110 ... 250 V DC	–	–	–	3VA9267-0HC30	–
24 V DC	Yes	–	–	3VA9267-0HC15	–
110 ... 230 V AC, 110 ... 250 V DC	Yes	–	–	3VA9267-0HC35	–

Reset mode

All motor operators have the following reset modes:
Reset mode 1: Automatic reset
Reset mode 2: Reset via OFF-signal

The motor operator with SEO520 stored energy operator additionally has:
Reset mode 3: Reset via OFF-signal with additional acknowledge signal

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Connection technology



❶ For mounting onto the circuit breaker
❷ For mounting onto draw-out and plug-in units

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	Connection options		Scope of supply			3VA10 3VA11
Box terminals						
	❶	❷	3 single terminals	Copper stranded 1.5 … 70 mm²		3VA9153-0JA11
				6 … 120 mm²		–
				25 … 185 mm²		–
				50 … 185 mm²		–
				35 … 300 mm²		–
	❶	❷	4 single terminals	1.5 … 70 mm²		3VA9154-0JA11
				6 … 120 mm²		–
				25 … 185 mm²		–
				50 … 185 mm²		–
				35 … 300 mm²		–
Nut keeper kits						
	Connection options		Scope of supply	Max. tap width	Max. tap thickness	
	❶	❷	3 single terminals	17 mm	6.5 mm	3VA9113-0QA00
				25 mm	8 mm	–
				35 mm	10 mm	–
			Nut keeper kit for 3-pole breakers, 1 terminal cover	50 mm	25 mm	–
	❶	❷	4 single terminals	17 mm	6.5 mm	3VA9114-0QA00
				25 mm	8 mm	–
				35 mm	10 mm	–
			Nut keeper kit for 4-pole breakers, 1 terminal cover	50 mm	28 mm	–
Circular conductor terminals, 1 cable						
	Connection options		Scope of supply	Copper/aluminum stranded		
	❶	❷	3 single terminals	1.5 … 10 mm²		3VA9113-0JB10
				1.5 … 50 mm²		–
				10 … 95 mm²		3VA9113-0JB11
				16 … 185 mm²		–
				35 … 185 mm²		–
				50 … 300 mm²		–
	❶	❷	4 single terminals	1.5 … 10 mm²		3VA9114-0JB10
				1.5 … 50 mm²		–
				10 … 95 mm²		3VA9114-0JB11
				16 … 185 mm²		–
				35 … 185 mm²		–
				50 … 300 mm²		–

[1] Maximum current-carrying capacity of cable connection 400 A
Flexible copper bar: No restrictions
[2] Maximum current-carrying capacity of copper cables 380 A
Maximum current-carrying capacity of aluminum cables 310 A

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3VA12	3VA20 3VA21	3VA22	3VA13 3VA14 3VA23 3VA24	3VA15 3VA25
–	–	–	–	–
3VA9253-0JA11	3VA9163-0JA12	3VA9163-0JA12	–	–
–	3VA9263-0JA12	3VA9263-0JA12	–	–
3VA9253-0JA12	–	–	–	–
–	–	–	3VA9483-0JA13 [1]	–
–	–	–	–	–
3VA9254-0JA11	3VA9164-0JA12	3VA9164-0JA12	–	–
–	3VA9264-0JA12	3VA9264-0JA12	–	–
3VA9254-0JA12	–	–	–	–
–	–	–	3VA9484-0JA13 [1]	–
–	–	–	–	–
3VA9213-0QA00	3VA9203-0QA00	3VA9203-0QA00	–	–
–	–	–	3VA9403-0QA00	–
–	–	–	–	3VA9603-0QA00
–	–	–	–	–
3VA9214-0QA00	3VA9204-0QA00	3VA9204-0QA00	–	–
–	–	–	3VA9404-0QA00	–
–	–	–	–	3VA9604-0QA00
–	–	–	–	–
–	3VA9103-0JB11	–	–	–
–	–	–	–	–
–	–	3VA9263-0JB12	–	–
3VA9253-0JB12	–	–	–	–
–	–	–	3VA9383-0JB13 [2]	–
–	–	–	–	–
–	3VA9104-0JB11	–	–	–
–	–	–	–	–
–	–	3VA9264-0JB12	–	–
3VA9254-0JB12	–	–	–	–
–	–	–	3VA9384-0JB13 [2]	–

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Connection technology



❶ For mounting onto the circuit breaker
❷ For mounting onto draw-out and plug-in units

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					3VA10 3VA11
Circular conductor terminals with auxiliary conductor terminals, 1 cable [2]					
	Connection options		**Scope of supply**	**Copper / aluminum stranded**	
	❶	❷	3 single terminals	1.5 … 10 mm²	3VA9113-0JG10
				1.5 … 50 mm²	–
				10 … 95 mm²	3VA9113-0JG11
				16 … 185 mm²	–
				50 … 185 mm²	–
				50 … 300 mm²	–
	❶	❷	4 single terminals	1.5 … 10 mm²	3VA9114-0JG10
				1.5 … 50 mm²	–
				10 … 95 mm²	3VA9114-0JG11
				16 … 185 mm²	–
				50 … 185 mm²	–
				50 … 300 mm²	–
Circular conductor terminals, 2 cables					
	Connection options		**Scope of supply**	**Copper / aluminum stranded**	**Aux. conductor terminal**
	❶	❷	3 single terminals, 1 short terminal cover	120 … 300 mm²	No –
					Yes [2] –
	❶	❷	4 single terminals, 1 short terminal cover	120 … 300 mm²	No –
					Yes [2] –
Circular conductor terminals, 3 cables					
	Connection options		**Scope of supply**	**Copper / aluminum stranded**	**Aux. conductor terminal**
	❶	❷	3 single terminals, 1 short terminal cover	120 … 185 mm²	No –
					Yes [2] –
	❶	❷	4 single terminals, 1 short terminal cover	120 … 185 mm²	No –
					Yes [2] –
Auxiliary conductor terminals for box terminals [2]					
	**Version**				
	Fixed-mounted				3VA9110-0WB00
	Plug-in and draw-out technology				3VA9150-0WB00
Auxiliary conductor terminals for busbars [2]					
	**Version**				
	Fixed-mounted				3VA9110-0WC00
	Plug-in and draw-out technology				3VA9150-0WC00

[1] Maximum current-carrying capacity of copper cables 380 A
Maximum current-carrying capacity of aluminum cables 310 A
[2] Maximum current-carrying capacity 15 A
Maximum cable connection up to 2.5 mm²

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3VA12	3VA20 3VA21	3VA22	3VA13 3VA14 3VA23 3VA24	3VA15 3VA25
–	–	–	–	–
–	3VA9103-0JG11	–	–	–
–	–	–	–	–
–	–	3VA9263-0JG12	–	–
3VA9253-0JG12	–	–	–	–
–	–	–	3VA9383-0JG13 [1]	–
–	3VA9104-0JG11	–	–	–
–	–	–	–	–
–	–	3VA9264-0JG12	–	–
3VA9254-0JG12	–	–	–	–
–	–	–	3VA9384-0JG13 [1]	–
–	–	–	–	3VA9503-0JB23
–	–	–	–	3VA9503-0JG23
–	–	–	–	3VA9504-0JB23
–	–	–	–	3VA9504-0JG23
–	–	–	–	3VA9503-0JB32
–	–	–	–	3VA9503-0JG32
–	–	–	–	3VA9504-0JB32
–	–	–	–	3VA9504-0JG32
3VA9200-0WB00	3VA9200-0WB00	3VA9200-0WB00	3VA9480-0WB00	–
3VA9280-0WB00	3VA9280-0WB00	3VA9280-0WB00	3VA9480-0WB00	–
3VA9200-0WC00	3VA9200-0WC00	3VA9200-0WC00	3VA9480-0WC00	–
3VA9280-0WC00	3VA9280-0WC00	3VA9280-0WC00	3VA9480-0WC00	–

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Connection technology



❶ For mounting onto the circuit breaker
❷ For mounting onto draw-out and plug-in units

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Note:
All bus connectors extended and rear connections are Cu/Sn 6 r plated according to ISO 2093

Front bus connectors extended

	Number of poles	Connection options		Scope of supply	Max. tap width	Max. tap thickness
	1P	❶	–	1 busbar connection piece	22 mm	8 mm
	3P	❶	❷	3 single terminals, 2 phase barriers	22 mm	8 mm
					32 mm	10 mm
					40 mm	12.5 mm
					50 mm	28 mm
	4P	❶	❷	4 single terminals, 3 phase barriers	22 mm	8 mm
					32 mm	10 mm
					40 mm	12.5 mm
					50 mm	28 mm

Front bus connectors offset

- Distance between pole centers:
  - 100/160 A = 35 mm
  - 250 A = 45 mm
  - 400/630 A = 70 mm

	Number of poles	Connection options		Scope of supply	Max. tap width	Max. tap thickness
	3P	❶	❷	3 single terminals, 2 phase barriers	30 mm	8 mm
					35 mm	10 mm
					60 mm	12.5 mm
					80 mm	10 mm
	4P	❶	❷	4 single terminals, 3 phase barriers	30 mm	8 mm
					35 mm	10 mm
					60 mm	12.5 mm
					80 mm	10 mm

Bus connectors edgewise

	Number of poles	Connection options		Scope of supply	Max. tap width	Max. tap thickness
	3P	❶	❷	3 single terminals, 2 phase barriers	20 mm	6 mm
					25 mm	7 mm
					40 mm	8 mm
	4P	❶	❷	4 single terminals, 3 phase barriers	20 mm	6 mm
					25 mm	7 mm
					40 mm	8 mm

Nut keeper units, right-angled [1)]

	Number of poles	Connection options		Scope of supply	Max. tap width	Max. tap thickness
	3P	❶	❷	3 single terminals, 2 phase barriers	22 mm	8 mm
					32 mm	10 mm
					40 mm	12.5 mm
	4P	❶	❷	4 single terminals, 3 phase barriers	22 mm	8 mm
					32 mm	10 mm
					40 mm	12.5 mm

[1)] Can only be connected to breaker side N, 1, 3, 5

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3VA10 3VA11	3VA12	3VA20 3VA21 3VA22	3VA13 3VA14 3VA23 3VA24	3VA15 3VA25
3VA9151-0QB00	–	–	–	–
3VA9153-0QB00	–	–	–	–
–	3VA9253-0QB00	3VA9263-0QB00	–	–
–	–	–	3VA9483-0QB00	–
–	–	–	–	3VA9603-0QB00
3VA9154-0QB00	–	–	–	–
–	3VA9254-0QB00	3VA9264-0QB00	–	–
–	–	–	3VA9484-0QB00	–
–	–	–	–	3VA9604-0QB00
3VA9153-0QC00	–	–	–	–
–	3VA9253-0QC00	3VA9263-0QC00	–	–
–	–	–	3VA9483-0QC00	–
–	–	–	–	3VA9603-0QC00 new
3VA9154-0QC00	–	–	–	–
–	3VA9254-0QC00	3VA9264-0QC00	–	–
–	–	–	3VA9484-0QC00	–
–	–	–	–	3VA9604-0QC00 new
3VA9153-0QD00	–	–	–	–
–	3VA9253-0QD00	3VA9263-0QD00	–	–
–	–	–	3VA9483-0QD00	–
3VA9154-0QD00	–	–	–	–
–	3VA9254-0QD00	3VA9264-0QD00	–	–
–	–	–	3VA9484-0QD00	–
3VA9113-0QG00	–	–	–	–
–	3VA9213-0QG00	3VA9223-0QG00	–	–
–	–	–	3VA9403-0QG00	–
3VA9114-0QG00	–	–	–	–
–	3VA9214-0QG00	3VA9224-0QG00	–	–
–	–	–	3VA9404-0QG00	–

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Connection technology



❶ For mounting onto the circuit breaker
❷ For mounting onto draw-out and plug-in units

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Note:
All bus connectors extended and rear connections are Cu/Sn 6 r plated according to ISO 2093

Rear connection studs flat

	Number of poles	Connection options		Scope of supply
	1P	❶	❷	1 short connection stud flat
				1 long connection stud flat
	3P	❶	❷	2 short connection studs flat, 1 long connection stud flat
	4P	❶	❷	2 short connection studs flat, 2 long connection studs flat

Rear connection studs round

	Number of poles	Connection options		Scope of supply
	1P	❶	❷	1 short connection stud round
				1 long connection stud round
	3P	❶	❷	1 long connection stud round, 2 short connection studs round
	4P	❶	❷	2 long connection studs round, 2 short connection studs round

[1] Can only be connected to breaker side N, 1, 3, 5

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3VA10 3VA11	3VA12	3VA20 3VA21 3VA22	3VA13 3VA14 3VA23 3VA24
3VA9111-0QE10	3VA9211-0QE10	3VA9201-0QE10	3VA9401-0QE10
3VA9111-0QE20	3VA9211-0QE20	3VA9201-0QE20	3VA9401-0QE20
3VA9113-0QE00	3VA9213-0QE00	3VA9203-0QE00	3VA9403-0QE00
3VA9114-0QE00	3VA9214-0QE00	3VA9204-0QE00	3VA9404-0QE00
3VA9111-0QF10	3VA9211-0QF10	3VA9201-0QF10	3VA9401-0QF10
3VA9111-0QF20	3VA9211-0QF20	3VA9201-0QF20	3VA9401-0QF20
3VA9113-0QF00	3VA9213-0QF00	3VA9203-0QF00	3VA9403-0QF00
3VA9114-0QF00	3VA9214-0QF00	3VA9204-0QF00	3VA9404-0QF00

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Connection technology



❶ For mounting onto the circuit breaker
❷ For mounting onto draw-out and plug-in units

For a complete and valid configuration of your molded case circuit breaker, please use our online configurator at www.siemens.com/lowvoltage/3va-configurator

Note:
All bus connectors extended and rear connections are Cu/Sn 6 r plated according to ISO 2093

Circular conductor terminals, 2P



Connection options		Scope of supply	Number of cables	Copper/aluminum stranded	Aux. conductor terminal
❶	–	2 single terminals, 1 extended terminal cover, 1 insulation plate	1	25 … 150 mm²	Yes [1]
					No
			6	1.5 … 35 mm²	No

Circular conductor terminals, 3P



Connection options		Scope of supply	Number of cables	Copper/aluminum stranded	Aux. conductor terminal
❶	–	3 single terminals, 1 extended terminal cover, 1 insulation plate	1	25 … 150 mm²	Yes [1]
					No
				50 … 240 mm²	Yes [1]
					No
			2	25 … 150 mm²	Yes [1]
					No
				70 … 300 mm²	Yes [1]
					No
			4	120 … 240 mm²	Yes [1]
					No
				120 … 300 mm² new	Yes [1]
					No
			6	1.5 … 35 mm²	No
–	❷	3 single terminals, 1 extended terminal cover, 1 insulation plate	1	25 … 150 mm²	Yes [1]
				50 … 240 mm²	Yes [1]
			2	25 … 150 mm²	Yes [1]
				70 … 300 mm²	Yes [1]
			6	1.5 … 35 mm²	No

Circular conductor terminals, 4P



Connection options		Scope of supply	Number of cables	Copper/aluminum stranded	Aux. conductor terminal
❶	–	4 single terminals, 1 extended terminal cover, 1 insulation plate	1	25 … 150 mm²	Yes [1]
					No
				50 … 240 mm²	Yes [1]
					No
			2	25 … 150 mm²	Yes [1]
					No
				70 … 300 mm²	Yes [1]
					No
			4	120 … 240 mm²	Yes [1]
					No
				120 … 300 mm² new	Yes [1]
					No
			6	1.5 … 35 mm²	No
–	❷	4 single terminals, 1 extended terminal cover, 1 insulation plate	1	25 … 150 mm²	Yes [1]
				50 … 240 mm²	Yes [1]
			2	25 … 150 mm²	Yes [1]
				70 … 300 mm²	Yes [1]
			6	1.5 … 35 mm²	No

[1] Maximum current-carrying capacity 15 A
Maximum cable connection up to 2.5 mm²

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3VA10 3VA11	3VA12	3VA20 3VA21 3VA22	3VA13 3VA14 3VA23 3VA24	3VA15 3VA25
3VA9112-0JC12	–	–	–	–
3VA9112-0JJ12	–	–	–	–
3VA9112-0JF60	–	–	–	–
3VA9113-0JC12	–	–	–	–
3VA9113-0JJ12	–	–	–	–
–	3VA9213-0JC13	3VA9223-0JC13	–	–
–	3VA9213-0JJ13	3VA9223-0JJ13	–	–
–	3VA9213-0JC22	3VA9223-0JC22	–	–
–	3VA9213-0JJ22	3VA9223-0JJ22	–	–
–	–	–	3VA9403-0JC23	–
–	–	–	3VA9403-0JJ23	–
–	–	–	–	3VA9603-0JC43
–	–	–	–	3VA9603-0JJ43
–	–	–	–	3VA9603-0JC44
–	–	–	–	3VA9603-0JJ44
3VA9113-0JF60	3VA9213-0JF60	3VA9223-0JF60	3VA9303-0JF60	–
3VA9153-0JC12	–	–	–	–
–	3VA9253-0JC13	3VA9263-0JC13	–	–
–	3VA9253-0JC22	3VA9263-0JC22	–	–
–	–	–	3VA9483-0JC23	–
3VA9153-0JF60	3VA9253-0JF60	3VA9263-0JF60	3VA9383-0JF60	–
3VA9114-0JC12	–	–	–	–
3VA9114-0JJ12	–	–	–	–
–	3VA9214-0JC13	3VA9224-0JC13	–	–
–	3VA9214-0JJ13	3VA9224-0JJ13	–	–
–	3VA9214-0JC22	3VA9224-0JC22	–	–
–	3VA9214-0JJ22	3VA9224-0JJ22	–	–
–	–	–	3VA9404-0JC23	–
–	–	–	3VA9404-0JJ23	–
–	–	–	–	3VA9604-0JC43
–	–	–	–	3VA9604-0JJ43
–	–	–	–	3VA9604-0JC44
–	–	–	–	3VA9604-0JJ44
3VA9114-0JF60	3VA9214-0JF60	3VA9224-0JF60	3VA9304-0JF60	–
3VA9154-0JC12	–	–	–	–
–	3VA9254-0JC13	3VA9264-0JC13	–	–
–	3VA9254-0JC22	3VA9264-0JC22	–	–
–	–	–	3VA9484-0JC23	–
3VA9154-0JF60	3VA9254-0JF60	3VA9264-0JF60	3VA9384-0JF60	–

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Connection technology



❶ For mounting onto the circuit breaker
❷ For mounting onto draw-out and plug-in units

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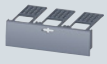
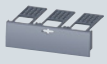
					3VA10	3VA11
Terminal covers specially for fixed mounting						
	Version	**Number of poles**	**Mounting location**			
	Short	1P	❶	–	3VA9111-0WD10	3VA9111-0WD10
		2P	❶	–	3VA9111-0WD20	3VA9111-0WD20
		3P	❶	–	3VA9111-0WD30	3VA9111-0WD30
		4P	❶	–	3VA9111-0WD40	3VA9111-0WD40
	Long new	3P	❶	–	–	–
		4P	❶	–	–	–
						
	Extended [1]	2P	❶	–	3VA9111-0WF20	3VA9111-0WF20
		3P	❶	–	3VA9111-0WF30	3VA9111-0WF30
		4P	❶	–	3VA9111-0WF40	3VA9111-0WF40
	Broadened [1]	3P	❶	–	3VA9111-0WG30	3VA9111-0WG30
		4P	❶	–	3VA9111-0WG40	3VA9111-0WG40
Terminal covers specially for plug-in and draw-out units (spare part)						
	• To provide circuit breaker touch protection • For mounting to the molded case circuit breaker • Included in scope of supply: Cover for the infeed and outgoing terminal					
	**Version**	**Number of poles**	**Mounting location**			
	Short	3P	❶	–	3VA9113-0KB01	3VA9113-0KB01
		4P	❶	–	3VA9114-0KB01	3VA9114-0KB01
Terminal covers for plug-in or draw-out sockets						
	• For touch protection in the termination area of the plug-in or draw-out socket • For mounting onto the plug-in or draw-out socket					
	Version	**Number of poles**	**Mounting location**			
	Short	3P	–	❷	–	3VA9153-0KB03
		4P	–	❷	–	3VA9154-0KB03
						
	Extended [1]	3P	–	❷	–	3VA9153-0KB04
			–	❷	–	3VA9154-0KB04
	Broadened [1]	3P	–	❷	–	3VA9153-0KB05
		4P	–	❷	–	3VA9154-0KB05

[1] Including insulating plate
[2] Suitable for circular conductor terminals 2/4 cables

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3VA12	3VA20 3VA21 3VA22	3VA13 3VA14 3VA23 3VA24	3VA15 3VA25
–	–	–	–
–	–	–	–
3VA9211-0WD30	3VA9221-0WD30	3VA9481-0WD30	3VA9601-0WD30
3VA9211-0WD40	3VA9221-0WD40	3VA9481-0WD40	3VA9601-0WD40
–	–	–	3VA9601-0WF30
–	–	–	3VA9601-0WF40
–	–	–	–
3VA9211-0WF30	3VA9221-0WF30	3VA9481-0WF30	3VA9601-0WE30 [2] new
3VA9211-0WF40	3VA9221-0WF40	3VA9481-0WF40	3VA9601-0WE40 [2] new
3VA9211-0WG30	3VA9221-0WG30	3VA9401-0WG30	–
3VA9211-0WG40	3VA9221-0WG40	3VA9401-0WG40	–
3VA9213-0KB01	3VA9123-0KB01	3VA9353-0KB01	–
3VA9214-0KB01	3VA9124-0KB01	3VA9354-0KB01	–
3VA9253-0KB03	3VA9163-0KB03	3VA9353-0KB03	–
3VA9254-0KB03	3VA9164-0KB03	3VA9354-0KB03	–
3VA9253-0KB04	3VA9163-0KB04	3VA9353-0KB04	–
3VA9254-0KB04	3VA9164-0KB04	3VA9354-0KB04	–
3VA9253-0KB05	3VA9163-0KB05	3VA9353-0KB05	–
3VA9254-0KB05	3VA9164-0KB05	3VA9354-0KB05	–

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Connection technology

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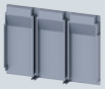
Insulating plates





Version	Number of poles	Mounting location		3VA10	3VA11
Standard	2P	1	–	3VA9111-0WJ20	3VA9111-0WJ20
	3P	1	–	3VA9111-0WJ30	3VA9111-0WJ30
	4P	1	–	3VA9111-0WJ40	3VA9111-0WJ40
Broadened	3P	1	–	3VA9111-0WK30	3VA9111-0WK30
	4P	1	–	3VA9111-0WK40	3VA9111-0WK40

Phase barriers (fixed mounting, plug-in and draw-out units)



Scope of supply	3VA10 / 3VA11
2 phase barriers	3VA9152-0WA00

DC insulation plates for 3VA1 for fixed-mounted molded case circuit breakers



Number of poles	3VA10 / 3VA11
3P	3VA9113-0SG10
4P	3VA9114-0SG10

Side plates for 3VA1 for fixed-mounted molded case circuit breakers



Number of poles	Mounting	3VA10 / 3VA11
2P	On 2-pole molded case circuit breakers	3VA9112-0SG20

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3VA12	3VA20 3VA21 3VA22	3VA13 3VA14 3VA23 3VA24	3VA15 3VA25	3VA26
–	–	–	–	–
3VA9211-0WJ30	3VA9221-0WJ30	3VA9481-0WJ30	–	–
3VA9211-0WJ40	3VA9221-0WJ40	3VA9481-0WJ40	–	–
3VA9211-0WK30	3VA9221-0WK30	3VA9481-0WK30	–	–
3VA9211-0WK40	3VA9221-0WK40	3VA9481-0WK40	–	–
3VA9252-0WA00	3VA9262-0WA00	3VA9482-0WA00	3VA9602-0WA00	3VA9602-0WA00
–	–	–	–	–
–	–	–	–	–
–	–	–	–	–

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Plug-in and draw-out technology

Thanks to plug-in and draw-out technology:

- Molded case circuit breakers can be replaced quickly and easily for overhauls or servicing
- Electrical isolation and clearly visible isolating distance
- The socket can be interlocked to prevent the 3VA molded case circuit breaker from being plugged in or moved in
- Identical connection technology for all molded case circuit breakers, whether they are plug-in, draw-out or fixed-mounted units

In addition, draw-out technology offers:

- Transmission of the position of the molded case circuit breaker via communication (CONNECT, TEST, DISCONNECT)
- The ability to test the auxiliary and control circuit connections in the test position of the draw-out unit, without contacted main current paths
- Transmission of the state of the molded case circuit breaker (ON, OFF, TRIP) via the COM060 communication module

For a complete and valid configuration of your molded case circuit breaker, please use our online configurator at www.siemens.com/lowvoltage/3va-configurator

		3VA11	3VA12	3VA20 3VA21 3VA22	3VA13 3VA14 3VA23 3VA24
Draw-out units, complete kits					
	• Scope of supply: – Draw-out socket – Conversion kit – Mounting screw kit • **Note:** The crank handle for the draw-out unit must be ordered separately.				
	Number of poles				
	3P	–	3VA9213-0KD00	3VA9123-0KD00	3VA9323-0KD00
	4P	–	3VA9214-0KD00	3VA9124-0KD00	3VA9324-0KD00
Draw-out units, conversion kits					
	• Scope of supply: – Screw-fastened terminal covers for molded case circuit breakers – Side panels – Plug-in contacts – Cable cages – Autotrip plunger • **Note:** The crank handle for the draw-out unit must be ordered separately.				
	Number of poles				
	3P	–	3VA9213-0KD10	3VA9123-0KD10	3VA9323-0KD10
	4P	–	3VA9214-0KD10	3VA9124-0KD10	3VA9324-0KD10
Plug-in units, complete kits					
	• Scope of supply: – Plug-in base – Conversion kit – Mounting screw kit				
	Number of poles				
	3P	3VA9113-0KP00	3VA9213-0KP00	3VA9123-0KP00	3VA9323-0KP00
	4P	3VA9114-0KP00	3VA9214-0KP00	3VA9124-0KP00	3VA9324-0KP00
Plug-in units, conversion kits					
	• Scope of supply: – Screw-fastened terminal covers for molded case circuit breakers – Plug-in contacts – Cable cages – Autotrip plunger				
	Number of poles				
	3P	3VA9113-0KP10	3VA9213-0KP10	3VA9123-0KP10	3VA9323-0KP10
	4P	3VA9114-0KP10	3VA9214-0KP10	3VA9124-0KP10	3VA9324-0KP10

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	3VA11	3VA12	3VA20 3VA21 3VA22	3VA13 3VA14 3VA23 3VA24
Cable cages for plug-in/draw-out units (spare part)				
 • For routing of the required cables from the internal accessories on the back of the circuit breaker				
Number of poles				
3P/4P	3VA9157-0KB02	3VA9257-0KB02	3VA9167-0KB02	3VA9367-0KB02
Door feedthroughs				
	–	3VA9257-0KT00	3VA9167-0KT00	3VA9367-0KT00
Autotrip plungers (spare part)				
 **Version**				
Plug-in unit	3VA9157-0KP81	3VA9257-0KP81	3VA9267-0KP81	3VA9457-0KP81
Draw-out unit	–	3VA9257-0KD81	3VA9267-0KD81	3VA9457-0KD81

Accessories

Communication links for draw-out unit



Scope of supply	Article No.
Set of cables with three special position signaling switches, 3VA9987-0KC10 connecting cables	3VA9987-0KC00

Position signaling switches for draw-out unit and plug-in unit



	Article No.
	3VA9987-0KB00

Connecting cables



Purpose	Article No.
Connection of position signaling switches for communication with COM060	3VA9987-0KC10

Crank handles for draw-out units



Version	Scope of supply	Article No.
Insulated	Including crank handle holder	3VA9987-0KD81

Auxiliary circuit connectors



- Each auxiliary circuit connector is designed for 4 cables.

Version	Article No.
For all draw-out units	3VA9987-0KD80
For all plug-in units	3VA9987-0KP80

Cylinder locks



- Scope of supply:
  – 1 lock with 2 keys
- For locking or interlocking
- **Note:** Not for 3VA15/3VA25!

Key	Lock number	Article No.
1	1	3VA9980-0VL10
3	3	3VA9980-0VL30
4	4	3VA9980-0VL40

Cylinder lock adapters for draw-out units



- To prevent unauthorized withdrawal or insertion of the circuit breaker into the draw-out unit
- Circuit breaker can be locked in the CONNECT, TEST and DISCONNECT positions

Purpose	Article No.
For fitting a cylinder lock in the right-hand side wall of the draw-out unit	3VA9980-0LF40

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Residual current devices RCD

According to IEC 60947-2 Annex B (Type A, Type B) and according to DIN VDE 0664-400 (Type B+)

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Residual current devices (RCD) for switch disconnectors and molded case circuit breakers

- Mounted onto the side (left)





Number of poles	Type	Sensitivity [3]	Rated residual response current $I_{\Delta n}$	Limit value of non-tripping time Δt	Rated voltage U_e	Fault current frequency	Pre-alarm			Tripped signal		
								NC / NO	COM	TRIP	NC / NO	COM
3-pole	RCD510	Type A	0.03 ... 5 A.	0 ... 3 s	127 ... 480 V AC	50/60 Hz	1	–	–	■	■	–
4-pole	RCD310	Type A	0.03 ... 5 A.	Instantaneous	127 ... 480 V AC	50/60 Hz	1	–	–	■	■	–
	RCD510	Type A	0.03 ... 5 A.	0 ... 3 s	127 ... 480 V AC	50/60 Hz	1	–	–	■	■	–

Residual current devices (RCD) for molded case circuit breakers

- Mounted below (under trip unit)





Number of poles	Type	Sensitivity [3]	Rated residual response current $I_{\Delta n}$	Limit value of non-tripping time Δt	Rated voltage U_e	Fault current frequency	Pre-alarm			Tripped signal		
								NC / NO	COM	TRIP	NC / NO	COM
3-pole	RCD520	Type A	0.03 ... 5 A.	0 ... 3 s	127 ... 480 V AC	50/60 Hz	1	–	–	■	■	–
	RCD520B [1][4]	Type B	0.03 ... 5 A.	0 ... 10 s	127 ... 690 V AC	0 ... 100 kHz	1	■	–	■	■	–
		Type B+	0.03 ... 0.3 A.									
	RCD820 [2]	Type A	0.03 ... 30 A [5]	0 ... 10 s	127 ... 690 V AC	50/60 Hz	2	■	■	■	■	■
4-pole	RCD320	Type A	0.03 ... 5 A.	Instantaneous	127 ... 480 V AC	50/60 Hz	1	–	–	■	■	–
	RCD520	Type A	0.03 ... 5 A.	0 ... 3 s	127 ... 480 V AC	50/60 Hz	1	–	–	■	■	–
	RCD520B [4]	Type B	0.03 ... 5 A.	0 ... 10 s	127 ... 690 V AC	0 ... 100 kHz	1	■	–	■	■	–
		Type B+	0.03 ... 0.3 A.									
	RCD820 [2]	Type A	0.03 ... 30 A [5]	0 ... 10 s	127 ... 690 V AC	50/60 Hz	2	■	■	■	■	■

Residual current releases (spare part)



Version	Scope of supply
For RCD310 or RCD510	RCR, RCR-RCD cables

[1] 3-pole version in 4-pole enclosure
[2] With energy infeed from below, the required auxiliary switch (AUX) must be ordered separately
[3] Type A: pulse current sensitive, type B/B+: universal current sensitive
[4] Sensitivity selectable for type B/B+
[5] $I_{\Delta n}$ = 30A: type AC
[6] If the molded case circuit breaker has no box terminals as connections, a set of box terminals must be ordered additionally for the taps below the thermal-magnetic trip units.
[7] 1 set of box terminals is included in scope of supply of the RCD510 (3VA921.-0RS20).

Modular residual current devices type A/B (according to IEC 60947-2 Annex M)
See monitoring devices, page 11/1

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			3VA11	3VA12	3VA20 3VA21	3VA22	3VA23	3VA24
Monitoring mode (tripping can be disabled as an option)	**Remote test/ remote reset**	**Communication-capable**						
■	–	–	3VA9113-0RS20 [6]	3VA9213-0RS20 [7]	–	–	–	–
■	–	–	3VA9114-0RS10 [6]	–	–	–	–	–
■	–	–	3VA9114-0RS20 [6]	3VA9214-0RS20 [7]	–	–	–	–

Monitoring mode (tripping can be disabled as an option)	**Remote test/ remote reset**	**Communication-capable**						
–	–	–	3VA9113-0RL20	3VA9213-0RL20	–	–	–	–
■	–	–	3VA9113-0RL21	–	–	–	–	–
■	■	■	–	–	3VA9123-0RL30	3VA9223-0RL30	3VA9323-0RL30	3VA9423-0RL30
–	–	–	3VA9114-0RL10	–	–	–	–	–
–	–	–	3VA9114-0RL20	3VA9214-0RL20	–	–	–	–
■	–	–	3VA9114-0RL21	–	–	–	–	–
■	■	■	–	–	3VA9124-0RL30	3VA9224-0RL30	3VA9324-0RL30	3VA9424-0RL30
			3VA9988-0BR10	3VA9988-0BR10	–	–	–	–

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Communication

Metering function [1]			ETU 5-series	ETU 8-series	Display in ETU	Display DSP800	Communication COM800/COM100
Current							
Phase and neutral conductor currents	I_1, I_2, I_3, I_N	A	■	■	□	□	■
Residual current to ground	I_g	A	■	■	□	□	■
Phase with highest load		A	■	■	□	□	■
Mean value over the three phase currents	$I_{leading\ axis} = (I_1 + I_2 + I_3)/3$	A	–	■	–	□	■
Asymmetry of the phase currents	I_{nba}	%	–	■	–	□	■
THD of the 3 phases	$THDI_1$, $THDI_2$, $THDI_3$	%	–	■	–	□	■
Voltage							
Phase voltages incl. mean value	U_{12}, U_{23}, U_{31}, U_{phavg}	V	–	■	□	□	■
Voltages to N conductor incl. mean value	U_{1N}, U_{2N}, U_{3N}, U_{Navg}	V	–	■	–	□	■
Voltage unbalance		%	–	■	–	□	■
THD phase/phase and phase/N	$THDI_1$, $THDI_2$, $THDI_3$	%	–	■	–	□	■
Power							
Active power, total and per phase	P_1, P_2, P_3, P_{tot}	kW	–	■	□ (P_{tot})	□	■
Apparent power, total and per phase	S_1, S_2, S_3, S_{tot}	kVA	–	■	–	□	■
Reactive power, total and per phase	Q_1, Q_2, Q_3, Q_{tot}	kVAr	–	■	□	□	■
Power factor of the fundamental	P_{F1}, P_{F2}, P_{F3}, P_{Favg}		–	■	□ (PF_{avg})	□	■
Energy							
Active energy, infeed and feedback	E_p	kWh	–	■	□	□	■
Reactive energy, infeed and feedback	E_q	kVArh	–	■	–	□	■
Apparent energy	E_s	kVAh	–	■	–	□	■
Frequency							
Present frequency	f	Hz	–	■	□	□	■
Maximum pointer function							
Min./max. current, voltage, power	With time stamp	–	–	–	–	–	■
Condition Monitoring [2]							
Operating cycles counter	CLOSE-OPEN cycle		■	■	–	–	■
Operating hours		h	■	■	–	–	■
Trip counter	Differentiated by trip causes		■	■	–	–	■
Health indicator [3]	Incl. contact state	%	■	■	■	–	■
Remaining life time [3]		Time	■	■	–	–	■

■ Available □ Displayable – Not available

[1] Depending on ETU version
[2] Only available with continuous external power supply and COM060 and COM800/100 communication interfaces
[3] Firmware 4.4 or higher of ETU, COM060, COM800/100 required

	3VA20 3VA21 3VA22	3VA23 3VA24 3VA25 3VA26
COM060 communication modules		
 • For mounting in the right-hand accessories compartment of the 3VA2 molded case circuit breaker (including ETU power supply) • Including a T-Connector		
Purpose		
Communication to the COM800/COM100 breaker data server via 3VA line	3VA9187-0TB10	3VA9387-0TB10
24 V modules		
 • 24 V DC • For mounting in the right-hand accessories compartment of the 3VA2		
Purpose		
Optional energy supply for the ETU, also includes continuous operation of the ETU display and the metering function of the ETU 8-series	3VA9187-0TB50	3VA9387-0TB50

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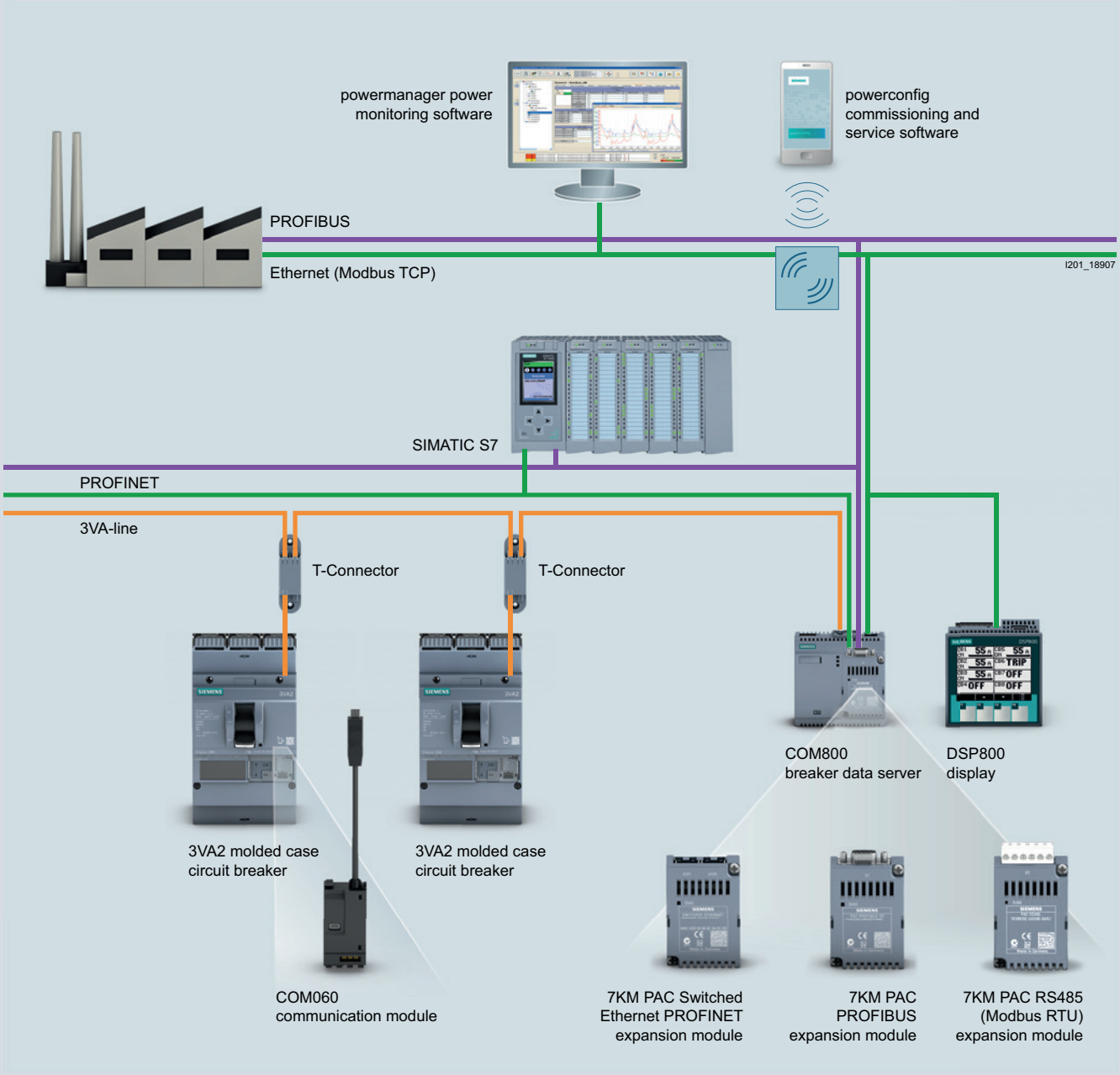

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Communication

Breaker data server

COM800 breaker data servers



Version	Article No.
Central communication module for connection of up to eight 3VA2 molded case circuit breakers via the 3VA line, Ethernet 10/100 Mbps interface module socket for inserting an optional PROFIBUS DP or PROFINET module, 2 terminating resistors	3VA9987-0TA10

COM100 breaker data servers



Version	Article No.
Central communication module for connection of a 3VA2 molded case circuit breaker via the 3VA line, Ethernet 10/100 Mbps interface module socket for inserting an optional PROFIBUS DP or PROFINET module, 2 terminating resistors	3VA9987-0TA20

7KM PAC PROFIBUS DP expansion modules



Purpose	Article No.
Used for connecting the COM800/COM100 breaker data server, and the 3VA molded case circuit breakers connected to it, to PROFIBUS DPV1. Supplies the state and measured variables of the 3VA molded case circuit breaker for the PROFIBUS DP master. Receives information (e.g. commands) from the PROFIBUS DP master and transmits them to the 3VA molded case circuit breaker.	7KM9300-0AB01-0AA0

7KM PAC Switched Ethernet PROFINET expansion modules



Purpose	Article No.
Used for connecting the COM800/COM100 breaker data server, and the connected 3VA molded case circuit breakers, to PROFINET via two Ethernet interfaces. Supplies the state and measured variables of the 3VA molded case circuit breakers to PROFINET via the PROFINET IO, PROFIenergy and Modbus TCP protocols.	7KM9300-0AE02-0AA0

7KM PAC RS485 Modbus RTU expansion modules



Purpose	Article No.
Used for connecting the COM800/COM100 breaker data server, and the 3VA molded case circuit breakers connected to it, to Modbus RTU. Supplies the state and measured variables of the 3VA molded case circuit breaker for the Modbus RTU master. Receives information (e.g. commands) from the Modbus RTU master and transmits them to the 3VA molded case circuit breaker.	7KM9300-0AM00-0AA0

Interfaces to IEC 61850

Purpose: The SICAM A8000 smart breaker data server connects the circuit breakers from the SENTRON portfolio via the MODBUS TCP/IP protocol and transmits data via communication protocols (e.g.: IEC 61850, IEC 60870-5-104, IEC 60870-5-101, MODBUS and DNP) to higher-level systems.





Type	Processor assembly	Operating voltage	Article No.
SICAM CP-8021 [1]	4 interfaces		6MF28021AA00
SICAM PS-8620	–	24 ... 60 V DC (12 W)	6MF28620AA00
SICAM PS-8622	–	110 ... 220 V DC (12 W)	6MF28622AA00

[1] Dimensioned for device quantities of 8× 3VA and 1× 3W

You will find further information at:
www.siemens.com/sicam-a8000

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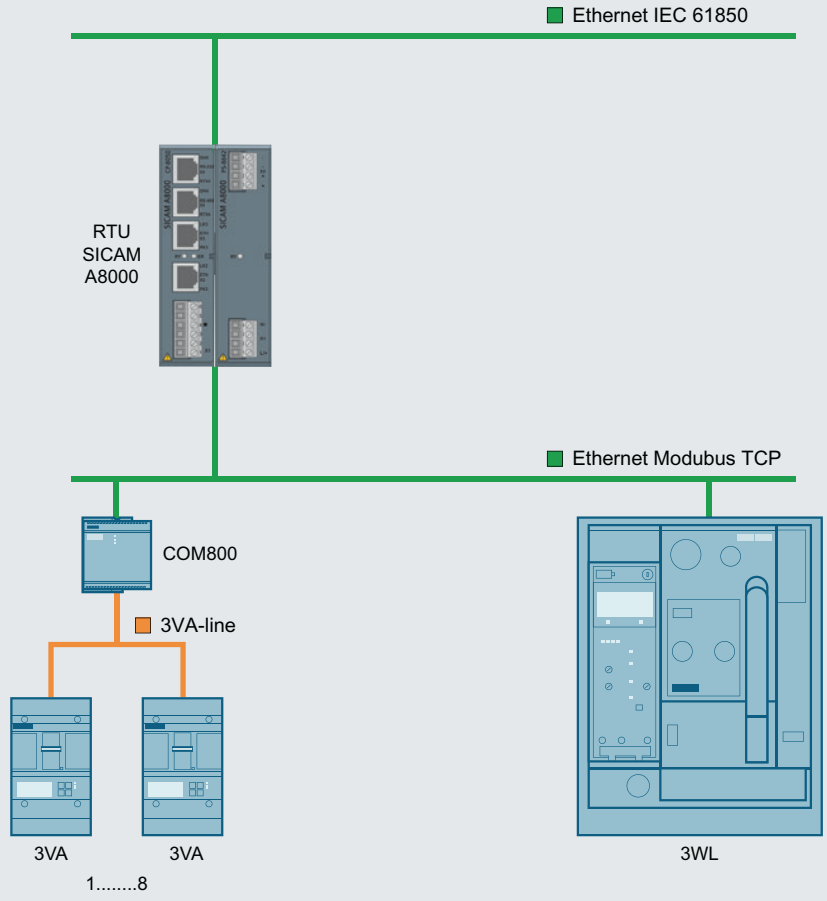

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Communication

Accessories for communication

T-connectors (spare part)



Purpose	Article No.
Provides a stub connection to the COM060 and loops through to the next circuit breaker.	3VA9987-0TG10

DIN rail adapters



Purpose	Article No.
For snapping the T-Connector onto a DIN rail.	3VA9987-0TG11

Prefabricated connecting cables, T-connector – T-connector or T-connector – COM800/COM100



Length	Article No.
0.4 m	3VA9987-0TC10
1 m	3VA9987-0TC20
2 m	3VA9987-0TC30
4 m	3VA9987-0TC40

Prefabricated connecting cables for extending the COM060 – T-connector stub connection



Length	Article No.
0.4 m	3VA9987-0TF20
0.8 m	3VA9987-0TF10

Additional bus terminating resistors (spare part)



Purpose	Article No.
For COM800 and COM060	3VA9987-0TE10

Voltage tap to external N conductors (spare part)



Purpose	Article No.
Cable for connection of the star point for the metering function of the 8-series ETU, length 1.5 m	3VA9987-0UC10

External current transformer for N conductors



Purpose	Rated current I_n	Article No.
For 3VA2 3-pole molded case circuit breakers, for 5 and 8-series ETUs, including connecting cables	25 ... 150 A	3VA9007-0NA10
	160 ... 350 A	3VA9107-0NA10
	400 ... 630 A	3VA9307-0NA10

External current transformers as straight-through transformers



Rated current I_n	Article No.
25 ... 150 A	3VA9077-0NA10
160 ... 350 A	3VA9177-0NA10
400 ... 630 A	3VA9377-0NA10
600 ... 1250 A	3VA9677-0NA10

Connecting cables for external current transformers for N conductors (spare part)



Article No.
3VA9907-0NB10

Display

DSP800 displays



Purpose	Article No.
For displaying the status and measured values of up to eight devices • 3VA2 via COM800/100 • 3VA27 • 3WL10 • 3WL11-13 • PAC3200T	3VA9987-0TD10

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External function box

EFB300 external function boxes



- 4 digital outputs for information output
- 1 digital input
- ZSI functionality
- S0-Interface
- Including cable 1.5 m in length

Purpose	Article No.
For connection to the ETU of 3VA2 molded case circuit breakers	3VA9987-0UA10

Connecting cables for EFB300



Length	Purpose	Article No.
1.5 m	For 3VA2 with EFB	3VA9987-0UB10
3.0 m	For 3VA2 with EFB	3VA9987-0UB20
	For 3VA2 with EFB and RCD820	3VA9987-0UB30

Test devices

TD300 test devices



Purpose	Connection	Article No.
For activation of the ETU and initiation of a test tripping operation	On the front interface of the ETU	3VA9987-0MA10

TD400 test devices



- Energy supply via batteries or the USB-C interface
- USB-C interface for connecting a PC with SENTRON powerconfig
- Bluetooth interface for connection to a PC, smartphone or tablet
- ETU parameterization
- Including adapter and connecting cable to 3VA2 molded case circuit breaker and IEC 3WL (ETU release 2)
- Including case

Purpose	Connection	Article No.
Initiation of a test tripping operation	On the front interface of the ETU (3VA and IEC 3WL ETU release 2)	3VW9011-0AT40

TD500 test devices



- USB interface for connecting a PC with SENTRON powerconfig
- Including external power supply
- Including connecting cable to 3VA2 molded case circuit breaker

Purpose	Connection	Article No.
Initiation of various test tripping operations (LSING), ETU parameterization	On the front interface of the ETU	3VA9987-0MB10

External power supplies for TD500 (spare part)



Voltage	Article No.
110 ... 240 V	3VA9987-0MX10

Connecting cables for connecting TD500 to 3VA2 molded case circuit breakers (spare part)



Article No.
3VA9987-0MY10

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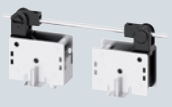
Locking, blocking and interlocking

			3VA11	3VA12	3VA20 3VA21 3VA22
Locking					
• The locking devices make it possible to lock the 3VA molded case circuit breakers in either the OFF or the ON operating position.					
Version					
 Cylinder lock	Key 1 (lock number 1)			3VA9980-0VL10	
	Key 3 (lock number 3)			3VA9980-0VL30	
	Key 4 (lock number 4)			3VA9980-0VL40	
 Adapter kit for mounting the cylinder lock (type RONIS) in the accessories compartment of the molded case circuit breaker			3VA9157-0LF10	3VA9257-0LF10	3VA9167-0LF10
 Locking device for toggle operating mechanism			3VA9088-0LB10		3VA9388-0LB10
Interlocking					
• Using interlocking technology, it is possible to mutually interlock two or more molded case circuit breakers. • The interlock system is designed to ensure that no more than one molded case circuit breaker can be operated at a time. • The following methods of interlocking can be used on 3VA molded case circuit breakers: – Front interlock – Rear interlock					
Version					
 Cylinder lock	Key 1 (lock number 1)			3VA9980-0VL10	
	Key 3 (lock number 3)			3VA9980-0VL30	
	Key 4 (lock number 4)			3VA9980-0VL40	
 Sliding bar interlock			3VA9158-0VF30	3VA9258-0VF30	3VA9168-0VF30
 Module for handle interlock using a Bowden cable			3VA9157-0VF10	3VA9257-0VF10	3VA9167-0VF10
Bowden cable	Length 0.6 m			3VA9980-0VC10	
	Length 1.0 m			3VA9980-0VC20	
	Length 1.5 m			3VA9980-0VC30	
 Rear interlock with rod	Circuit breaker, fixed-mounted			3VA9088-0VM10	
	Plug-in/draw-out technology			3VA9088-0VM30	
 Mounting frame for rear interlock with rod	Profile rails			3VA9088-0VK10	
	Mounting plate		3VA9158-0VK20	3VA9258-0VK20	3VA9268-0VK20

[1] With mounting frame for rear interlock.
Can be used with breaker 3VA15 from "E02" and 3VA25 from "E05" (Line protection CB with TMTU, 3-Series ETU and 5-Series ETU)

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3VA13 3VA14	3VA15	3VA23 3VA24	3VA25 3VA26

Locking

		Use in	Locking in OFF position	Locking in ON position	Front mounting	Rear mounting	Interlocked breakers
3VA9980-0VL10	–	Breakers, motor-drive mechanisms, manual operators, draw-out technology	■	■	■	–	–
3VA9980-0VL30	–						
3VA9980-0VL40	–						
3VA9367-0LF10	3VA9587-0LF10	Circuit breaker	■	■	■	–	–
3VA9388-0LB10	3VA9588-0LB10	Circuit breaker	■	■	■	–	–

Interlocking

		Use in	Locking in OFF position	Locking in ON position	Front mounting	Rear mounting	Interlocked breakers
3VA9980-0VL10	–	Breakers, manual operators	■	■	■	–	Unlimited
3VA9980-0VL30	–						
3VA9980-0VL40	–						
3VA9368-0VF30	–	Circuit breaker	–	–	■	–	3
3VA9367-0VF10	3VA9587-0VF10	Circuit breaker	–	–	■	–	3
3VA9980-0VC10							
3VA9980-0VC20							
3VA9980-0VC30							
3VA9088-0VM10	3VA9588-0VM10 [1]	Circuit breaker, fixed-mounted	–	–	–	■	2
3VA9088-0VM30	–	Plug-in/draw-out technology					
3VA9088-0VK10	–		–	–	–	■	
3VA9468-0VK20	–						

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Cover frame and mounting

		3VA10 3VA11	3VA12
Cover frames for door cutouts for molded case circuit breakers			
			
Number of poles	**Door cut-out with trip unit**		
3P	No	3VA9053-0SB10	3VA9253-0SB10
	Yes	3VA9053-0SB20	3VA9253-0SB20
4P	No	3VA9054-0SB10	3VA9254-0SB10
	Yes	3VA9054-0SB20	3VA9254-0SB20
Cover frames for MO320 motor operators			
			
Purpose			
MO320 motor operator		3VA9053-0SB20	3VA9257-0SB30
Motor operator with SEO520 stored energy operator		–	–
Cover frames for RCD320, RCD520 and RCD820 residual current devices			
			
Number of poles			
3P		3VA9053-0SB10	3VA9253-0SB10
4P		3VA9054-0SB10	3VA9254-0SB10
Cover frames for front mounted rotary operators			
			
		3VA9053-0SB10	3VA9253-0SB10
Cover frames for door feedthroughs			
			
		–	3VA9253-0SB20
Labeling plates for cover frame			
			
			3VA9087-0SX10
Adapters for DIN rails for 3VA1 molded case circuit breakers			
			
Number of poles			
1P		3VA9181-0SH10	–
2P		3VA9182-0SH10	–
3P and 4P		3VA9187-0SH10	–
3P and 4P in connection with RCD310 or RCD510		3VA9187-0SH20	–
Mounting screw kits			
			
Purpose	**Number of poles**		
For fixed-mounted breakers	1P	3VA9111-0SS10	–
	2P and 3P (apart from 125 A/160 A with 55 kA and 70 kA)	3VA9116-0SS10	
	3P (125 A/160 A with 55 kA and 70 kA) and 4P	3VA9114-0SS10	
	3P	–	–
	4P	–	–
	3P and 4P	–	–
For plug-in technology	–	3VA9114-0SS10	
For plug-in and draw-out technology	–	–	3VA9114-0SS10

Adapter for 60 mm busbar system (8US), see page 13/26

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3VA20 3VA21 3VA22	3VA13 3VA14 3VA23 3VA24	3VA15 3VA25 3VA26
3VA9163-0SB10	3VA9383-0SB10	3VA9503-0SB10
3VA9163-0SB20	3VA9363-0SB20	3VA9503-0SB20
3VA9164-0SB10	3VA9384-0SB10	3VA9504-0SB10
3VA9164-0SB20	3VA9364-0SB20	3VA9504-0SB20
3VA9257-0SB30	3VA9387-0SB30	–
3VA9167-0SB30	–	–
3VA9253-0SB10	3VA9303-0SB40	–
3VA9254-0SB10	3VA9304-0SB40	–
3VA9163-0SB10	3VA9383-0SB10	3VA9503-0SB50
3VA9253-0SB20	3VA9353-0SB20	–
	3VA9087-0SX10	
–	–	–
–	–	–
–	–	–
–	–	–
–	–	–
–	–	–
–	–	–
3VA9126-0SS10	–	–
3VA9124-0SS10	–	–
–	3VA9328-0SS10	3VA9517-0SS10
–	–	–
3VA9124-0SS10	3VA9328-0SS10	–

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System overview

For a complete and valid configuration of your molded case circuit breaker, please use our online configurator at www.siemens.com/lowvoltage/3va27-configurator

Switching devices

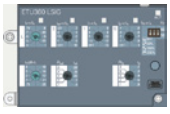


Handle



Stored energy operator

Trip units



Electronic trip unit (ETU)

Accessories



Communication module



Rating plugs



Breaker Connect module



Test devices and breaker data adapters

Main conductor connections



Rear vertical/ horizontal



Rear broadened



Front extended



Front broadened

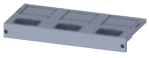


Cable lug

Accessories



Phase barriers



Terminal cover

Motors



Spring charging motor

Accessories



Mechanical operating cycles counter (MOC)

Auxiliary releases / closing coils



Undervoltage release (UVR) / Shunt trip (ST)



Closing coil (CC) / Remote reset magnet (RR)

Note:
You will find a detailed range of accessories in the Accessories and spare parts section.

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Auxiliary switches



Tripped signaling switch



Ready-to-close signaling switch (RTC)



Auxiliary switch ON/OFF (AUX)

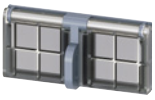


Tripped signaling switch (S24)



Trip alarm switch (TAS)

Further accessories



Padlockable protective cover



Locking device



Locking mechanism



Door sealing frame



Protective cover



Mutual mechanical interlocking



Manual operator

Note:
You will find a detailed range of accessories in the Accessories and spare parts section.

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Structure of the article numbers

Basic configuration with toggle operating mechanism

The structure shown below is intended as an overview of each position and its meaning. For a complete and valid configuration of your molded case circuit breaker, please use our online configurator at www.siemens.com/lowvoltage/3va27-configurator

	6	7	8	9	10	11	12	13	14	15	16
3VA27	■	■	– ■	■	■	■	■	–			

Basic units and ETUs

Max. rated current I_n	800 A			8	0		
	1000 A			1	0		
	1250 A			1	2		
	1600 A			1	6		
Short-circuit breaking capacity $I_{cu} = I_{cs}$ at 415 V	Toggle operating mechanism	55 kA			5		
		85 kA			6		
		110 kA			7		
Non-automatic air circuit breakers	Without metering function, without a communication link	Without trip unit			A	A	
Circuit breakers, ETU 3-series	Without metering function, without a communication link	With trip unit	ETU320 LI	(N) [1]	A	B	
			ETU350 LSI	(N) [1]	A	C	
			ETU360 LSIG	(N) [1]	A	D	
Circuit breakers, ETU 6-series		With trip unit	ETU650 LSI	(N) [1]		E	
			ETU660 LSIG	(N) [1]		F	
	Without communications interface	Without metering function			A		
	With communications interface	Without metering function			B		
		Metering function Basic	Voltage tap on bottom		C		
			Voltage tap on top		D		
		Metering function Advanced	Voltage tap on bottom		E		
			Voltage tap on top		F		

[1] Neutral conductor protection for 3-pole breakers with an external neutral conductor transformer or 4-pole breakers

Number of poles	Fixed-mounted versions	3-pole		0
		4-pole	Neutral left	1
			Neutral right	2
	Withdrawable	3-pole		3
		4-pole	Neutral left	4
			Neutral right	5

Connection

Installation type	Withdrawable	Withdrawable circuit breaker without guide frame (guide frame must be ordered separately)	0
	Fixed-mounted breaker / withdrawable breaker	Rear vertical connection	1
		Rear horizontal connection	2
		Front terminal for main circuit connection	3
		Front-accessible, extended terminal for main circuit connection	5
		Front-accessible, broadened terminal for main circuit connection	6
		Rear broadened bus connectors	7

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3VA27 6 7 – 8 9 10 11 12 – 13 14 15 16

Alarm switch combinations

Alarm switches	Without	0
	With tripped signaling switch TAS and tripped signaling switch S25	1
	With two leading changeover switches S26	2
	With tripped signaling switch TAS and tripped signaling switch S25 and two leading changeover switches S26	3

Auxiliary releases, closing coils

Closing coil (CC), remote reset magnet (RR)	Without	A

2nd auxiliary release	Without 2nd auxiliary release		A
	With undervoltage release (UVR)	24 V AC/DC	B
		30 V AC/DC	C
		48 V AC/DC	D
		60 V AC/DC	E
		110 ... 120 V AC/DC	F
		120 ... 127 V AC/DC	G
		220 ... 240 V AC/DC	H
		240 ... 250 V AC/DC	J
		380 ... 400 V AC/DC	K
		415 ... 440 V AC/DC	L
	With undervoltage release (UVR), delayable with external time-delay device Scope of supply: UVR + time-delay device	24 ... 30 V AC/DC	M
		110 ... 127 V AC/DC	N
		220 ... 250 V AC/DC	P
	With 2nd shunt trip (ST2)	24 V AC/DC	Q
		30 V AC/DC	R
		48 V AC/DC	S
		60 V AC/DC	T
		110 ... 120 V AC/DC	U
		120 ... 127 V AC/DC	V
		220 ... 240 V AC/DC	W
		240 ... 250 V AC/DC	X

1st auxiliary release	Without 1st auxiliary release		0
	Shunt trip (ST)	24 V AC/DC	1
		30 V AC/DC	2
		48 V AC/DC	3
		60 V AC/DC	4
		110 ... 120 V AC/DC	5
		120 ... 127 V AC/DC	6
		220 ... 240 V AC/DC	7
		240 ... 250 V AC/DC	8

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Structure of the article numbers

Basic configuration with stored energy operating mechanism

The structure shown below is intended as an overview of each position and its meaning. For a complete and valid configuration of your molded case circuit breaker, please use our online configurator at www.siemens.com/lowvoltage/3va27-configurator

	6	7		8	9	10	11	12		13	14	15	16
3VA27			–						–				

Basic units and ETUs

					6	7	8	9	10	11	12	13
Max. rated current I_n	800 A				8	0						
	1000 A				1	0						
	1250 A				1	2						
	1600 A				1	6						
Short-circuit breaking capacity $I_{cu} = I_{cs}$ at 415 V	Stored energy operating mechanism	55 kA					1					
		85 kA					2					
		110 kA					3					
Non-automatic air circuit breakers	Without metering function, without a communication link	Without trip unit						A	A			
Circuit breakers, ETU 3-series	Without metering function, without a communication link	With trip unit	ETU320 LI	(N) [1]				A	B			
			ETU350 LSI	(N) [1]				A	C			
			ETU360 LSIG	(N) [1]				A	D			
Circuit breakers, ETU 6-series		With trip unit	ETU650 LSI	(N) [1]					E			
			ETU660 LSIG	(N) [1]					F			
	Without communications interface	Without metering function						A				
	With communications interface	Without metering function						B				
		Metering function Basic	Voltage tap on bottom					C				
			Voltage tap on top					D				
		Metering function Advanced	Voltage tap on bottom					E				
			Voltage tap on top					F				

[1] Neutral conductor protection for 3-pole breakers with an external neutral conductor transformer or 4-pole breakers

				11	12	13
Number of poles	Fixed-mounted versions	3-pole		0		
		4-pole	Neutral left	1		
			Neutral right	2		
	Withdrawable	3-pole		3		
		4-pole	Neutral left	4		
			Neutral right	5		

Connections

			12	13
Installation type	Withdrawable	Withdrawable circuit breaker without guide frame (guide frame must be ordered separately)	0	
	Fixed-mounted breaker / withdrawable breaker	Rear vertical connection	1	
		Rear horizontal connection	2	
		Front terminal for main circuit connection	3	
		Front-accessible, extended terminal for main circuit connection	5	
		Front-accessible, broadened terminal for main circuit connection	6	
		Rear broadened bus connectors	7	

Motor

			13
Operating mechanisms	Manual operator		0
	Spring charging motor	24 ... 30 V AC/DC	1
		48 ... 60 V AC/DC	2
		110 V AC/DC	3
		230 V AC/DC	4

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3VA27 6 7 – 8 9 10 11 12 13 – 14 15 16

Auxiliary releases, closing coils, remote reset magnets

			14	15	16
Closing coil (CC), remote reset magnet (RR)	Without		A		
	Closing coil (CC)	24 V AC/DC	B		
		30 V AC/DC	C		
		48 V AC/DC	D		
		60 V AC/DC	E		
		110 ... 120 V AC/DC	F		
		120 ... 127 V AC/DC	G		
		220 ... 240 V AC/DC	H		
		240 ... 250 V AC/DC	J		
	Closing coil (CC) and additional remote reset magnet (RR)	24 V AC/DC	K		
		110 V AC/DC	L		
		220 V AC/DC	M		
2nd auxiliary release	Without 2nd auxiliary release			A	
	With undervoltage release (UVR)	24 V AC/DC		B	
		30 V AC/DC		C	
		48 V AC/DC		D	
		60 V AC/DC		E	
		110 ... 120 V AC/DC		F	
		120 ... 127 V AC/DC		G	
		220 ... 240 V AC/DC		H	
		240 ... 250 V AC/DC		J	
		380 ... 400 V AC/DC		K	
		415 ... 440 V AC/DC		L	
	With undervoltage release (UVR), delayable with external time-delay device Scope of supply: UVR + time-delay device	24 ... 30 V AC/DC		M	
		110 ... 127 V AC/DC		N	
		220 ... 250 V AC/DC		P	
	With 2nd shunt trip (ST2)	24 V AC/DC		Q	
		30 V AC/DC		R	
		48 V AC/DC		S	
		60 V AC/DC		T	
		110 ... 120 V AC/DC		U	
		120 ... 127 V AC/DC		V	
		220 ... 240 V AC/DC		W	
		240 ... 250 V AC/DC		X	
1st auxiliary release	Without 1st auxiliary release				0
	Shunt trip (ST)	24 V AC/DC			1
		30 V AC/DC			2
		48 V AC/DC			3
		60 V AC/DC			4
		110 ... 120 V AC/DC			5
		120 ... 127 V AC/DC			6
		220 ... 240 V AC/DC			7
		240 ... 250 V AC/DC			8

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Accessory options

For a complete and valid configuration of your molded case circuit breaker, please use our online configurator at www.siemens.com/lowvoltage/3va27-configurator

To specify the options, add „-Z" to the complete Article No. and indicate the appropriate order code(s).

3VA27..-.....-.... -Z

Order code

Accessories for basic configuration

Mounting options for fixed mounting

- In the basic configuration, the fixed-mounted circuit breaker is mounted onto the rear panel. Floor mounting is possible as an option. The device must additionally be modified if it is to be extended to include functionalities such as external auxiliary switches or mechanical interlocks.[1)]

Mounting options for fixed mounting[1)]	Floor mounting	Mounting support standard	≋	◢		A	0	7
		Mounting support extended[2)]	≋	◢		S	5	6
	Rear panel mounting onto mounting plate	Side wall extended[2)]	≋	◢		S	5	7

Accessories for electronic trip units ETU

Rating plugs

- The electronic trip units are equipped as standard with a rating plug for setting the rated current I_n, which is equal to the maximum rated circuit breaker current (< $I_{n\,max}$). The rated current of the selected rating plug must be less than or equal to $I_{n\,max}$.
- To downrate the circuit breaker, a rated current smaller than $I_{n\,max}$ is selected for the rating plug via a Z option.
- Other functions can also be activated using rating plugs (L = OFF or Rc protection).

Rating plug	For setting the rated current I_n	For all ETU	400 A	≋	◢		B	0	4
			630 A	≋	◢		B	0	6
			800 A	≋	◢		B	0	8
			1000 A	≋	◢		B	1	0
			1200 A	≋	◢		B	1	2
	For setting the rated current I_n, with overload protection L = OFF	For ETU 6-series	400 A	≋	◢		L	0	4
			630 A	≋	◢		L	0	6
			800 A	≋	◢		L	0	8
			1000 A	≋	◢		L	1	0
			1250 A	≋	◢		L	1	2
			1600 A	≋	◢		L	1	6
	For setting the rated current I_n, For enabling the residual current protection function. The residual current function is only possible with the MF Advanced metering function.	For ETU660 only	400 A	≋	◢		G	0	4
			630 A	≋	◢		G	0	6
			800 A	≋	◢		G	0	8
			1250 A	≋	◢		G	1	2

Communication modules

- Up to 2 different communication modules can be used at the same time.
- When using an IOM040 digital I/O module (Z option K56), only 1 communication module can be used.

Communication modules	COM040	Modbus TCP	≋	◢		F	0	2
	COM041	Modbus RTU	≋	◢		F	0	3
	COM043	Modbus TCP	≋	◢		F	1	1
	COM042	Modbus RTU	≋	◢		F	1	2

Breaker Connect modules

- When a circuit breaker with a communications interface is ordered, a Breaker Connect module for external 24 V DC power supply of the electronic components is also supplied ready installed as standard.
- By means of this Z option, the Breaker Connect module for 24 V DC is replaced by a Breaker Connect module for 110–240 V AC/DC.

Breaker Connect module	110 ... 240 V AC/DC		≋	◢		F	2	6

I/O modules internal

I/O modules internal	IOM040 digital I/O module	2 inputs, 2 outputs	≋	◢		K	5	6

≋ For molded case circuit breakers with stored energy operating mechanism

◢ For molded case circuit breakers with toggle operating mechanism

[1)] These functionalities can be applied directly to the frame of the withdrawable circuit breaker, without any modification of the side wall.

[2)] Not possible in connection with or as an alternative to the mounting support, standard (A07).

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To specify the options, add „-Z" to the complete Article No. and indicate the appropriate order code(s).

3VA27..-.....-.... -Z

Accessories for motors

					Order code		
5-digit mechanical operating cycles counter					C	0	1

Auxiliary switches and signaling switches

- Auxiliary and signaling switches for currents >100 mA and up to 400 V AC are installed as standard.
- For currents <100 mA for PLC connections, these auxiliary and signaling switches can be replaced.
- The auxiliary/signaling switches for 24 V DC digital signals are designed for a
  - minimum load above 1 mA at 5 V DC, and a
  - maximum breaking capacity of 100 mA at 24 V DC.

Position signaling switches for guide frames [1]		2 CO | 2 CO | 2 CO (connected | test | disconnected position)			K	5	5
Signaling switch	Ready-to-close signaling	1 CO contact digital 24 V DC			K	5	0
	Tripped signaling switch (S24)	1 CO contact digital 24 V DC			K	5	3
	Spring charged signaling switch (S21)	1 CO contact digital 24 V DC			K	5	4
Auxiliary switch	On / Off AUX	4 CO contacts digital 24 V DC			K	5	1
		2 CO contacts 400 V AC, and 2 CO contacts digital 24 V DC			K	5	2

Locking, blocking and interlocking

Locking devices [1]	To prevent movement of withdrawable circuit breaker	Cylinder lock	Made by RONIS		R	7	8
		For no more than three 8-mm padlocks			R	6	5
Locking mechanism	To prevent movement to disconnected position				R	7	9
Locking device	To prevent unauthorized activation in the operator panel (safe OFF)	Cylinder lock, made by RONIS			S	0	8
		For no more than 3 padlocks, plastic 4 mm			S	2	2
		For no more than 1 padlock, metal 7 mm			S	2	3
		For no more than 2 padlocks, metal 8 mm			S	0	7
Padlockable protective cover	For mechanical ON and/or OFF on the operator panel	For no more than 3 padlocks, plastic 4 mm			S	4	2
		For no more than 1 padlock, metal 7 mm			S	4	3
		For no more than 2 padlocks, metal 8 mm			S	4	4
Protective cover	For mechanical ON/OFF, not lockable				S	4	1
Door sealing frame IP30	IP3x				T	3	0

For molded case circuit breakers with stored energy operating mechanism

For molded case circuit breakers with toggle operating mechanism

[1] Can be used both for individual orders of the guide frame and complete orders (circuit breaker + guide frame).

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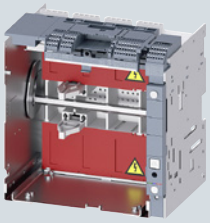
Guide frames

Guide frames for ordering separately without circuit breakers



- Guide frames without breakers up to 1250 A
- **Note:** All CB bus modules for communication COM04x / IOM300 / Breaker Connect module, as well as COMPSS signaling switches are configured without frames in the withdrawable circuit breaker and defined there by means of Z options, and are included with the switching device. PSS Standard is always included in the frame and can be changed to an electronics-capable signal by means of a Z option.

Number of poles	Connection type	3VA27 Article No.
3-pole	Rear vertical	3VW8116-7AA01
	Rear horizontal	3VW8116-7AB01
	Front straight bus connectors extended	3VW8116-7AE01
	Broadened bus connectors	3VW8116-7AF01
	Rear broadened bus connectors	3VW8116-7AG01
4-pole	Rear vertical	3VW8116-7BA01
	Rear horizontal	3VW8116-7BB01
	Front straight bus connectors extended	3VW8116-7BE01
	Broadened bus connectors	3VW8116-7BF01
	Rear broadened bus connectors	3VW8116-7BG01

To specify the options, add „-Z" to the complete Article No. and indicate the appropriate order code(s).

3VW8....-.....-.... -Z Order code

Locking, blocking and interlocking

Locking device	To prevent movement of withdrawable circuit breaker	Cylinder lock, made by RONIS	≡	◢		R	7	8
		For no more than 3 8-mm padlocks	≡	◢		R	6	5
Locking mechanism	To prevent movement to disconnected position (only in combination with R78 or R65)		≡	◢		R	7	9

Auxiliary/signaling switches

Position signaling switch PSS for guide frame	For 24 V DC digital signals, for minimum currents	2 CO | 2 CO | 2 CO (connected | test | disconnected position)	≡	◢		K	5	5

Auxiliary and signaling switches for currents >100 mA and up to 400 V AC are installed as standard.
For currents <100 mA for PLC connections, these auxiliary and signaling switches can be modified.
The auxiliary/signaling switches for 24 V DC digital signals are designed for
- A minimum load above 1 mA at 5 V DC, and
- A maximum breaking capacity of 100 mA at 24 V DC.

≡ For molded case circuit breakers with stored energy operating mechanism
◢ For molded case circuit breakers with toggle operating mechanism

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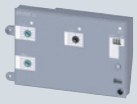
Electronic trip unit ETU and accessories

Electronic trip units (ETU)

	Version	With communications / metering function, enhanced protection functions	Type	Protective function		3VA27 Article No.
	With rotary coding switches	No	ETU320	LIN	≋ ◢	3VW9011-5AA00
			ETU350	LSIN	≋ ◢	3VW9012-5AA00
			ETU360	LSING	≋ ◢	3VW9012-7AA00
	With display	Yes	ETU650	LSIN	≋ ◢	3VW9017-5AA00
			ETU660	LSING	≋ ◢	3VW9017-7AA00

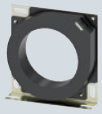
Metering functions for ETU650 or ETU660

	Description	Protective function / version	Arrangement		3VA27 Article No.
	Metering function	MF Basic	–	≋ ◢	3VW9011-0AT01
		MF Advanced	–	≋ ◢	3VW9011-0AT04
	Set of cables for voltage tap for MF	For 4-pole circuit breakers with N conductor right	Top or bottom	≋ ◢	3VW9011-0AT08
		For 4-pole circuit breakers with N conductor left	Top	≋ ◢	3VW9011-0AT75
			Bottom	≋ ◢	3VW9011-0AT76
		For 3-pole circuit breakers	Top	≋ ◢	3VW9011-0AT72
			Bottom	≋ ◢	3VW9011-0AT73

External current transformers for N conductors

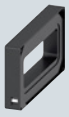
	Accessory for	Purpose		3VA27 Article No.
	ETU320, ETU350, ETU360, ETU650, ETU660	Only for 3-pole circuit breakers	≋ ◢	3VW9011-0AA30

External current transformers for grounded transformer star points

	Accessory for	G_{ret} (Ground return)		3VA27 Article No.
	ETU660	100 A	≋ ◢	3VW9011-0GF30
		250 A	≋ ◢	3VW9011-0GF31

Summation current transformers external Rc-CT for residual current measurement

- Only with MF Advanced metering function and Rc rating plug

	Accessory for	Purpose		3VA27 Article No.
	ETU660	For external residual current measurement	≋ ◢	3VW9011-0RC30

Remote reset magnets RR for the circuit breakers including tripped signal

- Remote reset magnet (RR) for resetting the circuit breaker after tripping as a result of overcurrent conditions

	Accessory for	Voltage		3VA27 Article No.
	ETU320, ETU350, ETU360, ETU650, ETU660	24 V DC	≋ –	3VW9011-0AK03
		110 V AC/DC	≋ –	3VW9011-0AK05
		250 V AC/DC	≋ –	3VW9011-0AK06

Replacement batteries for electronic trip unit ETU

	Accessory for		3VA27 Article No.
	ETU320, ETU350, ETU360, ETU650, ETU660	≋ ◢	3VW9011-0AT38

≋ For molded case circuit breakers with stored energy operating mechanism

◢ For molded case circuit breakers with toggle operating mechanism

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Electronic trip unit ETU and accessories

Rated current modules / rating plugs



- Only one module is possible per circuit breaker.

Accessory for	Version	Rated current I_n		Article No.
ETU320, ETU350, ETU360, ETU650, ETU660	Rating plugs for setting (< $I_{n\ max}$) the rated current I_n	400 A		3VW9011-0AA53
		630 A		3VW9011-0AA55
		800 A		3VW9011-0AA56
		1000 A		3VW9011-0AA57
		1250 A		3VW9011-0AA58
		1600 A		3VW9011-0AA61
ETU 6-series	Rating plug without overload protection (L = OFF) and for setting (< $I_{n\ max}$) the rated current I_n	400 A		3VW9011-0LF53
		630 A		3VW9011-0LF55
		800 A		3VW9011-0LF56
		1000 A		3VW9011-0LF57
		1250 A		3VW9011-0LF58
		1600 A		3VW9011-0LF61
ETU660	Rating plug Rc for ETU660 for enabling the residual current protection function and setting (< $I_{n\ max}$) the rated current I_n. The residual current function is only possible with the MF Advanced metering function.	400 A		3VW9011-0RC53
		630 A		3VW9011-0RC55
		800 A		3VW9011-0RC56
		1250 A		3VW9011-0RC58

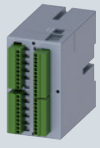
CB bus modules - communication modules



- Contains the communication module
- Up to 2 different communication modules can be used at the same time.
- When using a digital I/O module IOM040 (Z option K56), only 1 communication module can be used.
- Can only be used with ETU of the 6-series and require a Breaker Connect module for connection to the circuit breaker. This can also be configured directly on the device by means of a Z option if the communications interface to the ETU 6-series is selected.

Communication module	Protocol			Article No.
COM040	PROFIBUS			3VW9011-0AT15
COM041	PROFINET			3VW9011-0AT14
COM043	Modbus TCP			3VW9011-0AT16
COM042	Modbus RTU			3VW9011-0AT17

CB bus modules - I/O modules external IOM300



- For snapping onto standard mounting rail

Accessory for	Maximum switching current per contact	Inputs	Outputs		Article No.
ETU 6-series	• 2 A at ≤ 30 V DC • 0.8 A at 50 V DC • 0.2 A at 150 V DC • 4 A at 250 V AC	11	10		3VW9011-0AT20

CB bus modules - I/O modules internal IOM040



- When using a digital I/O module IOM040, only 1 communication module can be used.

Accessory for	Maximum switching current per contact	Inputs	Outputs		Article No.
ETU 6-series	• 2 A at ≤ 30 V DC • 0.8 A at 50 V DC • 0.2 A at 150 V DC • 4 A at 250 V AC	2	2		3VW9011-0AT30

For molded case circuit breakers with stored energy operating mechanism

For molded case circuit breakers with toggle operating mechanism

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				3VA27
Actuator modules COM ACT				
	• For switching the circuit breaker on/off remotely via communication. • Actuation of the closing coil (CC) and the 1st shunt trip (ST). • Can only be used in combination with a communication module, spring charging motor, closing coil and 1st shunt trip. • Automatically included if the communications interface of theETU 6-series is selected in the basic circuit breaker configuration.			
	Accessory for			**Article No.**
	ETU 6-series	≋	–	3VW9011-0AT10
Breaker Connect modules				
	• For external power supply for the electronics components			
	Voltage			**Article No.**
	110 ... 240 V AC/DC	≋	◢	3VW9011-0AT06
	24 ... 48 V DC	≋	◢	3VW9011-0AT07
Auxiliary contact signals for communications interfaces				
	• Auxiliary contacts for signaling the readiness to close or for position signaling switches of the withdrawable positions. • Can only be used in combination with communication module. • Can be combined with standard position signaling switches or ready-to-close signaling contacts. • **Note:** Both signaling switches are automatically included in the basic circuit breaker (COM PSS only with withdrawable versions) if the communications interface of the ETU 6-series is selected.			
	Function			**Article No.**
	Ready-to-close signaling switch for communication (COM RTC)	≋	–	3VW9011-0AT11
	Position signaling switch COM PSS (for withdrawable breaker only)	≋	◢	3VW9011-0AT12
Test devices and breaker data adapters				
	• Usable for all ETU 3-series and 6-series			
	Description	**Type**		**Article No.**
	Test device • For the trip test via ETU and tripping solenoid including release • Activation of the ETU and the tripping solenoid by means of a battery built into the test device • On activation in the ETU 6-series, the parameters can be configured on the display	TD310	≋ ◢	3VW9011-0AT32
	Breaker data adapter • As gateway for parameterization of the ETU with SENTRON powerconfig • For generation of a report of the set parameters with powerservice	TD410	≋ ◢	3VW9011-0AT34
	Test device and breaker data adapter • As gateway for parameterization of the ETU with SENTRON powerconfig – Testing a tripping operation using SENTRON powerconfig • For use with the powerservice software – Testing of the basic protection functions LSING – Testing of the enhanced protection functions – Test data storage – Readout of ETU buffer – Generation of a report of the set parameters	TD420	≋ ◢	3VW9011-0AT33

≋ For molded case circuit breakers with stored energy operating mechanism

◢ For molded case circuit breakers with toggle operating mechanism

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Accessories for connection and insulation

Front terminals for main circuit connections acc. to IEC 60947-2

- Acc. to IEC 60947-2 for 3VA27 up to 1600 A (depending on application conditions)
- To be ordered separately for top and bottom





Version	Description	Mounting onto	Number of poles / quantity		Article No.
Fixed-mounted	Front terminals for main circuit connection	–	3-pole / 3 units		3VW9011-0AL01
			4-pole / 4 units		3VW9011-0AL02
	Extended main terminals, including insulation plate and phase barriers, standard	Front terminals for main circuit connection	3-pole / 3 units		3VW9011-0AL77
			4-pole / 4 units		3VW9011-0AL78
	Broadened main terminals, including insulation plate and extended phase barriers	Front terminals for main circuit connection, top	3-pole / 3 units		3VW9011-0AL73
		Front terminals for main circuit connection, bottom	3-pole / 3 units		3VW9011-0AL75
		Front terminals for main circuit connection, top/ bottom	4-pole / 4 units		3VW9011-0AL74
Withdrawable	Front-accessible terminals for main circuit connection	Guide frame flange	3-pole / 3 units		3VW9011-0AN01
			4-pole / 4 units		3VW9011-0AN02
	Broadened main circuit connections	Front-accessible terminals for main circuit connection	3-pole / 3 units		3VW9011-0AN73
			4-pole / 4 units		3VW9011-0AN74




Rear terminals for main circuit connections acc. to IEC 60947-2

- Acc. to IEC 60947-2 for 3VA27 up to 1600 A (depending on application conditions)
- To be ordered separately for top and bottom





Fixing	Version	Mounting onto	Number of poles / quantity		Article No.
Fixed-mounted	Rear terminals for main circuit connection, rotatable for horizontal / vertical connection Including terminal cover	–	3-pole / 3 units		3VW9011-0AL32
			4-pole / 4 units		3VW9011-0AL33
Withdrawable	Rear terminals for main circuit connection, rotatable for horizontal / vertical connection Including terminal cover	–	3-pole / 3 units		3VW9011-0AN32
			4-pole / 4 units		3VW9011-0AN33
	Broadened main terminals	Rear horizontal main connec- tions	3-pole / 3 units		3VW9011-0AN75
			4-pole / 4 units		3VW9011-0AN76

Cu-/Al cable connections acc. to IEC 60947-2

- Acc. to IEC 60947-2 for 3VA27 up to 1600 A (depending on application conditions)
- To be ordered separately for top and bottom




Fixing	Version	Mounting onto	Number of poles / quantity		Article No.
Fixed-mounted	Circular conductor terminals 4 x 240 mm² for front cable connection, including insulation plate and high, extended terminal cover	Front terminals for main circuit connection	3-pole / 3 units		3VW9011-0AL71
			4-pole / 4 units		3VW9011-0AL72
Withdrawable	Set of circular conductor connection pieces 4 x 240 mm² for cable lugs for rear cable connection	Rear vertical main connec- tions	3-pole / 3 units		3VW9011-0AN71
			4-pole / 4 units		3VW9011-0AN72

For molded case circuit breakers with stored energy operating mechanism

For molded case circuit breakers with toggle operating mechanism

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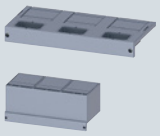
Auxiliary supply connectors in push-in version



- Auxiliary conductor terminal in push-in version for upgrading fixed-mounted breakers and guide frames.
- The device is always fitted at the factory with the exact number of auxiliary conductor terminals required.

Version	3VA27 Article No.
Push-in	3VW9011-0AB11

Terminal covers for fixed circuit breakers



- Finger-proof for front terminals for main circuit connection for fixed-mounting
- Necessary isolation measures are always supplied with the corresponding connection technology and do not need to be ordered separately.

Version	Number of poles / quantity	3VA27 Article No.
Standard	3-pole / 2 units	3VW9723-0WD30
	4-pole / 2 units	3VW9724-0WD40
Extended	3-pole / 2 units	3VW9723-0WF30
	4-pole / 2 units	3VW9724-0WF40

Phase barriers for fixed breakers



- Necessary isolation measures are always supplied with the corresponding connection technology and do not need to be ordered separately.
- For operating voltages >440 V AC the use of phase barriers is mandatory; up to 440 V AC their use is optional.

Height	Number of poles / quantity	3VA27 Article No.
100 mm (standard)	3-pole / 4 units	3VW9723-0WA00
	4-pole / 6 units	3VW9724-0WA10
200 mm (extended)	3-pole / 4 units	3VW9723-0WA01
	4-pole / 6 units	3VW9724-0WA11

Supports for mounting the fixed-mounted breakers on the floor

- For fixed-mounted versions only

Version	Purpose	3VA27 Article No.
Mounting support standard (circuit breaker feet) (= Z option A07)		3VW9011-0BB51
Mounting support extended (circuit breaker feet) including mechanical transmission of switch position on circuit breaker side panel (= Z option S56)	• Fixation for external auxiliary switches AUX 15 CO (3VW9011-0AG15) • Locking mechanism for control cabinet door, direct (for 3VW9011-0BB10) • Locking mechanism for control cabinet door, Bowden cable (for 3VW9011-0BB16), • Mutual mechanical interlocking to 3WL/3VA (for 3VW9011-0BB21)	3VW9011-0BB52

Extension kits for modification of the side wall of the fixed-mounted breakers



- For fixed-mounted breakers only
- Rear fixation on mounting plate
- For modification for mechanical transmission of switch position on circuit breaker side panel (= Z option S57)

Version	Purpose	3VA27 Article No.
Extension kit for side wall	• Fixation for external auxiliary switches AUX 15 CO (3VW9011-0AG15) • Locking mechanism for control cabinet door, direct (for 3VW9011-0BB10) • Locking mechanism for control cabinet door, Bowden cable (for 3VW9011-0BB16), • Mutual mechanical interlocking to 3WL/3VA (for 3VW9011-0BB21)	3VW9011-0BB53

For molded case circuit breakers with stored energy operating mechanism

For molded case circuit breakers with toggle operating mechanism

System overview, page 2/64

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Motor operators and manual operators

Spring charging motor (MO)



Description	Voltage		Article No.
For automatic charging of the stored energy operating mechanism	24 ... 30 V AC/DC	–	3VW9011-0AF01
	48 ... 60 V AC/DC	–	3VW9011-0AF02
	100 ... 130 V AC/DC	–	3VW9011-0AF03
	220 ... 250 V AC/DC	–	3VW9011-0AF04

Mechanical operating cycles counter MOC



Description	Version		Article No.
Only possible in combination with a spring charging motor.	5 digits	–	3VW9011-0AH07

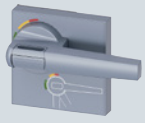
Manual operators for circuit breakers with toggle operating mechanism











Description	Version	Color	Degree of protection		Article No.
Front rotary operating mechanism incl. door sealing frame	Standard	Gray	IP30	–	3VW9727-0EK11
	EMERCENCY-OFF	Yellow-red	IP30	–	3VW9727-0EK15
Door mounted rotary operator	Standard	Gray	IP30	–	3VW9727-0FK21
	EMERCENCY-OFF	Yellow-red	IP30	–	3VW9727-0FK25
	Basic without handle		IP30	–	3VW9727-0GK00
	Shaft stub		IP30	–	8UD1900-3WD00
	Handle	Gray	IP30	–	8UD1861-0AB11
		Yellow-red	IP30	–	8UD1861-0AB15

For molded case circuit breakers with stored energy operating mechanism

For molded case circuit breakers with toggle operating mechanism

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Auxiliary release, closing coil

Closing coils CC / shunt trips ST

- **Note:**
  - For molded case circuit breakers with stored energy operators, the products can only be used as closing coils CC
  - For molded case circuit breakers with handle mechanisms, the products can be used as closing coils CC and shunt trips ST.



Voltage	Article No.	3VA27
24 V AC/DC	3VW9011-0AD01	
30 V AC/DC	3VW9011-0AD02	
48 V AC/DC	3VW9011-0AD03	
60 V AC/DC	3VW9011-0AD04	
110 ... 120 V AC/DC	3VW9011-0AD05	
120 ... 127 V AC/DC	3VW9011-0AD06	
220 ... 240 V AC/DC	3VW9011-0AD07	
240 ... 250 V AC/DC	3VW9011-0AD08	
380 ... 400 V AC	3VW9011-0AD17	
415 ... 440 V AC	3VW9011-0AD18	

TD320 function test units for closing coils / shunt trips



- The TD320 test unit allows the operational availability and functions of the closing coils and shunt trips with a rated operational voltage between 24 V and 250 V (AC and DC) to be tested.
- The operational availability test is performed cyclically at intervals of 30 seconds.
- The unit has visual indicators in the form of LEDs on the front in order to display the following states:
  - LED POWER ON LIT: Correct function of the YO/YC test unit
  - LED DEACTIVATION LIT: Power supply failure, wire break
  - LED SHORT-CIRCUIT LIT: Winding short-circuit
  - LED DEACTIVATION and SHORT-CIRCUIT FLASHING: Incorrect power supply
  - LED DEACTIVATION and SHORT-CIRCUIT OFF: Closing coil / shunt trips OK

Description			Article No.
For all closing coils / shunt trips	≋	–	3VW9011-0AT31

Auxiliary / signaling switches



- The auxiliary/signaling switches for 24 V DC digital signals are designed for a
  - minimum load above 1 mA at 5 V DC, and a
  - maximum breaking capacity of 100 mA at 24 V DC.
- For external auxiliary switches ON/OFF AUX 15 CO, a 3VW9011-0AG1x fixation must be ordered in addition, and for fixed-mounted breakers a 3VW9011-0BB5x side wall modification.

Description	Contacts			Article No.
Ready-to-close signal RTC	1 CO standard	≋	–	3VW9011-0AH01
	1 CO digital	≋	–	3VW9011-0AH02
Auxiliary switch ON/OFF AUX	4 CO standard	≋	◢	3VW9011-0AG01
	4 CO digital	≋	◢	3VW9011-0AG02
	2 CO standard + 2 CO digital	≋	◢	3VW9011-0AG03
External auxiliary switch ON/OFF AUX	15 CO standard	≋	◢	3VW9011-0AG05
	15 CO digital	≋	◢	3VW9011-0AG06
Tripped signaling switch S24	1 CO standard	≋	◢	3VW9011-0AH14
	1 CO digital	≋	◢	3VW9011-0AH15
Spring charged signaling switch S21	1 CO standard	≋	–	3VW9011-0AH10
	1 CO digital	≋	–	3VW9011-0AH08
Position signaling switches PSS (only with draw-out versions)	2 CO | 2 CO | 2 CO (connected | test | disconnected position) standard	≋	◢	3VW9011-0AH11
	2 CO | 2 CO | 2 CO (connected | test | disconnected position) digital	≋	◢	3VW9011-0AH12

≋ For molded case circuit breakers with stored energy operating mechanism

◢ For molded case circuit breakers with toggle operating mechanism

System overview, page 2/64

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Auxiliary release, closing coil

Auxiliary / signaling switches for toggle operating mechanisms



- Auxiliary and signaling switches are each offered in two versions:
  - Standard version for currents >100 mA and up to 400/250 V AC,
  - Minimum load above 100 mA at 24 V DC
  - Maximum breaking capacity 5 A at 250 V AC
  - Digital version for currents <100 mA for PLC connections, minimum load above 1 mA at 5 V DC, and maximum breaking capacity of 100 mA at 24 V DC
- For external auxiliary switches ON/OFF AUX 15 CO, a 3VW9011-0AG1x fixation must be ordered in addition, and for fixed-mounted breakers a 3VW9011-0BB5x side wall modification.

Description	Contacts		3VA27 Article No.
Trip alarm switch TAS signals the trip position irrespective of the tripping reason	1 CO standard	–	3VW9727-0AB11
	1 CO digital	–	3VW9727-0AB13
Tripped signaling switch via auxiliary release S25 signals tripping operations via auxiliary releases (UVR, ST) in UVR/ST2 pocket	1 CO standard	–	3VW9727-0AB41
	1 CO digital	–	3VW9727-0AB43
Leading auxiliary switch S26 (2 units)	1 NO standard, 250 V AC	–	3VW9727-0AA21

Fixation for external auxiliary switches AUX 15 CO



- External auxiliary switches ON/OFF AUX 15 CO must be ordered separately.

Version		3VA27 Article No.
For fixed-mounted breakers with rear panel or floor mounting (in combination with Z option S56 or S57)		3VW9011-0AG15
For guide frames		3VW9011-0AG17

Undervoltage releases UVR



Voltage		3VA27 Article No.
24 V AC/DC		3VW9011-0AE01
30 V AC/DC		3VW9011-0AE02
48 V AC/DC		3VW9011-0AE03
60 V AC/DC		3VW9011-0AE04
110 ... 120 V AC/DC		3VW9011-0AE05
120 ... 127 V AC/DC		3VW9011-0AE06
220 ... 240 V AC/DC		3VW9011-0AE07
240 ... 250 V AC/DC		3VW9011-0AE08
380 ... 400 V AC		3VW9011-0AE17
415 ... 440 V AC		3VW9011-0AE18

External time-delay devices for undervoltage releases



- With adjustable delay time from 0.5 to 3 s.
- Suitable for mounting onto DIN rail.

Voltage		3VA27 Article No.
24 ... 30 V AC/DC		3VW9011-0AE10
48 V AC/DC		3VW9011-0AE11
60 V AC/DC		3VW9011-0AE15
110 ... 127 V AC/DC		3VW9011-0AE12
220 ... 250 V AC/DC		3VW9011-0AE13

For molded case circuit breakers with stored energy operating mechanism

For molded case circuit breakers with toggle operating mechanism

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Locking devices and interlocks

Locking devices to prevent movement of the withdrawable circuit breakers



Version		Article No.
RONIS cylinder lock (replacement for R78)	≋ ◢	3VW9011-0BA80
Padlock 8 mm (replacement for R65), for no more than 3 padlocks	≋ ◢	3VW9011-0BA87

Locking mechanisms to prevent movement of the withdrawable circuit breakers in disconnected position



- Only possible as a supplement in conjunction with R78 (3VW9011-0BA80) and/or R65 (3VW9011-0BA87).

Description		Article No.
Locking mechanism (replacement for R79)	≋ ◢	3VW9011-0BA84

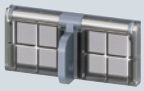
Locking devices in OFF position



- For fixed-mounted versions and withdrawable versions
- To prevent unauthorized activation in the operator panel (safe OFF)
- The disconnector unit fulfills the conditions for a supply disconnecting (isolating) device acc. to EN 60204-1.

Description		Article No.
Cylinder lock, made by RONIS (replacement for S08)	≋ –	3VW9011-0BA33

Locking devices in OFF position



- For fixed-mounted versions and withdrawable versions
- To prevent unauthorized activation in the operator panel (safe OFF)
- The disconnector unit fulfills the conditions for a supply disconnecting (isolating) device acc. to EN 60204-1.

Description	Version		Article No.
Padlock 4 mm (replacement for S22)	Plastic for no more than 3 locks	≋ –	3VW9011-0BA41
Padlock 7 mm (replacement for S23)	Metal for no more than 1 lock	≋ –	3VW9011-0BA42
Padlock 8 mm (replacement for S07)	Metal for no more than 2 locks	≋ –	3VW9011-0BA44

Locking devices in OFF position for toggle operating mechanisms with rotary operators



- To prevent unauthorized activation in the case of molded case circuit breakers with rotary operator

Description		Article No.
For RONIS	– ◢	3VW9727-0VL10

Locking devices in OFF position for toggle operating mechanisms without rotary operators

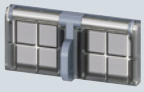
- To prevent unauthorized activation in the operator panel in the case of molded case circuit breakers without rotary operator

Description		Article No.
For padlocks	– ◢	3VW9727-0LB10
For RONIS	– ◢	3VW9727-0LF10





Padlockable protective covers ON/OFF on the operator panels



Description	Version		Article No.
Padlock 4 mm (replacement for S42)	Plastic for no more than 3 locks	≋ –	3VW9011-0BA22
Padlock 7 mm (replacement for S43)	Metal for no more than 1 lock	≋ –	3VW9011-0BA23
Padlock 8 mm (replacement for S44)	Metal for no more than 2 locks	≋ –	3VW9011-0BA24

≋ For molded case circuit breakers with stored energy operating mechanism

◢ For molded case circuit breakers with toggle operating mechanism

System overview, page 2/64

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Locking devices and interlocks

Protective covers for mechanical ON/OFF



- Mechanical ON/OFF to protect against unintentional actuation on the operator panel.
- Not lockable.

Description			3VA27 Article No.
Not lockable (replacement for S41)	≋	–	3VW9011-0BA21

Mutual mechanical interlocking



- Mutual mechanical interlocking with Bowden cable 2 m

Fixing	Mounting			3VA27 Article No.
Fixed-mounted	Rear panel or floor mounting	≋	◢	3VW9011-0BB21
Withdrawable	Mounting onto guide frame	≋	◢	3VW9011-0BB22

Bowden cables, separate

- One required for each circuit breaker

Variant	3VA27 Article No.
1000 mm	3VW9011-0BB23
2000 mm	3WL9111-0BB45-0AA0
3000 mm	3WL9111-0BB46-0AA0

Locking mechanisms to prevent opening of the control cabinet doors in ON position



- To prevent opening of the control cabinet door in ON position
- It additionally prevents the circuit breaker from being closed when the control cabinet door is open.

Fixing	Version			3VA27 Article No.
Fixed mounting on side panel or floor	Direct fixed interlocking	≋	◢	3VW9011-0BB10
	Locking with Bowden cable	≋	◢	3VW9011-0BB16
Withdrawable	Direct fixed interlocking	≋	◢	3VW9011-0BB14
	Locking with Bowden cable	≋	◢	3VW9011-0BB18

Door sealing frames IP30



- For IP4x and higher, you must order the protective cover IP54 3VW9011-0AP03 or 3VW9011-0AP13.

Description	Fixing	Version			3VA27 Article No.
Replacement part for Z option T30.	Fixed-mounted	IP3x	≋	◢	3VW9011-0AP01
	Withdrawable	IP3x	≋	–	3VW9011-0AP02
			–	◢	3VW9011-0AP04

Protective covers IP54



- Protective cover / hood IP54 lockable for fixed-mounted breakers and withdrawable breakers
- For implementing degrees of protection IP4x and IP54 when installing in switchboard door.
- Cannot be combined with IP30 door sealing frame and door mounted rotary operator.

Description	Version			3VA27 Article No.
Lock with unique key	IP54	≋	◢	3VW9011-0AP03
Lock with standard key	IP54	≋	◢	3VW9011-0AP13

≋ For molded case circuit breakers with stored energy operating mechanism

◢ For molded case circuit breakers with toggle operating mechanism

System overview, page 2/64

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3VL up to 1600 A, IEC



3VL molded case circuit breaker

Product Discontinuation

The 3VL molded case circuit breaker up to 1600 A IEC will only be able to be ordered as a spare part from 10/2020, and will be removed from the order portfolio from 10/2025.

Documents available for downloading:
You can find comprehensive information on the 3VL molded case circuit breaker in the catalog extract.

3VL molded case circuit breaker **(109769073)**

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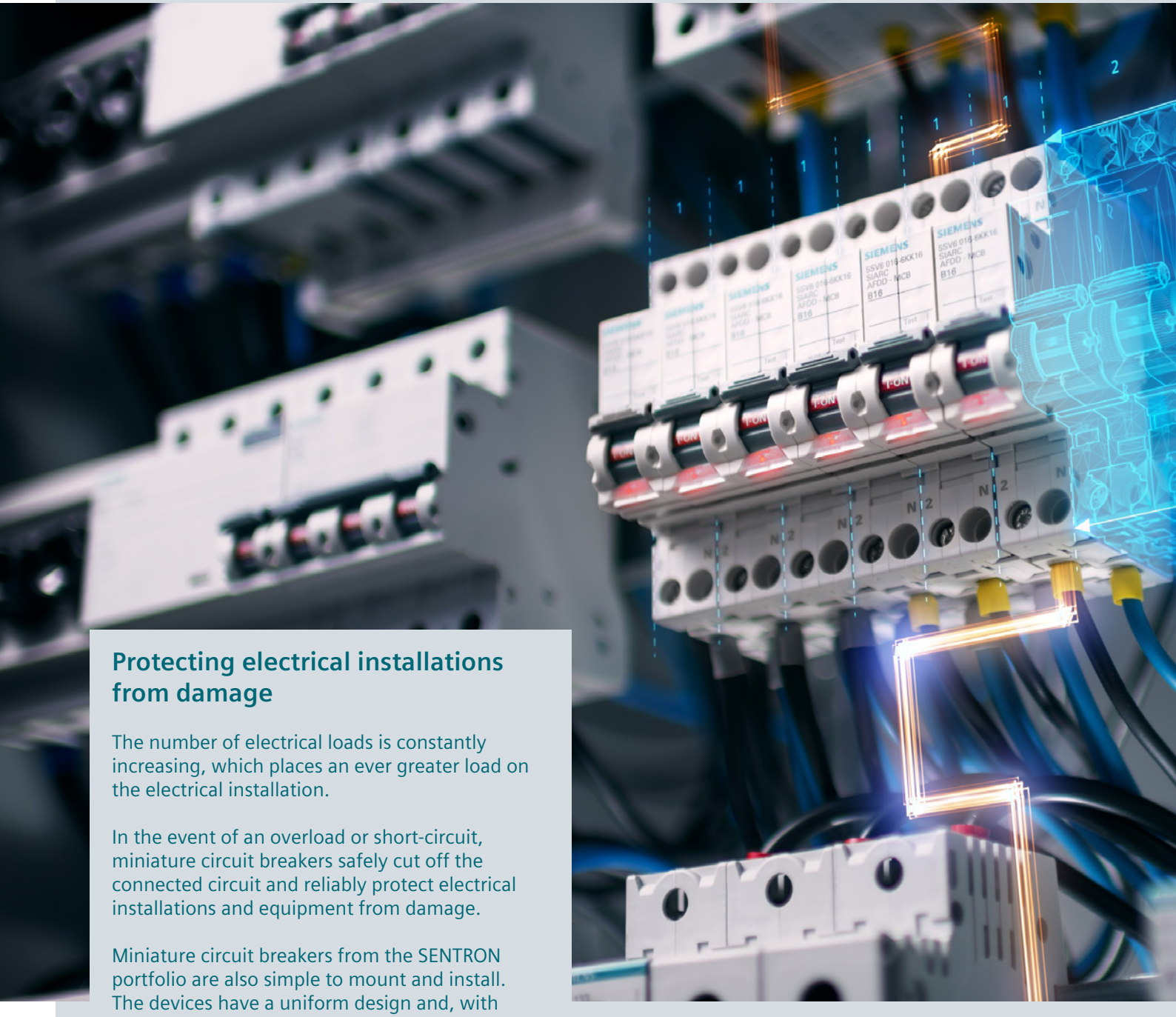

Protecting electrical installations from damage

The number of electrical loads is constantly increasing, which places an ever greater load on the electrical installation.

In the event of an overload or short-circuit, miniature circuit breakers safely cut off the connected circuit and reliably protect electrical installations and equipment from damage.

Miniature circuit breakers from the SENTRON portfolio are also simple to mount and install. The devices have a uniform design and, with the appropriate accessories, can be expanded by many additional functions.

For industry, buildings or infrastructure – with our versatile portfolio, you will find a suitable miniature circuit breaker for any application.

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Miniature Circuit Breakers



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A multitude of additional information ...

Information + ordering

All the important things at a glance

Information to get you started

For information about miniature circuit breakers, please visit our website
www.siemens.com/mcb
www.siemens.com/protection-concept

Contact persons in your region

We are there when you need us

You can find your local contacts at
www.siemens.com/lowvoltage/contact

Your product in detail

The Siemens Industry Online Support portal provides comprehensive information
www.siemens.com/lowvoltage/product-support

- Technical basic information – SENTRON protection concept (109767456)
- Technology primer – Miniature circuit breakers (109482304)

The relevant tender specifications can be found at
www.siemens.com/lowvoltage/tenderspecifications

Use our conversion tool for quick and easy conversion to Siemens products www.siemens.com/conversion-tool

Our video range

Siemens YouTube channel

- Miniature circuit breakers (general)
  bit.ly/2kJP2Dq

Everything you need for your order

Refer to the Industry Mall for an overview of your products

- Miniature circuit breakers sie.ag/2kTFXI5

Direct forwarding to the individual products in the Industry Mall by clicking on the Article No. in the catalog or by entering this web address incl. Article No.
www.siemens.com/product?Article No.

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… can be found in our online services

Commissioning + operation

Your product in detail

The Siemens Industry Online Support portal provides detailed technical information
www.siemens.com/lowvoltage/product-support

- Operating instructions
- Characteristic curves
- Certificates

Engineering data for CAD or CAE systems are available in the CAx Download Manager at
www.siemens.com/lowvoltage/cax

Manuals

Manuals are available for downloading in Siemens Industry Online Support at
www.siemens.com/lowvoltage/manuals

- Configuration manual – Miniature circuit breakers (45302792)

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Competent expert advice on technical questions with a wide range of demand-optimized services for all our products and systems.

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Training and tutorials

Our training courses can be found at
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- Protection concept (WT-LVBPC)

Technical overview – Miniature circuit breakers

The fast way to get you to our online services

This page provides you with comprehensive information and links on miniature circuit breakers
www.siemens.com/lowvoltage/product-support (109769082)

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Devices for all applications

Miniature circuit breakers for basic applications



Ideal for standard applications

The 5SL miniature circuit breakers are the new standard with B and C tripping characteristics for applications up to 63 A. They can be used to disconnect or isolate equipment.

The 5SL devices are mainly installed in meter panels and small distribution boards to protect circuits for lamps, cookers and even machines, for example, in residential or commercial buildings.

Miniature circuit breakers for advanced applications



Ideal for industrial applications

For circuits with motors or large lamps, semiconductors or strong pulse-generating equipment such as transformers and solenoid valves - the 5SY and 5SP devices are optimized for industrial applications and are proven in use.

The 5SY devices offer you top quality and functionality for installation in complex buildings and industry. With a rated breaking capacity of up to 25 kA, they are able to handle the most challenging requirements at a rated current of 0.3 to 80 A.

Special features

- Dual-chamber terminals
- Simple to detach without tools using sliding catches
- Separate switching position indication
- A wide range of accessories

Device protection switches for advanced applications



Ideal for devices in industry

Device protection switches from Siemens offer optimum protection for all applications in AC and DC control circuits in industrial applications and plant engineering.

Thermomagnetic 5SY17 device protection switches are used to protect solenoid valves, servo motors, signal lamps or even PLC inputs. Everywhere where loads have to be precisely protected from overloads and short-circuits.

Electronic 5SK9 device protection switches are optimally suited to protecting, for example, relays, programmable controllers, motors, sensors, actuators and valves. A current analysis in conjunction with fast tripping in the event of a fault avoid the danger of overloading the switched-mode power supply.

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System overview

Basic units and accessories

Miniature circuit breakers for basic applications


5SL3


5SL6


5SL4


5SJ6...-.KS


5SL30


5SL60


5SP3

Miniature circuit breakers for advanced applications


5SY6


5SY4


5SP4


5SY5


5SY7


5SY8


5SJ4..HG..

Device protection switches for advanced applications


5SY17


5SK9

Electrical accessories


Auxiliary switches (AS)


Fault signal contacts (FC)


Auxiliary switches and fault signal contacts (AS+FC)


Shunt trips (ST)


Undervoltage releases (UR)


Remote controlled mechanisms (RC mech.)


5SM6 arc fault detection devices

Mechanical accessories


Rotary operating mechanisms


Spacers


Terminal covers


Wall enclosures

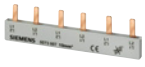

Molded-plastic enclosures

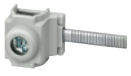

Holders for front panel installation


Intermediate frames

Busbars and accessories


Compact busbars


Standard busbars


Terminals


Touch protection


End caps


Series connectors


Distribution blocks

Note:
You will find a detailed range of accessories with the basic units and in the Accessories section.

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Miniature circuit breakers

For basic applications for buildings and infrastructure





			5SL3	5SL6
Standards				
Standards			IEC/EN 60898-1	IEC/EN 60898-1
Basic data				
Breaking capacity I_{cn} for AC (230/400 V) acc. to IEC/EN 60898-1 AC		kA	4.5	6
Rated current		A	0.3 ... 63	0.3 ... 63
Number of poles			1P | 2P | 3P | 4P | 1P+N | 3P+N	1P | 2P | 3P | 4P | 1P+N | 3P+N
Tripping characteristic			B | C	B | C
Approvals				
General product approvals			VDE, CEBEC, TSE	VDE, CEBEC, TSE
Marine classifications			–	–
Operational voltage				
Max. AC, acc. to EN 60898-1/-2, EN 60947-2		V	250/440	250/440
Max. DC per pole, acc. to EN 60898-1/-2, EN 60947-2		V	72	72
Max. AC, acc. to UL 1077, CSA C22.2 No.235		V	–	–
Rated voltage AC, acc. to UL 489		V	–	–
Rated impulse withstand voltage U_{imp}		kV	4	4
Rated frequency f_n		Hz	50/60	50/60
Connection				
Dual-chamber terminal			–	–
Conductor cross-section 1 wire	Solid/stranded	mm^2	0.75 ... 35	0.75 ... 35
	Finely stranded with end sleeve	mm^2	0.75 ... 25	0.75 ... 25
	Finely stranded without end sleeve	mm^2	1 ... 35	1 ... 35
Conductor cross-section 2 wires (same cross-section and same conductor type)	Solid/stranded	mm^2	0.75 ... 10	0.75 ... 10
	Finely stranded with end sleeve	mm^2	0.75 ... 4	0.75 ... 4
	Finely stranded without end sleeve	mm^2	1 ... 4	1 ... 4
Conductor cross-section 1-wire + busbar (pin thickness 1.5 mm)	Solid/stranded	mm^2	10 ... 25	10 ... 25
	Finely stranded with non-insulated end sleeve	mm^2	6 ... 25	6 ... 25
	Finely stranded with insulated end sleeve	mm^2	6 ... 16	6 ... 16
Ambient conditions				
Ambient temperature		°C	–25 ... +45 [1]	–25 ... +45 [1]
Storage temperature		°C	–40 ... +75 [3]	–40 ... +75 [3]
Shock acc. to IEC 60068-2-27 150 m/s^2 at 11 ms half-sine			–	–
Resistance to vibrations acc. to IEC 60068-2-6 50 m/s^2 at 25 ... 150 Hz and 60 m/s^2 at 35 Hz (4 s)			–	–
Resistant to shock and vibrations acc. to EN 61373 and EN 50155 "1B" (railway engineering)			–	–
Fire behavior of materials acc. to EN 45545-2 (fire protection on railway vehicles)			–	–
Pollution degree for overvoltage category			2/III	2/III
More information				
Catalog LV 10 – 10/2020			See page 3/12	See page 3/14

[1] Periodically +55 °C, max. 95% humidity
[2] Max. 95% humidity
[3] 95% humidity up to 55 °C

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5SL4	5SJ6...-.KS	5SL30	5SL60	5SP3
IEC/EN 60898-1	IEC/EN 60898-1	IEC/EN 60898-1	IEC/EN 60898-1	DIN VDE 0641-21
10	6	4.5	6	–
0.3 ... 63	10 ... 20	2 ... 40	2 ... 40	16 ... 63
1P | 2P | 3P | 4P | 1P+N | 3P+N	1P | 2P | 3P | 1P+N	1P+N	1P+N	1P | 2P | 3P | 4P
B | C | D	B | C	C	B | C	E
VDE, CEBEC, IMQ	VDE	VDE, IMQ, NF, CCC	VDE, IMQ, NF, CCC	VDE
–	–	–	DNV-GL	–
250/440	250/440	250	250	–
72	60	72	72	–
–	–	–	–	–
–	–	–	–	–
4	4	4	4	4
50/60	50/60	50/60	50/60	50/60
–	Plug-in terminal on outgoing side	–	–	–
0.75 ... 35	1.5 ... 4 (top) | 0.75 ... 25 (bottom)	0.75 ... 16	0.75 ... 16	2.5 ... 50 (bottom)
0.75 ... 25	1.5 ... 2.5 (top) | 0.75 ... 25 (bottom)	0.75 ... 10	0.75 ... 10	2.5 ... 50 (bottom)
1 ... 35	1.5 ... 4			2.5 ... 16 (top)
0.75 ... 10	–	–	–	–
0.75 ... 4	–	–	–	–
1 ... 4	–	–	–	–
10 ... 25	–	–	–	–
6 ... 25	–	–	–	–
6 ... 16	–	–	–	–
–25 ... +55 [2]	–25 ... +45 [1]	–25 ... +60	–25 ... +60	–25 ... +55
–40 ... +75 [3]	–40 ... +75 [3]	–40 ... +75	–40 ... +75	–40 ... +70
–	–	–	–	–
–	–	–	–	–
–	–	–	–	–
–	–	–	–	–
2/III	2/III	2/III	2/III	3/IV
See page 3/16	See page 3/18	See page 3/20	See page 3/22	See page 3/38

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Miniature circuit breakers

For advanced applications for buildings and infrastructure and for industry and machine manufacturing





				5SY6	5SY4
Standards					
Standards				IEC/EN 60898-1 IEC/EN 60947-2 UL 1077	IEC/EN 60898-1 IEC/EN 60947-2 UL 1077
Basic data					
Breaking capacity I_{cn}	For AC (230/400 V) acc. to IEC/EN 60898-1 AC		kA	6	10
	Acc. to UL1077 and CSA C22.2 No.235			Suplementary protector, OC, FW 0, OL 0, TC 3 at 50°C	Suplementary protector, OC, FW 0, OL 0, TC 3 at 50°C
			SC	U2: see Certificate of Compliance	U2: see Certificate of Compliance
Rated breaking capacity I_{cu} acc. to IEC/EN 60947-2 at U_e 230 V | at U_e 400 V (1P, 1P+N) | (2P, 3P, 4P, 3P+N)		I_n 0.3 ... 2 A	kA	30 | 30	35 | 35
		I_n 3 ... 6 A	kA	30 | 30	35 | 35
		I_n 8 ... 10 A	kA	15 | 15	20 | 20
		I_n 13 ... 32 A	kA	15 | 15	20 | 20
		I_n 40 A	kA	10 | 10	15 | 15
		I_n 50 ... 63 A	kA	10 | 10	15 | 15
		I_n 80 ... 125 A	kA	– | –	10 | 10
Rated current			A	0.3 ... 63	0.3 ... 80
Number of poles				1P | 2P | 3P | 4P | 1P+N | 3P+N	1P | 2P | 3P | 4P | 1P+N | 3P+N
Tripping characteristic				B | C	A | B | C | D
Approvals					
General product approvals				VDE, IMQ, CCC, cULus	VDE, IMQ, CCC, cULus
Marine classifications				DNV-GL, LR, BV, RINA, ABS	DNV-GL, LR, BV, RINA, ABS
Operational voltage					
Max. AC	Acc. to EN 60898-1/-2, EN 60947-2		V	250/440	250/440
	Acc. to UL 1077, CSA C22.2 No.235		V	277/480	277/480
Max. DC per pole	Acc. to EN 60898-1/-2, EN 60947-2		V	72 [1]	72 [1]
Rated voltage AC	Acc. to UL 489		V	–	–
Rated impulse withstand voltage U_{imp}			kV	4	4
Rated frequency f_n			Hz	50/60	50/60
Connection					
Dual-chamber terminal				■	■
Conductor cross-section 1 wire	Solid/stranded		mm^2	0.75 ... 35	0.75 ... 35
	Finely stranded, with end sleeve		mm^2	0.75 ... 25	0.75 ... 25
	Conductors (Cu 60/75 °C I_n ≤40 A; 60 °C I_n >40 A)			AWG 18 ... 4	AWG 18 ... 4
Terminal tightening torque			Nm	2.5 ... 3.5 max.	2.5 ... 3.5 max.
			lb-in	22 ... 26	22 ... 26
Ambient conditions					
Ambient temperature			°C	–25 ... +55 [4]	–40 ... +70 [3]
Storage temperature			°C	–40 ... +75 [3]	–40 ... +75 [3]
Shock acc. to IEC 60068-2-27 150 m/s^2 at 11 ms half-sine				■	■
Resistance to vibrations acc. to IEC 60068-2-6 50 m/s^2 at 25 ... 150 Hz and 60 m/s^2 at 35 Hz (4 s)				■	■
Resistant to shock and vibrations acc. to EN 61373 and EN 50155 "1B" (railway engineering)				–	■
Fire behavior of materials acc. to EN 45545-2 (fire protection on railway vehicles)				–	■
Pollution degree for overvoltage category				3/III	3/III [2]
More information					
Catalog LV 10 – 10/2020				See page 3/24	See page 3/26

[1] Exempt: C/D 0.3 A ... 0.5 A
[2] 5SY54.. 4-pole, degree of pollution 2 for overvoltage category II
[3] 95% humidity up to 55 °C
95% rel. humidity up to +55°C
55% rel. humidity up to +70°C
[4] Max. 95% humidity
[5] When used with a busbar at the front or 2 conductors, the terminal area at the rear is restricted, see notes on the Internet

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5SP4	**5SY5**	**5SY7**	**5SY8**	**5SJ4..HG..**
IEC/EN 60898-1 UL 1077	IEC/EN 60898-2 UL 1077	IEC/EN 60898-1 IEC/EN 60947-2 UL 1077	IEC/EN 60947-2 UL 1077	IEC/EN 60947-2 UL 489
10	10	15	25	–
Suplementary protector, OC, FW 0, OL 0, TC 3 at 50°C	Suplementary protector, OC, FW 0, OL 0, TC 3 at 50°C	Suplementary protector, OC, FW 0, OL 0, TC 3 at 50°C	Suplementary protector, OC, FW 0, OL 0, TC 3 at 50°C	–
U2: see Certificate of Compliance	U2: see Certificate of Compliance	U2: see Certificate of Compliance	U2: see Certificate of Compliance	–
– | –	– | –	50 | 50	70 | 70	10
– | –	– | –	40 | 40	50 | 50	10
– | –	– | –	30 | 30	40 | 40	10
– | –	– | –	25 | 25	30 | 30	10
– | –	– | –	20 | 20	25 | 25	10
– | –	– | –	15 | 15	20 | 20	10
10 | 10	– | –	– | –	– | –	–
80 ... 125	0.3 ... 63	0.3 ... 63	0.3 ... 63	0.3 ... 63
1P | 2P | 3P | 4P	1P | 2P | 4P	1P | 2P | 3P | 4P | 1P+N | 3P+N	1P | 2P | 3P | 4P | 1P+N | 3P+N	1P | 2P | 3P
B | C | D	B | C	B | C | D	C | D	B | C | D
VDE, CCC, cULus	VDE, CCC, cULus	VDE, IMQ, CCC, cULus	cULus	VDE, CCC, UL
LR	ABS	DNV-GL, LR, BV, RINA, ABS	ABS	–
250/440	250/440	250/440	250/440	250/440
277/480	–	277/480	277/480	–
72	250	72 [1]	72 [1]	60
–	–	–	–	277/480
4	4	4	4	4
50/60	50/60	50/60	50/60	50/60
–	■	■	■	■
10 ... 50	0.75 ... 35	0.75 ... 35	0.75 ... 35	0.75 ... 25 (16) [5]
10 ... 35	0.75 ... 25	0.75 ... 25	0.75 ... 25	0.75 ... 25 (10)
AWG 3 ... 1	AWG 18 ... 4	AWG 18 ... 4	AWG 18 ... 4	AWG 18 ... 4 (5)
2.5 ... 3.5 max.	2.5 ... 3.5 max.	2.5 ... 3.5 max.	2.5 ... 3.5 max.	2.5 ... 3.5 max.
22 ... 31	22 ... 26	22 ... 26	22 ... 26	22 ... 26
–25 ... +55 [4]	–40 ... +70 [3]	–40 ... +70 [3]	–25 ... +55 [4]	–25 ... +55 [4]
–40 ... +75 [3]	–40 ... +75 [3]	–40 ... +75 [3]	–40 ... +75 [3]	–40 ... +75 [3]
–	■	■	–	■
■	■	■	■	■
–	■	■	–	–
■	■	■	–	–
3/III	3/III	3/III	3/III	3/III
See page 3/28	See page 3/30	See page 3/32	See page 3/34	See page 3/36

System overview, page 3/5

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Device protection switches

For advanced applications for industry and machine manufacturing



			5SY17
Standards			
Standards			IEC 60934 UL 1077
Basic data			
Breaking capacity I_{cn}	for AC (230/400 V) acc. to IEC/EN 60898-1 AC	kA	3
Rated current		A	0.5 ... 16
Number of poles			1P+AS
DC tripping	Magnetic		F1 (2.5 ... 4 × I_n) | F2 (4 ... 7 × I_n)
	Thermal		1.05 × holding current | 1.35 × tripping current | TC3 1.35 × I_n
	Electronic		–
Service life	Actuations		6000
Approvals			
General product approvals			CCC, cULus
Operational voltage			
Max. AC	Acc. to EN 60898-1/-2, EN 60947-2	V	250
	Acc. to UL 1077, CSA C22.2 No.235	V	277
Max. DC per pole		V	72
Rated impulse withstand voltage U_{imp}		kV	4
Rated frequency f_n		Hz	50/60
Connection			
Dual-chamber terminal			–
Conductor cross-section 1 wire	Solid/stranded	mm^2	0.75 ... 16
	Finely stranded with end sleeve	mm^2	0.75 ... 10
	Finely stranded with insulated end sleeve	mm^2	0.75 ... 10
	Finely stranded without end sleeve	mm^2	0.75 ... 16
	Conductor cross-section AWG		–
2-wire (same cross-section)	Solid/stranded	mm^2	0.75 ... 4
	Finely stranded with end sleeve	mm^2	0.75 ... 2.5
	Finely stranded with insulated end sleeve	mm^2	0.75 ... 1.5
	Finely stranded without end sleeve	mm^2	0.75 ... 4
Terminal tightening torque		Nm	2.0 ... 2.5 max.
		lb-in	17.7 ... 22.1
Ambient conditions			
Ambient temperature		°C	–25 ... +60
Storage temperature		°C	–40 ... +70
Shock acc. to IEC 60068-2-27 150 m/s^2 at 11 ms half-sine			–
Resistance to vibrations acc. to IEC 60068-2-6 50 m/s^2 at 25 ... 150 Hz and 60 m/s^2 at 35 Hz (4 s)			–
Resistant to shock and vibrations acc. to EN 61373 and EN 50155 "1B" (railway engineering)			–
Fire behavior of materials acc. to EN 45545-2 (fire protection on railway vehicles)			–
Pollution degree for overvoltage category	Acc. to IEC		2/III
More information			
Catalog LV 10 – 10/2020			See page 3/40

[1] Max. 95% humidity

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5SK9

EN 61000-6-2, EN 61000-6-3, EN 60068-2-78, EN 50178, EN 60068-2-6, EN 60068-2-27, UL 508, UL 2367
–
1 ... 8
1P+AS
–
–
Overload 1.2 × I_n / 1s | Short-circuit 2 × I_n / <10 ms
–
cULus
–
–
30
0.5
–
–
0.2 ... 4
0.2 ... 2.5
0.2 ... 2.5
–
AWG 24 ... 12
–
–
–
–
–
–
–25 ... +60 [1]
–40 ... +70
–
–
–
–
–
See page 3/41

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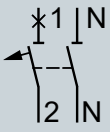
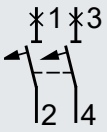
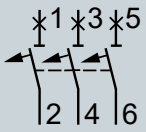
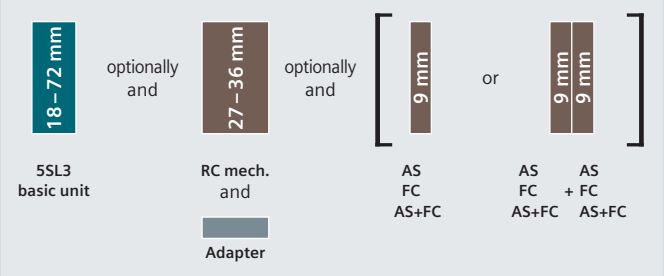
5SL3 miniature circuit breakers

4.5 kA

	1P 230/400 V AC		1P+N 230 V AC		2P 400 V AC		3P 400 V AC	
Mounting width	1 MW		2 MW		2 MW		3 MW	
								
Rated current I_n	Characteristic B	C	Characteristic B	C	Characteristic B	C	Characteristic B	C
0.3 A	–	5SL3114-7	–	5SL3514-7	–	5SL3214-7	–	–
0.5 A	–	5SL3105-7	–	5SL3505-7	–	5SL3205-7	–	–
1 A	–	5SL3101-7	–	5SL3501-7	–	5SL3201-7	–	5SL3301-7
1.6 A	–	5SL3115-7	–	5SL3515-7	–	5SL3215-7	–	–
2 A	–	5SL3102-7	–	5SL3502-7	–	5SL3202-7	–	5SL3302-7
3 A	–	5SL3103-7	–	5SL3503-7	–	5SL3203-7	–	5SL3303-7
4 A	–	5SL3104-7	–	5SL3504-7	–	5SL3204-7	–	5SL3304-7
6 A	5SL3106-6	5SL3106-7	5SL3506-6	5SL3506-7	5SL3206-6	5SL3206-7	5SL3306-6	5SL3306-7
8 A	–	5SL3108-7	–	5SL3508-7	–	5SL3208-7	–	–
10 A	5SL3110-6	5SL3110-7	5SL3510-6	5SL3510-7	5SL3210-6	5SL3210-7	5SL3310-6	5SL3310-7
13 A	5SL3113-6	5SL3113-7	5SL3513-6	5SL3513-7	5SL3213-6	5SL3213-7	–	–
16 A	5SL3116-6	5SL3116-7	5SL3516-6	5SL3516-7	5SL3216-6	5SL3216-7	5SL3316-6	5SL3316-7
20 A	5SL3120-6	5SL3120-7	5SL3520-6	5SL3520-7	5SL3220-6	5SL3220-7	5SL3320-6	5SL3320-7
25 A	5SL3125-6	5SL3125-7	5SL3525-6	5SL3525-7	5SL3225-6	5SL3225-7	5SL3325-6	5SL3325-7
32 A	5SL3132-6	5SL3132-7	5SL3532-6	5SL3532-7	5SL3232-6	5SL3232-7	5SL3332-6	5SL3332-7
40 A	5SL3140-6	5SL3140-7	5SL3540-6	5SL3540-7	5SL3240-6	5SL3240-7	5SL3340-6	5SL3340-7
50 A	5SL3150-6	5SL3150-7	5SL3550-6	5SL3550-7	5SL3250-6	5SL3250-7	5SL3350-6	5SL3350-7
63 A	5SL3163-6	5SL3163-7	5SL3563-6	5SL3563-7	5SL3263-6	5SL3263-7	5SL3363-6	5SL3363-7

Mounting concept



AS	Auxiliary switches	See page 3/44
FC	Fault signal contacts	See page 3/46
AS+FC	Auxiliary switches and fault signal contacts	See page 3/47
RC mech.	Remote controlled mechanisms	See page 3/50

Quick selection guide, page 3/6

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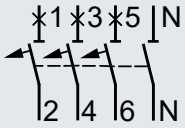
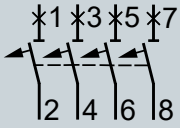
3P+N 400 V AC		4P 400 V AC	
4 MW		4 MW	
			
Characteristic		Characteristic	
B	C	B	C
–	–	–	–
–	–	–	–
–	5SL3601-7	–	5SL3401-7
–	–	–	–
–	5SL3602-7	–	5SL3402-7
–	5SL3603-7	–	5SL3403-7
–	5SL3604-7	–	5SL3404-7
5SL3606-6	5SL3606-7	–	5SL3406-7
–	5SL3608-7	–	–
5SL3610-6	5SL3610-7	–	5SL3410-7
5SL3613-6	5SL3613-7	–	5SL3413-7
5SL3616-6	5SL3616-7	–	5SL3416-7
5SL3620-6	5SL3620-7	–	5SL3420-7
5SL3625-6	5SL3625-7	–	5SL3425-7
5SL3632-6	5SL3632-7	–	5SL3432-7
5SL3640-6	5SL3640-7	–	5SL3440-7
5SL3650-6	5SL3650-7	–	5SL3450-7
5SL3663-6	5SL3663-7	–	5SL3463-7

Accessories

Auxiliary switches (AS)		Article No.
1 NO + 1 NC	Standard	5ST3010
	For low power	5ST3013
	For low power (with diode)	5ST3013-0XX01
2 NO	Standard	5ST3011
	For low power	5ST3014
2 NC	Standard	5ST3012
	For low power	5ST3015
1 CO	Standard	5ST3016
Fault signal contacts (FC)		**Article No.**
1 NO + 1 NC		5ST3020
2 NO		5ST3021
2 NC		5ST3022

Auxiliary switches and fault signal contacts (AS+FC)		Article No.
1 CO (AS) + 1 CO (FC)		5ST3062
Remote controlled mechanisms (RC mech.)		**Article No.**
Basic	12 ... 30 V AC, 12 ... 48 V DC	5ST3053
	177 ... 270 V AC	5ST3054
Power	12 ... 30 V AC, 12 ... 48 V DC	5ST3055
	177 ... 270 V AC	5ST3056
Power with ARD	12 ... 30 V AC, 12 ... 48 V DC	5ST3057
	177 ... 270 V AC	5ST3058
Power with extended function	12 ... 30 V AC, 12 ... 48 V DC	5ST3070
Adapters for remote controlled mechanisms (RC mech.)		**Article No.**
1–2 MW		5ST3820-6
3–4 MW		5ST3820-7

Quick selection guide, page 3/6

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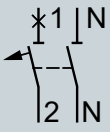
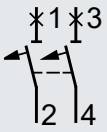
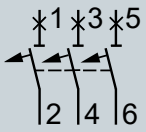
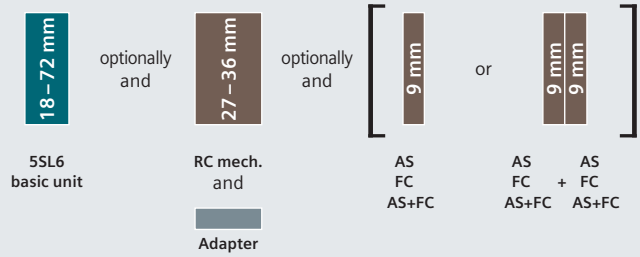
5SL6 miniature circuit breakers

6 kA

	1P 230/400 V AC		1P+N 230 V AC		2P 400 V AC		3P 400 V AC	
Mounting width	1 MW		2 MW		2 MW		3 MW	
								
Rated current I_n	Characteristic		Characteristic		Characteristic		Characteristic	
	B	C	B	C	B	C	B	C
0.3 A	–	5SL6114-7	–	5SL6514-7	–	5SL6214-7	–	5SL6314-7
0.5 A	–	5SL6105-7	–	5SL6505-7	–	5SL6205-7	–	5SL6305-7
1 A	–	5SL6101-7	–	5SL6501-7	–	5SL6201-7	–	5SL6301-7
1.6 A	–	5SL6115-7	–	5SL6515-7	–	5SL6215-7	–	5SL6315-7
2 A	5SL6102-6	5SL6102-7	–	5SL6502-7	–	5SL6202-7	–	5SL6302-7
3 A	–	5SL6103-7	–	5SL6503-7	–	5SL6203-7	–	5SL6303-7
4 A	5SL6104-6	5SL6104-7	–	5SL6504-7	–	5SL6204-7	–	5SL6304-7
6 A	5SL6106-6	5SL6106-7	5SL6506-6	5SL6506-7	5SL6206-6	5SL6206-7	5SL6306-6	5SL6306-7
8 A	–	5SL6108-7	–	5SL6508-7	–	5SL6208-7	–	5SL6308-7
10 A	5SL6110-6	5SL6110-7	5SL6510-6	5SL6510-7	5SL6210-6	5SL6210-7	5SL6310-6	5SL6310-7
13 A	5SL6113-6	5SL6113-7	5SL6513-6	5SL6513-7	5SL6213-6	5SL6213-7	5SL6313-6	5SL6313-7
16 A	5SL6116-6	5SL6116-7	5SL6516-6	5SL6516-7	5SL6216-6	5SL6216-7	5SL6316-6	5SL6316-7
20 A	5SL6120-6	5SL6120-7	5SL6520-6	5SL6520-7	5SL6220-6	5SL6220-7	5SL6320-6	5SL6320-7
25 A	5SL6125-6	5SL6125-7	5SL6525-6	5SL6525-7	5SL6225-6	5SL6225-7	5SL6325-6	5SL6325-7
32 A	5SL6132-6	5SL6132-7	5SL6532-6	5SL6532-7	5SL6232-6	5SL6232-7	5SL6332-6	5SL6332-7
40 A	5SL6140-6	5SL6140-7	5SL6540-6	5SL6540-7	5SL6240-6	5SL6240-7	5SL6340-6	5SL6340-7
50 A	5SL6150-6	5SL6150-7	5SL6550-6	5SL6550-7	5SL6250-6	5SL6250-7	5SL6350-6	5SL6350-7
63 A	5SL6163-6	5SL6163-7	5SL6563-6	5SL6563-7	5SL6263-6	5SL6263-7	5SL6363-6	5SL6363-7

Mounting concept



AS	Auxiliary switches	See page 3/44
FC	Fault signal contacts	See page 3/46
AS+FC	Auxiliary switches and fault signal contacts	See page 3/47
RC mech.	Remote controlled mechanisms	See page 3/50

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3P+N 400 V AC 4 MW		4P 400 V AC 4 MW	
Characteristic		Characteristic	
B	C	B	C
–	5SL6614-7	–	5SL6414-7
–	5SL6605-7	–	5SL6405-7
–	5SL6601-7	–	5SL6401-7
–	5SL6615-7	–	5SL6415-7
–	5SL6602-7	–	5SL6402-7
–	5SL6603-7	–	5SL6403-7
–	5SL6604-7	–	5SL6404-7
5SL6606-6	5SL6606-7	5SL6406-6	5SL6406-7
–	5SL6608-7	–	5SL6408-7
5SL6610-6	5SL6610-7	5SL6410-6	5SL6410-7
5SL6613-6	5SL6613-7	5SL6413-6	5SL6413-7
5SL6616-6	5SL6616-7	5SL6416-6	5SL6416-7
5SL6620-6	5SL6620-7	5SL6420-6	5SL6420-7
5SL6625-6	5SL6625-7	5SL6425-6	5SL6425-7
5SL6632-6	5SL6632-7	5SL6432-6	5SL6432-7
5SL6640-6	5SL6640-7	5SL6440-6	5SL6440-7
5SL6650-6	5SL6650-7	5SL6450-6	5SL6450-7
5SL6663-6	5SL6663-7	5SL6463-6	5SL6463-7

Accessories

Auxiliary switches (AS)		Article No.
1 NO + 1 NC	Standard	5ST3010
	For low power	5ST3013
	For low power (with diode)	5ST3013-0XX01
2 NO	Standard	5ST3011
	For low power	5ST3014
2 NC	Standard	5ST3012
	For low power	5ST3015
1 CO	Standard	5ST3016
Fault signal contacts (FC)		**Article No.**
1 NO + 1 NC		5ST3020
2 NO		5ST3021
2 NC		5ST3022

Auxiliary switches and fault signal contacts (AS+FC)		Article No.
1 CO (AS) + 1 CO (FC)		5ST3062
Remote controlled mechanisms (RC mech.)		**Article No.**
Basic	12 ... 30 V AC, 12 ... 48 V DC	5ST3053
	177 ... 270 V AC	5ST3054
Power	12 ... 30 V AC, 12 ... 48 V DC	5ST3055
	177 ... 270 V AC	5ST3056
Power with ARD	12 ... 30 V AC, 12 ... 48 V DC	5ST3057
	177 ... 270 V AC	5ST3058
Power with extended function	12 ... 30 V AC, 12 ... 48 V DC	5ST3070
Adapters for remote controlled mechanisms (RC mech.)		**Article No.**
1–2 MW		5ST3820-6
3–4 MW		5ST3820-7

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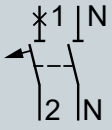
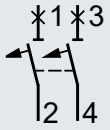
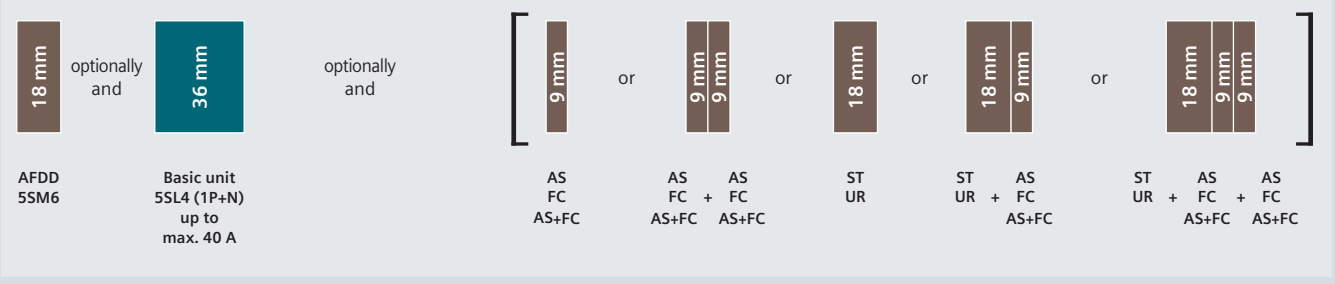
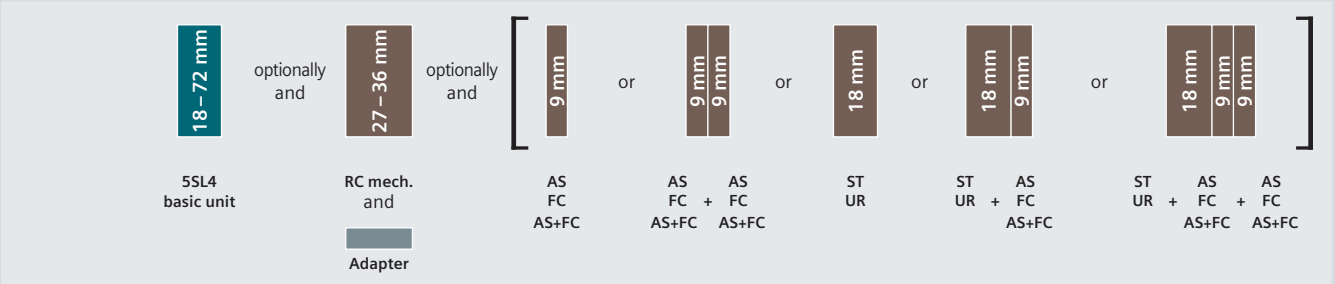
5SL4 miniature circuit breakers

10 kA

	1P 230/400 V AC			1P+N 230 V AC			2P 400 V AC		
Mounting width	1 MW			2 MW			2 MW		
									
Rated current I_n	Characteristic B	C	D	Characteristic B	C	D	Characteristic B	C	D
0.3 A	–	5SL4114-7	5SL4114-8	–	5SL4514-7	5SL4514-8	–	5SL4214-7	5SL4214-8
0.5 A	–	5SL4105-7	5SL4105-8	–	5SL4505-7	5SL4505-8	–	5SL4205-7	5SL4205-8
1 A	5SL4101-6	5SL4101-7	5SL4101-8	5SL4501-6	5SL4501-7	5SL4501-8	5SL4201-6	5SL4201-7	5SL4201-8
1.6 A	–	5SL4115-7	5SL4115-8	–	5SL4515-7	5SL4515-8	–	5SL4215-7	5SL4215-8
2 A	5SL4102-6	5SL4102-7	5SL4102-8	5SL4502-6	5SL4502-7	5SL4502-8	5SL4202-6	5SL4202-7	5SL4202-8
3 A	5SL4103-6	5SL4103-7	5SL4103-8	5SL4503-6	5SL4503-7	5SL4503-8	5SL4203-6	5SL4203-7	5SL4203-8
4 A	5SL4104-6	5SL4104-7	5SL4104-8	5SL4504-6	5SL4504-7	5SL4504-8	5SL4204-6	5SL4204-7	5SL4204-8
6 A	5SL4106-6	5SL4106-7	5SL4106-8	5SL4506-6	5SL4506-7	5SL4506-8	5SL4206-6	5SL4206-7	5SL4206-8
8 A	5SL4108-6	5SL4108-7	5SL4108-8	5SL4508-6	5SL4508-7	5SL4508-8	5SL4208-6	5SL4208-7	5SL4208-8
10 A	5SL4110-6	5SL4110-7	5SL4110-8	5SL4510-6	5SL4510-7	5SL4510-8	5SL4210-6	5SL4210-7	5SL4210-8
13 A	5SL4113-6	5SL4113-7	5SL4113-8	5SL4513-6	5SL4513-7	5SL4513-8	5SL4213-6	5SL4213-7	5SL4213-8
16 A	5SL4116-6	5SL4116-7	5SL4116-8	5SL4516-6	5SL4516-7	5SL4516-8	5SL4216-6	5SL4216-7	5SL4216-8
20 A	5SL4120-6	5SL4120-7	5SL4120-8	5SL4520-6	5SL4520-7	5SL4520-8	5SL4220-6	5SL4220-7	5SL4220-8
25 A	5SL4125-6	5SL4125-7	5SL4125-8	5SL4525-6	5SL4525-7	5SL4525-8	5SL4225-6	5SL4225-7	5SL4225-8
32 A	5SL4132-6	5SL4132-7	5SL4132-8	5SL4532-6	5SL4532-7	5SL4532-8	5SL4232-6	5SL4232-7	5SL4232-8
40 A	5SL4140-6	5SL4140-7	5SL4140-8	5SL4540-6	5SL4540-7	5SL4540-8	5SL4240-6	5SL4240-7	5SL4240-8
50 A	5SL4150-6	5SL4150-7	5SL4150-8	5SL4550-6	5SL4550-7	5SL4550-8	5SL4250-6	5SL4250-7	5SL4250-8
63 A	5SL4163-6	5SL4163-7	5SL4163-8	5SL4563-6	5SL4563-7	5SL4563-8	5SL4263-6	5SL4263-7	5SL4263-8

Mounting concept





AFDD	Arc fault detection devices	See page 3/51	AS+FC	Auxiliary switches and fault signal contacts	See page 3/47	UR Undervoltage releases	See page 3/49
AS	Auxiliary switches	See page 3/44	ST	Shunt trips	See page 3/48	RC mech. Remote controlled mechanisms	See page 3/50
FC	Fault signal contacts	See page 3/46					

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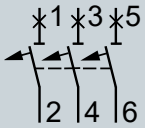
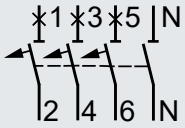
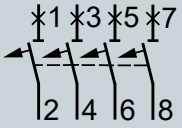
3P 400 V AC 3 MW			3P+N 400 V AC 4 MW			4P 400 V AC 4 MW		
								
Characteristic			Characteristic			Characteristic		
B	C	D	B	C	D	B	C	D
–	5SL4314-7	5SL4314-8	–	5SL4614-7	5SL4614-8	–	5SL4414-7	5SL4414-8
–	5SL4305-7	5SL4305-8	–	5SL4605-7	5SL4605-8	–	5SL4405-7	5SL4405-8
5SL4301-6	5SL4301-7	5SL4301-8	5SL4601-6	5SL4601-7	5SL4601-8	5SL4401-6	5SL4401-7	5SL4401-8
–	5SL4315-7	5SL4315-8	–	5SL4615-7	5SL4615-8	–	5SL4415-7	5SL4415-8
5SL4302-6	5SL4302-7	5SL4302-8	5SL4602-6	5SL4602-7	5SL4602-8	5SL4402-6	5SL4402-7	5SL4402-8
5SL4303-6	5SL4303-7	5SL4303-8	5SL4603-6	5SL4603-7	5SL4603-8	5SL4403-6	5SL4403-7	5SL4403-8
5SL4304-6	5SL4304-7	5SL4304-8	5SL4604-6	5SL4604-7	5SL4604-8	5SL4404-6	5SL4404-7	5SL4404-8
5SL4306-6	5SL4306-7	5SL4306-8	5SL4606-6	5SL4606-7	5SL4606-8	5SL4406-6	5SL4406-7	5SL4406-8
5SL4308-6	5SL4308-7	5SL4308-8	5SL4608-6	5SL4608-7	5SL4608-8	5SL4408-6	5SL4408-7	5SL4408-8
5SL4310-6	5SL4310-7	5SL4310-8	5SL4610-6	5SL4610-7	5SL4610-8	5SL4410-6	5SL4410-7	5SL4410-8
5SL4313-6	5SL4313-7	5SL4313-8	5SL4613-6	5SL4613-7	5SL4613-8	5SL4413-6	5SL4413-7	5SL4413-8
5SL4316-6	5SL4316-7	5SL4316-8	5SL4616-6	5SL4616-7	5SL4616-8	5SL4416-6	5SL4416-7	5SL4416-8
5SL4320-6	5SL4320-7	5SL4320-8	5SL4620-6	5SL4620-7	5SL4620-8	5SL4420-6	5SL4420-7	5SL4420-8
5SL4325-6	5SL4325-7	5SL4325-8	5SL4625-6	5SL4625-7	5SL4625-8	5SL4425-6	5SL4425-7	5SL4425-8
5SL4332-6	5SL4332-7	5SL4332-8	5SL4632-6	5SL4632-7	5SL4632-8	5SL4432-6	5SL4432-7	5SL4432-8
5SL4340-6	5SL4340-7	5SL4340-8	5SL4640-6	5SL4640-7	5SL4640-8	5SL4440-6	5SL4440-7	5SL4440-8
5SL4350-6	5SL4350-7	5SL4350-8	5SL4650-6	5SL4650-7	5SL4650-8	5SL4450-6	5SL4450-7	5SL4450-8
5SL4363-6	5SL4363-7	5SL4363-8	5SL4663-6	5SL4663-7	5SL4663-8	5SL4463-6	5SL4463-7	5SL4463-8

Accessories

Auxiliary switches (AS)		Article No.
1 NO + 1 NC	Standard	5ST3010
	For low power	5ST3013
	For low power (with diode)	5ST3013-0XX01
2 NO	Standard	5ST3011
	For low power	5ST3014
2 NC	Standard	5ST3012
	For low power	5ST3015
1 CO	Standard	5ST3016
Fault signal contacts (FC)		**Article No.**
1 NO + 1 NC		5ST3020
2 NO		5ST3021
2 NC		5ST3022
Auxiliary switches and fault signal contacts (AS+FC)		**Article No.**
1 CO (AS) + 1 CO (FC)		5ST3062
Shunt trips (ST)		**Article No.**
110 ... 415 V AC, 110 ... 220 V DC		5ST3030
24 ... 48 V AC/DC		5ST3031
12 V DC		5ST3031-0XX01

Undervoltage releases (UR)		Article No.
With integrated auxiliary switch	230 V AC	5ST3040
	110 V DC	5ST3041
	24 V DC	5ST3042
Without integrated auxiliary switch	230 V AC	5ST3043
	110 V DC	5ST3044
	24 V DC	5ST3045
Remote controlled mechanisms (RC mech.)		**Article No.**
Basic	12 ... 30 V AC, 12 ... 48 V DC	5ST3053
	177 ... 270 V AC	5ST3054
Power	12 ... 30 V AC, 12 ... 48 V DC	5ST3055
	177 ... 270 V AC	5ST3056
Power with ARD	12 ... 30 V AC, 12 ... 48 V DC	5ST3057
	177 ... 270 V AC	5ST3058
Power with extended function	12 ... 30 V AC, 12 ... 48 V DC	5ST3070
Adapters for remote controlled mechanisms (RC mech.)		**Article No.**
1–2 MW		5ST3820-6
3–4 MW		5ST3820-7
Arc fault detection devices (AFDD)		**Article No.**
For basic units 1P+N (2 MW), not in combination with RC mech.	I_n up to 16 A	5SM6021-2
	I_n up to 40 A	5SM6024-2

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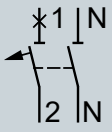
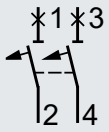
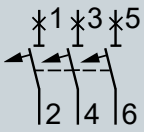
5SJ6...-.KS miniature circuit breakers

6 kA – plug-in terminal on outgoing side



	1P 230/400 V AC		1P+N 230/400 V AC		2P 230/400 V AC		3P 230/400 V AC	
Mounting width	1 MW		2 MW		2 MW		3 MW	
								
Rated current I_n	Characteristic		Characteristic		Characteristic		Characteristic	
	B	C	B	C	B	C	B	C
10 A	5SJ6110-6KS	5SJ6110-7KS	5SJ6510-6KS	5SJ6510-7KS	5SJ6210-6KS	5SJ6210-7KS	5SJ6310-6KS	5SJ6310-7KS
13 A	5SJ6113-6KS	5SJ6113-7KS	5SJ6513-6KS	5SJ6513-7KS	5SJ6213-6KS	5SJ6213-7KS	5SJ6313-6KS	5SJ6313-7KS
16 A	5SJ6116-6KS	5SJ6116-7KS	5SJ6516-6KS	5SJ6516-7KS	5SJ6216-6KS	5SJ6216-7KS	5SJ6316-6KS	5SJ6316-7KS
20 A	5SJ6120-6KS	5SJ6120-7KS	5SJ6520-6KS	5SJ6520-7KS	5SJ6220-6KS	5SJ6220-7KS	5SJ6320-6KS	5SJ6320-7KS

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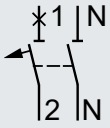
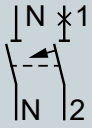
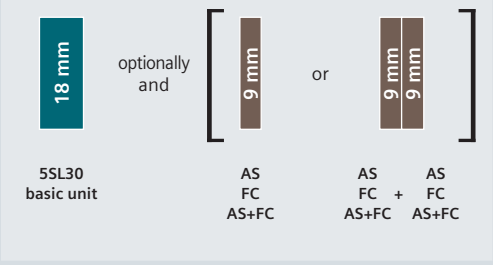
5SL30 miniature circuit breakers

1P+N 4.5 kA compact miniature circuit breakers

	1P+N (N pole right) 230 V AC	1P+N (N pole left) 230 V AC
Mounting width	2 MW	2 MW
		
Rated current I_n	**Characteristic C**	**Characteristic C**
2 A	5SL3002-7	5SL3002-7KL
4 A	5SL3004-7	5SL3004-7KL
6 A	5SL3006-7	5SL3006-7KL
8 A	5SL3008-7	5SL3008-7KL
10 A	5SL3010-7	5SL3010-7KL
13 A	5SL3013-7	5SL3013-7KL
16 A	5SL3016-7	5SL3016-7KL
20 A	5SL3020-7	5SL3020-7KL
25 A	5SL3025-7	5SL3025-7KL
32 A	5SL3032-7	5SL3032-7KL
40 A	5SL3040-7	5SL3040-7KL

Mounting concept



AS	Auxiliary switches	See page 3/44
FC	Fault signal contacts	See page 3/46
AS+FC	Auxiliary switches and fault signal contacts	See page 3/47

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Accessories

Auxiliary switches (AS)		Article No.
1 NO + 1 NC	Standard	5ST3010
	For low power	5ST3013
	For low power (with diode)	5ST3013-0XX01
2 NO	Standard	5ST3011
	For low power	5ST3014
2 NC	Standard	5ST3012
	For low power	5ST3015
1 CO	Standard	5ST3016

Fault signal contacts (FC)	Article No.
1 NO + 1 NC	5ST3020
2 NO	5ST3021
2 NC	5ST3022
Auxiliary switches and fault signal contacts (AS+FC)	**Article No.**
1 CO (AS) + 1 CO (FC)	5ST3062

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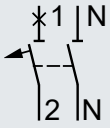
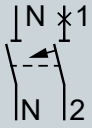
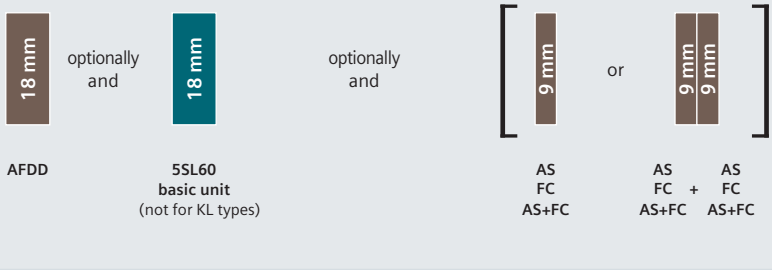
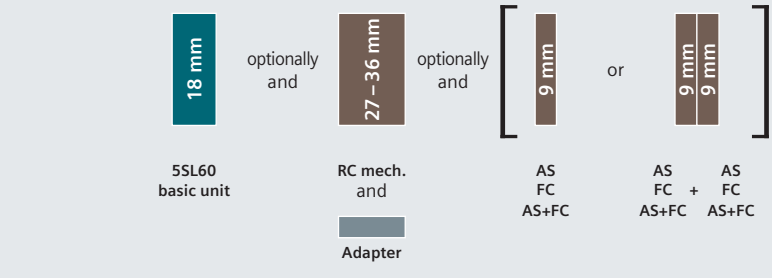
5SL60 miniature circuit breakers

1P+N 6 kA compact miniature circuit breakers

	1P+N (N pole right) 230 V AC		1P+N (N pole left) 230 V AC
Mounting width	1 MW		1 MW
			
Rated current I_n	Characteristic B	C	Characteristic C
2 A	–	5SL6002-7	5SL6002-7KL
4 A	–	5SL6004-7	5SL6004-7KL
6 A	5SL6006-6	5SL6006-7	5SL6006-7KL
8 A	–	5SL6008-7	5SL6008-7KL
10 A	5SL6010-6	5SL6010-7	5SL6010-7KL
13 A	5SL6013-6	5SL6013-7	5SL6013-7KL
16 A	5SL6016-6	5SL6016-7	5SL6016-7KL
20 A	5SL6020-6	5SL6020-7	5SL6020-7KL
25 A	5SL6025-6	5SL6025-7	5SL6025-7KL
32 A	5SL6032-6	5SL6032-7	5SL6032-7KL
40 A	5SL6040-6	5SL6040-7	5SL6040-7KL

Mounting concept





AFDD	Arc fault detection devices	See page 3/51
AS	Auxiliary switches	See page 3/44
FC	Fault signal contacts	See page 3/46
AS+FC	Auxiliary switches and fault signal contacts	See page 3/47
RC mech.	Remote controlled mechanisms	See page 3/50

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Accessories

Auxiliary switches (AS)		Article No.
1 NO + 1 NC	Standard	5ST3010
	For low power	5ST3013
	For low power (with diode)	5ST3013-0XX01
2 NO	Standard	5ST3011
	For low power	5ST3014
2 NC	Standard	5ST3012
	For low power	5ST3015
1 CO	Standard	5ST3016

Fault signal contacts (FC)	Article No.
1 NO + 1 NC	5ST3020
2 NO	5ST3021
2 NC	5ST3022

Auxiliary switches and fault signal contacts (AS+FC)	Article No.
1 CO (AS) + 1 CO (FC)	5ST3062

Remote controlled mechanisms (RC mech.)		Article No.
Basic	12 ... 30 V AC, 12 ... 48 V DC	5ST3053
	177 ... 270 V AC	5ST3054
Power	12 ... 30 V AC, 12 ... 48 V DC	5ST3055
	177 ... 270 V AC	5ST3056
Power with ARD	12 ... 30 V AC, 12 ... 48 V DC	5ST3057
	177 ... 270 V AC	5ST3058
Power with extended function	12 ... 30 V AC, 12 ... 48 V DC	5ST3070

Adapters for remote controlled mechanisms (RC mech.)	Article No.
1 MW	5ST3820-6

Arc fault detection devices (AFDD)		Article No.
For basic units 1P + N (1 MW), not for KL types	I_n up to 16 A	5SM6011-2
	I_n up to 40 A	5SM6014-2

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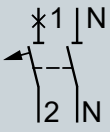
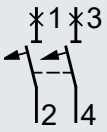
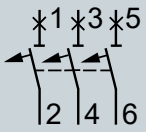
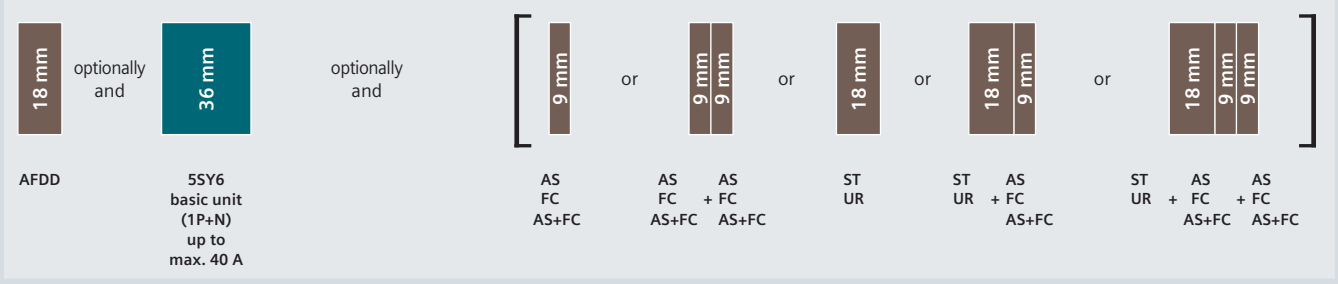
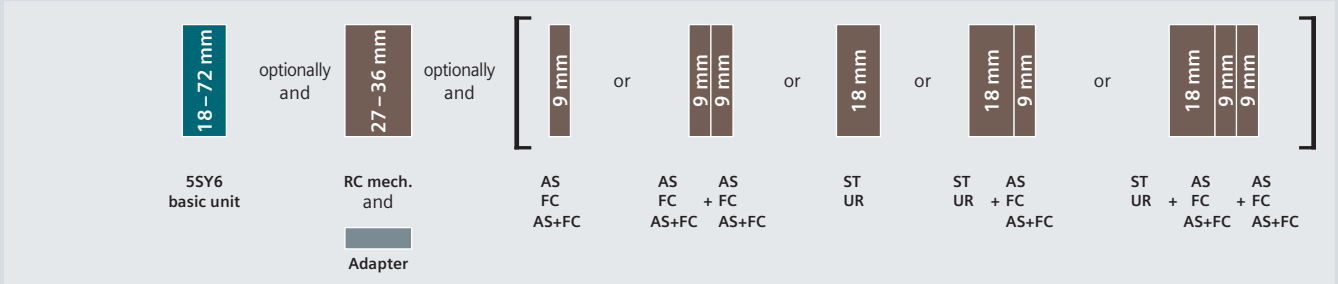
5SY6 miniature circuit breakers

6 kA

	1P 230/400 V AC		1P+N 230 V AC		2P 400 V AC		3P 400 V AC	
Mounting width	1 MW		2 MW		2 MW		3 MW	
								
Rated current I_n	Characteristic B	C	Characteristic B	C	Characteristic B	C	Characteristic B	C
0.3 A	–	5SY6114-7	–	5SY6514-7	–	5SY6214-7	–	5SY6314-7
0.5 A	–	5SY6105-7	–	5SY6505-7	–	5SY6205-7	–	5SY6305-7
1 A	–	5SY6101-7	–	5SY6501-7	–	5SY6201-7	–	5SY6301-7
1.6 A	–	5SY6115-7	–	5SY6515-7	–	5SY6215-7	–	5SY6315-7
2 A	5SY6102-6	5SY6102-7	–	5SY6502-7	–	5SY6202-7	–	5SY6302-7
3 A	–	5SY6103-7	–	5SY6503-7	–	5SY6203-7	–	5SY6303-7
4 A	5SY6104-6	5SY6104-7	–	5SY6504-7	–	5SY6204-7	–	5SY6304-7
5 A	–	5SY6111-7	–	–	–	5SY6211-7	–	5SY6311-7
6 A	5SY6106-6	5SY6106-7	5SY6506-6	5SY6506-7	5SY6206-6	5SY6206-7	5SY6306-6	5SY6306-7
8 A	–	5SY6108-7	–	5SY6508-7	–	5SY6208-7	–	5SY6308-7
10 A	5SY6110-6	5SY6110-7	5SY6510-6	5SY6510-7	5SY6210-6	5SY6210-7	5SY6310-6	5SY6310-7
13 A	5SY6113-6	5SY6113-7	5SY6513-6	5SY6513-7	5SY6213-6	5SY6213-7	5SY6313-6	5SY6313-7
15 A	–	5SY6118-7	–	–	–	5SY6218-7	–	5SY6318-7
16 A	5SY6116-6	5SY6116-7	5SY6516-6	5SY6516-7	5SY6216-6	5SY6216-7	5SY6316-6	5SY6316-7
20 A	5SY6120-6	5SY6120-7	5SY6520-6	5SY6520-7	5SY6220-6	5SY6220-7	5SY6320-6	5SY6320-7
25 A	5SY6125-6	5SY6125-7	5SY6525-6	5SY6525-7	5SY6225-6	5SY6225-7	5SY6325-6	5SY6325-7
30 A	–	5SY6130-7	–	–	–	5SY6230-7	–	5SY6330-7
32 A	5SY6132-6	5SY6132-7	5SY6532-6	5SY6532-7	5SY6232-6	5SY6232-7	5SY6332-6	5SY6332-7
40 A	5SY6140-6	5SY6140-7	5SY6540-6	5SY6540-7	5SY6240-6	5SY6240-7	5SY6340-6	5SY6340-7
50 A	5SY6150-6	5SY6150-7	5SY6550-6	5SY6550-7	5SY6250-6	5SY6250-7	5SY6350-6	5SY6350-7
63 A	5SY6163-6	5SY6163-7	5SY6563-6	5SY6563-7	5SY6263-6	5SY6263-7	5SY6363-6	5SY6363-7

Mounting concept





AFDD Arc fault detection devices See page 3/51
AS Auxiliary switches See page 3/44
FC Fault signal contacts See page 3/46
AS+FC Auxiliary switches and fault signal contacts See page 3/47
ST Shunt trips See page 3/48
UR Undervoltage releases See page 3/49
RC mech. Remote controlled mechanisms See page 3/50

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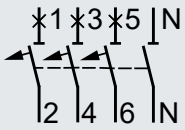
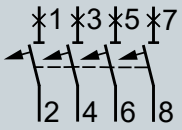
3P+N 400 V AC 4 MW		4P 400 V AC 4 MW	
			
Characteristic		Characteristic	
B	C	B	C
–	5SY6614-7	–	5SY6414-7
–	5SY6605-7	–	5SY6405-7
–	5SY6601-7	–	5SY6401-7
–	5SY6615-7	–	5SY6415-7
–	5SY6602-7	–	5SY6402-7
–	5SY6603-7	–	5SY6403-7
–	5SY6604-7	–	5SY6404-7
–	–	–	–
5SY6606-6	5SY6606-7	5SY6406-6	5SY6406-7
–	5SY6608-7	–	5SY6408-7
5SY6610-6	5SY6610-7	5SY6410-6	5SY6410-7
5SY6613-6	5SY6613-7	5SY6413-6	5SY6413-7
–	–	–	–
5SY6616-6	5SY6616-7	5SY6416-6	5SY6416-7
5SY6620-6	5SY6620-7	5SY6420-6	5SY6420-7
5SY6625-6	5SY6625-7	5SY6425-6	5SY6425-7
–	–	–	–
5SY6632-6	5SY6632-7	5SY6432-6	5SY6432-7
5SY6640-6	5SY6640-7	5SY6440-6	5SY6440-7
5SY6650-6	5SY6650-7	5SY6450-6	5SY6450-7
5SY6663-6	5SY6663-7	5SY6463-6	5SY6463-7

Accessories

Auxiliary switches (AS)		Article No.
1 NO + 1 NC	Standard	5ST3010
	For low power	5ST3013
	For low power (with diode)	5ST3013-0XX01
2 NO	Standard	5ST3011
	For low power	5ST3014
2 NC	Standard	5ST3012
	For low power	5ST3015
1 CO	Standard	5ST3016
Fault signal contacts (FC)		**Article No.**
1 NO + 1 NC		5ST3020
2 NO		5ST3021
2 NC		5ST3022
Auxiliary switches and fault signal contacts (AS+FC)		**Article No.**
1 CO (AS) + 1 CO (FC)		5ST3062
Shunt trips (ST)		**Article No.**
110 ... 415 V AC, 110 ... 220 DC		5ST3030
24 ... 48 V AC/DC		5ST3031
12 V DC		5ST3031-0XX01

Undervoltage releases (UR)		Article No.
With integrated auxiliary switch	230 V AC	5ST3040
	110 V DC	5ST3041
	24 V DC	5ST3042
Without integrated auxiliary switch	230 V AC	5ST3043
	110 V DC	5ST3044
	24 V DC	5ST3045
Remote controlled mechanisms (RC mech.)		**Article No.**
Basic	12 ... 30 V AC, 12 ... 48 V DC	5ST3053
	177 ... 270 V AC	5ST3054
Power	12 ... 30 V AC, 12 ... 48 V DC	5ST3055
	177 ... 270 V AC	5ST3056
Power with ARD	12 ... 30 V AC, 12 ... 48 V DC	5ST3057
	177 ... 270 V AC	5ST3058
Power with extended function	12 ... 30 V AC, 12 ... 48 V DC	5ST3070
Adapters for remote controlled mechanisms (RC mech.)		**Article No.**
1–2 MW		5ST3820-1
3–4 MW		5ST3820-2
Arc fault detection devices (AFDD)		**Article No.**
For basic units 1P+N (2 MW), not in combination with RC mech.	I_n up to 16 A	5SM6021-2
	I_n up to 40 A	5SM6024-2

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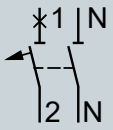
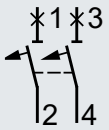
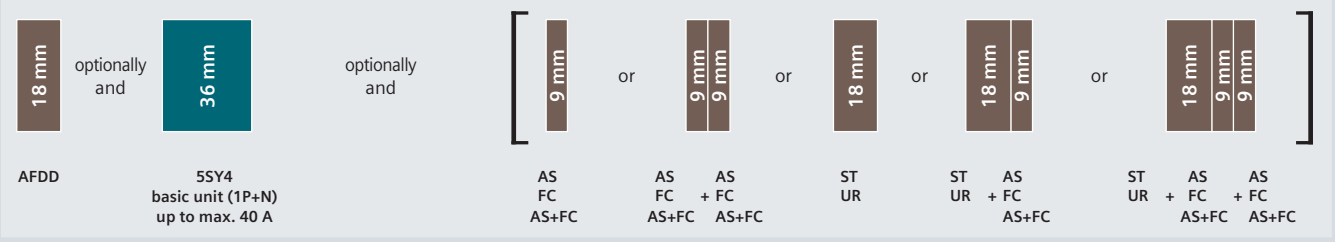
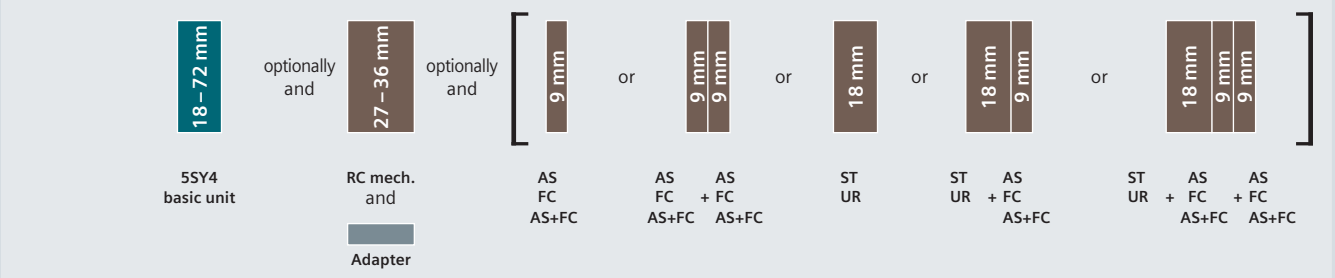
5SY4 miniature circuit breakers

10 kA

	1P 230/400 V AC				1P+N 230 V AC				2P 400 V AC			
Mounting width	1 MW				2 MW				2 MW			
												
Rated current	Characteristic				Characteristic				Characteristic			
I_n	A	B	C	D	A	B	C	D	A	B	C	D
0.3 A	–	–	5SY4114-7	5SY4114-8	–	–	5SY4514-7	5SY4514-8	–	–	5SY4214-7	5SY4214-8
0.5 A	5SY4105-5	–	5SY4105-7	5SY4105-8	–	–	5SY4505-7	5SY4505-8	5SY4205-5	–	5SY4205-7	5SY4205-8
1 A	5SY4101-5	5SY4101-6 new	5SY4101-7	5SY4101-8	5SY4501-5	–	5SY4501-7	5SY4501-8	5SY4201-5	5SY4201-6 new	5SY4201-7	5SY4201-8
1.6 A	5SY4115-5	5SY4115-6 new	5SY4115-7	5SY4115-8	5SY4515-5	5SY4515-6 new	5SY4515-7	5SY4515-8	5SY4215-5	5SY4215-6 new	5SY4215-7	5SY4215-8
2 A	5SY4102-5	5SY4102-6	5SY4102-7	5SY4102-8	5SY4502-5	–	5SY4502-7	5SY4502-8	5SY4202-5	5SY4202-6 new	5SY4202-7	5SY4202-8
3 A	5SY4103-5	5SY4103-6 new	5SY4103-7	5SY4103-8	5SY4503-5	–	5SY4503-7	5SY4503-8	5SY4203-5	5SY4203-6 new	5SY4203-7	5SY4203-8
4 A	5SY4104-5	5SY4104-6	5SY4104-7	5SY4104-8	5SY4504-5	5SY4504-6 new	5SY4504-7	5SY4504-8	5SY4204-5	5SY4204-6 new	5SY4204-7	5SY4204-8
5 A	–	–	5SY4111-7	–	–	–	–	–	–	–	5SY4211-7	–
6 A	5SY4106-5	5SY4106-6	5SY4106-7	5SY4106-8	5SY4506-5	5SY4506-6	5SY4506-7	5SY4506-8	5SY4206-5	5SY4206-6	5SY4206-7	5SY4206-8
8 A	5SY4108-5	5SY4108-6 new	5SY4108-7	5SY4108-8	5SY4508-5	–	5SY4508-7	5SY4508-8	5SY4208-5	5SY4208-6 new	5SY4208-7	5SY4208-8
10 A	5SY4110-5	5SY4110-6	5SY4110-7	5SY4110-8	5SY4510-5	5SY4510-6	5SY4510-7	5SY4510-8	5SY4210-5	5SY4210-6	5SY4210-7	5SY4210-8
13 A	5SY4113-5	5SY4113-6	5SY4113-7	5SY4113-8	5SY4513-5	5SY4513-6	5SY4513-7	5SY4513-8	5SY4213-5	5SY4213-6	5SY4213-7	5SY4213-8
15 A	–	–	5SY4118-7	–	–	–	–	–	–	–	5SY4218-7	–
16 A	5SY4116-5	5SY4116-6	5SY4116-7	5SY4116-8	5SY4516-5	5SY4516-6	5SY4516-7	5SY4516-8	5SY4216-5	5SY4216-6	5SY4216-7	5SY4216-8
20 A	5SY4120-5	5SY4120-6	5SY4120-7	5SY4120-8	5SY4520-5	5SY4520-6	5SY4520-7	5SY4520-8	5SY4220-5	5SY4220-6	5SY4220-7	5SY4220-8
25 A	5SY4125-5	5SY4125-6	5SY4125-7	5SY4125-8	5SY4525-5	5SY4525-6	5SY4525-7	5SY4525-8	5SY4225-5	5SY4225-6	5SY4225-7	5SY4225-8
30 A	–	–	5SY4130-7	–	–	–	–	–	–	–	5SY4230-7	–
32 A	5SY4132-5	5SY4132-6	5SY4132-7	5SY4132-8	5SY4532-5	5SY4532-6	5SY4532-7	5SY4532-8	5SY4232-5	5SY4232-6	5SY4232-7	5SY4232-8
35 A	–	–	5SY4135-7	–	–	–	–	–	–	–	5SY4235-7	–
40 A	5SY4140-5	5SY4140-6	5SY4140-7	5SY4140-8	5SY4540-5	5SY4540-6	5SY4540-7	5SY4540-8	5SY4240-5	5SY4240-6	5SY4240-7	5SY4240-8
45 A	–	–	5SY4145-7	–	–	–	–	–	–	–	5SY4245-7	–
50 A	5SY4150-5	5SY4150-6	5SY4150-7	5SY4150-8	5SY4550-5	5SY4550-6	5SY4550-7	5SY4550-8	5SY4250-5	5SY4250-6	5SY4250-7	5SY4250-8
60 A	–	–	5SY4160-7	–	–	–	–	–	–	–	5SY4260-7	–
63 A	5SY4163-5	5SY4163-6	5SY4163-7	5SY4163-8	5SY4563-5	5SY4563-6	5SY4563-7	5SY4563-8	5SY4263-5	5SY4263-6	5SY4263-7	5SY4263-8
80 A	–	5SY4180-6	5SY4180-7	–	–	–	5SY4580-7	–	–	5SY4280-6	5SY4280-7	–

Mounting concept





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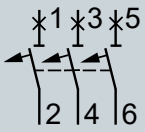
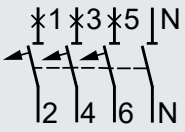
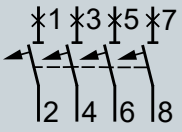
3P 400 V AC 3 MW				3P+N 400 V AC 4 MW				4P 400 V AC 4 MW			
											
Characteristic				Characteristic				Characteristic			
A	B	C	D	A	B	C	D	A	B	C	D
–	–	5SY4314-7	5SY4314-8	–	–	5SY4614-7	5SY4614-8	–	–	5SY4414-7	5SY4414-8
5SY4305-5	–	5SY4305-7	5SY4305-8	–	–	5SY4605-7	5SY4605-8	–	–	5SY4405-7	5SY4405-8
5SY4301-5	5SY4301-6 new	5SY4301-7	5SY4301-8	5SY4601-5	–	5SY4601-7	5SY4601-8	5SY4401-5	–	5SY4401-7	5SY4401-8
5SY4315-5	5SY4315-6 new	5SY4315-7	5SY4315-8	5SY4615-5	–	5SY4615-7	5SY4615-8	5SY4415-5	–	5SY4415-7	5SY4415-8
5SY4302-5	5SY4302-6 new	5SY4302-7	5SY4302-8	5SY4602-5	–	5SY4602-7	5SY4602-8	5SY4402-5	–	5SY4402-7	5SY4402-8
5SY4303-5	5SY4303-6 new	5SY4303-7	5SY4303-8	5SY4603-5	–	5SY4603-7	5SY4603-8	5SY4403-5	–	5SY4403-7	5SY4403-8
5SY4304-5	5SY4304-6 new	5SY4304-7	5SY4304-8	5SY4604-5	–	5SY4604-7	5SY4604-8	5SY4404-5	–	5SY4404-7	5SY4404-8
–	–	5SY4311-7	–	–	–	–	–	–	–	–	–
5SY4306-5	5SY4306-6	5SY4306-7	5SY4306-8	5SY4606-5	5SY4606-6	5SY4606-7	5SY4606-8	5SY4406-5	5SY4406-6	5SY4406-7	5SY4406-8
5SY4308-5	5SY4308-6 new	5SY4308-7	5SY4308-8	5SY4608-5	–	5SY4608-7	5SY4608-8	5SY4408-5	–	5SY4408-7	5SY4408-8
5SY4310-5	5SY4310-6	5SY4310-7	5SY4310-8	5SY4610-5	5SY4610-6	5SY4610-7	5SY4610-8	5SY4410-5	5SY4410-6	5SY4410-7	5SY4410-8
5SY4313-5	5SY4313-6	5SY4313-7	5SY4313-8	5SY4613-5	5SY4613-6	5SY4613-7	5SY4613-8	5SY4413-5	5SY4413-6	5SY4413-7	5SY4413-8
–	–	5SY4318-7	–	–	–	–	–	–	–	–	–
5SY4316-5	5SY4316-6	5SY4316-7	5SY4316-8	5SY4616-5	5SY4616-6	5SY4616-7	5SY4616-8	5SY4416-5	5SY4416-6	5SY4416-7	5SY4416-8
5SY4320-5	5SY4320-6	5SY4320-7	5SY4320-8	5SY4620-5	5SY4620-6	5SY4620-7	5SY4620-8	5SY4420-5	5SY4420-6	5SY4420-7	5SY4420-8
5SY4325-5	5SY4325-6	5SY4325-7	5SY4325-8	5SY4625-5	5SY4625-6	5SY4625-7	5SY4625-8	5SY4425-5	5SY4425-6	5SY4425-7	5SY4425-8
–	–	5SY4330-7	–	–	–	–	–	–	–	–	–
5SY4332-5	5SY4332-6	5SY4332-7	5SY4332-8	5SY4632-5	5SY4632-6	5SY4632-7	5SY4632-8	5SY4432-5	5SY4432-6	5SY4432-7	5SY4432-8
–	–	5SY4335-7	–	–	–	–	–	–	–	–	–
5SY4340-5	5SY4340-6	5SY4340-7	5SY4340-8	5SY4640-5	5SY4640-6	5SY4640-7	5SY4640-8	5SY4440-5	5SY4440-6	5SY4440-7	5SY4440-8
–	–	5SY4345-7	–	–	–	–	–	–	–	–	–
5SY4350-5	5SY4350-6	5SY4350-7	5SY4350-8	5SY4650-5	5SY4650-6	5SY4650-7	5SY4650-8	5SY4450-5	5SY4450-6	5SY4450-7	5SY4450-8
–	–	5SY4360-7	–	–	–	–	–	–	–	–	–
5SY4363-5	5SY4363-6	5SY4363-7	5SY4363-8	5SY4663-5	5SY4663-6	5SY4663-7	5SY4663-8	5SY4463-5	5SY4463-6	5SY4463-7	5SY4463-8
–	5SY4380-6	5SY4380-7	–	–	–	5SY4680-7	–	–	5SY4480-6	5SY4480-7	–

Accessories

Auxiliary switches (AS)		Article No.
1 NO + 1 NC	Standard	5ST3010
	For low power	5ST3013
	For low power (with diode)	5ST3013-0XX01
2 NO	Standard	5ST3011
	For low power	5ST3014
2 NC	Standard	5ST3012
	For low power	5ST3015
1 CO	Standard	5ST3016
Fault signal contacts (FC)		**Article No.**
1 NO + 1 NC		5ST3020
2 NO		5ST3021
2 NC		5ST3022
Auxiliary switches and fault signal contacts (AS+FC)		**Article No.**
1 CO (AS) + 1 CO (FC)		5ST3062
Shunt trips (ST)		**Article No.**
110 ... 415 V AC, 110 ... 220 DC		5ST3030
24 ... 48 V AC/DC		5ST3031
12 V DC		5ST3031-0XX01

Arc fault detection devices (AFDD)		Article No.
For basic units 1P+N (2 MW)	I_n up to 16 A	5SM6021-2
	I_n up to 40 A	5SM6024-2
Undervoltage releases (UR)		**Article No.**
With integrated auxiliary switch	230 V AC	5ST3040
	110 V DC	5ST3041
	24 V DC	5ST3042
Without integrated auxiliary switch	230 V AC	5ST3043
	110 V DC	5ST3044
	24 V DC	5ST3045
Remote controlled mechanisms (RC mech.)		**Article No.**
Basic	12 ... 30 V AC, 12 ... 48 V DC	5ST3053
	177 ... 270 V AC	5ST3054
Power	12 ... 30 V AC, 12 ... 48 V DC	5ST3055
	177 ... 270 V AC	5ST3056
Power with ARD	12 ... 30 V AC, 12 ... 48 V DC	5ST3057
	177 ... 270 V AC	5ST3058
Power with extended function	12 ... 30 V AC, 12 ... 48 V DC	5ST3070
Adapters for remote controlled mechanisms (RC mech.)		**Article No.**
1–2 MW		5ST3820-1
3–4 MW		5ST3820-2

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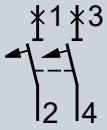
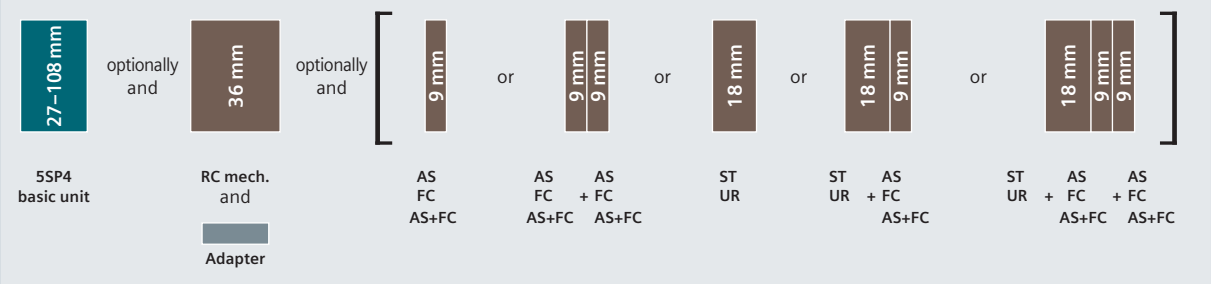
5SP4 miniature circuit breakers

10 kA

	1P 230/400 V AC			2P 400 V AC		
Mounting width	1.5 MW			3 MW		
						
Rated current I_n	Characteristic			Characteristic		
	B	C	D	B	C	D
80 A	5SP4180-6	5SP4180-7	5SP4180-8	5SP4280-6	5SP4280-7	5SP4280-8
100 A	5SP4191-6	5SP4191-7	5SP4191-8	5SP4291-6	5SP4291-7	5SP4291-8
125 A	5SP4192-6	5SP4192-7	–	5SP4292-6	5SP4292-7	–

Mounting concept



AS	Auxiliary switches	See page 3/44
FC	Fault signal contacts	See page 3/46
AS+FC	Auxiliary switches and fault signal contacts	See page 3/47
ST	Shunt trips	See page 3/48
UR	Undervoltage releases	See page 3/49
RC mech.	Remote controlled mechanisms	See page 3/50

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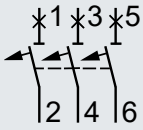
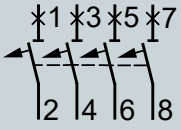
3P 400 V AC 4.5 MW			4P 400 V AC 6 MW		
					
Characteristic			**Characteristic**		
B	**C**	**D**	**B**	**C**	**D**
5SP4380-6	5SP4380-7	5SP4380-8	5SP4480-6	5SP4480-7	5SP4480-8
5SP4391-6	5SP4391-7	5SP4391-8	5SP4491-6	5SP4491-7	5SP4491-8
5SP4392-6	5SP4392-7	–	5SP4492-6	5SP4492-7	–

Accessories

Auxiliary switches (AS)		Article No.
1 NO + 1 NC	Standard	5ST3010
	For low power	5ST3013
	For low power (with diode)	5ST3013-0XX01
2 NO	Standard	5ST3011
	For low power	5ST3014
2 NC	Standard	5ST3012
	For low power	5ST3015
1 CO	Standard	5ST3016
Fault signal contacts (FC)		**Article No.**
1 NO + 1 NC		5ST3020
2 NO		5ST3021
2 NC		5ST3022
Auxiliary switches and fault signal contacts (AS+FC)		**Article No.**
1 CO (AS) + 1 CO (FC)		5ST3062
Shunt trips (ST)		**Article No.**
110 ... 415 V AC, 110 ... 220 DC		5ST3030
24 ... 48 V AC/DC		5ST3031
12 V DC		5ST3031-0XX01

Undervoltage releases (UR)		Article No.
With integrated auxiliary switch	230 V AC	5ST3040
	110 V DC	5ST3041
	24 V DC	5ST3042
Without integrated auxiliary switch	230 V AC	5ST3043
	110 V DC	5ST3044
	24 V DC	5ST3045
Remote controlled mechanisms (RC mech.)		**Article No.**
Power	12 ... 30 V AC, 12 ... 48 V DC	5ST3055
	177 ... 270 V AC	5ST3056
Power with ARD	12 ... 30 V AC, 12 ... 48 V DC	5ST3057
	177 ... 270 V AC	5ST3058
Power with extended function	12 ... 30 V AC, 12 ... 48 V DC	5ST3070
Adapters for remote controlled mechanisms (RC mech.)		**Article No.**
1.5 MW		5ST3820-1
3–6 MW		5ST3820-2

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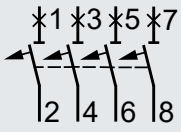
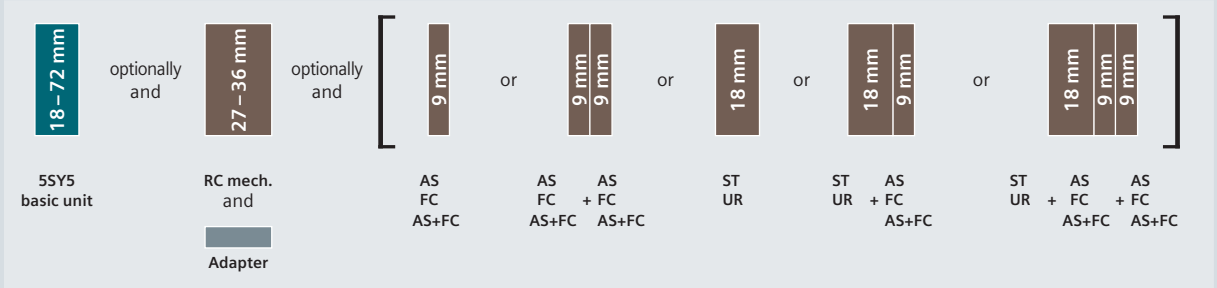
5SY5 miniature circuit breakers

10 kA

	1P 230/400 V AC, 220 V DC		2P 400 V AC, 440 V DC		4P 400 V AC, 880 V DC	
Mounting width	1 MW		2 MW		4 MW	
						
Rated current I_n	Characteristic		Characteristic		Characteristic	
	B	C	B	C	B	C
0.3 A	–	5SY5114-7	–	5SY5214-7	–	5SY5414-7
0.5 A	–	5SY5105-7	–	5SY5205-7	–	5SY5405-7
1 A	–	5SY5101-7	–	5SY5201-7	–	5SY5401-7
1.6 A	–	5SY5115-7	–	5SY5215-7	–	5SY5415-7
2 A	5SY5102-6	5SY5102-7	5SY5202-6 new	5SY5202-7	–	5SY5402-7
3 A	–	5SY5103-7	–	5SY5203-7	–	5SY5403-7
4 A	5SY5104-6	5SY5104-7	5SY5204-6 new	5SY5204-7	–	5SY5404-7
6 A	5SY5106-6	5SY5106-7	5SY5206-6	5SY5206-7	5SY5406-6	5SY5406-7
8 A	5SY5108-6 new	5SY5108-7	5SY5208-6 new	5SY5208-7	–	5SY5408-7
10 A	5SY5110-6	5SY5110-7	5SY5210-6	5SY5210-7	5SY5410-6	5SY5410-7
13 A	5SY5113-6	5SY5113-7	5SY5213-6	5SY5213-7	5SY5413-6	5SY5413-7
16 A	5SY5116-6	5SY5116-7	5SY5216-6	5SY5216-7	5SY5416-6	5SY5416-7
20 A	5SY5120-6	5SY5120-7	5SY5220-6	5SY5220-7	5SY5420-6	5SY5420-7
25 A	5SY5125-6	5SY5125-7	5SY5225-6	5SY5225-7	5SY5425-6	5SY5425-7
32 A	5SY5132-6	5SY5132-7	5SY5232-6	5SY5232-7	5SY5432-6	5SY5432-7
40 A	5SY5140-6	5SY5140-7	5SY5240-6	5SY5240-7	5SY5440-6	5SY5440-7
50 A	5SY5150-6	5SY5150-7	5SY5250-6	5SY5250-7	5SY5450-6	5SY5450-7
63 A	5SY5163-6	5SY5163-7	5SY5263-6	5SY5263-7	5SY5463-6	5SY5463-7

Mounting concept



AS	Auxiliary switches	See page 3/44
FC	Fault signal contacts	See page 3/46
AS+FC	Auxiliary switches and fault signal contacts	See page 3/47
ST	Shunt trips	See page 3/48
UR	Undervoltage releases	See page 3/49
RC mech.	Remote controlled mechanisms	See page 3/50

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Accessories

Auxiliary switches (AS)		Article No.
1 NO + 1 NC	Standard	5ST3010
	For low power	5ST3013
	For low power (with diode)	5ST3013-0XX01
2 NO	Standard	5ST3011
	For low power	5ST3014
2 NC	Standard	5ST3012
	For low power	5ST3015
1 CO	Standard	5ST3016

Fault signal contacts (FC)	Article No.
1 NO + 1 NC	5ST3020
2 NO	5ST3021
2 NC	5ST3022

Auxiliary switches and fault signal contacts (AS+FC)	Article No.
1 CO (AS) + 1 CO (FC)	5ST3062

Shunt trips (ST)	Article No.
110 ... 415 V AC, 110 ... 220 DC	5ST3030
24 ... 48 V AC/DC	5ST3031
12 V DC	5ST3031-0XX01

Undervoltage releases (UR)		Article No.
With integrated auxiliary switch	230 V AC	5ST3040
	110 V DC	5ST3041
	24 V DC	5ST3042
Without integrated auxiliary switch	230 V AC	5ST3043
	110 V DC	5ST3044
	24 V DC	5ST3045

Remote controlled mechanisms (RC mech.)		Article No.
Basic	12 ... 30 V AC, 12 ... 48 V DC	5ST3053
	177 ... 270 V AC	5ST3054
Power	12 ... 30 V AC, 12 ... 48 V DC	5ST3055
	177 ... 270 V AC	5ST3056
Power with ARD	12 ... 30 V AC, 12 ... 48 V DC	5ST3057
	177 ... 270 V AC	5ST3058
Power with extended function	12 ... 30 V AC, 12 ... 48 V DC	5ST3070

Adapters for remote controlled mechanisms (RC mech.)	Article No.
1–2 MW	5ST3820-1
4 MW	5ST3820-2

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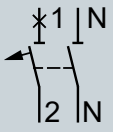
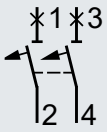
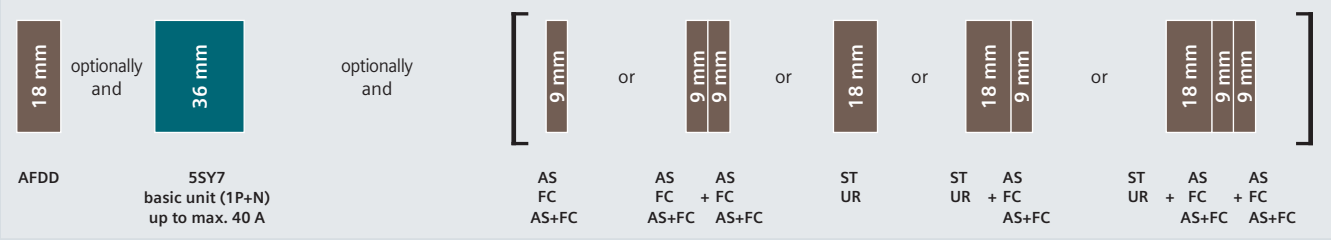
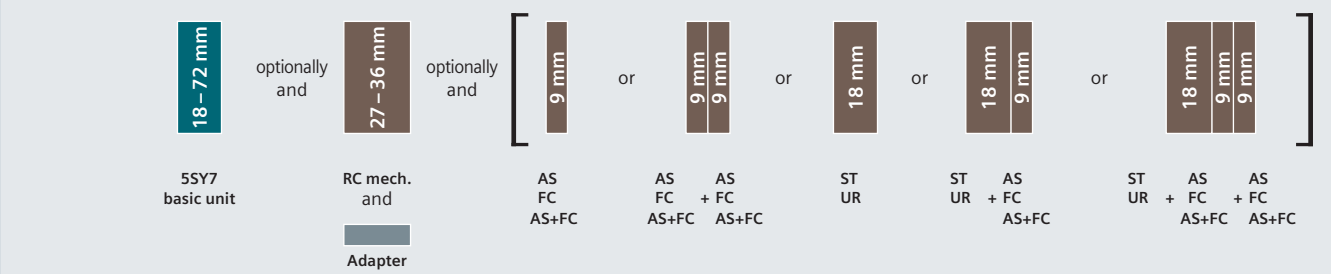
5SY7 miniature circuit breakers

15 kA

	1P 230/400 V AC			1P+N 230 V AC			2P 400 V AC		
Mounting width	1 MW			2 MW			2 MW		
									
Rated current	Main MCB, line side of meter	Characteristic			Characteristic			Characteristic		
I_n		B	C	D	B	C	D	B	C	D
0.3 A	–	–	5SY7114-7	5SY7114-8	–	5SY7514-7	5SY7514-8	–	5SY7214-7	5SY7214-8
0.5 A	–	–	5SY7105-7	5SY7105-8	–	5SY7505-7	5SY7505-8	–	5SY7205-7	5SY7205-8
1 A	–	–	5SY7101-7	5SY7101-8	–	5SY7501-7	5SY7501-8	–	5SY7201-7	5SY7201-8
1.6 A	–	–	5SY7115-7	5SY7115-8	–	5SY7515-7	5SY7515-8	–	5SY7215-7	5SY7215-8
2 A	–	–	5SY7102-7	5SY7102-8	–	5SY7502-7	5SY7502-8	–	5SY7202-7	5SY7202-8
3 A	–	–	5SY7103-7	5SY7103-8	–	5SY7503-7	5SY7503-8	–	5SY7203-7	5SY7203-8
4 A	–	–	5SY7104-7	5SY7104-8	–	5SY7504-7	5SY7504-8	–	5SY7204-7	5SY7204-8
6 A	–	5SY7106-6	5SY7106-7	5SY7106-8	5SY7506-6	5SY7506-7	5SY7506-8	5SY7206-6	5SY7206-7	5SY7206-8
	■	5SY7106-6KK13	–	–	–	–	–	–	–	–
8 A	–	–	5SY7108-7	5SY7108-8	–	5SY7508-7	5SY7508-8	–	5SY7208-7	5SY7208-8
10 A	–	5SY7110-6	5SY7110-7	5SY7110-8	5SY7510-6	5SY7510-7	5SY7510-8	5SY7210-6	5SY7210-7	5SY7210-8
	■	5SY7110-6KK13	–	–	–	–	–	–	–	–
13 A	–	5SY7113-6	5SY7113-7	5SY7113-8	5SY7513-6	5SY7513-7	5SY7513-8	5SY7213-6	5SY7213-7	5SY7213-8
16 A	–	5SY7116-6	5SY7116-7	5SY7116-8	5SY7516-6	5SY7516-7	5SY7516-8	5SY7216-6	5SY7216-7	5SY7216-8
20 A	–	5SY7120-6	5SY7120-7	5SY7120-8	5SY7520-6	5SY7520-7	5SY7520-8	5SY7220-6	5SY7220-7	5SY7220-8
25 A	–	5SY7125-6	5SY7125-7	5SY7125-8	5SY7525-6	5SY7525-7	5SY7525-8	5SY7225-6	5SY7225-7	5SY7225-8
32 A	–	5SY7132-6	5SY7132-7	5SY7132-8	5SY7532-6	5SY7532-7	5SY7532-8	5SY7232-6	5SY7232-7	5SY7232-8
40 A	–	5SY7140-6	5SY7140-7	5SY7140-8	5SY7540-6	5SY7540-7	5SY7540-8	5SY7240-6	5SY7240-7	5SY7240-8
50 A	–	5SY7150-6	5SY7150-7	5SY7150-8	5SY7550-6	5SY7550-7	5SY7550-8	5SY7250-6	5SY7250-7	5SY7250-8
63 A	–	5SY7163-6	5SY7163-7	5SY7163-8	5SY7563-6	5SY7563-7	5SY7563-8	5SY7263-6	5SY7263-7	5SY7263-8

Mounting concept





AFDD	Arc fault detection devices	See page 3/51	AS+FC	Auxiliary switches and fault signal contacts	See page 3/47	UR	Undervoltage releases	See page 3/49
AS	Auxiliary switches	See page 3/44	ST	Shunt trips	See page 3/48	RC mech.	Remote controlled mechanisms	See page 3/50
FC	Fault signal contacts	See page 3/46						

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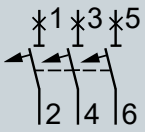
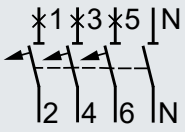
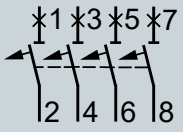
3P 400 V AC 3 MW			3P+N 400 V AC 4 MW			4P 400 V AC 4 MW		
								
Characteristic			Characteristic			Characteristic		
B	C	D	B	C	D	B	C	D
–	5SY7314-7	5SY7314-8	–	5SY7614-7	5SY7614-8	–	5SY7414-7	5SY7414-8
–	5SY7305-7	5SY7305-8	–	5SY7605-7	5SY7605-8	–	5SY7405-7	5SY7405-8
–	5SY7301-7	5SY7301-8	–	5SY7601-7	5SY7601-8	–	5SY7401-7	5SY7401-8
–	5SY7315-7	5SY7315-8	–	5SY7615-7	5SY7615-8	–	5SY7415-7	5SY7415-8
–	5SY7302-7	5SY7302-8	–	5SY7602-7	5SY7602-8	–	5SY7402-7	5SY7402-8
–	5SY7303-7	5SY7303-8	–	5SY7603-7	5SY7603-8	–	5SY7403-7	5SY7403-8
–	5SY7304-7	5SY7304-8	–	5SY7604-7	5SY7604-8	–	5SY7404-7	5SY7404-8
5SY7306-6	5SY7306-7	5SY7306-8	5SY7606-6	5SY7606-7	5SY7606-8	5SY7406-6	5SY7406-7	5SY7406-8
–	–	–	–	–	–	–	–	–
–	5SY7308-7	5SY7308-8	–	5SY7608-7	5SY7608-8	–	5SY7408-7	5SY7408-8
5SY7310-6	5SY7310-7	5SY7310-8	5SY7610-6	5SY7610-7	5SY7610-8	5SY7410-6	5SY7410-7	5SY7410-8
–	–	–	–	–	–	–	–	–
5SY7313-6	5SY7313-7	5SY7313-8	5SY7613-6	5SY7613-7	5SY7613-8	5SY7413-6	5SY7413-7	5SY7413-8
5SY7316-6	5SY7316-7	5SY7316-8	5SY7616-6	5SY7616-7	5SY7616-8	5SY7416-6	5SY7416-7	5SY7416-8
5SY7320-6	5SY7320-7	5SY7320-8	5SY7620-6	5SY7620-7	5SY7620-8	5SY7420-6	5SY7420-7	5SY7420-8
5SY7325-6	5SY7325-7	5SY7325-8	5SY7625-6	5SY7625-7	5SY7625-8	5SY7425-6	5SY7425-7	5SY7425-8
5SY7332-6	5SY7332-7	5SY7332-8	5SY7632-6	5SY7632-7	5SY7632-8	5SY7432-6	5SY7432-7	5SY7432-8
5SY7340-6	5SY7340-7	5SY7340-8	5SY7640-6	5SY7640-7	5SY7640-8	5SY7440-6	5SY7440-7	5SY7440-8
5SY7350-6	5SY7350-7	5SY7350-8	5SY7650-6	5SY7650-7	5SY7650-8	5SY7450-6	5SY7450-7	5SY7450-8
5SY7363-6	5SY7363-7	5SY7363-8	5SY7663-6	5SY7663-7	5SY7663-8	5SY7463-6	5SY7463-7	5SY7463-8

Accessories

Auxiliary switches (AS)		Article No.
1 NO + 1 NC	Standard	5ST3010
	For low power	5ST3013
	For low power (with diode)	5ST3013-0XX01
2 NO	Standard	5ST3011
	For low power	5ST3014
2 NC	Standard	5ST3012
	For low power	5ST3015
1 CO	Standard	5ST3016
Fault signal contacts (FC)		**Article No.**
1 NO + 1 NC		5ST3020
2 NO		5ST3021
2 NC		5ST3022
Auxiliary switches and fault signal contacts (AS+FC)		**Article No.**
1 CO (AS) + 1 CO (FC)		5ST3062
Shunt trips (ST)		**Article No.**
110 ... 415 V AC, 110 ... 220 V DC		5ST3030
24 ... 48 V AC/DC		5ST3031
12 V DC		5ST3031-0XX01

Undervoltage releases (UR)		Article No.
With integrated auxiliary switch	230 V AC	5ST3040
	110 V DC	5ST3041
	24 V DC	5ST3042
Without integrated auxiliary switch	230 V AC	5ST3043
	110 V DC	5ST3044
	24 V DC	5ST3045
Remote controlled mechanisms (RC mech.)		**Article No.**
Basic	12 ... 30 V AC, 12 ... 48 V DC	5ST3053
	177 ... 270 V AC	5ST3054
Power	12 ... 30 V AC, 12 ... 48 V DC	5ST3055
	177 ... 270 V AC	5ST3056
Power with ARD	12 ... 30 V AC, 12 ... 48 V DC	5ST3057
	177 ... 270 V AC	5ST3058
Power with extended function	12 ... 30 V AC, 12 ... 48 V DC	5ST3070
Adapters for remote controlled mechanisms (RC mech.)		**Article No.**
1–2 MW		5ST3820-1
3–4 MW		5ST3820-2
Arc fault detection devices (AFDD)		**Article No.**
For basic units 1P+N (2 MW)	I_n up to 16 A	5SM6021-2
	I_n up to 40 A	5SM6024-2

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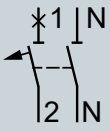
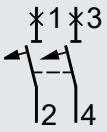
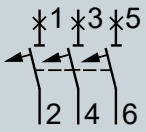
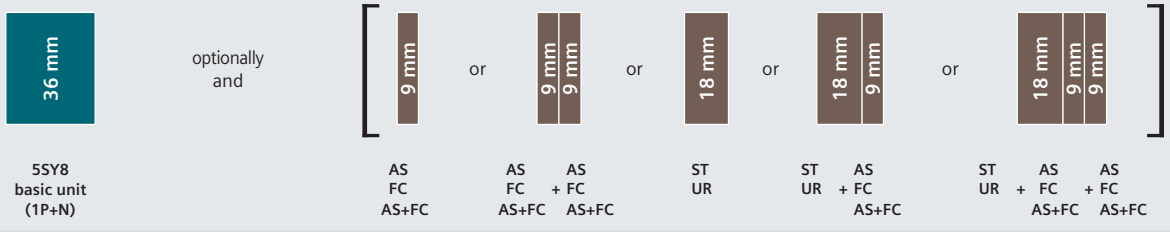
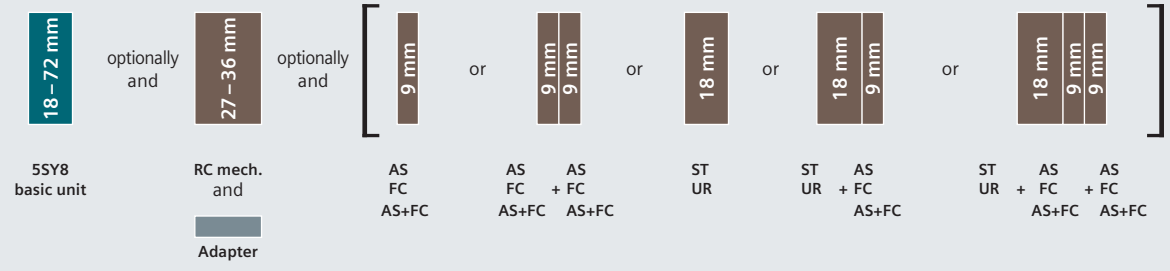
5SY8 miniature circuit breakers

25 kA

	1P 230/400 V AC		1P+N 230 V AC		2P 400 V AC		3P 400 V AC	
Mounting width	1 MW		2 MW		2 MW		3 MW	
								
Rated current I_n	Characteristic		Characteristic		Characteristic		Characteristic	
	C	D	C	D	C	D	C	D
0.3 A	5SY8114-7	5SY8114-8	5SY8514-7	5SY8514-8	5SY8214-7	5SY8214-8	5SY8314-7	5SY8314-8
0.5 A	5SY8105-7	5SY8105-8	5SY8505-7	5SY8505-8	5SY8205-7	5SY8205-8	5SY8305-7	5SY8305-8
1 A	5SY8101-7	5SY8101-8	5SY8501-7	5SY8501-8	5SY8201-7	5SY8201-8	5SY8301-7	5SY8301-8
1.6 A	5SY8115-7	5SY8115-8	5SY8515-7	5SY8515-8	5SY8215-7	5SY8215-8	5SY8315-7	5SY8315-8
2 A	5SY8102-7	5SY8102-8	5SY8502-7	5SY8502-8	5SY8202-7	5SY8202-8	5SY8302-7	5SY8302-8
3 A	5SY8103-7	5SY8103-8	5SY8503-7	5SY8503-8	5SY8203-7	5SY8203-8	5SY8303-7	5SY8303-8
4 A	5SY8104-7	5SY8104-8	5SY8504-7	5SY8504-8	5SY8204-7	5SY8204-8	5SY8304-7	5SY8304-8
6 A	5SY8106-7	5SY8106-8	5SY8506-7	5SY8506-8	5SY8206-7	5SY8206-8	5SY8306-7	5SY8306-8
8 A	5SY8108-7	5SY8108-8	5SY8508-7	5SY8508-8	5SY8208-7	5SY8208-8	5SY8308-7	5SY8308-8
10 A	5SY8110-7	5SY8110-8	5SY8510-7	5SY8510-8	5SY8210-7	5SY8210-8	5SY8310-7	5SY8310-8
12.5 A	–	–	–	–	–	–	–	–
13 A	5SY8113-7	5SY8113-8	5SY8513-7	5SY8513-8	5SY8213-7	5SY8213-8	5SY8313-7	5SY8313-8
16 A	5SY8116-7	5SY8116-8	5SY8516-7	5SY8516-8	5SY8216-7	5SY8216-8	5SY8316-7	5SY8316-8
20 A	5SY8120-7	5SY8120-8	5SY8520-7	5SY8520-8	5SY8220-7	5SY8220-8	5SY8320-7	5SY8320-8
25 A	5SY8125-7	5SY8125-8	5SY8525-7	5SY8525-8	5SY8225-7	5SY8225-8	5SY8325-7	5SY8325-8
32 A	5SY8132-7	5SY8132-8	5SY8532-7	5SY8532-8	5SY8232-7	5SY8232-8	5SY8332-7	5SY8332-8
40 A	5SY8140-7	5SY8140-8	5SY8540-7	5SY8540-8	5SY8240-7	5SY8240-8	5SY8340-7	5SY8340-8
50 A	5SY8150-7	5SY8150-8	5SY8550-7	5SY8550-8	5SY8250-7	5SY8250-8	5SY8350-7	5SY8350-8
63 A	5SY8163-7	5SY8163-8	5SY8563-7	5SY8563-8	5SY8263-7	5SY8263-8	5SY8363-7	5SY8363-8

Mounting concept





AFDD Arc fault detection devices See page 3/51
AS Auxiliary switches See page 3/44
FC Fault signal contacts See page 3/46
AS+FC Auxiliary switches and fault signal contacts See page 3/47
ST Shunt trips See page 3/48
UR Undervoltage releases See page 3/49
RC mech. Remote controlled mechanisms See page 3/50

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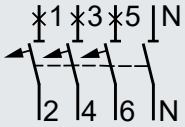
3P+N 400 V AC		4P 400 V AC	
4 MW		4 MW	
			
Characteristic		Characteristic	
C	D	C	D
5SY8614-7	5SY8614-8	5SY8414-7	5SY8414-8
5SY8605-7	5SY8605-8	5SY8405-7	5SY8405-8
5SY8601-7	5SY8601-8	5SY8401-7	5SY8401-8
5SY8615-7	5SY8615-8	5SY8415-7	5SY8415-8
5SY8602-7	5SY8602-8	5SY8402-7	5SY8402-8
5SY8603-7	5SY8603-8	5SY8403-7	5SY8403-8
5SY8604-7	5SY8604-8	5SY8404-7	5SY8404-8
5SY8606-7	5SY8606-8	5SY8406-7	5SY8406-8
5SY8608-7	5SY8608-8	5SY8408-7	5SY8408-8
5SY8610-7	5SY8610-8	5SY8410-7	5SY8410-8
–	–	–	–
5SY8613-7	5SY8613-8	5SY8413-7	5SY8413-8
5SY8616-7	5SY8616-8	5SY8416-7	5SY8416-8
5SY8620-7	5SY8620-8	5SY8420-7	5SY8420-8
5SY8625-7	5SY8625-8	5SY8425-7	5SY8425-8
5SY8632-7	5SY8632-8	5SY8432-7	5SY8432-8
5SY8640-7	5SY8640-8	5SY8440-7	5SY8440-8
5SY8650-7	5SY8650-8	5SY8450-7	5SY8450-8
5SY8663-7	5SY8663-8	5SY8463-7	5SY8463-8

Accessories

Auxiliary switches (AS)		Article No.
1 NO + 1 NC	Standard	5ST3010
	For low power	5ST3013
	For low power (with diode)	5ST3013-0XX01
2 NO	Standard	5ST3011
	For low power	5ST3014
2 NC	Standard	5ST3012
	For low power	5ST3015
1 CO	Standard	5ST3016
Fault signal contacts (FC)		**Article No.**
1 NO + 1 NC		5ST3020
2 NO		5ST3021
2 NC		5ST3022
Auxiliary switches and fault signal contacts (AS+FC)		**Article No.**
1 CO (AS) + 1 CO (FC)		5ST3062
Shunt trips (ST)		**Article No.**
110 ... 415 V AC, 110 ... 220 V DC		5ST3030
24 ... 48 V AC/DC		5ST3031
12 V DC		5ST3031-0XX01

Undervoltage releases (UR)		Article No.
With integrated auxiliary switch	230 V AC	5ST3040
	110 V DC	5ST3041
	24 V DC	5ST3042
Without integrated auxiliary switch	230 V AC	5ST3043
	110 V DC	5ST3044
	24 V DC	5ST3045
Remote controlled mechanisms (RC mech.)		**Article No.**
Basic	12 ... 30 V AC, 12 ... 48 V DC	5ST3053
	177 ... 270 V AC	5ST3054
Power	12 ... 30 V AC, 12 ... 48 V DC	5ST3055
	177 ... 270 V AC	5ST3056
Power with ARD	12 ... 30 V AC, 12 ... 48 V DC	5ST3057
	177 ... 270 V AC	5ST3058
Power with extended function	12 ... 30 V AC, 12 ... 48 V DC	5ST3070
Adapters for remote controlled mechanisms (RC mech.)		**Article No.**
1–2 MW		5ST3820-1
3–4 MW		5ST3820-2

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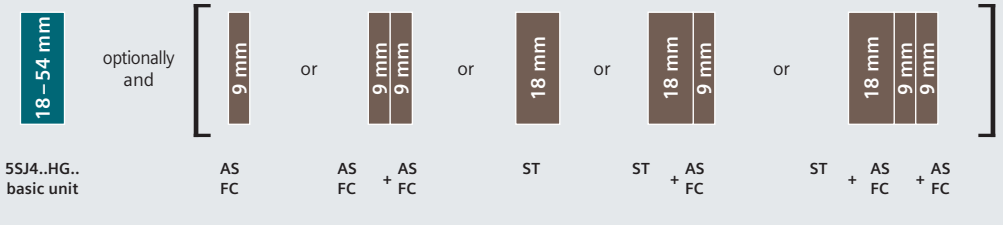
5SJ4..HG.. miniature circuit breakers

According to UL489, 14/10 kA

	1P "same polarity only"			1P			
	240 V AC	240 V AC	240 V AC	240 V AC	480Y/277 V AC	240 V AC	480Y/277 V AC
Mounting width	1 MW			1 MW			
							
Rated current I_n	Characteristic			Characteristic			
	B	C	D	C	C	D	D
0.3 A	–	5SJ4114-7HG40	5SJ4114-8HG40	5SJ4114-7HG41	5SJ4114-7HG42	5SJ4114-8HG41	5SJ4114-8HG42
0.5 A	–	5SJ4105-7HG40	5SJ4105-8HG40	5SJ4105-7HG41	5SJ4105-7HG42	5SJ4105-8HG41	5SJ4105-8HG42
1 A	–	5SJ4101-7HG40	5SJ4101-8HG40	5SJ4101-7HG41	5SJ4101-7HG42	5SJ4101-8HG41	5SJ4101-8HG42
1.6 A	–	5SJ4115-7HG40	5SJ4115-8HG40	5SJ4115-7HG41	5SJ4115-7HG42	5SJ4115-8HG41	5SJ4115-8HG42
2 A	–	5SJ4102-7HG40	5SJ4102-8HG40	5SJ4102-7HG41	5SJ4102-7HG42	5SJ4102-8HG41	5SJ4102-8HG42
3 A	–	5SJ4103-7HG40	5SJ4103-8HG40	5SJ4103-7HG41	5SJ4103-7HG42	5SJ4103-8HG41	5SJ4103-8HG42
4 A	–	5SJ4104-7HG40	5SJ4104-8HG40	5SJ4104-7HG41	5SJ4104-7HG42	5SJ4104-8HG41	5SJ4104-8HG42
5 A	–	5SJ4111-7HG40	5SJ4111-8HG40	5SJ4111-7HG41	5SJ4111-7HG42	5SJ4111-8HG41	5SJ4111-8HG42
6 A	5SJ4106-6HG40	5SJ4106-7HG40	5SJ4106-8HG40	5SJ4106-7HG41	5SJ4106-7HG42	5SJ4106-8HG41	5SJ4106-8HG42
8 A	–	5SJ4108-7HG40	5SJ4108-8HG40	5SJ4108-7HG41	5SJ4108-7HG42	5SJ4108-8HG41	5SJ4108-8HG42
10 A	5SJ4110-6HG40	5SJ4110-7HG40	5SJ4110-8HG40	5SJ4110-7HG41	5SJ4110-7HG42	5SJ4110-8HG41	5SJ4110-8HG42
13 A	5SJ4113-6HG40	5SJ4113-7HG40	5SJ4113-8HG40	5SJ4113-7HG41	5SJ4113-7HG42	5SJ4113-8HG41	5SJ4113-8HG42
15 A	5SJ4118-6HG40	5SJ4118-7HG40	5SJ4118-8HG40	5SJ4118-7HG41	5SJ4118-7HG42	5SJ4118-8HG41	5SJ4118-8HG42
16 A	5SJ4116-6HG40	5SJ4116-7HG40	5SJ4116-8HG40	5SJ4116-7HG41	5SJ4116-7HG42	5SJ4116-8HG41	5SJ4116-8HG42
20 A	5SJ4120-6HG40	5SJ4120-7HG40	5SJ4120-8HG40	5SJ4120-7HG41	5SJ4120-7HG42	5SJ4120-8HG41	5SJ4120-8HG42
25 A	5SJ4125-6HG40	5SJ4125-7HG40	5SJ4125-8HG40	5SJ4125-7HG41	5SJ4125-7HG42	5SJ4125-8HG41	5SJ4125-8HG42
30 A	5SJ4130-6HG40	5SJ4130-7HG40	5SJ4130-8HG40	5SJ4130-7HG41	5SJ4130-7HG42	5SJ4130-8HG41	5SJ4130-8HG42
32 A	5SJ4132-6HG40	5SJ4132-7HG40	5SJ4132-8HG40	5SJ4132-7HG41	5SJ4132-7HG42	5SJ4132-8HG41	5SJ4132-8HG42
35 A	5SJ4135-6HG40	5SJ4135-7HG40	5SJ4135-8HG40	5SJ4135-7HG41	5SJ4135-7HG42	5SJ4135-8HG41	–
40 A	5SJ4140-6HG40	5SJ4140-7HG40	5SJ4140-8HG40	5SJ4140-7HG41	5SJ4140-7HG42	5SJ4140-8HG41	–
45 A	5SJ4145-6HG40	5SJ4145-7HG40	5SJ4145-8HG40	5SJ4145-7HG41	–	5SJ4145-8HG41	–
50 A	5SJ4150-6HG40	5SJ4150-7HG40	5SJ4150-8HG40	5SJ4150-7HG41	–	5SJ4150-8HG41	–
60 A	5SJ4160-6HG40	5SJ4160-7HG40	5SJ4160-8HG40	5SJ4160-7HG41	–	5SJ4160-8HG41	–
63 A	5SJ4163-6HG40	5SJ4163-7HG40	5SJ4163-8HG40	5SJ4163-7HG41	–	5SJ4163-8HG41	–

Mounting concept



AS Auxiliary switches See page 3/44
FC Fault signal contacts See page 3/46
ST Shunt trips See page 3/48

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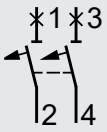
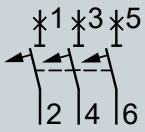
2P				3P			
240 V AC	480Y/277 V AC	240 V AC	480Y/277 V AC	240 V AC	480Y/277 V AC	240 V AC	480Y/277 V AC
2 MW				3 MW			
							
Characteristic				Characteristic			
C	C	D	D	C	C	D	D
5SJ4214-7HG41	5SJ4214-7HG42	5SJ4214-8HG41	5SJ4214-8HG42	5SJ4314-7HG41	5SJ4314-7HG42	5SJ4314-8HG41	5SJ4314-8HG42
5SJ4205-7HG41	5SJ4205-7HG42	5SJ4205-8HG41	5SJ4205-8HG42	5SJ4305-7HG41	5SJ4305-7HG42	5SJ4305-8HG41	5SJ4305-8HG42
5SJ4201-7HG41	5SJ4201-7HG42	5SJ4201-8HG41	5SJ4201-8HG42	5SJ4301-7HG41	5SJ4301-7HG42	5SJ4301-8HG41	5SJ4301-8HG42
5SJ4215-7HG41	5SJ4215-7HG42	5SJ4215-8HG41	5SJ4215-8HG42	5SJ4315-7HG41	5SJ4315-7HG42	5SJ4315-8HG41	5SJ4315-8HG42
5SJ4202-7HG41	5SJ4202-7HG42	5SJ4202-8HG41	5SJ4202-8HG42	5SJ4302-7HG41	5SJ4302-7HG42	5SJ4302-8HG41	5SJ4302-8HG42
5SJ4203-7HG41	5SJ4203-7HG42	5SJ4203-8HG41	5SJ4203-8HG42	5SJ4303-7HG41	5SJ4303-7HG42	5SJ4303-8HG41	5SJ4303-8HG42
5SJ4204-7HG41	5SJ4204-7HG42	5SJ4204-8HG41	5SJ4204-8HG42	5SJ4304-7HG41	5SJ4304-7HG42	5SJ4304-8HG41	5SJ4304-8HG42
5SJ4211-7HG41	5SJ4211-7HG42	5SJ4211-8HG41	5SJ4211-8HG42	5SJ4311-7HG41	5SJ4311-7HG42	5SJ4311-8HG41	5SJ4311-8HG42
5SJ4206-7HG41	5SJ4206-7HG42	5SJ4206-8HG41	5SJ4206-8HG42	5SJ4306-7HG41	5SJ4306-7HG42	5SJ4306-8HG41	5SJ4306-8HG42
5SJ4208-7HG41	5SJ4208-7HG42	5SJ4208-8HG41	5SJ4208-8HG42	5SJ4308-7HG41	5SJ4308-7HG42	5SJ4308-8HG41	5SJ4308-8HG42
5SJ4210-7HG41	5SJ4210-7HG42	5SJ4210-8HG41	5SJ4210-8HG42	5SJ4310-7HG41	5SJ4310-7HG42	5SJ4310-8HG41	5SJ4310-8HG42
5SJ4213-7HG41	5SJ4213-7HG42	5SJ4213-8HG41	5SJ4213-8HG42	5SJ4313-7HG41	5SJ4313-7HG42	5SJ4313-8HG41	5SJ4313-8HG42
5SJ4218-7HG41	5SJ4218-7HG42	5SJ4218-8HG41	5SJ4218-8HG42	5SJ4318-7HG41	5SJ4318-7HG42	5SJ4318-8HG41	5SJ4318-8HG42
5SJ4216-7HG41	5SJ4216-7HG42	5SJ4216-8HG41	5SJ4216-8HG42	5SJ4316-7HG41	5SJ4316-7HG42	5SJ4316-8HG41	5SJ4316-8HG42
5SJ4220-7HG41	5SJ4220-7HG42	5SJ4220-8HG41	5SJ4220-8HG42	5SJ4320-7HG41	5SJ4320-7HG42	5SJ4320-8HG41	5SJ4320-8HG42
5SJ4225-7HG41	5SJ4225-7HG42	5SJ4225-8HG41	5SJ4225-8HG42	5SJ4325-7HG41	5SJ4325-7HG42	5SJ4325-8HG41	5SJ4325-8HG42
5SJ4230-7HG41	5SJ4230-7HG42	5SJ4230-8HG41	5SJ4230-8HG42	5SJ4330-7HG41	5SJ4330-7HG42	5SJ4330-8HG41	5SJ4330-8HG42
5SJ4232-7HG41	5SJ4232-7HG42	5SJ4232-8HG41	5SJ4232-8HG42	5SJ4332-7HG41	5SJ4332-7HG42	5SJ4332-8HG41	5SJ4332-8HG42
5SJ4235-7HG41	5SJ4235-7HG42	5SJ4235-8HG41	–	5SJ4335-7HG41	5SJ4335-7HG42	5SJ4335-8HG41	–
5SJ4240-7HG41	5SJ4240-7HG42	5SJ4240-8HG41	–	5SJ4340-7HG41	5SJ4340-7HG42	5SJ4340-8HG41	–
5SJ4245-7HG41	–	5SJ4245-8HG41	–	5SJ4345-7HG41	–	5SJ4345-8HG41	–
5SJ4250-7HG41	–	5SJ4250-8HG41	–	5SJ4350-7HG41	–	5SJ4350-8HG41	–
5SJ4260-7HG41	–	5SJ4260-8HG41	–	5SJ4360-7HG41	–	5SJ4360-8HG41	–
5SJ4263-7HG41	–	5SJ4263-8HG41	–	5SJ4363-7HG41	–	5SJ4363-8HG41	–

Accessories

Auxiliary switches (AS) acc. to UL 489	Article No.
1 NO + 1 NC	5ST3010-0HG
2 NO	5ST3011-0HG
2 NC	5ST3012-0HG
Fault signal contacts (FC) acc. to UL 489	**Article No.**
1 NO + 1 NC	5ST3020-0HG
2 NO	5ST3021-0HG
2 NC	5ST3022-0HG
Shunt trips (ST) acc. to UL 489	**Article No.**
110 ... 415 V AC, 110 ... 220 V DC	5ST3030-0HG
24 ... 48 V AC/DC	5ST3031-0HG

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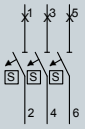
5SP3 selective main miniature circuit breakers (SHU)



25 kA, mounting on a 40 mm busbar

	1P 230/400 V AC				3× 1P 230/400 V AC
Mounting width	1.5 MW				4.5 MW
					
Rated current I_n	Characteristic E				Characteristic E
	L1	L2	L3	L1 + L2 + L3	
16 A	5SP3716-2KK01	5SP3716-2KK02	5SP3716-2KK03	5SP3716-2	5SP3816-2
20 A	5SP3720-2KK01	5SP3720-2KK02	5SP3720-2KK03	5SP3720-2	5SP3820-2
25 A	5SP3725-2KK01	5SP3725-2KK02	5SP3725-2KK03	5SP3725-2	5SP3825-2
35 A	5SP3735-2KK01	5SP3735-2KK02	5SP3735-2KK03	5SP3735-2	5SP3835-2
40 A	5SP3740-2KK01	5SP3740-2KK02	5SP3740-2KK03	5SP3740-2	5SP3840-2
50 A	5SP3750-2KK01	5SP3750-2KK02	5SP3750-2KK03	5SP3750-2	5SP3850-2
63 A	5SP3763-2KK01	5SP3763-2KK02	5SP3763-2KK03	5SP3763-2	5SP3863-2

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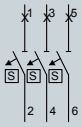
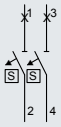
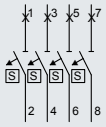
25 kA, mounting on a mounting rail

	1P 230/400 V AC	3× 1P 230/400 V AC	2P 230/400 V AC	3P 230/400 V AC	4P 230/400 V AC
Mounting width	1.5 MW	4.5 MW	3 MW	4.5 MW	6 MW
					
Rated current I_n	**Characteristic E**	**Characteristic E**	**Characteristic E**	**Characteristic E**	**Characteristic E**
16 A	5SP3716-3	5SP3816-3	5SP3216-3	5SP3316-3	5SP3416-3
20 A	5SP3720-3	5SP3820-3	5SP3220-3	5SP3320-3	5SP3420-3
25 A	5SP3725-3	5SP3825-3	5SP3225-3	5SP3325-3	5SP3425-3
35 A	5SP3735-3	5SP3835-3	5SP3235-3	5SP3335-3	5SP3435-3
40 A	5SP3740-3	5SP3840-3	5SP3240-3	5SP3340-3	5SP3440-3
50 A	5SP3750-3	5SP3850-3	5SP3250-3	5SP3350-3	5SP3450-3
63 A	5SP3763-3	5SP3863-3	5SP3263-3	5SP3363-3	5SP3463-3

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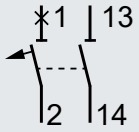
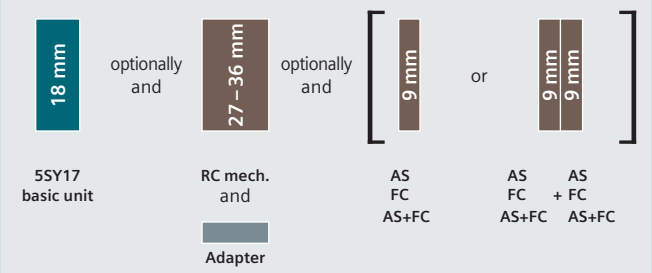
5SY17 device protection switches

Electromechanical



	1P+AS	
	230 V AC/60 V DC	230 V AC/60 V DC
Mounting width	1 MW (18 mm)	
		
Rated current I_n	Characteristic	
	F1 (quick)	F2 (slow)
0.5 A	5SY1705-2	5SY1705-4
1 A	5SY1701-2	5SY1701-4
2 A	5SY1702-2	5SY1702-4
4 A	5SY1704-2	5SY1704-4
6 A	5SY1706-2	5SY1706-4
8 A	5SY1708-2	5SY1708-4
10 A	5SY1710-2	5SY1710-4
16 A	5SY1716-2	5SY1716-4

Mounting concept



AS	Auxiliary switches	See page 3/44
FC	Fault signal contacts	See page 3/46
AS+FC	Auxiliary switches and fault signal contacts	See page 3/47
RC mech.	Remote controlled mechanisms	See page 3/50

Accessories

Auxiliary switches (AS)		Article No.
1 NO + 1 NC	Standard	5ST3010
	For low power	5ST3013
	For low power (with diode)	5ST3013-0XX01
2 NO	Standard	5ST3011
	For low power	5ST3014
2 NC	Standard	5ST3012
	For low power	5ST3015
1 CO	Standard	5ST3016
Fault signal contacts (FC)		**Article No.**
1 NO + 1 NC		5ST3020
2 NO		5ST3021
2 NC		5ST3022

Auxiliary switches and fault signal contacts (AS+FC)		Article No.
1 CO (AS) + 1 CO (FC)		5ST3062
Remote controlled mechanisms (RC mech.)		**Article No.**
Basic	12 ... 30 V AC, 12 ... 48 V DC	5ST3053
	177 ... 270 V AC	5ST3054
Power	12 ... 30 V AC, 12 ... 48 V DC	5ST3055
	177 ... 270 V AC	5ST3056
Power with ARD	12 ... 30 V AC, 12 ... 48 V DC	5ST3057
	177 ... 270 V AC	5ST3058
Power with extended function	12 ... 30 V AC, 12 ... 48 V DC	5ST3070
Adapters for remote controlled mechanisms (RC mech.)		**Article No.**
1 MW		5ST3820-6

Quick selection guide, page 3/10

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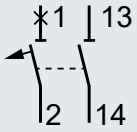
5SK9 device protection switches

Electronic



	1P+AS
	24 V DC
Mounting width	6.2 mm
	

Rated current I_n	
1 A	5SK9101-1
2 A	5SK9102-1
3 A	5SK9103-1
4 A	5SK9104-1
6 A	5SK9106-1
8 A	5SK9108-1

Specific accessories

Connecting combs



Variant	Number of poles	Max. load current I_{max}	Article No.
For parallel infeed	2-pole	24 A	8WH9020-6BC10
		32 A	8WH9020-6CC10
	5-pole	24 A	8WH9020-6BF10
		32 A	8WH9020-6CF10
For remote signal – group signal	2-pole	32 A	8WH9020-6CC10

Reducing combs for 10 mm² terminal blocks



Variant	Number of poles	Max. load current I_{max}	Article No.
For bypassing the power supply	2-pole	40 A	8WH9020-0AC10

See general accessories, page 14/57 onwards

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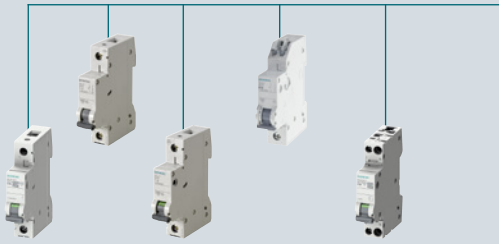
Overview of the modular system

Miniature circuit breakers



				5SL3	5SL6	5SL4	5SJ6...-.KS	5SL30
Auxiliary switches (AS)			**Article No.**					
	1 NO + 1 NC	Standard	5ST3010	■	■	■	–	■
		For low power	5ST3013	■	■	■	–	■
		For low power (with diode)	5ST3013-0XX01	■	■	■	–	■
	2 NO	Standard	5ST3011	■	■	■	–	■
		For low power	5ST3014	■	■	■	–	■
	2 NC	Standard	5ST3012	■	■	■	–	■
		For low power	5ST3015	■	■	■	–	■
	1 CO	Standard	5ST3016	■	■	■	–	■
Fault signal contacts (FC)			**Article No.**					
	1 NO + 1 NC		5ST3020	■	■	■	–	■
	2 NO		5ST3021	■	■	■	–	■
	2 NC		5ST3022	■	■	■	–	■
Auxiliary switches and fault signal contacts (AS+FC)			**Article No.**					
	1 CO (AS) + 1 CO (FC)	Standard	5ST3062	■	■	■	–	■
Shunt trips (ST)			**Article No.**					
	110 ... 415 V AC, 110 ... 220 V DC		5ST3030	–	–	■	–	–
	24 ... 48 V AC/DC		5ST3031	–	–	■	–	–
	12 V DC		5ST3031-0XX01	–	–	■	–	–
Undervoltage releases (UR)			**Article No.**					
	With integrated auxiliary switch	230 V AC	5ST3040	–	–	■	–	–
		110 V DC	5ST3041	–	–	■	–	–
		24 V DC	5ST3042	–	–	■	–	–
	Without integrated auxiliary switch	230 V AC	5ST3043	–	–	■	–	–
		110 V DC	5ST3044	–	–	■	–	–
		24 V DC	5ST3045	–	–	■	–	–
Remote controlled mechanisms (RC mech.)			**Article No.**					
	Basic	12 ... 30 V AC, 12 ... 48 V DC	5ST3053	■	■	□	–	–
		177 ... 270 V AC	5ST3054	■	■	□	–	–
	Power	12 ... 30 V AC, 12 ... 48 V DC	5ST3055	■	■	□	–	–
		177 ... 270 V AC	5ST3056	■	■	□	–	–
	Power with ARD	12 ... 30 V AC, 12 ... 48 V DC	5ST3057	■	■	□	–	–
		177 ... 270 V AC	5ST3058	■	■	□	–	–
	Power with extended function	12 ... 30 V AC, 12 ... 48 V DC	5ST3070	■	■	□	–	–
5SM6 arc fault detection devices			**Article No.**					
	Rated current up to 16 A	Standard	5SM6021-2	–	–	□	–	–
		For compact devices 1P+N in 1 MW	5SM6011-2	–	–	–	–	–
	Rated current up to 40 A	Standard	5SM6024-2	–	–	□	–	–
		For compact devices 1P+N in 1 MW	5SM6014-2	–	–	–	–	–
Standard busbars			**Article No.**					
	Cannot be cut		5ST36..	■	■	■	■	■
	Can be cut		5ST37..	■	■	■	■	■
Compact busbars			**Article No.**					
	Cannot be cut		5ST36..	□	□	□	–	■
	Can be cut		5ST37..	□	□	□	–	■

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■ Suitable for all versions □ Suitable for some versions

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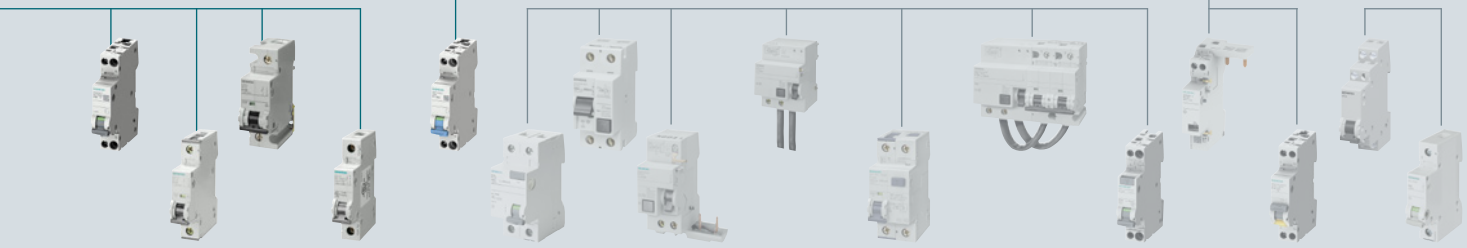
Device protection switches

Miniature circuit breakers

Residual current protective devices

Arc fault detection devices

Switching devices



5SL60	5SY	5SP4	5SJ4..HG..	5SY17	5SV	5SM3	5SM2	5SM2 (100 A)	5SU1	5SU1 (125 A)	5SV1	5SM6	5SV6	5TE8	5TL
■	■	■	...-0HG	■	■	–	■	■	■	■	■	□	■	■	■
■	■	■	–	■	■	–	■	■	■	■	■	□	■	■	■
■	■	■	–	■	■	–	■	■	■	■	■	□	■	■	■
■	■	■	...-0HG	■	■	–	■	■	■	■	■	□	■	■	■
■	■	■	–	■	■	–	■	■	■	■	■	□	■	■	■
■	■	■	...-0HG	■	■	–	■	■	■	■	■	□	■	■	■
■	■	■	–	■	■	–	■	■	■	■	■	□	■	■	■
■	■	■	–	■	■	–	■	■	■	■	■	□	■	■	■
■	■	■	...-0HG	■	■	–	■	■	■	■	■	□	■	–	–
■	■	■	...-0HG	■	■	–	■	■	■	■	■	□	■	–	–
■	■	■	...-0HG	■	■	–	■	■	■	■	■	□	■	–	–
■	■	■	–	■	■	–	■	■	■	■	■	□	■	–	–
–	■	■	...-0HG	–	■	–	■	■	■	■	–	□	–	–	–
–	■	■	...-0HG	–	■	–	■	■	■	■	–	□	–	–	–
–	■	■	–	–	■	–	■	■	■	■	–	□	–	–	–
–	■	■	–	–	■	–	■	■	■	■	–	□	–	–	–
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–	■	■	–	–	■	–	■	■	■	■	–	□	–	–	–
–	■	■	–	–	■	–	■	■	■	■	–	□	–	–	–
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□	□	■	–	■	–	–	–	–	■	–	■	–	–	–	■
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□	–	–	–	–	–	–	–	–	–	–	■	–	–	–	–
–	□	–	–	–	–	–	–	–	■	–	■	–	–	–	–
□	–	–	–	–	–	–	–	–	–	–	■	–	–	–	–
■	■	■	■	■	■	–	■	■	■	■	■	□	■	□	■
■	■	■	■	■	■	–	■	■	■	■	■	□	■	□	■
■	–	–	–	■	■	–	–	–	–	–	■	■	■	–	–
■	–	–	–	–	■	–	–	–	–	–	■	■	■	–	–
from page 3/18				from page 3/40	from page 4/1							from page 4/37		from page 5/6	

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Electrical accessories



Auxiliary switches (AS)

- Signals the contact position of the mounted device
- Version for the switching of small currents and voltages according to EN 61131-2 for control of programmable control systems (PLCs).
- Test button enables the testing of control circuits without the need to switch the mounted device

For combining with basic units						Contacts	Version	Mounting width (1 MW = 18 mm)	Article No.
Miniature circuit breakers	Device protection switches	RCCBs	RCBOs	Arc fault detection devices	ON/OFF switches				
Auxiliary switches (AS)									
5SL, 5SY, 5SP4	5SY17	5SV	5SU1 [1], 5SV1	5SV6	5TL1, 5TE8	1 NO + 1 NC	Standard	0.5 MW	5ST3010
							For low power	0.5 MW	5ST3013
							For low power (with diode)	0.5 MW	5ST3013-0XX01
						2 NO	Standard	0.5 MW	5ST3011
							For low power	0.5 MW	5ST3014
						2 NC	Standard	0.5 MW	5ST3012
							For low power	0.5 MW	5ST3015
						1 CO	Standard	0.5 MW	5ST3016
Auxiliary switches (AS) with TEST button									
5SL, 5SY, 5SP4	5SY17	5SV	5SU1 [1], 5SV1	5SV6	5TL1, 5TE8	1 NO + 1 NC	Standard	0.5 MW	5ST3010-2
							For low power	0.5 MW	5ST3013-2
						2 NO	Standard	0.5 MW	5ST3011-2
							For low power	0.5 MW	5ST3014-2
						2 NC	Standard	0.5 MW	5ST3012-2
							For low power	0.5 MW	5ST3015-2
Auxiliary switches (AS) acc. to UL 489									
5SJ4...-.HG	–	–	–		–	1 NO + 1 NC	Standard	0.5 MW	5ST3010-0HG
						2 NO	Standard	0.5 MW	5ST3011-0HG
						2 NC	Standard	0.5 MW	5ST3012-0HG

[1] Handle coupler 5ST3805-1 required

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Further technical specifications

		5ST3010, 5ST3010-2 5ST3011, 5ST3011-2 5ST3012, 5ST3012-2	5ST3013, 5ST3014 5ST3015, 5ST3016 5ST3013-0XX01	5ST3013-2 5ST3014-2 5ST3015-2	5ST3010-0HG 5ST3011-0HG 5ST3012-0HG
Standards					
Standards	IEC/EN	IEC/EN 62019, IEC/EN 60947-5-1			–
	UL, CSA	UL 1077, CSA C22.2 No. 235			UL 489, UL-File E321559, CSA 22.2 No. 5-02
Contacts					
Minimum contact load		50 mA, 24 V	1 mA, 5 V DC	5 mA, 5 V DC	50 mA, 24 V
Maximum contact load		–	100 mA, 30 V DC	30 mA, 30 V DC	–
Contact load acc. to IEC/EN 62019 and IEC/EN 60947-5-1	230 V AC, AC-13	6 A	–		6 A
	400 V AC, AC-14	2 A	–		2 A
	24 V DC, DC-13	6 A	–		6 A (3 A)
	60 V DC, DC-13	3 A	–		3 A (1.5 A)
	110 V DC, DC-13	1 A	–		1 A (0.75 A)
	220 V DC, DC-13	1 A	–		1 A (0.5 A)
Contact load acc. to UL	120 V AC	–			6 A
	240 V AC	–			4 A
	277 V AC	–			3 A
	480 V AC	–			1.5 A
	60 V DC	–			3 A
	125 V DC	–			1 A
Service life, on average, with rated load	Actuations	20000			12000
Safety					
Short-circuit protection		Miniature circuit breaker or gG 6 A fuse			
Connections					
Conductor cross-sections		0.5 ... 2.5 mm^2 (AWG 22 ... 14)			
Terminals	Max. tightening torque	0.5 Nm (4.5 lb-in)			
Ambient conditions					
Permissible ambient temperature		–25 ... +55 °C			
Permissible storage temperature		–40 ... +75 °C			
Resistance to climate	Acc. to IEC 60068-2-30	28 cycles			
Mounting position		Any			
Shock at 11 ms half-sine	Acc. to IEC 60068-2-27	50 m/s^2			
Resistance to vibrations at 10 ... 150 Hz	Acc. to IEC 60068-2-6	50 m/s^2			

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Electrical accessories



Fault signal contacts (FC)

- Signals automatic tripping of the protective switching device in the event of a fault, such as an overload or a short circuit
- If the fault signal contact is activated, the contact position does not change if the protective switching device is tripped manually
- Version with TEST and RESET buttons enable the testing of control circuits without operation of the protective switching device
- Red RESET button in the operating handle indicates automatic tripping of the mounted protective switching device

For combining with basic units					Contacts	Mounting width (1 MW = 18 mm)	Article No.
Miniature circuit breakers	Device protection switches	RCCBs	RCBOs	Arc fault detection devices			
Fault signal contacts (FC)							
5SL, 5SY, 5SP4	5SY17	5SV	5SU1 [1], 5SV1	5SV6	1 NO + 1 NC	0.5 MW	5ST3020
					2 NO	0.5 MW	5ST3021
					2 NC	0.5 MW	5ST3022
Fault signal contacts (FC) with TEST and RESET button							
5SL, 5SY, 5SP4	5SY17	5SV	5SU1 [1], 5SV1	5SV6	1 NO + 1 NC	0.5 MW	5ST3020-2
					2 NO	0.5 MW	5ST3021-2
					2 NC	0.5 MW	5ST3022-2
Fault signal contacts (FC) acc. to UL 489							
5SJ4...-.HG	–	–	–	–	1 NO + 1 NC	0.5 MW	5ST3020-0HG
					2 NO	0.5 MW	5ST3021-0HG
					2 NC	0.5 MW	5ST3022-0HG

[1] Handle coupler 5ST3805-1 required

Further technical specifications

		5ST3020, 5ST3020-2 5ST3021, 5ST3021-2 5ST3022, 5ST3022-2	5ST3020-0HG 5ST3021-0HG 5ST3022-0HG
Standards			
Standards	IEC/EN	IEC/EN 62019, IEC/EN 60947-5-1	
	UL, CSA	UL 1077, CSA C22.2 No. 235	UL 489, UL-File E321559, CSA 22.2 No. 5-02
Contacts			
Minimum contact load		50 mA, 24 V	
Contact load acc. to IEC/EN 62019 and IEC/EN 60947-5-1	230 V AC, AC-13	6 A	
	400 V AC, AC-14	2 A	
	24 V DC, DC-13	6 A	6 A (3 A)
	60 V DC, DC-13	3 A	3 A (1.5 A)
	110 V DC, DC-13	1 A	1 A (0.75 A)
	220 V DC, DC-13	1 A	1 A (0.5 A)
Contact load acc. to UL	120 V AC	–	6 A
	240 V AC	–	4 A
	277 V AC	–	3 A
	480 V AC	–	1.5 A
	60 V DC	–	3 A
	125 V DC	–	1 A
Service life, on average, with rated load	Actuations	20000	12000
Safety			
Short-circuit protection		Miniature circuit breaker or gG 6 A fuse	
Connections			
Conductor cross-sections		0.5 ... 2.5 mm² (AWG 22 ... 14)	
Terminals	Max. tightening torque	0.5 Nm (4.5 lb-in)	
Ambient conditions			
Permissible ambient temperature		–25 ... +55 °C	
Permissible storage temperature		–40 ... +75 °C	
Resistance to climate	Acc. to IEC 60068-2-30	28 cycles	
Mounting position		Any	
Shock at 11 ms half-sine	Acc. to IEC 60068-2-27	50 m/s²	
Resistance to vibrations at 10 ... 150 Hz	Acc. to IEC 60068-2-6	50 m/s²	

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Auxiliary switches and fault signal contacts (AS+FC)

- Combines the function of both switches in a width of only 0.5 MW (9 mm).
- Signals the contact position of the mounted device
- Signals automatic tripping of the protective switching device in the event of a fault, such as an overload, a short circuit or a fault current
- If the fault signal contact is activated, the contact position does not change if the protective switching device is tripped manually

For combining with basic units					Contacts	Mounting width (1 MW = 18 mm)	Article No.
Miniature circuit breakers	Device protection switches	RCCBs	RCBOs	Arc fault detection devices			
Auxiliary switches and fault signal contacts (AS+FC)							
5SL, 5SY, 5SP4	5SY17	5SV	5SU1 [1], 5SV1	5SV6	1 CO (AS) + 1 CO (FC)	0.5 MW	5ST3062

[1] Handle coupler 5ST3805-1 required

Further technical specifications

		5ST3062
Standards		
Standards	IEC/EN	IEC/EN 62019, IEC/EN 60947-5-1
	UL, CSA	UL 1077, CSA C22.2 No. 235
Contacts		
Minimum contact load		50 mA, 24 V
Maximum contact load		–
Contact load acc. to IEC/EN 62019 and IEC/EN 60947-5-1	230 V AC, AC-13	6 A
	400 V AC, AC-14	2 A
Contact load acc. to IEC/EN 62019 (acc. to IEC/EN 60947-5-1)	24 V DC, DC-13	3 A (3 A)
	60 V DC, DC-13	3 A (1 A)
	110 V DC, DC-13	0.5 A (0.5 A)
	220 V DC, DC-13	0.5 A (0.3 A)
Service life, on average, with rated load	Actuations	20000
Safety		
Short-circuit protection		Miniature circuit breaker or gG 6 A fuse
Connections		
Conductor cross-sections		0.5 ... 2.5 mm^2 (AWG 22 ... 14)
Terminals	Max. tightening torque	0.5 Nm (4.5 lb-in)
Ambient conditions		
Permissible ambient temperature		–25 ... +55 °C
Permissible storage temperature		–40 ... +75 °C
Resistance to climate	Acc. to IEC 60068-2-30	28 cycles
Mounting position		Any
Shock at 11 ms half-sine	Acc. to IEC 60068-2-27	50 m/s^2
Resistance to vibrations at 10 ... 150 Hz	Acc. to IEC 60068-2-6	50 m/s^2

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Electrical accessories



Shunt trips (ST)

- For remote-controlled tripping of the mounted device

For combining with basic units Miniature circuit breakers	RCCBs	RCBOs	Rated voltage U_n	Mounting width (1 MW = 18 mm)	Article No.
Shunt trips (ST)					
5SL4, 5SY, 5SP	5SV	5SU1 [1]	110 ... 415 V AC, 110 ... 220 V DC	1 MW	5ST3030
			24 ... 48 V AC/DC	1 MW	5ST3031
			12 V DC	1 MW	5ST3031-0XX01
Shunt trips (ST) acc. to UL 489					
5SJ4...-.HG	–	–	110 ... 415 V AC, 110 ... 220 V DC	1 MW	5ST3030-0HG
			24 ... 60 V AC/DC	1 MW	5ST3031-0HG

[1] Handle coupler 5ST3805-1 required

3

Further technical specifications		5ST3030	5ST3031	5ST3031-0XX01	5ST3030-0HG	5ST3031-0HG
Standards						
Standards	IEC/EN	EN 60947-1			IEC/EN 60947-1	
	UL, CSA	–			UL 489, UL-File E321559, CSA 22.2 No. 5-02	
Supply						
Primary operating range		0.7 ... 1.1 × U_n				
Rated frequency f_n		50 ... 60 Hz		–	50 ... 60 Hz	
Contacts						
Minimum contact load		50 mA, 24 V		1 mA, 5 V	50 mA, 24 V	
Tripping operations		Max. 2000				
Service life, on average, with rated load	Actuations	20000			12000	
Safety						
Short-circuit protection		Miniature circuit breaker B/C 6 A or fuse gG 6 A				
Connections						
Conductor cross-sections		0.5 ... 2.5 mm² (AWG 22 ... 14)				
Terminals	Max. tightening torque	0.8 Nm (6.8 lb-in)				
Ambient conditions						
Permissible ambient temperature		–25 ... +55 °C		–40 ... +70 °C	–25 ... +55 °C	
Permissible storage temperature		–40 ... +75 °C				
Resistance to climate	Acc. to IEC 60068-2-30	28 cycles				
Mounting position		Any				
Shock at 11 ms half-sine	Acc. to IEC 60068-2-27	50 m/s²				
Resistance to vibrations at 10 ... 150 Hz	Acc. to IEC 60068-2-6	50 m/s²				

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Undervoltage releases (UR)

- Integrated, e.g. in EMERGENCY-STOP loops
- Ensure that the mounted device trips in the event of an emergency, which, in turn, ensures disconnection of the control circuit according to EN 60204.
- Trip the mounted device if the voltage is interrupted or too low or prevents the mounted device from closing

For combining with basic units Miniature circuit breakers	RCCBs	RCBOs	Rated voltage U_n	Mounting width (1 MW = 18 mm)	Article No.
With integrated auxiliary switch					
5SL4, 5SY, 5SP4	5SV	5SU1 [1]	230 V AC	1 MW	5ST3040
			110 V DC	1 MW	5ST3041
			24 V DC	1 MW	5ST3042
Without integrated auxiliary switch					
5SL4, 5SY, 5SP4	5SV	5SU1 [1]	230 V AC	1 MW	5ST3043
			110 V DC	1 MW	5ST3044
			24 V DC	1 MW	5ST3045

[1] Handle coupler 5ST3805-1 required

Further technical specifications

		5ST304.
Standards		
Standards	IEC/EN	EN 60947-1
Supply		
Primary operating range		0.85 ... 1.1 × U_n
Rated frequency f_n		50/60 Hz
Contacts		
Minimum contact load		50 mA, 24 V
Tripping operations		Max. 2000
Service life, on average, with rated load		20000 actuations
Safety		
Short-circuit protection		Miniature circuit breaker B/C 6 A or fuse gG 6 A
Connections		
Conductor cross-sections		0.5 ... 2.5 mm² (AWG 22 ... 14)
Terminals	Max. tightening torque	0.8 Nm (6.8 lb-in)
Ambient conditions		
Permissible ambient temperature		–25 ... +55 °C
Permissible storage temperature		–40 ... +75 °C
Resistance to climate	Acc. to IEC 60068-2-30	28 cycles
Mounting position		Any
Shock at 11 ms half-sine	Acc. to IEC 60068-2-27	50 m/s²
Resistance to vibrations at 10 ... 150 Hz	Acc. to IEC 60068-2-6	50 m/s²

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Electrical accessories



5ST3 remote controlled mechanisms (RC mech.)

- For locations that are spread out over a wide area or not permanently attended
- Permits direct and immediate access to the installation even if it is remote or in a location that is hard to access
- Permits fast reconnection after a fault
- Version with ARD with automatic restart
- Versions with ARD and Power with integrated auxiliary switches and fault signal contacts

Type of remote operating mechanism	Display	Ambient temperature	Vibration and shock requirements	Rated voltage U_n	Mounting width (1 MW = 18 mm)	Article No.
Basic	–	–25 °C ... +45 °C	–	12 ... 30 V AC, 12 ... 48 V DC	1.5 MW	5ST3053
				177 ... 270 V AC	2 MW	5ST3054
Power	LED	–25 °C ... +45 °C	–	12 ... 30 V AC, 12 ... 48 V DC	2 MW	5ST3055
				177 ... 270 V AC	2 MW	5ST3056
Power with ARD	LED	–25 °C ... +45 °C	–	12 ... 30 V AC, 12 ... 48 V DC	2 MW	5ST3057
				177 ... 270 V AC	2 MW	5ST3058
Power with extended function	LED	–40 °C ... +70 °C	Acc. to DIN EN 61373 / DIN EN 50155 "1B"	12 ... 30 V AC, 12 ... 48 V DC	2 MW	5ST3070

Further technical specifications	5ST3053	5ST3054	5ST3055	5ST3056	5ST3057	5ST3058	5ST3070
Standards							
Standards	EN 50557 (VDE 0640-20)						
Supply							
Rated frequency f_n	50 ... 60 Hz						
Rated power dissipation in standby	≤1 VA						
Contacts							
Service life, on average, with rated load Actuations	10000						
Number of remote switching operations per minute	2						
Number of automatic reclose attempts	–				3		–
Cable length in the control circuit	≤1500 m						
Sliding selector with locking device	–	■					
Integrated auxiliary switches	–		1W (1CO); 2 A; 250 V				
Integrated fault signal contact	–		1W (1CO); 2 A; 250 V				
Connections							
Conductor cross-sections	0.5 ... 1.5 mm² (AWG 14 ... 30)						
Terminal tightening torque	0.2 ... 0.25 Nm (2.0 lb-in)						
Ambient conditions							
Permissible storage temperature	–40 ... +55 °C						–40 ... +70 °C
Degree of protection	IP20						
Pollution degree for overvoltage category	3/II						

Suitable adapters for combination with miniature circuit breakers



Basic units	Mounting width			Adapters
	1–2 MW	3–4 MW	3–6 MW	
5SY4/5/6/7/8	■	–	–	5ST3820-1
	–	■	–	5ST3820-2
5SL3/4/6	■	–	–	5ST3820-6
	–	■	–	5ST3820-7
5SL60 / 5SY17	■	–	–	5ST3820-6
5SP4	■	–	–	5ST3820-1
	–	–	■	5ST3820-2

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5SM6 arc fault detection devices (AFDD)

- Detects arcing faults
- Offers extremely effective protection against fires started by electrical faults
- Ensures adequate fire protection even in applications without residual current protective device

For combining with basic units			Rated current I_e	Mounting width (1 MW = 18 mm)	Article No.
Width of basic unit	Miniature circuit breakers	RCBOs			
1 MW	5SL60 2-pole (no KL types)	5SV1	Up to 16 A	1 MW	5SM6011-2
			Up to 40 A	1 MW	5SM6014-2
2 MW	5SY [1], 5SL4 (1P+N devices only)	5SU1.5	Up to 16 A	1 MW	5SM6021-2
			Up to 40 A	1 MW	5SM6024-2

[1] Not for 5SY5, 5SY8, 5SL60 2-pole

Further technical specifications

		5SM6
Standards		
Standards		IEC/EN 62606
Supply		
Rated voltage U_n		230 V
Rated current I_n		Up to 16/40 A
Rated frequency		50 Hz
Power loss		0.6 W
Contacts		
Number of poles		2-pole
Service life	Average number of switching cycles	>10000
Safety		
Touch protection	Acc. to EN 50274 (VDE 0660-514)	Finger and back-of-hand safe
Degree of protection	Acc. to EN 60529 (VDE 0470-1)	IP20, with connected conductors
Overvoltage category		III
Tripping in the event of overvoltage		>275 V
Connections		
Terminal/conductor cross-sections	Solid and stranded	0.75 ... 16 mm^2
	Finely stranded with end sleeve	0.75 ... 10 mm^2
Terminal tightening torque		2.0 ... 2.5 Nm
Mains connection		Bottom
Ambient conditions		
Permissible ambient temperature		–25 ... +40 °C
Permissible storage temperature		–40 ... +75 °C
Resistance to climate at 95% relative air humidity	Acc. to IEC 60068-2-30	28 cycles, 55 °C
Pollution degree		2
CFC and silicone-free		Yes
Mounting position		Any

Suitable busbars, page 3/54 onwards
Suitable busbars and end caps, page 3/66 onwards

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Mechanical accessories

Mechanical rotary operating mechanisms complete with handle



- For 5SY, 5SP4, 5SL (but not for 5SL.0 1P + N in 1TE), 5TL1, 5TE2, 5TE8, 5SU1

Versions	Article No.
Handle black	5ST3060
Handle red/yellow	5ST3061

Terminal cover



- For miniature circuit breakers, but not for 5SL60..
- For additional covering of the screw openings per pole
- Lockable
- In the case of 5SY, also prevents removal of device from the standard mounting rail

Article No.
5ST3800

Handle locking devices

- To prevent undesired mechanical ON/OFF switching
- Sealable





For miniature circuit breakers	For padlocks with	Article No.
5SP4, 5SY	Max. 3 mm shackle	5ST3801
5SL, 5TL1	3 ... 6 mm shackle	5ST3806

Padlocks



- For 5ST3801 and 5ST3806 handle locking devices and remote operating mechanisms 5ST3054 ... 58, 5ST3070

Article No.
5ST3802

Locking devices

- Comprising 5ST3801 or 5ST3806 handle locking device and 5ST3802 padlock

For miniature circuit breakers	Comprising	Article No.
5SP4 and 5SY	5ST3801 handle locking device, 5ST3802 padlock	5ST3803
5SL, 5SV, 5TL1	5ST3806 handle locking device, 5ST3802 padlock	5ST3807

Spacers



- Can be placed on either side of the standard mounting rail. Two spacers allow for convenient cable routing

Mounting width	Article No.
0.5 MW	5TG8240

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Device labels

- Adhesive
- For modular installation devices, e.g. 5SY, 5SL, 5TL1

Versions	Article No.
15 x 6 mm, white (WIN 098)	8WH8210-0AA35
15 x 6 mm, yellow (WIN 099)	8WH8210-0AA36

Terminal covers, gray



- For surface mounting, degree of protection IP40
- Sealable
- Can be used with 35 mm mounting rail

For widths up to	Article No.
2.5 MW	5SW3004
4.5 MW	5SW3005

Wall enclosures, gray



- For flush mounting, degree of protection IP40
- Can be used with 35 mm mounting rail

For widths up to	Article No.
2.5 MW	5SW3006
4.5 MW	5SW3007

Molded-plastic enclosures, gray



- For surface mounting, degree of protection IP54
- Sealable
- Can be used with 35 mm mounting rail
- With transparent hinged lid

For widths up to	Article No.
4.5 MW	5SW1200

Covers



- Can be assembled as mini distribution board
- Suitable for all devices
- Cover parts prepared for rail mounting of conventional label caps

Comprising	Article No.
End plate	5ST2134
Angled profile	5ST2135
Alternatively flat profile	5ST2136

Holders for front panel installation



- Universal use for devices from 1 to 6 MW

Cutout height	Cutout width	Article No.
$45^{+0.5}$ mm	23, 41, 59, 77, 95 or 113 mm	7LF9006

Intermediate frames



- For 70 mm devices in 55 mm ALPHA SIMBOX small distribution boards

Versions	Article No.
1-tier	8GB4561
2-tier	8GB4562
3-tier	8GB4563
4-tier	8GB4564

System overview, page 3/5

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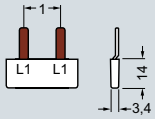
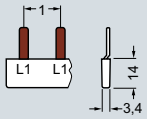
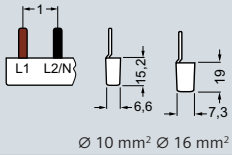
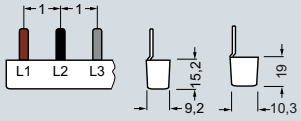
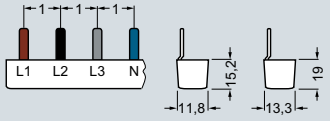
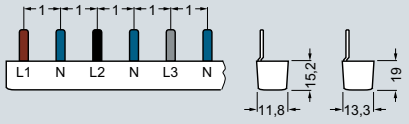
Standard busbars

5ST36, fixed length, cannot be cut

For miniature circuit breakers (MCBs)

Pin spacing in MW (1 MW = 18 mm)	Application	No. of MW	Length	Conductor cross-section 10 mm²	16 mm²
Single-phase				**Article No.**	**Article No.**
	For 2 MCBs 1P	2 MW	33 mm	5ST3600	5ST3630
	For 6 MCBs 1P	6 MW	105 mm	5ST3601	5ST3631
	For 12 MCBs 1P	12 MW	212 mm	5ST3602	5ST3632
Two-phase / single-phase + N				**Article No.**	**Article No.**
 Ø 10 mm² Ø 16 mm²	For 2 MCBs (2P / 1P+N)	4 MW	76 mm	5ST3606	5ST3636
	For 3 MCBs (2P / 1P+N)	6 MW	105 mm	5ST3607	5ST3637
	For 6 MCBs (2P / 1P+N)	12 MW	210 mm	5ST3608	5ST3638
Three-phase				**Article No.**	**Article No.**
 Ø 10 mm² Ø 16 mm²	For 2 MCBs 3P	6 MW	102 mm	5ST3613	5ST3643
	For 3 MCBs 3P	9 MW	157.5 mm	5ST3614	5ST3644
	For 4 MCBs 3P	12 MW	210 mm	5ST3615	5ST3645
	Combi pack: 20× 5ST3613 + 10× 5ST3614 + 50× 5ST3615 + 50× 5ST3655			5ST3656	–
	Combi pack: 20× 5ST3643 + 10× 5ST3644 + 50× 5ST3645 + 50× 5ST3655			–	5ST3657
Four-phase / three-phase + N				**Article No.**	**Article No.**
 Ø 10 mm² Ø 16 mm²	For 2 MCBs (4P / 3P+N)	8 MW	138 mm/ 140 mm	5ST3621	5ST3651
	For 3 MCBs (4P / 3P+N)	12 MW	210 mm	5ST3622	5ST3652
 Ø 10 mm² Ø 16 mm²	For 6 MCBs (1P+N)	12 MW	210 mm	5ST3623	5ST3653

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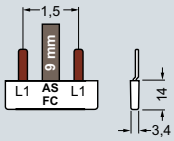
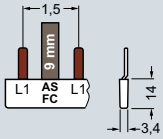
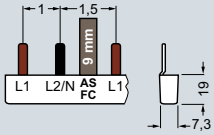
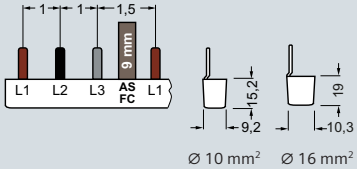
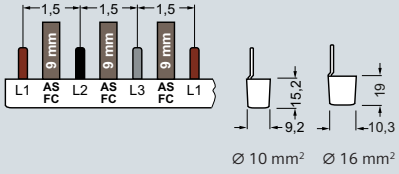
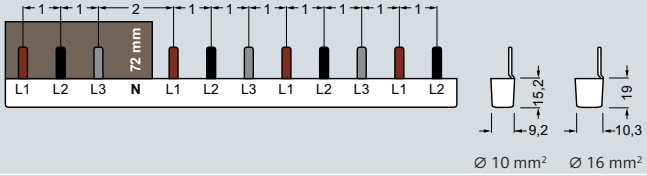
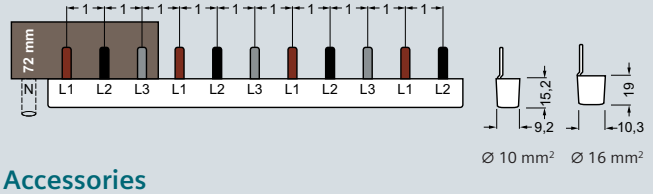
For MCBs equipped with auxiliary switch (AS) or fault signal contact (FC)

Pin spacing in MW (1 MW = 18 mm)	Application	No. of MW	Length	Conductor cross-section 10 mm²	16 mm²
Single-phase				Article No.	Article No.
	For 2 MCBs 1P	2 MW	40 mm	5ST3603	5ST3633
	For 6 MCBs 1P	6 MW	158 mm	5ST3604	5ST3634
	For 9 MCBs 1P	9 MW	237 mm	5ST3605	5ST3635
Two-phase / single-phase + N				Article No.	Article No.
	For 2 MCBs (2P / 1P+N)	4 MW	76 mm	–	5ST3640
	For 3 MCBs (2P / 1P+N)	6 MW	121 mm	–	5ST3641
	For 5 MCBs (2P / 1P+N)	10 MW	210 mm	–	5ST3642
Three-phase				Article No.	Article No.
	For 2 MCBs 3P	6 MW	115 mm	5ST3616	5ST3646
	For 4 MCBs 3P	12 MW	237 mm	5ST3617	5ST3647
	For 6 MCBs 1P	9 MW	156 mm/ 158 mm	5ST3618	5ST3648
	For 9 MCBs 1P	12 MW	227 mm	5ST3620	5ST3650

For MCBs with RCCB

Pin spacing in MW (1 MW = 18 mm)	Application	No. of MW	Length	Conductor cross-section 10 mm²	16 mm²
Three-phase				Article No.	Article No.
	For 8 MCBs 1P with 1 RCCB 3P+N, N right	12 MW	210 mm	5ST3624	5ST3654
	For 8 MCBs 1P with 1 RCCB 3P+N, N left	11 MW	192 mm	5ST3667	5ST3668

Accessories

Terminals for 5ST36 and 5ST37		Article No.
For conductors up to 25 mm²	Cable entry on the left	5ST3768-4
	Cable entry in the center	5ST3768-3
	Cable entry on the right	5ST3768-5
For conductors up to 50 mm²	Cable entry on the left	5ST3760-4
	Cable entry in the center	5ST3760-3
	Cable entry on the right	5ST3760-5

Terminals for infeed at side		Article No.
For conductors up to 25 mm²	Short	5ST3768
	Short, IP20	5ST3771-2
Touch protection		**Article No.**
For free connections, yellow (RAL 1004) 5× 1 pin		5ST3655

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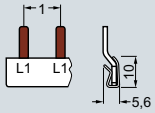
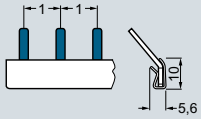
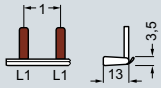
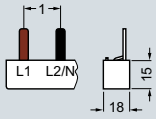
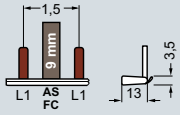
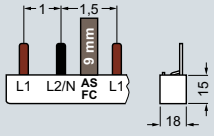
Standard busbars

5ST37, can be cut

For miniature circuit breakers (MCBs)

Pin spacing in MW (1 MW = 18 mm)	Application	No. of MW	Length	End caps incl.	Color	Conductor cross-section 10 mm²	16 mm²
Single-phase, straight						**Article No.**	**Article No.**
	For MCB 1P+N compact	12 MW	216 mm	■	Gray	5ST3762	–
					Blue	5ST3687-0	–
		56 MW	1016 mm	–	Gray	5ST3764	–
					Blue	5ST3787-0	–
Single-phase, angled 45°						**Article No.**	**Article No.**
	For MCB 1P+N compact	12 MW	216 mm	■	Blue	5ST3763	–
		56 MW	1016 mm	–	Blue	5ST3765	–
Single-phase, angled 90°						**Article No.**	**Article No.**
	For MCBs 1P	12 MW	214 mm	■		5ST3730	5ST3700
		56 MW	1016 mm	–		5ST3731	5ST3701
Two-phase / single-phase + N						**Article No.**	**Article No.**
	For 2MW devices (2P / 1P+N)	12 MW	214 mm	■		5ST3734	5ST3704
		56 MW	1016 mm	–		5ST3735	5ST3705

For MCBs equipped with auxiliary switch (AS) / fault signal contact (FC)

Pin spacing in MW (1 MW = 18 mm)	Application	No. of MW	Length	End caps incl.	Conductor cross-section 10 mm²	16 mm²
Single-phase, angled 90°					**Article No.**	**Article No.**
	For MCBs 1P	12 MW	214 mm	■	5ST3732	5ST3702
		56 MW	1016 mm	–	5ST3733	5ST3703
Two-phase / single-phase + N					**Article No.**	**Article No.**
	For 2MW devices (2P / 1P+N)	12 MW	214 mm	■	5ST3736	5ST3706
		56 MW	1016 mm	–	5ST3737	5ST3707

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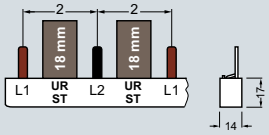
For MCBs equipped with undervoltage release (UR) / shunt trips (ST)

Pin spacing in MW (1 MW = 18 mm)	Application	No. of MW	Length	End caps incl.	Conductor cross-section 10 mm²	Conductor cross-section 16 mm²
Two-phase					**Article No.**	**Article No.**
	For MCBs 1P with UR / ST	56 MW	1016 mm	–	5ST3735-2	–

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Accessories

Terminals for 5ST36 and 5ST37		Article No.
For conductors up to 25 mm²	Cable entry on the left	5ST3768-4
	Cable entry in the center	5ST3768-3
	Cable entry on the right	5ST3768-5
For conductors up to 50 mm²	Cable entry on the left	5ST3760-4
	Cable entry in the center	5ST3760-3
	Cable entry on the right	5ST3760-5

Terminals for infeed at side		Article No.
For conductors up to 25 mm²	Short	5ST3768
	Short, IP20	5ST3771-2
End caps		**Article No.**
For single-phase busbars (MCB 1P+N compact)	Gray	5ST3766
	Blue	5ST3767
	White	5ST3748
For two-phase busbars		5ST3750
Touch protection		**Article No.**
For free connections, yellow (RAL 1004) 5× 1 pin		5ST3655

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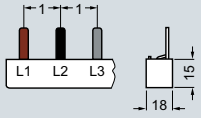
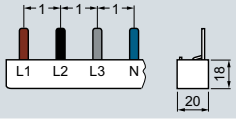
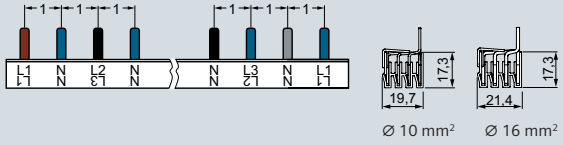
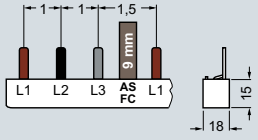
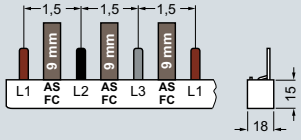
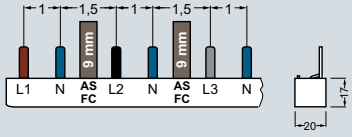
Standard busbars

5ST37, can be cut

For miniature circuit breakers (MCBs)

Pin spacing in MW (1 MW = 18 mm)	Application	No. of MW	Length	End caps incl.	Conductor cross-section 10 mm²	16 mm²
Three-phase					**Article No.**	**Article No.**
	For MCBs 3P	12 MW	214 mm	■	5ST3738	5ST3708
		56 MW	1016 mm	–	5ST3740	5ST3710
Four-phase / three-phase + N					**Article No.**	**Article No.**
	For MCBs 4P or 3P+N	12 MW	214 mm	■	5ST3745	5ST3715
		56 MW	1016 mm	–	5ST3746	5ST3716
	For RCBOs or MCBs 1P+N	56 MW	1000 mm	–	5ST3770-2	5ST3770-3

For MCBs equipped with auxiliary switch (AS) / fault signal contact (FC)

Pin spacing in MW (1 MW = 18 mm)	Application	No. of MW	Length	End caps incl.	Conductor cross-section 10 mm²	16 mm²
Three-phase					**Article No.**	**Article No.**
	For MCBs 3P	12 MW	214 mm	■	5ST3741	5ST3711
		56 MW	1016 mm	–	5ST3742	5ST3712
	For MCBs 1P	12 MW	214 mm	■	5ST3743	5ST3713
		56 MW	1016 mm	–	5ST3744	5ST3714
Four-phase / three-phase + N					**Article No.**	**Article No.**
	For MCBs 1P+N	56 MW	1016 mm	–	5ST3746-2	–

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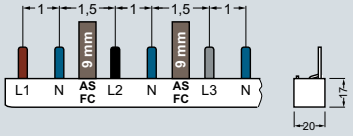
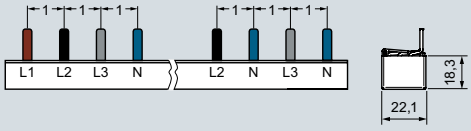
For MCBs with line-side RCCB or RCCBs equipped with AS/FC devices

Pin spacing in MW (1 MW = 18 mm)	Application	No. of MW	Length	End caps incl.	Conductor cross-section 10 mm²	16 mm²
Four-phase / three-phase + N					**Article No.**	**Article No.**
	For RCCBs/MCBs	56 MW	1016 mm	–	5ST3746-2	–
	For 6 MCBs 1P+N with 1 RCCB 3P+N, N right	16 MW	292 mm	■	5ST3770-4	5ST3770-5

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Accessories

Terminals for 5ST36 and 5ST37		Article No.
For conductors up to 25 mm²	Cable entry on the left	5ST3768-4
	Cable entry in the center	5ST3768-3
	Cable entry on the right	5ST3768-5
For conductors up to 50 mm²	Cable entry on the left	5ST3760-4
	Cable entry in the center	5ST3760-3
	Cable entry on the right	5ST3760-5

End caps	Article No.
For three-phase busbars	5ST3750
For four-phase busbars	5ST3718
Touch protection	**Article No.**
For free connections, yellow (RAL 1004) 5× 1 pin	5ST3655

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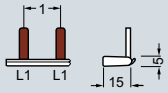
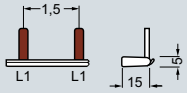
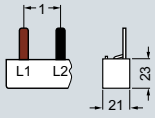
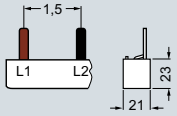
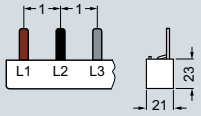
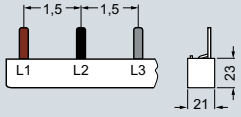
Standard busbars

5ST37 acc. to UL 508, can be cut

For miniature circuit breakers (MCBs)

Pin spacing in MW (1 MW = 18 mm)	Application	No. of MW	Length	Conductor cross-section 18 mm²	25 mm²
Single-phase				**Article No.**	**Article No.**
	For MCBs 1P or fuse holders 10 x 38 mm/class CC	56 MW	1000 mm	5ST3701-0HG	–
	For MCBs 1P or fuse holders 14 x 51 mm	56 MW	1000 mm	–	5ST3701-2HG
Two-phase				**Article No.**	**Article No.**
	For MCBs 2P or fuse holders 10 x 38 mm/class CC	56 MW	1000 mm	5ST3705-0HG	–
	For MCBs 2P or fuse holders 14 x 51 mm	56 MW	1000 mm	–	5ST3705-2HG
Three-phase				**Article No.**	**Article No.**
	For MCBs 3P or fuse holders 10 x 38 mm/class CC	56 MW	1000 mm	5ST3710-0HG	–
	For MCBs 3P or fuse holders 14 x 51 mm	56 MW	1000 mm	–	5ST3710-2HG

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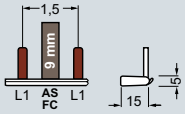
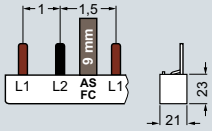
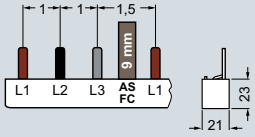
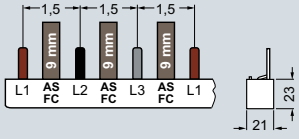
für LS mit angebautem Hilfsstrom- (AS) / Fehlersignalschalter (FC)

Pin spacing in MW (1 MW = 18 mm)	Application	No. of MW	Length	Conductor cross-section 18 mm²	25 mm²
Single-phase				**Article No.**	**Article No.**
	For MCBs 1P	56 MW	1000 mm	5ST3703-0HG	–
Two-phase				**Article No.**	**Article No.**
	For MCBs 2P	56 MW	1000 mm	5ST3707-0HG	–
Three-phase				**Article No.**	**Article No.**
	For MCBs 3P	56 MW	1000 mm	5ST3712-0HG	–
	For MCBs 1P	56 MW	1000 mm	5ST3714-0HG	–

Accessories

Terminals according to UL 508		Article No.
For infeed at the device	35 mm²	5ST3770-0HG
For infeed at the busbar	50 mm²	5ST3770-1HG

End caps acc. to UL 508	Article No.
For single-phase busbars	5ST3748-0HG
For two- and three-phase busbars	5ST3750-0HG

Touch protection acc. to UL 508	Article No.
For open terminals, yellow 5× 1 pin	5ST3655-0HG

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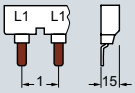
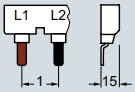
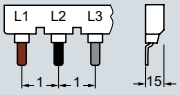
Standard busbars

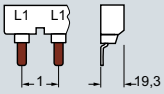
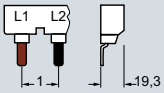
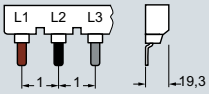
5ST3.. acc. to UL 489 specially for 5SJ4... -.HG..

Fixed length, cannot be cut, for miniature circuit breakers (MCBs) [1)]

Pin spacing in MW (1 MW = 18 mm)	Application	No. of MW	Length	Conductor cross-section 16 mm²
Single-phase				**Article No.**
	For 6 MCBs 1P	6 MW	100 mm	5ST3663-0HG
	For 12 MCBs 1P	12 MW	205 mm	5ST3663-1HG
	For 18 MCBs 1P	18 MW	310 mm	5ST3663-2HG
Two-phase				**Article No.**
	For 6 MCBs 1P	6 MW	100 mm	5ST3664-0HG
	For 12 MCBs 1P	12 MW	205 mm	5ST3664-1HG
	For 18 MCBs 1P	18 MW	310 mm	5ST3664-2HG
Three-phase				**Article No.**
	For 2 MCBs 3P	6 MW	100 mm	5ST3665-0HG
	For 4 MCBs 3P	12 MW	205 mm	5ST3665-1HG
	For 6 MCBs 3P	18 MW	310 mm	5ST3665-2HG

[1)] All unassigned pins of the busbars that cannot be cut must be covered with 5ST3666-1HG touch protection covers.

Can be cut, for MCBs

Pin spacing in MW (1 MW = 18 mm)	Application	No. of MW	Length	Conductor cross-section 18 mm²
Single-phase				**Article No.**
	For MCBs 1P	56 MW	1016 mm	5ST3701-3HG
Two-phase				**Article No.**
	For MCBs 2P	56 MW	1016 mm	5ST3705-3HG
Three-phase				**Article No.**
	For MCBs 3P	56 MW	1016 mm	5ST3710-3HG

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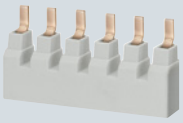
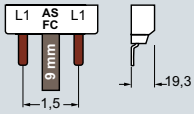
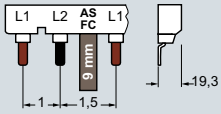
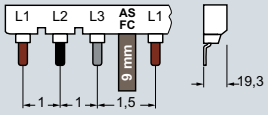
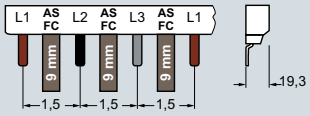


Can be cut, for MCBs equipped with auxiliary switch (AS) / fault signal contact (FC)

Pin spacing in MW (1 MW = 18 mm)	Application	No. of MW	Length	Conductor cross-section 18 mm²
Single-phase				**Article No.**
	For MCBs 1P	56 MW	1016 mm	5ST3703-3HG
Two-phase				**Article No.**
	For MCBs 2P	56 MW	1016 mm	5ST3707-3HG
Three-phase				**Article No.**
	For MCBs 3P	56 MW	1016 mm	5ST3712-3HG
	For MCBs 1P	56 MW	1016 mm	5ST3714-3HG

Accessories

Terminals according to UL 489		Article No.
For infeed at the 5SJ4... -.HG.. miniature circuit breaker	16 mm²	5ST3666-0HG
	18 mm²	5ST3770-3HG
For infeed at the busbar	16 mm²	5ST3666-2HG
End caps acc. to UL 489		**Article No.**
For single-, two- and three-phase busbars		5ST3750-3HG
Touch protection acc. to UL 489		**Article No.**
For open terminals, yellow 3× 1 pin	For 5ST37..-.HG busbars that cannot be cut	5ST3666-1HG
	For 5ST37..-3HG busbars that can be cut	5ST3655-3HG

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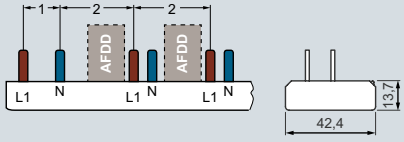
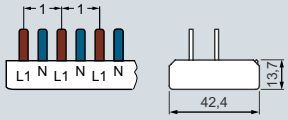
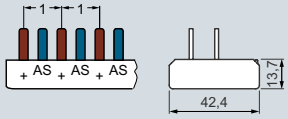
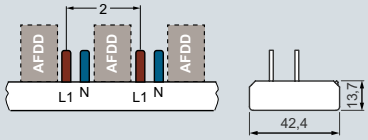
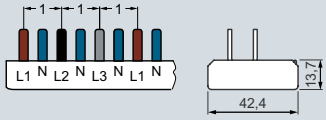
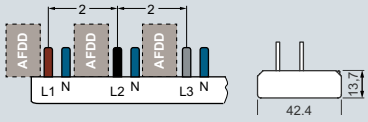
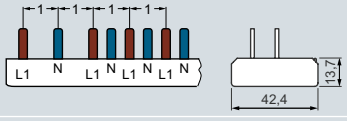
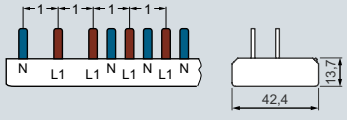
Compact busbars

5ST36, fixed length, cannot be cut

Pin spacing in MW (1 MW = 18 mm)	Application	No. of MW	Length	End caps incl.	Conductor cross-section 10 mm²
Two-phase / single-phase + N, for infeed via RCCB					**Article No.**
	For 1× RCCB 1P+N and 5× compact devices equipped with 5SM6 arc fault detection device	12 MW	216 mm	■	5ST3685-0
Two-phase / single-phase + N					**Article No.**
	For compact devices	6 MW	113 mm	■	5ST3674-6 new
		9 MW	166 mm	■	5ST3674-7 new
		12 MW	218 mm	■	5ST3674-0
	For 12x CBE (device protection switch) 5SY17	12 MW	218 mm	■	5ST3674-1 new
	For 6× compact devices equipped with 5SM6 arc fault detection device	11 MW	200 mm	■	5ST3676-0
Four-phase / three-phase + N					**Article No.**
	For compact devices	6 MW	113 mm	■	5ST3673-6 new
		9 MW	116 mm	■	5ST3673-7 new
		12 MW	218 mm	■	5ST3673-0
		14 MW	254 mm	■	5ST3673-4 new
	For 6× compact devices equipped with 5SM6 arc fault detection device	11 MW	200 mm	■	5ST3675-0

5ST37, can be cut

Pin spacing in MW (1 MW = 18 mm)	Application	No. of MW	Length	End caps incl.	Conductor cross-section 10 mm²
Two-phase / single-phase + N, for infeed via RCCB					**Article No.**
	For 1× RCCB 1P+N and 10× compact devices	12 MW	215 mm	■	5ST3784-0
	For 1× RCCB 1P+N (RCCB N-left only) and 10× compact devices	12 MW	215 mm	■	5ST3784-0KL

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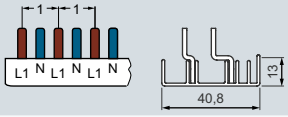
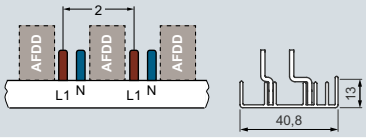
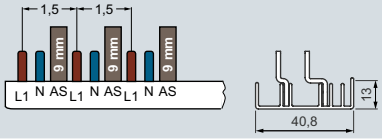
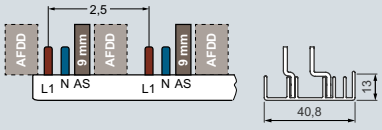
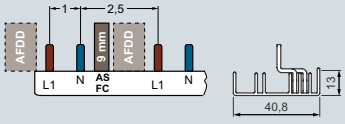
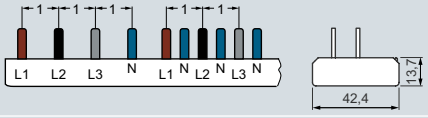
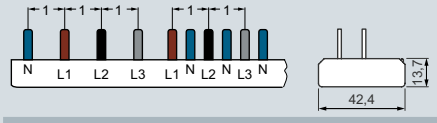
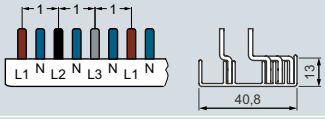
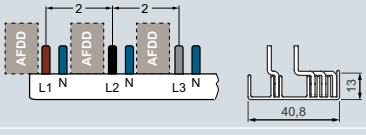
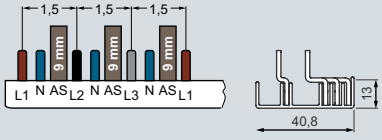
5ST37, can be cut

Pin spacing in MW (1 MW = 18 mm)	Application	No. of MW	Length	End caps incl.	Conductor cross-section 10 mm²
Two-phase / single-phase + N					**Article No.**
	For compact devices	60 MW	1060 mm	–	5ST3774-0
	For compact devices equipped with 5SM6 arc fault detection device	59 MW	1042 mm	–	5ST3776-0
	For compact devices equipped with auxiliary switch	59.5 MW	1055 mm	–	5ST3778-0
	For compact devices equipped with 5SM6 arc fault detection device and auxiliary switch	58.5 MW	1036 mm	–	5ST3780-0
	For 2 MW units (MCBs or RCBOs) with 5SM6 arc fault detection device and auxiliary switch	54 MW	956 mm	–	5ST3786-0
Four-phase / three-phase + N, for infeed via RCCB					**Article No.**
	For 1× RCCB 3P+N and 8× compact devices	12 MW	216 mm	■	5ST3783-0
	For 1× RCCB 3P+N (RCCB N-left only) and 8× compact devices	12 MW	216 mm	■	5ST3783-0KL
Four-phase / three-phase + N					**Article No.**
	For compact devices	60 MW	1060 mm	–	5ST3773-0
	For compact devices equipped with 5SM6 arc fault detection device	59 MW	1042 mm	–	5ST3775-0
	For compact devices equipped with auxiliary switch	59.5 MW	1055 mm	–	5ST3777-0

Accessories

Terminals for infeed at side	Article No.
For conductors up to 25 mm² Short, IP20	5ST3771-2

End caps	Article No.
Two- and three-phase busbars	5ST3788-0

Touch protection		Article No.
For free connections, yellow (RAL 1004)	For pins L1, N	5ST3655
	For pins L2, L3	5ST3655-0HG

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Accessories for busbars

General accessories

Terminals

	For conductors	Version	Cable entry	Infeed	Article No.
	Up to 25 mm²	Short	–	Side	5ST3768
		Short, IP20	–	Side	5ST3771-2
	Up to 25 mm²	–	Center	–	5ST3768-3
			Left	–	5ST3768-4
			Right	–	5ST3768-5
	Up to 30 mm²	–	–	Busbar	5ST3770-1HG
	Up to 35 mm²	–	–	Device	5ST3770-0HG
	Up to 35 mm²	For 5SJ4... -.HG..	–	Miniature circuit breaker	5ST3666-0HG
		For 5ST37..-3HG that can be cut	–	Miniature circuit breaker	5ST3770-3HG
	Up to 50 mm²	–	Center	–	5ST3760-3
			Left	–	5ST3760-4
			Right	–	5ST3760-5
	Up to 50 mm²	–	–	Busbar	5ST3666-2HG

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5ST36	5ST37	5ST37 (acc. to UL 508)	5ST3.. (acc. to UL 489)	5ST3 compact
■	■			
■	■			
	■			
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			■	
			■	
	■			
	■			
	■			
			■	

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Accessories for busbars

General accessories

Touch protection



Version	Scope of supply	Version	Article No.
For free connections, yellow (RAL 1004)	5× 1 pin	–	5ST3655
			5ST3655-0HG
	3× 1 pin	–	5ST3666-1HG
		–	5ST3655-3HG
For 10 mm² conductors	20× 5ST3613 + 10× 5ST3614 + 50× 5ST3615 + 50× 5ST3655	–	5ST3656
For 16 mm² conductors	20× 5ST3643 + 10× 5ST3644 + 50× 5ST3645 + 50× 5ST3655	For 5ST337..-3HG	5ST3657

End caps









Version	Color	Article No.
For single-phase busbars	Gray	5ST3748
For two- and three-phase busbars	Gray	5ST3750
For four-phase busbars	Gray	5ST3718
For single-, two- and three-phase busbars	Gray	5ST3750-3HG
–	Gray	5ST3766
–	Blue	5ST3767
For single-phase busbars	Gray	5ST3748-0HG
For two- and three-phase busbars	Gray	5ST3750-0HG
For two- and four-phase compact busbars	Gray	5ST3788-0

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5ST36	5ST37	5ST37 (acc. to UL 508)	5ST3.. (acc. to UL 489)	5ST3 compact
■				■
		■		■
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3

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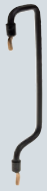
Accessories for busbars

General accessories

Series connectors





Conductor cross-section	Length of cable	Color	Number of phases	Article No.
10 mm²	125 mm	N conductor blue	1	5ST3781-0
		Cable black	1	5ST3791-0
			3	5ST3793-0
	150 mm	N conductor blue	1	5ST3781-1
		Cable black	1	5ST3791-1
			3	5ST3793-1
16 mm²	125 mm	N conductor blue	1	5ST3782-0
		Cable black	1	5ST3792-0
			3	5ST3794-0
	150 mm	N conductor blue	1	5ST3782-1
		Cable black	1	5ST3792-1
			3	5ST3794-1
	200 mm	N conductor blue	1	5ST3781-2
		Cable black	1	5ST3791-2
			3	5ST3793-2
		3× cables black and 1× N conductor blue	3 + N	5ST3793-3

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5ST36	5ST37	5ST37 (acc. to UL 508)	5ST3.. (acc. to UL 489)	5ST3 compact
	■			
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Distribution blocks for standard rail mounting

Acc. to IEC

Distribution blocks acc. to IEC

	Number of poles	Operational voltage U_e	Rated current I_e	Mounting width	Article No.
	4-pole	690 V AC	80 A	5 MW	5ST2501
			125 A	5.5 MW	5ST2502
			160 A	9 MW	5ST2503

Further technical specifications

			5ST2501	5ST2502	5ST2503
Standards					
Standards			IEC 60947-7-1		
Supply					
Operational voltage AC			690 V		
Max. rated current			80 A	125 A	160 A
Conductor cross-section					
Inputs per pole	Solid/stranded		1× 2.5 ... 16 mm²	1× 6 ... 35 mm²	1× 10 ... 50 mm²
	Finely stranded with end sleeve		1× 1.5 ... 10 mm²	1× 6 ... 25 mm²	1× 10 ... 35 mm²
Outputs per pole	Solid/stranded		8× 1.5 ... 10 mm²	5× 1.5 ... 6 mm² 2× 4 ... 16 mm²	8× 2.5 ... 16 mm² 3× 10 ... 35 mm²
	Finely stranded with end sleeve		8× 1.5 ... 10 mm²	5× 1.5 ... 6 mm² (small) 2× 4 ... 10 mm² (large)	8× 1.5 ... 16 mm² (small) 3× 10 ... 25 mm² (large)
Tightening torque					
Inputs	Screw terminals		13.5 lb-in (1.5 Nm)		3.5 ... 5 lb-in (2 Nm)
	Tools		PZ2		
Outputs	Screw terminals	Large	13.5 lb-in (1.5 Nm)		
		Small	–	7.2 lb-in (0.8 Nm)	13.5 lb-in (1.5 Nm)
	Tools	Large	PZ1	PZ2	
		Small	–	PZ1	PZ2
Safety					
Rated peak withstand current I_{pk}			21.6 kA	24 kA	20 kA
Rated short-time withstand current I_{cw} (1 s)			3 kA	4.2 kA	6.2 kA
Ambient conditions					
Permissible ambient temperature			–25 ... +70 °C		
Degree of protection	Acc. to EN 60529		IP 20		
Approved cable			Copper		

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According to IEC and UL

Distribution blocks acc. to IEC and UL



Number of poles	Operational voltage U_e	Rated current I_e	Mounting width	Article No.
1-pole	600 V AC	80 A	1.5 MW	5ST2504
		125 A	1.5 MW	5ST2505
		160 A	2 MW	5ST2507
		250 A	2.5 MW	5ST2508
		350 A	2.5 MW	5ST2511

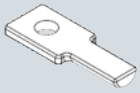
Connector for 5ST2505 distribution board



- Touch protection
- 20 mm²
- 32 mm

Version	Article No.
Single-phase	5ST2506

Terminal lug for ring terminal ends



Versions	Article No.
For 5ST2508 distribution block	5ST2510
For 5ST2511 distribution block	5ST2512

Further technical specifications

			5ST2504	5ST2505	5ST2507	5ST2508	5ST2511
Standards							
Standards			UL 1059 / UL 486E / IEC 60947-7-1 UL File No. E80027 / XCFR2 C22.2 No. 158 -1987 / XCFR8				
Supply							
Operational voltage		UL	600 V AC				
		IEC	1000/1500 V AC/DC				
Max. rated current		UL	80 A	115 A	160 A	230 A	310 A
		IEC	80 A	125 A	160 A	250 A	400 A
Conductor cross-section							
Inputs per pole	Solid/stranded	Large	3× 2.5 ... 25 mm²	10 ... 35 mm²	10 ... 70 mm²	35 ... 120 mm²	95 ... 185 mm²
			AWG 3× 14 ... 4	AWG 1× 8 ... 2	AWG 1× 8 ... 2/0	AWG 1× 2 ... 4/0	AWG 1× 3/0 ... 350 MCM
		Small	–	2.5 ... 25 mm²	–		
			–	AWG 1× 14 ... 6	–		
	Finely stranded with end sleeve	Large	3× 2.5 ... 16 mm²	10 ... 35 mm²	10 ... 50 mm²	35 ... 95 mm²	95 ... 150 mm²
			AWG 3× 14 ... 6	AWG 1× 8 ... 2	AWG 1× 8 ... 1	AWG 1× 2 ... 3/0	AWG 3/0 ... 300 MCM
		Small	–	2.5 ... 25 mm²	–		
			–	AWG 1× 14 ... 6	–		
Outputs per pole	Solid/stranded	Top	2.5 ... 6 mm²	2.5 ... 16 mm²	2.5 ... 16 mm²	2.5 ... 10 mm²	2× 2.5... 35 mm²
			AWG 4× 14 ... 10	AWG 6× 14 ... 4	AWG 6× 14 ... 4	AWG 4× 16 ... 8	AWG 2× 14 ... 2
		Center	–			2.5 ... 16 mm²	5× 2.5 ... 16 mm²
			–			AWG 5 x 14 ... 6	
		Bottom	2.5 ... 6 mm²	–		2× 2.5... 35 mm²	4× 2.5 ... 10 mm²
			AWG 4× 14 ... 10	–		AWG 2 x 14 ... 2	AWG 4 x 14 ... 8
	Finely stranded with end sleeve	Top	2.5 ... 6 mm²	2.5 ... 16 mm²		2× 2.5... 25 mm²	
			AWG 4× 14 ... 10	AWG 6× 14 ... 6	AWG 6× 14 ... 4	AWG 2× 14 ... 4	
		Bottom	2.5 ... 6 mm²	–		2× 2.5... 25 mm²	4× 2.5 ... 25 mm²
			AWG 4× 14 ... 10	–		AWG 2 x 14 ... 4	AWG 5 x 14 ... 4

Continued on next page

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Distribution blocks for standard rail mounting

According to IEC and UL (continued)

Further technical specifications			5ST2504	5ST2505	5ST2507	5ST2508	5ST2511
Tightening torque							
Inputs	Screw terminals		13.2 ... 26.5 lb-in (1.5 ... 3 Nm)	31 ... 44 lb-in (3.5 ... 5 Nm)	44 ... 53 lb-in (5 ... 6 Nm)	170 ... 186 lb-in (19 ... 21 Nm)	222 lb-in (25 Nm)
	Tools		PZ2	Allen key 4 mm	Allen key 5 mm	Allen key 6 mm	Allen key 8 mm
Outputs	Screw terminals	Large	13.2 ... 26.5 lb-in (1.5 ... 3 Nm)	17.7 ... 26.5 lb-in (2 ... 3 Nm)	13.2 ... 26.5 lb-in (1.5 ... 3 Nm)	31 ... 62 lb-in (3.5 ... 7 Nm)	
		Small	7 ... 13.2 lb-in (0.8 ... 1.5 Nm)	–		18 ... 27 lb-in (2 ... 3 Nm)	
	Tools	Large	PZ2			Standard screwdriver	
		Small	PZ1	PZ2		Standard screwdriver	
Safety							
Rated peak withstand current I_{pk}			2.7 kA	30 kA		51 kA	
Rated short-time withstand current I_{cw} (1 s)			1.9 kA	4.2 kA	11 kA	21 kA	
Overcurrent protection class			J				
Short circuit current rating (SCCR)	RMS Sym A		100 kA				
Electrical isolation	Creepage distances		1/2" (12.7 mm)				
	Clearances		3/8" (9.5 mm)				
Ambient conditions							
Permissible ambient temperature			–25 ... +70 °C				
Degree of protection	Acc. to EN 60529		IP20				
Fire class			UL 94V-0				
Approved cable			Copper				

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SIKclip wiring system

SIKclip busbar



Length	Article No.
12 MW	5ST2520
24 MW	5ST2521
36 MW	5ST2522

Connecting cables with plug



Length	Conductor cross-section	Color	Article No.
120 mm	6 mm²	Black	5ST2523
		Blue	5ST2524
	10 mm²	Black	5ST2525
		Blue	5ST2526
200 mm	6 mm²	Black	5ST2527
		Blue	5ST2528
	10 mm²	Black	5ST2530
		Blue	5ST2531

Crimp connector



- For connection to cables 4/6 mm²

Article No.
5ST2532

Mounting brackets



- For mounting on the rear of the standard mounting rail (pair)

Article No.
5ST2533

Further technical specifications

	5ST25..
Standards	
Test specifications	EN 60947-1, EN 61439-1
Rated values	
Rated operational voltage U_n	400 V AC
Max. rated current I_n	250 A
Max. rated output current I_n (at 40 °C ambient temperature)	63 A
Rated insulation voltage	660 V AC
Test voltage (50 Hz)	2.5 kV
Ambient conditions	
Degree of protection	IP20
Connecting cables	40 A (6 mm²), 63 A (10 mm²)
Connecting cable type	H07VK
Ambient temperature	−5 ... +60 °C

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More safety for humans, plants and assets

The number of electrical consumers in residential homes and commercial buildings has increased dramatically in recent decades.

Modern appliances often have quite different characteristics in terms of current consumption than earlier equipment due, for example, to the use of frequency converters in washing machines, or switched-mode power supply units in TVs, PCs or LED lights.

There are also decentralized power generators like photovoltaic systems or charging devices for electric vehicles.

All of this requires new protection strategies for electrical installations. This also includes appropriate residual current protection devices or residual current circuit breakers that will cut the current immediately and safely in the event of a fault.

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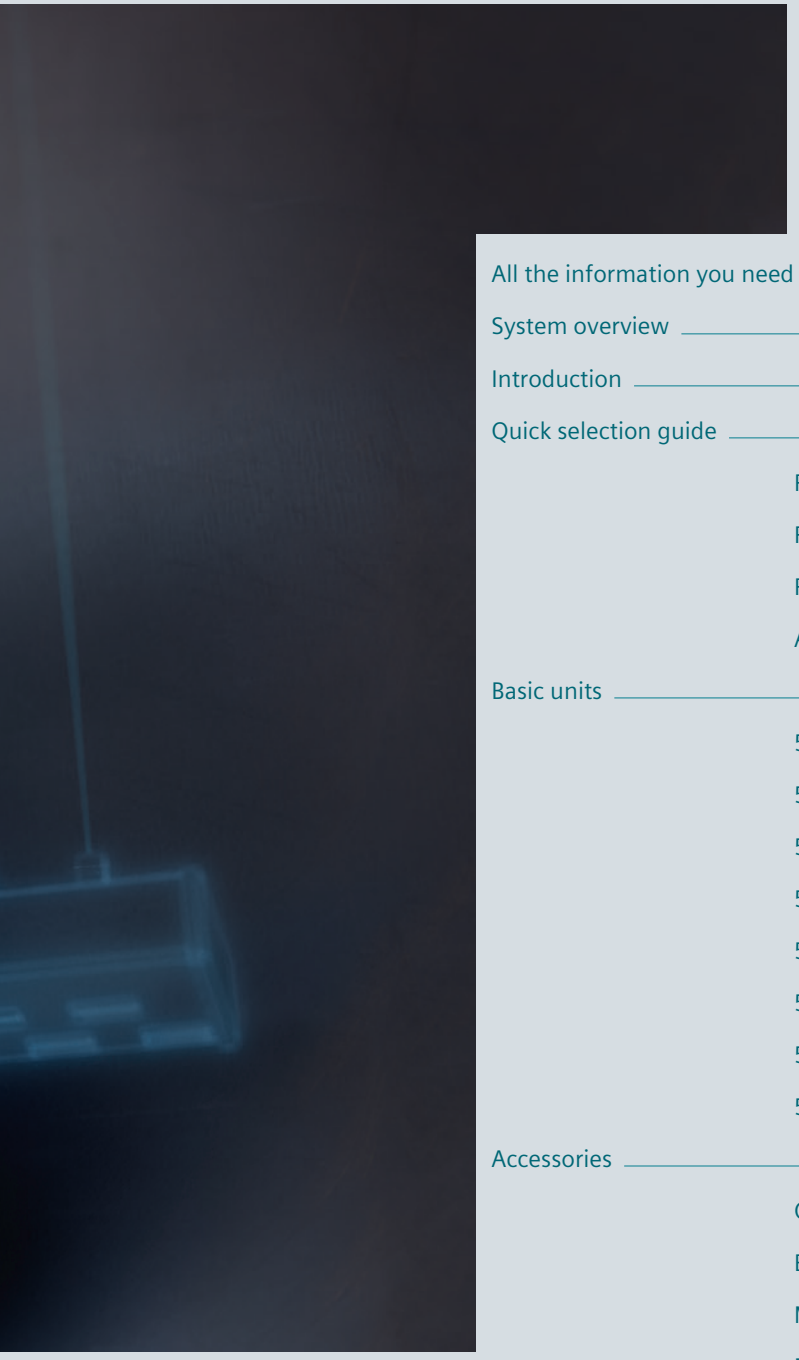
Residual Current Protective Devices / Arc Fault Detection Devices (AFDDs)



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- RCBOs 4/10
- Arc fault detection devices (AFDD) 4/12

Basic units 4/14

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- 5SV3 RCCBs, type B and B+ (SIQUENCE) 4/26
- 5SM3 RCCBs, type A and AC 4/30
- 5SM2 RC units, type A, F and AC 4/32
- 5SU1 RCBOs, type A, F, AC, B and B+ 4/38
- 5SV1 RCBOs (1 MW), type A, F and AC 4/48
- 5SM6 arc fault detection devices 4/50
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A multitude of additional information ...

Information + ordering

All the important things at a glance

Information to get you started

For information about residual current protective devices / arc fault detection devices, please visit our websites
www.siemens.com/rccb
www.siemens.com/protection-concept

Contact persons in your region

We are there when you need us

You can find your local contacts at
www.siemens.com/lowvoltage/contact

Your product in detail

The Siemens Industry Online Support portal provides comprehensive information
www.siemens.com/lowvoltage/product-support

- Technical basic information – SENTRON protection concept (109767456)
- Technology primer – Residual current protective devices (109482301)

The relevant tender specifications can be found at
www.siemens.com/lowvoltage/tenderspecifications

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Our video range

Siemens YouTube channel

- Residual current protective devices (general)
  bit.ly/2kKQhCj

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- Residual current protective devices / arc fault detection devices sie.ag/2m55Y7j

Direct forwarding to the individual products in the Industry Mall by clicking on the Article No. in the catalog or by entering this web address incl. Article No.
www.siemens.com/product?Article No.

… can be found in our online services

Commissioning + operation

Your product in detail

The Siemens Industry Online Support portal provides detailed technical information
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- Operating instructions
- Characteristic curves
- Certificates

Engineering data for CAD or CAE systems are available in the CAx Download Manager at
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Manuals

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- Configuration manual – Residual current protective devices / arc fault detection devices (45303255)

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www.siemens.com/service-catalog

Training and tutorials

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- Protection concept (WT-LVBPC)
- 5SM6 arc fault detection devices (WT-LVBAFDD)

Technical overview – Residual current protective devices / arc fault detection devices

The fast way to get you to our online services

This page provides you with comprehensive information and links on residual current protective devices / arc fault detection devices

www.siemens.com/lowvoltage/product-support (109769082)

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System overview

Basic devices and accessories

Basic units


5SV3 RCCBs


5SM3 RCCBs


5SM2 RC units


5SU1 RCBOs


5SV1 RCBOs


5SM6 and 5SV6
arc fault detection devices

Electrical accessories


Auxiliary switches (AS)


Fault signal contacts (FC)


Auxiliary switches and fault signal contacts (AS+FC)


Shunt trips (ST)


Undervoltage releases (UR)


Remote controlled (RC) mechanisms

Mechanical accessories


Locking devices


Handle couplers


Touch protection

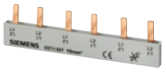

Wall enclosures


Molded-plastic enclosures


Terminal covers

Busbars and accessories


Compact busbars


Standard busbars


Terminals


Touch protection


End caps

RCCB protective socket outlets


In molded-plastic enclosure


For mounting on device box

Note:
You will find a detailed range of accessories with the basic units and in the Accessories section.

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Introduction

Residual current protective devices

Selection criteria

Equipment, power, environmental conditions

Design

RCCBs

RCBOs

RC units

Number of pole

1P+N

2P

3P

3P+N

4P

Rated current I_n

0.3 ... 125 A

Types and waveform

					6 mA	10 mA		
Type AC	■	–	–	–	–	–	–
Type A	■	■	■	■	–	–	–
Type F	■	■	■	■	■	■	–
Type B	■	■	■	■	■	■	■
Type B+	■	■	■	■	■	■	■

Version

SIGRES	With active condensation protection for use in severe ambient conditions
[G] / [K]	Super-resistant, 10 ms short-term delayed devices with increased immunity to false triggering due to transient disruptions
[S]	As an upstream group switch for selective shutdown against downstream RCCBs
500 V	With their creep and air distances designed for power grids up to 500 V alternating voltage
50 ... 400 Hz	Meet the triggering conditions up to 400 Hz due to low decrease in sensitivity with increasing frequency

Protection objective, equipment directives VDE 0100-410, VDE 0100-530, VDE 0100-7xx, VDS 3501, Shutdown conditions according to VDE 0100-410

Rated residual current $I_{\Delta n}$ (Protection objective)

Additional protection $I_{\Delta n}$ ≤30 mA

Error protection $I_{\Delta n}$ >30 mA

Fire protection $I_{\Delta n}$ ≤300 mA

Characteristic CB (for residual current operated circuit breakers)

A

B

C

D

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RCCBs



			5SV		
Types			**Instantaneous**	**SIGRES, instantaneous**	**Short-time delayed [G]**
Type AC			■	–	■
Type A			■	■	■
Type F			–	–	–
Type B / Type B+			–	–	–
Surge current withstand capability 8/20 µs					
Type A		kA	>1	>1	>3
Type F		kA	–	–	>3
Type B / Type B+		kA	–	–	–
Minimum operational voltage for test function operation					
30-mA devices		V AC	195		
Non-30-mA devices		V AC	100		
24 V devices		V AC	20		
Terminal conductor cross-sections					
1-wire	Solid/stranded	mm^2	0.75 ... 35		
	Finely stranded with end sleeve	mm^2	0.75 ... 25		
	Finely stranded without end sleeve	mm^2	1 ... 35		
2-wire, same cross-section, same conductor type	Solid/stranded	mm^2	0.75 ... 10		
	Finely stranded with end sleeve	mm^2	0.75 ... 4		
	Finely stranded without end sleeve	mm^2	1 ... 4		
1-wire + busbar (pin thickness 1.5 mm)	Solid/stranded	mm^2	10 ... 25		
	Finely stranded with non-insulated end sleeve	mm^2	6 ... 25		
	Finely stranded with insulated end sleeve	mm^2	6 ... 16		
Terminal tightening torque		Nm	2.5... 3.5		
Poles					
Number of poles			1P+N | 3P+N		
Rated voltage U_n		V AC	24 ... 125 | 230 | 400 | 500		
Operating frequency		Hz	50 | 50 ... 400 | 50/60		
Standards					
			IEC/EN 61008 (VDE 0664-10), IEC/EN 61008-2-1 (VDE 0664-11), IEC/EN 61543 (VDE 0664-30), IEC/ EN 62423 (VDE 0664-40), ÖVE EN 61008,ÖVE/ÖNORM E 8601		
Rated residual current $I_{\Delta n}$		mA	10, 30, 100, 300, 500, 1000		
Rated current I_n		A	16 ... 80		
Rated breaking capacity I_{cn}		kA	–		
Connection			N right | N left		
Service life	Average number of switching cycles		>10000		
Test button Test cycles			Half-yearly [1] | SIGRES annually [2]		
Degree of protection	Acc. to EN 60529 (VDE 0470-1)		IP20, if the distribution board is installed, with connected conductors		
Touch protection	Acc. to EN 50274 (VDE 0660-514)		Finger and back-of-hand safe		
Temperatures	Storage temperature	°C	-40 ... +75 °C		
	Ambient temperature	°C	-25 ... +45, marked with		
Resistance to climate	Acc. to IEC 60068-2-30		28 cycles (55 °C; 95% rel. air humidity)		
CFC and silicone-free			■		
Mains connection			Top | bottom | SIGRES on top only		
Overvoltage category | Pollution degree			III | 2		
More information					
Catalog LV 10 – 10/2020			See page 4/14		

[1] Extension to annual test interval under certain conditions
[2] Extension to four-yearly test interval under certain conditions

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5SV			SIQUENCE 5SV3		5SM3	
Super resistant [K]	Selective [S]	SIGRES, selective [S]	SIGRES, super-resistant [K]	SIGRES, Selective [S]	Instantaneous	Selective [S]
–	–	–	–	–	■	■
■	■	■	–	–	■	■
■	■	–	–	–	–	–
–	–	–	■	■	–	–
>3	>5	>5	–	–	>1	>5
>3	–	–	–	–	–	–
–	–	–	>3	>5	–	–
195			195		195	
100			–		–	
20			–		–	
0.75 ... 35			0.75 ... 35		1.5 ... 50 (2 MW) | 2.5 ... 50 (4 MW)	
0.75 ... 25			0.75 ... 25		–	
1 ... 35			1 ... 35		–	
0.75 ... 10			0.75 ... 10		–	
0.75 ... 4			0.75 ... 4		–	
1 ... 4			1 ... 4		–	
10 ... 25			0.75 ... 35		–	
6 ... 25			0.75 ... 25		–	
6 ... 16			1 ... 35		–	
2.5... 3.5			2.5 ... 3.0		3.0... 3.5	
1P+N | 3P+N			1P+N | 3P+N		1P+N | 3P+N	
24 ... 125 | 230 | 400 | 500			230 | 400		230 | 400	
50/60			50/60		50	
IEC/EN 61008 (VDE 0664-10), IEC/EN 61008-2-1 (VDE 0664-11), IEC/EN 61543 (VDE 0664-30), IEC/EN 62423 (VDE 0664-40), ÖVE EN 61008,ÖVE/ÖNORM E 8601			IEC/EN 62423 (VDE 0664-40), IEC/EN 61543 (VDE 0664-30), DIN VDE 0664-400 (Type B+ only)		IEC/EN 61008-1 (VDE 0664-10), IEC/EN 61008-2-1 (VDE 0664-11), IEC/EN 61543 (VDE 0664-30), EC/EN 62423 (VDE 0664-40)	
10, 30, 100, 300, 500, 1000			30, 300, 500		30, 100, 300, 500	
16 ... 80			16 ... 80		100 ... 125	
–			–		–	
N right | N left			N right		N right	
>10000			>10000		>10 000	
Half-yearly [1] | SIGRES annually [2]			Annually [2]		Half-yearly	
IP20, if the distribution board is installed, with connected conductors			IP20, if the distribution board is installed, with connected conductors		IP20, if the distribution board is installed, with connected conductors	
Finger and back-of-hand safe			Finger and back-of-hand safe		Finger and back-of-hand safe	
-40 ... +75 °C			-40 ... +75 °C		-40 ... +75 °C	
-25 ... +45, marked with			-25 ... +45, marked with		-25 ... +45, marked with	
28 cycles (55 °C; 95% rel. air humidity)			28 cycles (55 °C; 95% rel. air humidity)		28 cycles (55 °C; 95% rel. air humidity)	
■			■		■	
Top | bottom | SIGRES on top only			Top | bottom		Top | bottom	
III | 2			III | 2		III | 2	
See page 4/14			See page 4/26		See page 4/30	

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RC units



			5SM2 (0.3 ... 63 A)
Types			**Instantaneous**
Type AC			■
Type A			■
Type F			–
Surge current withstand capability 8/20 µs			
Type A		kA	>1
Type F		kA	–
Minimum operational voltage for test equipment			
30-mA devices		V AC	195
Non-30-mA devices		V AC	100
Terminal conductor cross-sections			
Solid/stranded		mm^2	1.0 ... 25
Terminal tightening torque		Nm	2.5 ... 3.0
Poles			
Number of poles			2P | 3P | 4P
Rated voltage U_n		V AC	230 | 400
Operating frequency		Hz	50 | 50/60
Standards			
			IEC/EN 61009-1 (VDE 0664-20), IEC/EN 61009-2-1 (VDE 0664-21), IEC/EN 61543 (VDE 0664-30), IEC/EN 62423 (VDE 0664-40)
Rated residual current $I_{\Delta n}$		mA	10, 30, 100, 300, 500, 1000
Rated current I_n		A	0.3 ... 63
Service life	Average number of switching cycles		>10000
Test button Test cycles			half-yearly [1]
Degree of protection	Acc. to EN 60529 (VDE 0470-1)		IP20, if the distribution board is installed, with connected conductors
Touch protection	Acc. to EN 50274 (VDE 0660-514)		Finger and back-of-hand safe
Temperatures	Storage temperature	°C	-40 ... +75 °C
	Ambient temperature	°C	-25 ... +45, marked with
Resistance to climate	Acc. to IEC 60068-2-30		28 cycles (55 °C; 95% rel. air humidity)
CFC and silicone-free			■
Mains connection			Top | bottom
Overvoltage category | Pollution degree			III | 2
More information			
Catalog LV 10 – 10/2020			See page 4/32

[1] Extension to annual test interval under certain conditions

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5SM2 (0.3 ... 63 A)		5SM2 (80 ... 100 A)	
Super resistant [K]	**Selective [S]**	**Instantaneous**	**Selective [S]**
■	■	■	■
■	■	■	■
■	–	–	–
>3	>5	>1	>5
>3	–	–	–
195		195	
100		100	
1.0 ... 25		6.0 ... 50	
2.5 ... 3.0	2.5 ... 3.0	2.5 ... 3.0	2.5 ... 3.0
2P | 3P | 4P		2P | 4P	
230 | 400		230 | 400	
50 | 50/60		50 | 50/60	
IEC/EN 61009-1 (VDE 0664-20), IEC/EN 61009-2-1 (VDE 0664-21), IEC/EN 61543 (VDE 0664-30), IEC/EN 62423 (VDE 0664-40)		IEC/EN 61009-1 (VDE 0664-20), IEC/EN 61009-2-1 (VDE 0664-21), IEC/EN 61543 (VDE 0664-30), IEC/EN 62423 (VDE 0664-40)	
30	300, 500, 1000	30, 300	300, 1000
0.3 ... 63	0.3 ... 63	80 ... 100	80 ... 100
>10000	>10000	>10000	>10000
half-yearly [1)]	half-yearly [1)]	half-yearly [1)]	half-yearly [1)]
IP20, if the distribution board is installed, with connected conductors		IP20, if the distribution board is installed, with connected conductors	
Finger and back-of-hand safe		Finger and back-of-hand safe	
-40 ... +75 °C		-40 ... +75 °C	
-25 ... +45, marked with		-25 ... +45, marked with	
28 cycles (55 °C; 95% rel. air humidity)		28 cycles (55 °C; 95% rel. air humidity)	
■		■	
Top | bottom		Top | bottom	
III | 2		III | 2	
See page 4/32		See page 4/32	

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RCBOs



			5SU1 (up to 40 A)		
Types			**Instantaneous**	**Short-time delayed / Super resistant**	**Selective [S]**
Type AC			■	■	–
Type A			■	■	■
Type B			–	–	–
Type B+			–	–	–
Type F			–	■	–
Surge current withstand capability 8/20 µs 8/20 µs					
Type A		kA	>1	>3	>5
Type F		kA	–	>3	–
Minimum voltage for operation of the test equipment					
30-mA devices		AC V		195	
Non-30-mA devices		AC V		100	
Terminal conductor cross-sections					
1 conductor at front + busbar at rear	Solid/stranded	mm^2		0.75 ... 35	
	Finely stranded with end sleeve	mm^2		0.75 ... 25	
	Finely stranded without end sleeve	mm^2		1 ... 25	
2 conductors at rear	Solid/stranded	mm^2		0.75 ... 6	
	Finely stranded with non-insulated end sleeve	mm^2		0.75 ... 4	
	Finely stranded with insulated end sleeve	mm^2		0.75 ... 4	
	Finely stranded without end sleeve	mm^2		1 ... 4	
Terminal tightening torque		Nm		2.5 ... 3.0	
Poles					
Number of poles				1P+N | 2P	
Rated voltage U_n		AC V		110 | 230	
Operating frequency		Hz		50 | 50/60	
Standards					
				IEC/DIN EN 61009-1 (VDE 0664-20), IEC/DIN EN 61009-2-1 (VDE 0664-21), IEC/DIN EN 61543 (VDE 0664-30), IEC/DIN EN 62423 (VDE 0664-40)	
Rated residual current $I_{\Delta n}$		mA		10, 30, 100, 300	
Rated current I_n		A		6 ... 40	
Rated breaking capacity I_{cn}		kA		4.5 | 6 | 10	
Connection				N right | N left	
Service life	Average number of switching cycles			>10000	
Test button Test cycles				Half-yearly [1]	
Degree of protection	Acc. to EN 60529 (VDE 0470-1)			IP20, if the distribution board is installed, with connected conductors	
Touch protection	Acc. to EN 50274 (VDE 0660-514)			Finger and back-of-hand safe	
Temperatures	Storage temperature	°C		-40 ... +75 °C	
	Ambient temperature	°C		-25 ... +45, marked with	
Resistance to climate	Acc. to IEC 60068-2-30			28 cycles (55 °C; 95% rel. air humidity)	
CFC and silicone-free				■	
Mains connection				Top | bottom	
Energy limitation class				3	
Overvoltage category | Pollution degree				III | 2	
More information					
Catalog LV 10 – 10/2020				See page 4/42	

[1] Extension to annual test interval under certain conditions

System overview, page 4/4

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5SV1		5SU1 (125 A)		5SU1 (100 A, 125 A)	
Instantaneous	Short-time delayed / Super resistant	Instantaneous	Short-time delayed / Super resistant	Short-time delayed / Super resistant	Selective [S]
■	–	■	■	–	–
■	■	■	■	–	–
–	–	–	–	■	■
–	–	–	–	■	■
–	■	–	–	–	–
>1	>3	>1	>3	>3	>5
–	>3	–	–	–	–
195		195		195	
100		100		100	
0.75 ... 16		25 ... 50		20 ... 50	
0.75 ... 10		25 ... 35		25 ... 35	
0.75 ... 16		–		–	
0.75 ... 4		–		–	
0.75 ... 2.5		–		–	
0.75 ... 1.5		–		–	
0.75 ... 4		–		–	
1.2 ... 2.0		3.0 ... 3.5		3.0 ... 3.5	
1P+N		2P | 4P		4P	
230		230 | 400		400 | 430	
50 | 50/60		50 | 50/60		50/60	
IEC/DIN EN 61009-1 (VDE 0664-20), IEC/DIN EN 61009-2-1 (VDE 0664-21), IEC/DIN EN 61543 (VDE 0664-30), IEC/DIN EN 62423 (VDE 0664-40)		IEC/DIN EN 61009-1 (VDE 0664-20), IEC/DIN EN 61009-2-1 (VDE 0664-21), IEC/DIN EN 61543 (VDE 0664-30), IEC/DIN EN 62423 (VDE 0664-40)		IEC/DIN EN 61009-1 (VDE 0664-20), IEC/DIN EN 61009-2-1 (VDE 0664-21), IEC/DIN EN 61543 (VDE 0664-30), IEC/DIN EN 62423 (VDE 0664-40)	
30, 300		30, 300, 1000		30, 300	
2 ... 16		125		100, 125	
4.5 | 6		10		10	
N right		N right | N left		N right | N left	
>10 000		>10000		>10000	
Half-yearly [1]		Half-yearly [1]		Half-yearly [1]	
IP20, if the distribution board is installed, with connected conductors		IP20, if the distribution board is installed, with connected conductors		IP20, if the distribution board is installed, with connected conductors	
Finger and back-of-hand safe		Finger and back-of-hand safe		Finger and back-of-hand safe	
-40 ... +75 °C		-40 ... +75 °C		-40 ... +75 °C	
-25 ... +45, marked with ❄		-25 ... +45, marked with ❄		-25 ... +45, marked with ❄	
28 cycles (55 °C; 95% rel. air humidity)		28 cycles (55 °C; 95% rel. air humidity)		28 cycles (55 °C; 95% rel. air humidity)	
■		■		■	
Top | bottom		Top | bottom		Top | bottom	
3		3		3	
III | 2		III | 2		III | 2	
See page 4/48		See page 4/42		See page 4/47	

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Arc fault detection devices (AFDD)





			5SM6	5SV6	5SV6....KP..
Poles					
Number of poles			2P	1P+N	1P+N
Rated voltage U_n		V AC	230	230	230
Operating frequency		Hz	50	50	50
Terminal conductor cross-sections					
Solid and stranded		mm^2	0.75 ... 16	0.75 ... 16	0.75 ... 16 (top) 0.75 ... 35 (bottom)
Finely stranded with end sleeve		mm^2	0.75 ... 10	0.75 ... 10	0.75 ... 10 (top) 0.75 ... 25 (bottom)
Terminal tightening torque		Nm	2.0 ... 2.5	1.2 ... 2.0	1.2 ... 2.0 (top) 2.5 ... 3.5 (bottom)
Standards					
			IEC/EN 62606	IEC/EN 62606	IEC/EN 62606
Rated current I_n		A	Up to 16/40 A	6 ... 40	6 ... 40
Service life	Average number of switching cycles		>10000	>10000	>10000
Mounting position			Any	Any	Any
Degree of protection	Acc. to EN 60529 (VDE 0470-1)		IP20, with connected conductors		
Touch protection	Acc. to EN 50274 (VDE 0660-514)		Finger and back-of-hand safe		
Temperatures	Storage temperature	°C	-40 ... +75 °C		
	Ambient temperature	°C	-25 ... +45, marked with		
Resistance to climate	Acc. to IEC 60068-2-30		28 cycles (55 °C; 95% rel. air humidity)		
CFC and silicone-free			■	■	■
Mains connection			Bottom	Top | bottom	Bottom
Overvoltage category | Pollution degree			III | 2	III | 2	III | 2
Tripping in the event of overvoltage		V	>275	>285	>285
More information					
Catalog LV 10 – 10/2020			See page 4/50	See page 4/51	See page 4/51

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System overview, page 4/4

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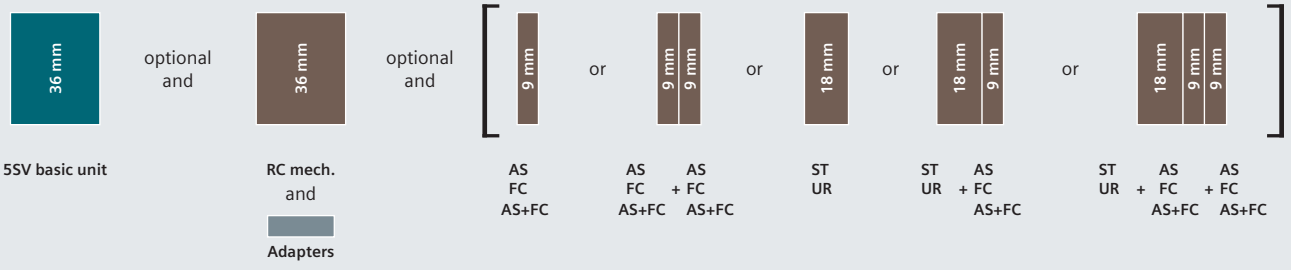
5SV RCCBs

Type A, 1P+N (2 MW)

				Instantaneous			Instantaneous (only available in Belgium) [2]
				24 ... 125 V AC	230 V AC		230 V AC
			N connection	Right	Right	Left	Right
							
$I_{\Delta n}$	I_n	Thermal overload protection [1]	Bulk packaging (36 units)				
Type A							
10 mA	16 A	–	–	–	5SV3111-6	5SV3111-6KL	–
30 mA	16 A	–	–	5SV3311-6KK13	5SV3311-6	5SV3311-6KL	–
		–	■	–	5SV3311-6GV01	–	–
	25 A	–	–	5SV3312-6KK13	5SV3312-6	5SV3312-6KL	5SV3312-6BA
		–	■	–	5SV3312-6GV01	–	–
	40 A	–	–	5SV3314-6KK13	5SV3314-6	5SV3314-6KL	5SV3314-6BA
		–	■	–	5SV3314-6GV01	–	–
		■	–	–	5SV3314-6LA	–	–
	63 A	–	–	5SV3316-6KK13	5SV3316-6	5SV3316-6KL	5SV3316-6BA
	80 A	–	–	–	5SV3317-6	5SV3317-6KL	–
100 mA	25 A	–	–	–	5SV3412-6	5SV3412-6KL	5SV3612-6BA
	40 A	–	–	–	5SV3414-6	5SV3414-6KL	5SV3614-6BA
	63 A	–	–	–	5SV3416-6	5SV3416-6KL	5SV3616-6BA
	80 A	–	–	–	5SV3417-6	5SV3417-6KL	–
300 mA	25 A	–	–	–	5SV3612-6	5SV3612-6KL	–
	40 A	–	–	–	5SV3614-6	5SV3614-6KL	–
	63 A	–	–	–	5SV3616-6	5SV3616-6KL	–
	80 A	–	–	–	5SV3617-6	5SV3617-6KL	–

[1] Thermal overload protection according to ÖVE/ÖNORM E 8001 possible up to rated current of the RCCB (40 A, 63 A).
[2] These products cannot be used in France according to NF C 15-100. Product complies with the specifications of the Belgian market only. (Simultaneous tripping of the 3 poles and the N conductor.) Available for the export market only.

Mounting concept



AS	Auxiliary switch	See page 4/54
FC	Fault signal contact	See page 4/56
AS+FC	Auxiliary switch and fault signal contact	See page 4/58
ST	Shunt trips	See page 4/59
UR	Undervoltage release	See page 4/60
RC mech.	Remote controlled mechanism	See page 4/61

Quick selection guide, page 4/6

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SIGRES, instantaneous 230 V AC	Short-time delayed [G] 230 V AC	Super resistant [K] 230 V AC	Selective [S] 230 V AC	
Right	Right	Right	Right	Left
				
–	–	–	–	–
5SV3311-6KK12	–	–	–	–
–	–	–	–	–
5SV3312-6KK12	–	5SV3312-6KK01	–	–
–	–	–	–	–
5SV3314-6KK12	–	5SV3314-6KK01	–	–
–	–	–	–	–
–	5SV3314-6LA01	–	–	–
5SV3316-6KK12	–	5SV3316-6KK01	–	–
–	–	5SV3317-6KK01	–	–
–	–	–	–	–
–	–	–	–	–
–	–	–	5SV3416-8	–
–	–	–	–	–
–	–	5SV3612-6KK01	5SV3612-8	–
–	–	5SV3614-6KK01	5SV3614-8	5SV3614-8KL
–	–	5SV3616-6KK01	5SV3616-8	5SV3616-8KL
–	–	5SV3617-6KK01	5SV3617-8	–

Accessories

Auxiliary switches (AS)		Article No.
1 NO contact + 1 NC contact	Standard	5ST3010
	For low power	5ST3013
	For low power (with diode)	5ST3013-0XX01
2 NO contacts	Standard	5ST3011
	For low power	5ST3014
2 NC contacts	Standard	5ST3012
	For low power	5ST3015
1 CO contact	Standard	5ST3016

Fault signal contacts (FC)	Article No.
1 NO contact + 1 NC contact	5ST3020
2 NO contacts	5ST3021
2 NC contacts	5ST3022

Auxiliary switches and fault signal contacts (AS+FC)	Article No.
1 CO contact (AS) + 1 CO contact (FC)	5ST3062

Shunt trips (ST)	Article No.
110 ... 415 V AC, 110 ... 220 V DC	5ST3030
24 ... 48 V AC/DC	5ST3031
12 V DC	5ST3031-0XX01

Undervoltage releases (UR)		Article No.
With integrated auxiliary switch	230 V AC	5ST3040
	110 V DC	5ST3041
	24 V DC	5ST3042
Without integrated auxiliary switch	230 V AC	5ST3043
	110 V DC	5ST3044
	24 V DC	5ST3045

Remote controlled (RC) mechanisms		Article No.
Power	12 ... 30 V AC, 12 ... 48 V DC	5ST3055
	177 ... 270 V AC	5ST3056
Power with ARD	12 ... 30 V AC, 12 ... 48 V DC	5ST3057
	177 ... 270 V AC	5ST3058
Power with extended function	12 ... 30 V AC, 12 ... 48 V DC	5ST3070

Adapter for RC mechanism	Article No.
2 MW	5ST3820-6

Quick selection guide, page 4/6

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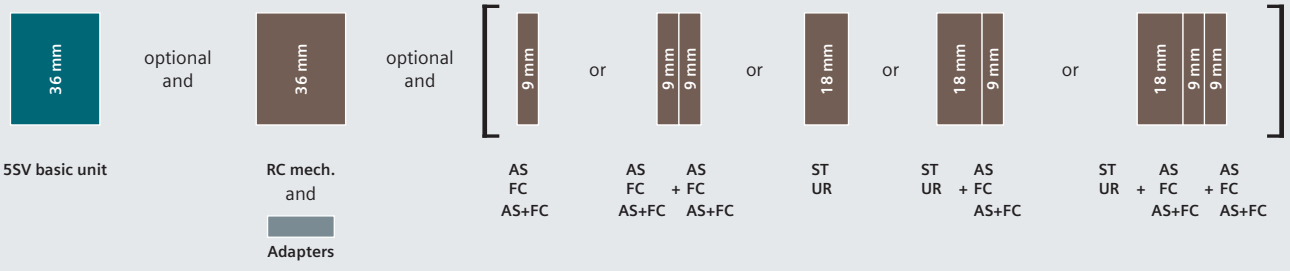
5SV RCCBs

Type F, 1P+N (2 MW)

		Super resistant [K] 230 V AC	Selective [S] 230 V AC
N connection		Right	Right
			
$I_{\Delta n}$	I_n		
Type F			
30 mA	25 A	5SV3312-3	–
	40 A	5SV3314-3	–
	63 A	5SV3316-3	–
	80 A	5SV3317-3	–
300 mA	25 A	5SV3612-3	–
	40 A	5SV3614-3	5SV3614-7
	63 A	5SV3616-3	–
	80 A	5SV3617-3	5SV3617-7

4

Mounting concept



AS	Auxiliary switch	See page 4/54
FC	Fault signal contact	See page 4/56
AS+FC	Auxiliary switch and fault signal contact	See page 4/58
ST	Shunt trips	See page 4/59
UR	Undervoltage release	See page 4/60
RC mech.	Remote controlled mechanism	See page 4/61

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Accessories

Auxiliary switches (AS)		Article No.
1 NO contact + 1 NC contact	Standard	5ST3010
	For low power	5ST3013
	For low power (with diode)	5ST3013-0XX01
2 NO contacts	Standard	5ST3011
	For low power	5ST3014
2 NC contacts	Standard	5ST3012
	For low power	5ST3015
1 CO contact	Standard	5ST3016

Fault signal contacts (FC)	Article No.
1 NO contact + 1 NC contact	5ST3020
2 NO contacts	5ST3021
2 NC contacts	5ST3022

Auxiliary switches and fault signal contacts (AS+FC)	Article No.
1 CO contact (AS) + 1 CO contact (FC)	5ST3062

Shunt trips (ST)	Article No.
110 ... 415 V AC, 110 ... 220 V DC	5ST3030
24 ... 48 V AC/DC	5ST3031
12 V DC	5ST3031-0XX01

Undervoltage releases (UR)		Article No.
With integrated auxiliary switch	230 V AC	5ST3040
	110 V DC	5ST3041
	24 V DC	5ST3042
Without integrated auxiliary switch	230 V AC	5ST3043
	110 V DC	5ST3044
	24 V DC	5ST3045

Remote controlled (RC) mechanisms		Article No.
Power	12 ... 30 V AC, 12 ... 48 V DC	5ST3055
	177 ... 270 V AC	5ST3056
Power with ARD	12 ... 30 V AC, 12 ... 48 V DC	5ST3057
	177 ... 270 V AC	5ST3058
Power with extended function	12 ... 30 V AC, 12 ... 48 V DC	5ST3070

Adapter for RC mechanism	Article No.
2 MW	5ST3820-6

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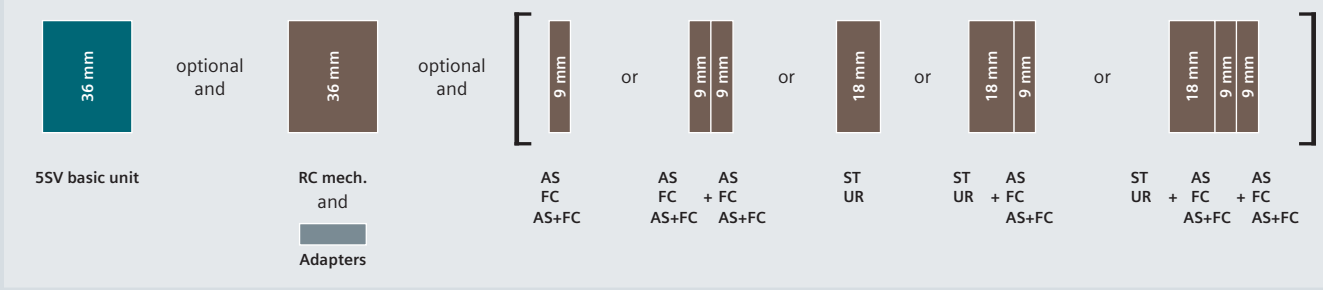
5SV RCCBs

Type AC, 1P+N (2 MW)

				Instantaneous			Short-time delayed [G]
				230 V AC		24 ... 125 V AC	230 V AC
			N connection	Right	Left	Right	Right
							
$I_{\Delta n}$	I_n	Thermal overload protection [1]	Bulk packaging (36 units)				
Type AC							
10 mA	16 A	–	–	5SV4111-0	5SV4111-0KL	–	–
30 mA	16 A	–	–	5SV4311-0	5SV4311-0KL	5SV4311-0KK13	–
	25 A	–	–	5SV4312-0	5SV4312-0KL	5SV4312-0KK13	–
		–	■	5SV4312-0GV01	–	–	–
	40 A	–	–	5SV4314-0	5SV4314-0KL	5SV4314-0KK13	5SV4314-0LA01
		–	■	5SV4314-0GV01	5SV4314-0GV02	–	–
		■	–	5SV4314-0LA	–	–	–
	63 A	–	–	5SV4316-0	5SV4316-0KL	5SV4316-0KK13	–
	80 A	–	–	5SV4317-0	5SV4317-0KL	–	–
100 mA	25 A	–	–	5SV4412-0	–	–	–
	40 A	–	–	5SV4414-0	5SV4414-0KL	–	–
	63 A	–	–	5SV4416-0	5SV4416-0KL	–	–
	80 A	–	–	5SV4417-0	–	–	–
300 mA	25 A	–	–	5SV4612-0	5SV4612-0KL	–	–
	40 A	–	–	5SV4614-0	5SV4614-0KL	–	–
	63 A	–	–	5SV4616-0	5SV4616-0KL	–	–
	80 A	–	–	5SV4617-0	5SV4617-0KL	–	–

[1] Thermal overload protection according to ÖVE/ÖNORM E 8001 possible up to rated current of the RCCB (40 A, 63 A).

Mounting concept



AS	Auxiliary switch	See page 4/54
FC	Fault signal contact	See page 4/56
AS+FC	Auxiliary switch and fault signal contact	See page 4/58
ST	Shunt trips	See page 4/59
UR	Undervoltage release	See page 4/60
RC mech.	Remote controlled mechanism	See page 4/61

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Accessories

Auxiliary switches (AS)		Article No.
1 NO contact + 1 NC contact	Standard	5ST3010
	For low power	5ST3013
	For low power (with diode)	5ST3013-0XX01
2 NO contacts	Standard	5ST3011
	For low power	5ST3014
2 NC contacts	Standard	5ST3012
	For low power	5ST3015
1 CO contact	Standard	5ST3016

Fault signal contacts (FC)	Article No.
1 NO contact + 1 NC contact	5ST3020
2 NO contacts	5ST3021
2 NC contacts	5ST3022

Auxiliary switches and fault signal contacts (AS+FC)	Article No.
1 CO contact (AS) + 1 CO contact (FC)	5ST3062

Shunt trips (ST)	Article No.
110 ... 415 V AC, 110 ... 220 V DC	5ST3030
24 ... 48 V AC/DC	5ST3031
12 V DC	5ST3031-0XX01

Undervoltage releases (UR)		Article No.
With integrated auxiliary switch	230 V AC	5ST3040
	110 V DC	5ST3041
	24 V DC	5ST3042
Without integrated auxiliary switch	230 V AC	5ST3043
	110 V DC	5ST3044
	24 V DC	5ST3045

Remote controlled (RC) mechanisms		Article No.
Power	12 ... 30 V AC, 12 ... 48 V DC	5ST3055
	177 ... 270 V AC	5ST3056
Power with ARD	12 ... 30 V AC, 12 ... 48 V DC	5ST3057
	177 ... 270 V AC	5ST3058
Power with extended function	12 ... 30 V AC, 12 ... 48 V DC	5ST3070

Adapter for RC mechanism	Article No.
2 MW	5ST3820-6

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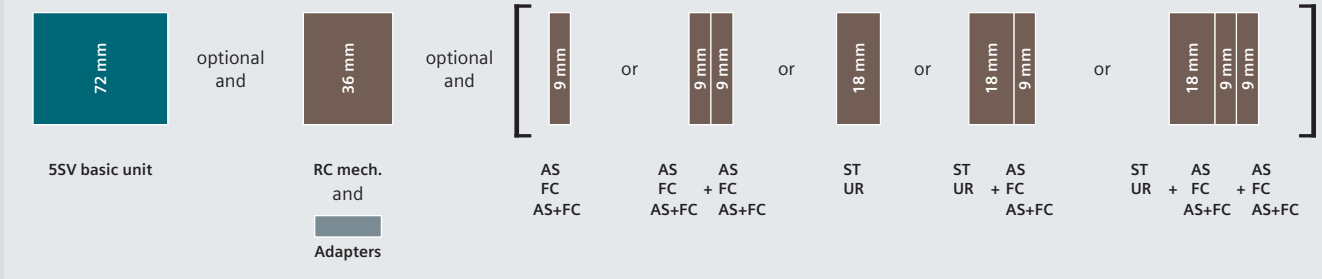
5SV RCCBs

Type A, 3P + N (4 MW)

				Instantaneous			
				400 V AC		400 V AC/400 Hz	500 V AC
			N connection	Right	Left	Right	Right
							
$I_{\Delta n}$	I_n	Thermal overload protection [1]	Bulk packaging (18 units)				
Type A							
30 mA	25 A	–	–	5SV3342-6	5SV3342-6KL	5SV3342-6KK03	5SV3352-6
		–	■	5SV3342-6GV01	–	–	–
	40 A	–	–	5SV3344-6	5SV3344-6KL	5SV3344-6KK03	5SV3354-6
		–	■	5SV3344-6GV01	5SV3344-6GV02	–	–
		■	–	5SV3344-6LA	–	–	–
	63 A	–	–	5SV3346-6	5SV3346-6KL	–	5SV3356-6
		–	■	5SV3346-6GV01	–	–	–
		■	–	5SV3346-6LA	–	–	–
	80 A	–	–	5SV3347-6	5SV3347-6KL	–	5SV3357-6
100 mA	25 A	–	–	5SV3442-6	–	–	–
	40 A	–	–	5SV3444-6	–	–	–
		■	–	5SV3444-6LA	–	–	–
	63 A	–	–	5SV3446-6	–	–	–
		■	–	5SV3446-6LA	–	–	–
	80 A	–	–	5SV3447-6	–	–	–
300 mA	25 A	–	–	5SV3642-6	5SV3642-6KL	–	5SV3652-6
	40 A	–	–	5SV3644-6	5SV3644-6KL	–	5SV3654-6
		■	–	–	–	–	–
	63 A	–	–	5SV3646-6	5SV3646-6KL	–	5SV3656-6
		■	–	–	–	–	–
	80 A	–		5SV3647-6	5SV3647-6KL	–	5SV3657-6
500 mA	25 A	–	–	5SV3742-6	–	–	–
	40 A	–	–	5SV3744-6	–	–	–
	63 A	–	–	5SV3746-6	5SV3746-6KL	–	–
		–	■	5SV3746-6GV01	–	–	–
	80 A	–	–	5SV3747-6	–	–	–
1000 mA	63 A	–	–	–	–	–	–

[1] Thermal overload protection according to ÖVE/ÖNORM E 8001 possible up to rated current of the RCCB (40 A, 63 A).
[2] These products cannot be used in France according to NF C 15-100. Product complies with the specifications of the Belgian market only. (Simultaneous tripping of the 3 poles and the N conductor.) Available for the export market only.

Mounting concept



AS	Auxiliary switch	See page 4/54	ST	Shunt trips	See page 4/59
FC	Fault signal contact	See page 4/56	UR	Undervoltage release	See page 4/60
AS+FC	Auxiliary switch and fault signal contact	See page 4/58	RC mech.	Remote controlled mechanism	See page 4/61

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Instantaneous (only available in Belgium) [2] 400 V AC	SIGRES, instantaneous 400 V AC	Short-time delayed [G] 400 V AC	Super resistant [K] 400 V AC	Selective [S] 400 V AC		SIGRES, Selective [S] 400 V AC
Right	Right	Right	Right	Right	Left	Right
						
5SV3342-6BA	5SV3342-6KK12	–	5SV3342-6KK01	–	–	–
–	–	–	–	–	–	–
5SV3344-6BA	5SV3344-6KK12	5SV3344-6LB01	5SV3344-6KK01	–	–	–
–	–	–	–	–	–	–
–	–	5SV3344-6LA01	–	–	–	–
5SV3346-6BA	5SV3346-6KK12	5SV3346-6LB01	5SV3346-6KK01	–	–	–
–	–	–	–	–	–	–
–	–	5SV3346-6LA01	–	–	–	–
–	5SV3347-6KK12	5SV3347-6LB01	5SV3347-6KK01	–	–	–
–	–	–	–	–	–	–
–	–	5SV3444-6LB01	–	5SV3444-8	–	–
–	–	5SV3444-6LA01	–	5SV3444-8LA	–	–
–	–	5SV3446-6LB01	–	5SV3446-8	–	–
–	–	5SV3446-6LA01	–	5SV3446-8LA	–	–
–	–	–	–	–	–	–
5SV3642-6BA	5SV3642-6KK12	–	5SV3642-6KK01	5SV3642-8	–	–
5SV3644-6BA	5SV3644-6KK12	–	5SV3644-6KK01	5SV3644-8	–	–
–	–	–	–	5SV3644-8LA	–	–
5SV3646-6BA	5SV3646-6KK12	–	5SV3646-6KK01	5SV3646-8	5SV3646-8KL	5SV3646-8KK12
–	–	–	–	5SV3646-8LA	–	–
–	5SV3647-6KK12	–	5SV3647-6KK01	5SV3647-8	–	–
–	–	–	–	–	–	–
–	–	–	–	–	–	–
–	–	–	–	–	–	–
–	–	–	–	–	–	–
–	–	–	–	–	–	–
–	–	–	–	5SV3846-8	–	–

Accessories

Auxiliary switches (AS)		Article No.
1 NO contact + 1 NC contact	Standard	5ST3010
	For low power	5ST3013
	For low power (with diode)	5ST3013-0XX01
2 NO contacts	Standard	5ST3011
	For low power	5ST3014
2 NC contacts	Standard	5ST3012
	For low power	5ST3015
1 CO contact	Standard	5ST3016

Fault signal contacts (FC)	Article No.
1 NO contact + 1 NC contact	5ST3020
2 NO contacts	5ST3021
2 NC contacts	5ST3022

Auxiliary switches and fault signal contacts (AS+FC)	Article No.
1 CO contact (AS) + 1 CO contact (FC)	5ST3062

Shunt trips (ST)	Article No.
110 ... 415 V AC, 110 ... 220 V DC	5ST3030
24 ... 48 V AC/DC	5ST3031
12 V DC	5ST3031-0XX01

Undervoltage releases (UR)		Article No.
With integrated auxiliary switch	230 V AC	5ST3040
	110 V DC	5ST3041
	24 V DC	5ST3042
Without integrated auxiliary switch	230 V AC	5ST3043
	110 V DC	5ST3044
	24 V DC	5ST3045

Remote controlled (RC) mechanisms		Article No.
Power	12 ... 30 V AC, 12 ... 48 V DC	5ST3055
	177 ... 270 V AC	5ST3056
Power with ARD	12 ... 30 V AC, 12 ... 48 V DC	5ST3057
	177 ... 270 V AC	5ST3058
Power with extended function	12 ... 30 V AC, 12 ... 48 V DC	5ST3070

Adapter for RC mechanism	Article No.
4 MW	5ST3820-6

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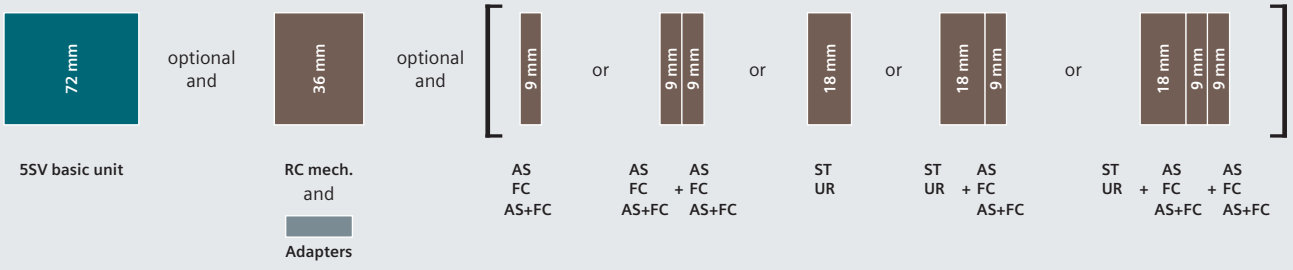
5SV RCCBs

Type F, 3P+N (4 MW)

		Super resistant [K] 400 V AC	Selective [S] 400 V AC
N connection		Right	Right
			
$I_{\Delta n}$	I_n		
Type F			
30 mA	25 A	5SV3342-3	–
	40 A	5SV3344-3	–
	63 A	5SV3346-3	–
	80 A	5SV3347-3	–
300 mA	25 A	5SV3642-3	–
	40 A	5SV3644-3	5SV3644-7
	63 A	5SV3646-3	–
	80 A	5SV3647-3	5SV3647-7

Mounting concept



AS	Auxiliary switch	See page 4/54
FC	Fault signal contact	See page 4/56
AS+FC	Auxiliary switch and fault signal contact	See page 4/58
ST	Shunt trips	See page 4/59
UR	Undervoltage release	See page 4/60
RC mech.	Remote controlled mechanism	See page 4/61

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Accessories

Auxiliary switches (AS)		Article No.
1 NO contact + 1 NC contact	Standard	5ST3010
	For low power	5ST3013
	For low power (with diode)	5ST3013-0XX01
2 NO contacts	Standard	5ST3011
	For low power	5ST3014
2 NC contacts	Standard	5ST3012
	For low power	5ST3015
1 CO contact	Standard	5ST3016

Fault signal contacts (FC)	Article No.
1 NO contact + 1 NC contact	5ST3020
2 NO contacts	5ST3021
2 NC contacts	5ST3022

Auxiliary switches and fault signal contacts (AS+FC)	Article No.
1 CO contact (AS) + 1 CO contact (FC)	5ST3062

Shunt trips (ST)	Article No.
110 ... 415 V AC, 110 ... 220 V DC	5ST3030
24 ... 48 V AC/DC	5ST3031
12 V DC	5ST3031-0XX01

Undervoltage releases (UR)		Article No.
With integrated auxiliary switch	230 V AC	5ST3040
	110 V DC	5ST3041
	24 V DC	5ST3042
Without integrated auxiliary switch	230 V AC	5ST3043
	110 V DC	5ST3044
	24 V DC	5ST3045

Remote controlled (RC) mechanisms		Article No.
Power	12 ... 30 V AC, 12 ... 48 V DC	5ST3055
	177 ... 270 V AC	5ST3056
Power with ARD	12 ... 30 V AC, 12 ... 48 V DC	5ST3057
	177 ... 270 V AC	5ST3058
Power with extended function	12 ... 30 V AC, 12 ... 48 V DC	5ST3070

Adapter for RC mechanism	Article No.
4 MW	5ST3820-6

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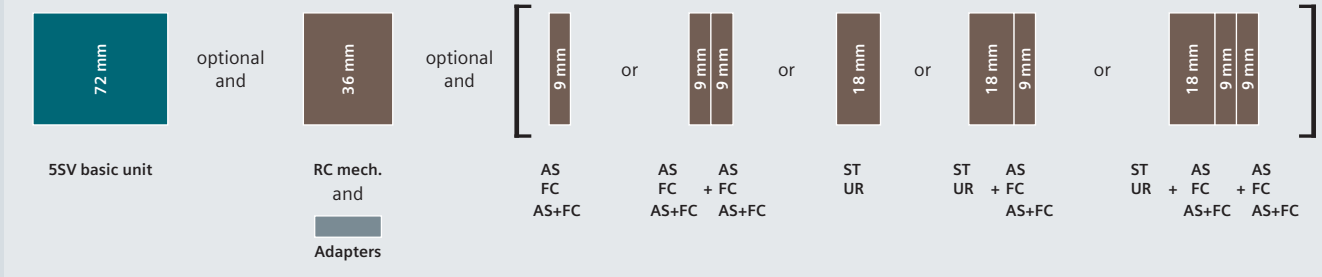
5SV RCCBs

Type AC, 3P+N (4 MW)

				Instantaneous 400 V AC		Short-time delayed [G] 400 V AC
			N connection	Right	Left	Right
						
$I_{\Delta n}$	I_n	Thermal overload protection [1]	Bulk packaging (18 units)			
Type AC						
30 mA	25 A	–	–	5SV4342-0	5SV4342-0KL	–
		–	■	5SV4342-0GV01	–	–
	40 A	–	–	5SV4344-0	5SV4344-0KL	5SV4344-0LA01
		–	■	5SV4344-0GV01	–	–
		■	–	5SV4344-0LA	–	–
	63 A	–	–	5SV4346-0	5SV4346-0KL	5SV4346-0LA01
		■	–	5SV4346-0LA	–	–
	80 A	–	–	5SV4347-0	5SV4347-0KL	–
100 mA	25 A	–	–	5SV4442-0	–	–
	40 A	–	–	5SV4444-0	–	5SV4444-0LA01
		■	–	5SV4444-0LA	–	–
	63 A	–	–	5SV4446-0	–	5SV4446-0LA01
		■	–	5SV4446-0LA	–	–
	80 A	–	–	5SV4447-0	–	–
300 mA	25 A	–	–	5SV4642-0	5SV4642-0KL	–
	40 A	–	–	5SV4644-0	5SV4644-0KL	–
	63 A	–	–	5SV4646-0	5SV4646-0KL	–
	80 A	–	–	5SV4647-0	5SV4647-0KL	–
500 mA	25 A	–	–	5SV4742-0	–	–
	40 A	–	–	5SV4744-0	–	–
	63 A	–	–	5SV4746-0	–	–
	80 A	–	–	5SV4747-0	–	–

[1] Thermal overload protection according to ÖVE/ÖNORM E 8001 possible up to rated current of the RCCB (40 A, 63 A).

Mounting concept



AS	Auxiliary switch	See page 4/54
FC	Fault signal contact	See page 4/56
AS+FC	Auxiliary switch and fault signal contact	See page 4/58
ST	Shunt trips	See page 4/59
UR	Undervoltage release	See page 4/60
RC mech.	Remote controlled mechanism	See page 4/61

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Accessories

Auxiliary switches (AS)		Article No.
1 NO contact + 1 NC contact	Standard	5ST3010
	For low power	5ST3013
	For low power (with diode)	5ST3013-0XX01
2 NO contacts	Standard	5ST3011
	For low power	5ST3014
2 NC contacts	Standard	5ST3012
	For low power	5ST3015
1 CO contact	Standard	5ST3016

Fault signal contacts (FC)	Article No.
1 NO contact + 1 NC contact	5ST3020
2 NO contacts	5ST3021
2 NC contacts	5ST3022

Auxiliary switches and fault signal contacts (AS+FC)	Article No.
1 CO contact (AS) + 1 CO contact (FC)	5ST3062

Shunt trips (ST)	Article No.
110 ... 415 V AC, 110 ... 220 V DC	5ST3030
24 ... 48 V AC/DC	5ST3031
12 V DC	5ST3031-0XX01

Undervoltage releases (UR)		Article No.
With integrated auxiliary switch	230 V AC	5ST3040
	110 V DC	5ST3041
	24 V DC	5ST3042
Without integrated auxiliary switch	230 V AC	5ST3043
	110 V DC	5ST3044
	24 V DC	5ST3045

Remote controlled (RC) mechanisms		Article No.
Power	12 ... 30 V AC, 12 ... 48 V DC	5ST3055
	177 ... 270 V AC	5ST3056
Power with ARD	12 ... 30 V AC, 12 ... 48 V DC	5ST3057
	177 ... 270 V AC	5ST3058
Power with extended function	12 ... 30 V AC, 12 ... 48 V DC	5ST3070

Adapter for RC mechanism	Article No.
4 MW	5ST3820-6

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5SV3 RCCBs (SIQUENCE)

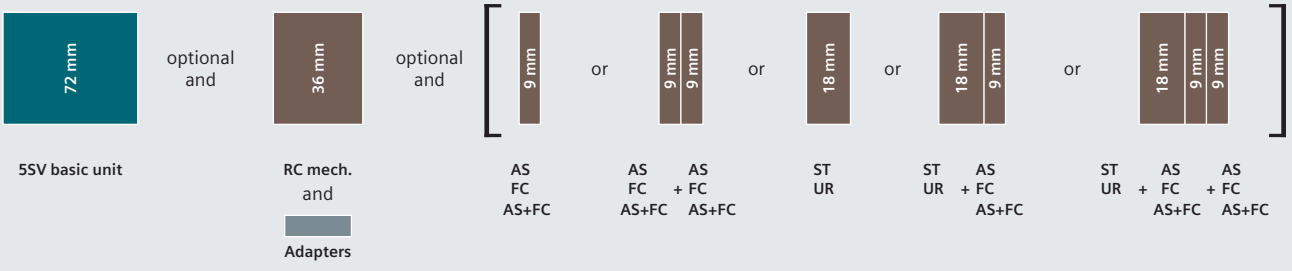
Type B, 1P+N (4 MW)

	SIGRES, super resistant [K] 230 V AC
N connection	Right



$I_{\Delta n}$	I_n	Bulk packaging (18 units)	
Type B			
30 mA	16 A	–	5SV3321-4
	25 A	–	5SV3322-4
	40 A	–	5SV3324-4
		■	5SV3324-4GV01
	63 A	–	5SV3326-4
300 mA	16 A	–	5SV3621-4
	25 A	–	5SV3622-4
	40 A	–	5SV3624-4
	63 A	–	5SV3626-4

Mounting concept



AS	Auxiliary switch	See page 4/54
FC	Fault signal contact	See page 4/56
AS+FC	Auxiliary switch and fault signal contact	See page 4/58
ST	Shunt trips	See page 4/59
UR	Undervoltage release	See page 4/60
RC mech.	Remote controlled mechanism	See page 4/61

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Accessories

Auxiliary switches (AS)		Article No.
1 NO contact + 1 NC contact	Standard	5ST3010
	For low power	5ST3013
	For low power (with diode)	5ST3013-0XX01
2 NO contacts	Standard	5ST3011
	For low power	5ST3014
2 NC contacts	Standard	5ST3012
	For low power	5ST3015
1 CO contact	Standard	5ST3016

Fault signal contacts (FC)	Article No.
1 NO contact + 1 NC contact	5ST3020
2 NO contacts	5ST3021
2 NC contacts	5ST3022

Auxiliary switches and fault signal contacts (AS+FC)	Article No.
1 CO contact (AS) + 1 CO contact (FC)	5ST3062

Shunt trips (ST)	Article No.
110 ... 415 V AC, 110 ... 220 V DC	5ST3030
24 ... 48 V AC/DC	5ST3031
12 V DC	5ST3031-0XX01

Undervoltage releases (UR)		Article No.
With integrated auxiliary switch	230 V AC	5ST3040
	110 V DC	5ST3041
	24 V DC	5ST3042
Without integrated auxiliary switch	230 V AC	5ST3043
	110 V DC	5ST3044
	24 V DC	5ST3045

Remote controlled (RC) mechanisms		Article No.
Power	12 ... 30 V AC, 12 ... 48 V DC	5ST3055
	177 ... 270 V AC	5ST3056
Power with ARD	12 ... 30 V AC, 12 ... 48 V DC	5ST3057
	177 ... 270 V AC	5ST3058
Power with extended function	12 ... 30 V AC, 12 ... 48 V DC	5ST3070

Adapter for RC mechanism	Article No.
4 MW	5ST3820-6

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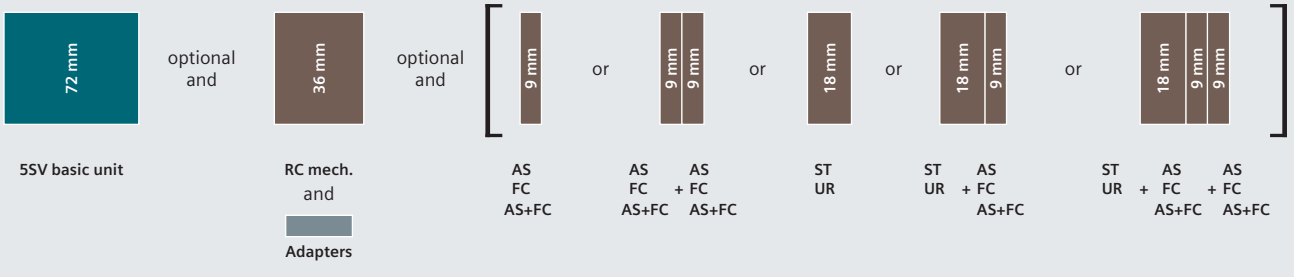
5SV3 RCCBs (SIQUENCE)

Type B and B +, 3P+N (4 MW)

			SIGRES, super resistant [K] 230 ... 400 V AC	SIGRES, selective [S] 230 ... 400 V AC
		N connection	Right	Right
				
$I_{\Delta n}$	I_n	Bulk packaging (18 units)		
Type B				
30 mA	25 A	–	5SV3342-4	–
		■	5SV3342-4GV01	–
	40 A	–	5SV3344-4	–
		■	5SV3344-4GV01	–
	63 A	–	5SV3346-4	–
		■	5SV3346-4GV01	–
	80 A	–	5SV3347-4	–
300 mA	25 A	–	5SV3642-4	–
		■	5SV3642-4GV01	–
	40 A	–	5SV3644-4	–
		■	5SV3644-4GV01	–
	63 A	–	5SV3646-4	5SV3646-5
		■	5SV3646-4GV01	–
	80 A	–	5SV3647-4	5SV3647-5
500 mA	25 A	–	5SV3742-4	–
	40 A	–	5SV3744-4	–
	63 A	–	5SV3746-4	5SV3746-5
	80 A	–	5SV3747-4	5SV3747-5
Type B+				
30 mA	25 A	–	5SV3342-4KK14	–
	40 A	–	5SV3344-4KK14	–
	63 A	–	5SV3346-4KK14	–
	80 A	–	5SV3347-4KK14	–
300 mA	25 A	–	5SV3642-4KK14	–
	40 A	–	5SV3644-4KK14	–
	63 A	–	5SV3646-4KK14	5SV3646-5KK14
	80 A	–	5SV3647-4KK14	5SV3647-5KK14

Mounting concept



AS	Auxiliary switch	See page 4/54
FC	Fault signal contact	See page 4/56
AS+FC	Auxiliary switch and fault signal contact	See page 4/58
ST	Shunt trips	See page 4/59
UR	Undervoltage release	See page 4/60
RC mech.	Remote controlled mechanism	See page 4/61

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Accessories

Auxiliary switches (AS)		Article No.
1 NO contact + 1 NC contact	Standard	5ST3010
	For low power	5ST3013
	For low power (with diode)	5ST3013-0XX01
2 NO contacts	Standard	5ST3011
	For low power	5ST3014
2 NC contacts	Standard	5ST3012
	For low power	5ST3015
1 CO contact	Standard	5ST3016

Fault signal contacts (FC)	Article No.
1 NO contact + 1 NC contact	5ST3020
2 NO contacts	5ST3021
2 NC contacts	5ST3022

Auxiliary switches and fault signal contacts (AS+FC)	Article No.
1 CO contact (AS) + 1 CO contact (FC)	5ST3062

Shunt trips (ST)	Article No.
110 ... 415 V AC, 110 ... 220 V DC	5ST3030
24 ... 48 V AC/DC	5ST3031
12 V DC	5ST3031-0XX01

Undervoltage releases (UR)		Article No.
With integrated auxiliary switch	230 V AC	5ST3040
	110 V DC	5ST3041
	24 V DC	5ST3042
Without integrated auxiliary switch	230 V AC	5ST3043
	110 V DC	5ST3044
	24 V DC	5ST3045

Remote controlled (RC) mechanisms		Article No.
Power	12 ... 30 V AC, 12 ... 48 V DC	5ST3055
	177 ... 270 V AC	5ST3056
Power with ARD	12 ... 30 V AC, 12 ... 48 V DC	5ST3057
	177 ... 270 V AC	5ST3058
Power with extended function	12 ... 30 V AC, 12 ... 48 V DC	5ST3070

Adapter for RC mechanism	Article No.
4 MW	5ST3820-6

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5SM3 RCCBs

Type A and AC, 1P+N (2 MW), high-current

		Instantaneous 230 V AC
	N connection	Right
		
$I_{\Delta n}$	I_n	
Type A		
30 mA	100 A	5SM3318-6KK
	125 A	5SM3315-6KK
100 mA	100 A	5SM3418-6KK
	125 A	5SM3415-6KK
300 mA	100 A	5SM3618-6KK
	125 A	5SM3615-6KK
Type AC		
30 mA	100 A	5SM3318-0KK
	125 A	5SM3315-0KK
100 mA	100 A	5SM3418-0KK
	125 A	5SM3415-0KK
300 mA	100 A	5SM3618-0KK
	125 A	5SM3615-0KK

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Type A and AC, 3P + N (4 MW), high-current

		Instantaneous 400 V AC	Selective [S] 400 V AC
N connection		Right	Right
			
$I_{\Delta n}$	**I_n**		
Type A			
30 mA	100 A	5SM3348-6	–
	125 A	5SM3345-6	–
100 mA	100 A	5SM3448-6	–
	125 A	5SM3445-6	–
300 mA	100 A	5SM3648-6	5SM3648-8
	125 A	5SM3645-6	5SM3645-8
500 mA	100 A	5SM3748-6	–
	125 A	5SM3745-6	5SM3745-8
Type AC			
30 mA	100 A	5SM3348-0	–
	125 A	5SM3345-0	–
100 mA	100 A	5SM3448-0	–
	125 A	5SM3445-0	–
300 mA	100 A	5SM3648-0	5SM3648-2
	125 A	5SM3645-0	–
500 mA	100 A	5SM3748-0	–
	125 A	5SM3745-0	–

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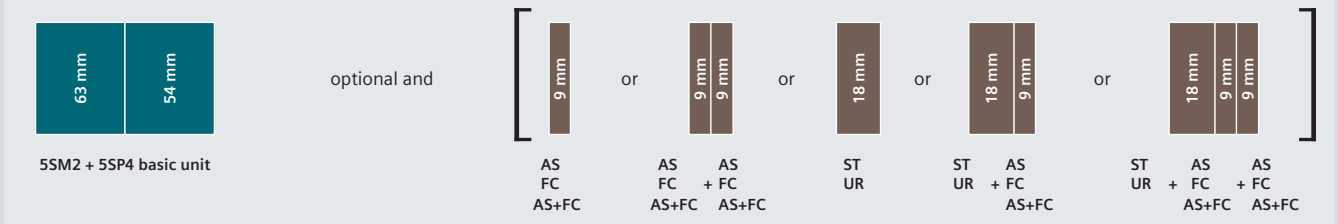
5SM2 RC units

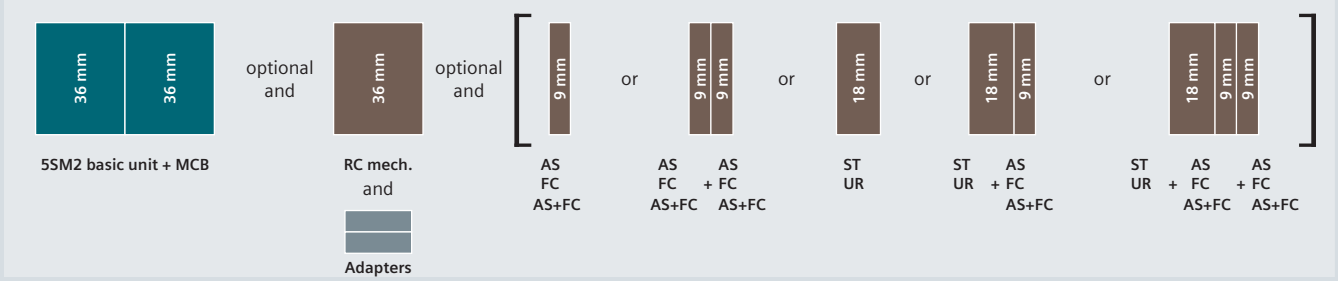
Type A, F and AC, 2-pole

		For 5SY miniature circuit breakers [1] 230 V AC		
Version		Instantaneous	Super resistant [K]	Selective [S]
Mounting width		2 MW	2 MW	2 MW
				
$I_{\Delta n}$	I_n			
Type A				
10 mA	0.3 ... 16 A	5SM2121-6	–	–
30 mA	0.3 ... 40 A	5SM2322-6	5SM2322-6KK01	–
	0.3 ... 63 A	5SM2325-6	5SM2325-6KK01	–
	80 ... 100 A	–	–	–
100 mA	0.3 ... 63 A	5SM2425-6	–	–
300 mA	0.3 ... 40 A	5SM2622-6	–	5SM2622-8
	0.3 ... 63 A	5SM2625-6	–	5SM2625-8
	80 ... 100 A	–	–	–
500 mA	0.3 ... 63 A	5SM2725-6	–	–
1000 mA	0.3 ... 40 A	–	–	5SM2822-8
	0.3 ... 63 A	–	–	5SM2825-8
	80 ... 100 A	–	–	–
Type F				
30 mA	0.3 ... 40 A	–	5SM2322-3	–
	0.3 ... 63 A	–	5SM2325-3	–
Type AC				
10 mA	0.3 ... 40 A	5SM2121-0	–	–
30 mA	0.3 ... 40 A	5SM2322-0	–	–
	0.3 ... 63 A	5SM2325-0	–	–
	80 ... 100 A	–	–	–
300 mA	0.3 ... 40 A	5SM2622-0	–	5SM2622-2
	0.3 ... 63 A	5SM2625-0	–	5SM2625-2
	80 ... 100 A	–	–	–
500 mA	0.3 ... 63 A	5SM2725-0	–	–
1000 mA	0.3 ... 63 A	5SM2825-0	–	–

[1] but not for 5SY5 or 5SY8

Mounting concept





MCB Miniature circuit breaker See page 3/1
AS Auxiliary switch See page 4/54
FC Fault signal contact See page 4/56
AS+FC Auxiliary switch and fault signal contact See page 4/58
ST Shunt trips See page 4/59
UR Undervoltage release See page 4/60
RC mech. Remote controlled mechanism See page 4/61

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For 5SL4 miniature circuit breakers 230 V AC		For 5SP4 miniature circuit breakers (B and C characteristics) 230 V AC	
Instantaneous	Selective [S]	Instantaneous	Selective [S]
2 MW	2 MW	3.5 MW	3.5 MW
			
–	–	–	–
5SM2323-6	–	–	–
5SM2326-6	–	–	–
–	–	5SM2327-6	–
–	–	–	–
5SM2623-6	5SM2623-8	–	–
5SM2626-6	5SM2626-8	–	–
–	–	5SM2627-6	5SM2627-8
–	–	–	–
–	–	–	–
–	–	–	–
–	–	–	5SM2827-8
–	–	–	–
–	–	–	–
–	–	–	–
5SM2323-0	–	–	–
5SM2326-0	–	–	–
–	–	5SM2327-0	–
5SM2623-0	5SM2623-2	–	–
5SM2626-0	5SM2626-2	–	–
–	–	5SM2627-0	–
–	–	–	–
–	–	–	–

Accessories

Auxiliary switches (AS)		Article No.
1 NO contact + 1 NC contact	Standard	5ST3010
	For low power	5ST3013
	For low power (with diode)	5ST3013-0XX01
2 NO contacts	Standard	5ST3011
	For low power	5ST3014
2 NC contacts	Standard	5ST3012
	For low power	5ST3015
1 CO contact	Standard	5ST3016

Fault signal contacts (FC)	Article No.
1 NO contact + 1 NC contact	5ST3020
2 NO contacts	5ST3021
2 NC contacts	5ST3022

Auxiliary switches and fault signal contacts (AS+FC)	Article No.
1 CO contact (AS) + 1 CO contact (FC)	5ST3062

Shunt trips (ST)	Article No.
110 ... 415 V AC, 110 ... 220 V DC	5ST3030
24 ... 48 V AC/DC	5ST3031
12 V DC	5ST3031-0XX01

Undervoltage releases (UR)		Article No.
With integrated auxiliary switch	230 V AC	5ST3040
	110 V DC	5ST3041
	24 V DC	5ST3042
Without integrated auxiliary switch	230 V AC	5ST3043
	110 V DC	5ST3044
	24 V DC	5ST3045

Remote controlled (RC) mechanisms		Article No.
Power	12 ... 30 V AC, 12 ... 48 V DC	5ST3055
	177 ... 270 V AC	5ST3056
Power with ARD	12 ... 30 V AC, 12 ... 48 V DC	5ST3057
	177 ... 270 V AC	5ST3058
Power with extended function	12 ... 30 V AC, 12 ... 48 V DC	5ST3070

Adapter for RC mechanism	Article No.
5SM2 with 5SY (2P)	5ST3820-3 + 5ST3820-1
5SM2 with 5SL (2P)	5ST3820-3 + 5ST3820-6

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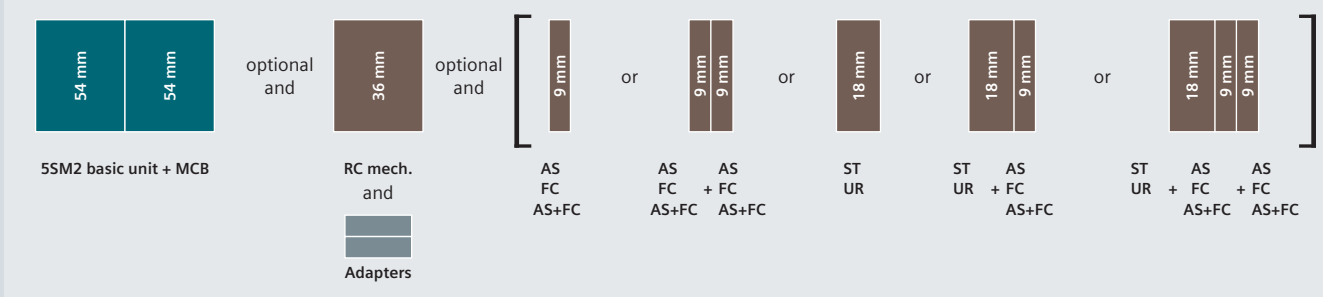
5SM2 RC units

Type A and AC, 3-pole

		For 5SY miniature circuit breakers [1] 400 V AC			For 5SL4 miniature circuit breakers 400 V AC	
Version		Instantaneous	Super resistant [K]	Selective [S]	Instantaneous	Selective [S]
Mounting width		3 MW	3 MW	3 MW	3 MW	3 MW
						
$I_{\Delta n}$	I_n					
Type A						
30 mA	0.3 ... 40 A	5SM2332-6	5SM2332-6KK01	–	5SM2333-6	–
	0.3 ... 63 A	5SM2335-6	5SM2335-6KK01	–	5SM2336-6	–
100 mA	0.3 ... 63 A	5SM2435-6	–	–	–	–
300 mA	0.3 ... 40 A	5SM2632-6	–	–	5SM2633-6	–
	0.3 ... 63 A	5SM2635-6	–	5SM2635-8	5SM2636-6	5SM2636-8
500 mA	0.3 ... 63 A	5SM2735-6	–	5SM2735-8	–	–
1000 mA	0.3 ... 40 A	–	–	5SM2832-8	–	–
	0.3 ... 63 A	–	–	5SM2835-8	–	–
Type AC						
30 mA	0.3 ... 40 A	5SM2332-0	–	–	5SM2333-0	–
	0.3 ... 63 A	5SM2335-0	–	–	5SM2336-0	–
300 mA	0.3 ... 40 A	5SM2632-0	–	–	5SM2633-0	–
	0.3 ... 63 A	5SM2635-0	–	–	5SM2636-0	–
500 mA	0.3 ... 63 A	5SM2735-0	–	–	–	–

[1] but not for 5SY5 or 5SY8

Mounting concept



MCB	Miniature circuit breaker	See page 3/1	ST	Shunt trips	See page 4/59
AS	Auxiliary switch	See page 4/54	UR	Undervoltage release	See page 4/60
FC	Fault signal contact	See page 4/56	RC mech.	Remote controlled mechanism	See page 4/61
AS+FC	Auxiliary switch and fault signal contact	See page 4/58			

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Accessories

Auxiliary switches (AS)		Article No.
1 NO contact + 1 NC contact	Standard	5ST3010
	For low power	5ST3013
	For low power (with diode)	5ST3013-0XX01
2 NO contacts	Standard	5ST3011
	For low power	5ST3014
2 NC contacts	Standard	5ST3012
	For low power	5ST3015
1 CO contact	Standard	5ST3016

Fault signal contacts (FC)	Article No.
1 NO contact + 1 NC contact	5ST3020
2 NO contacts	5ST3021
2 NC contacts	5ST3022

Auxiliary switches and fault signal contacts (AS+FC)	Article No.
1 CO contact (AS) + 1 CO contact (FC)	5ST3062

Shunt trips (ST)	Article No.
110 ... 415 V AC, 110 ... 220 V DC	5ST3030
24 ... 48 V AC/DC	5ST3031
12 V DC	5ST3031-0XX01

Undervoltage releases (UR)		Article No.
With integrated auxiliary switch	230 V AC	5ST3040
	110 V DC	5ST3041
	24 V DC	5ST3042
Without integrated auxiliary switch	230 V AC	5ST3043
	110 V DC	5ST3044
	24 V DC	5ST3045

Remote controlled (RC) mechanisms		Article No.
Power	12 ... 30 V AC, 12 ... 48 V DC	5ST3055
	177 ... 270 V AC	5ST3056
Power with ARD	12 ... 30 V AC, 12 ... 48 V DC	5ST3057
	177 ... 270 V AC	5ST3058
Power with extended function	12 ... 30 V AC, 12 ... 48 V DC	5ST3070

Adapter for RC mechanism	Article No.
5SM2 with 5SY (3P)	5ST3820-3 + 5ST3820-2
5SM2 with 5SL (3P)	5ST3820-3 + 5ST3820-7

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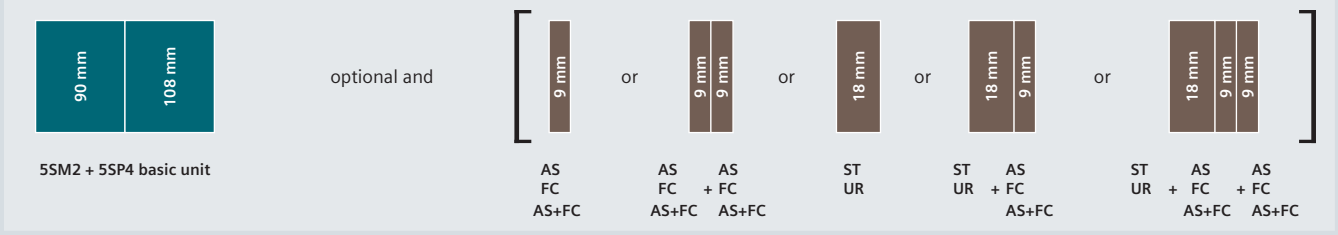
5SM2 RC units

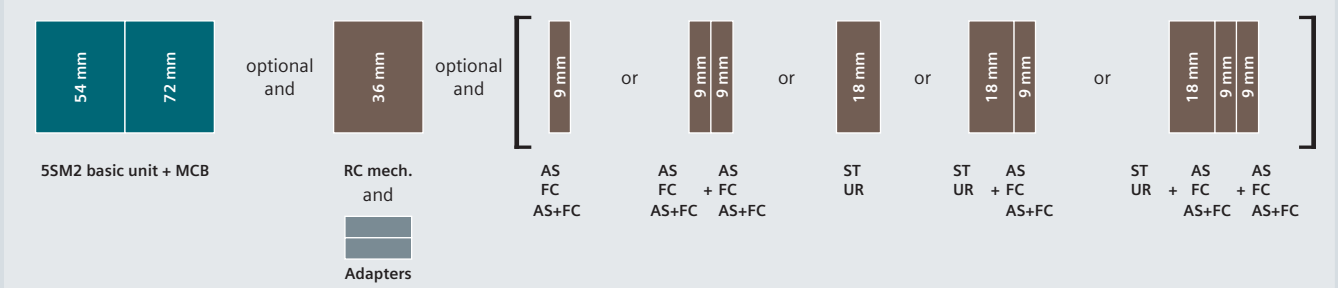
Type A and AC, 4-pole

		For 5SY miniature circuit breakers [1] 400 V AC		
Version		Instantaneous	Super resistant [K]	Selective [S]
Mounting width		3 MW	3 MW	3 MW
				
$I_{\Delta n}$	I_n			
Type A				
30 mA	0.3 ... 40 A	5SM2342-6	5SM2342-6KK01	–
	0.3 ... 63 A	5SM2345-6	5SM2345-6KK01	–
	80 ... 100 A	–	–	–
100 mA	0.3 ... 63 A	5SM2445-6	–	–
300 mA	0.3 ... 40 A	5SM2642-6	–	–
	0.3 ... 63 A	5SM2645-6	–	5SM2645-8
	80 ... 100 A	–	–	–
500 mA	0.3 ... 63 A	5SM2745-6	–	5SM2745-8
1000 mA	0.3 ... 40 A	–	–	5SM2842-8
	0.3 ... 63 A	–	–	5SM2845-8
	80 ... 100 A	–	–	–
Type AC				
30 mA	0.3 ... 40 A	5SM2342-0	–	–
	0.3 ... 63 A	5SM2345-0	–	–
	80 ... 100 A	–	–	–
300 mA	0.3 ... 40 A	5SM2642-0	–	–
	0.3 ... 63 A	5SM2645-0	–	5SM2645-2
	80 ... 100 A	–	–	–
500 mA	0.3 ... 63 A	5SM2745-0	–	–
1000 mA	0.3 ... 63 A	–	–	5SM2845-2

[1] but not for 5SY5 or 5SY8

Mounting concept





MCB Miniature circuit breaker See page 3/1
AS Auxiliary switch See page 4/54
FC Fault signal contact See page 4/56
AS+FC Auxiliary switch and fault signal contact See page 4/58
ST Shunt trips See page 4/59
UR Undervoltage release See page 4/60
RC mech. Remote controlled mechanism See page 4/61

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For 5SL4 miniature circuit breakers 400 V AC		For 5SP4 miniature circuit breakers (B and C characteristics) 400 V AC	
Instantaneous	Selective [S]	Instantaneous	Selective [S]
3 MW	3 MW	5 MW	5 MW
			
5SM2343-6	–	–	–
5SM2346-6	–	–	–
–	–	5SM2347-6	–
–	–	–	–
5SM2643-6	–	–	–
5SM2646-6	5SM2646-8	–	–
–	–	5SM2647-6	5SM2647-8
–	–	–	–
–	–	–	–
–	–	–	–
–	–	–	5SM2847-8
5SM2343-0	–	–	–
5SM2346-0	–	–	–
–	–	5SM2347-0	–
5SM2643-0	–	–	–
5SM2646-0	5SM2646-2	–	–
–	–	5SM2647-0	–
–	–	–	–
–	–	–	–

Accessories

Auxiliary switches (AS)		Article No.
1 NO contact + 1 NC contact	Standard	5ST3010
	For low power	5ST3013
	For low power (with diode)	5ST3013-0XX01
2 NO contacts	Standard	5ST3011
	For low power	5ST3014
2 NC contacts	Standard	5ST3012
	For low power	5ST3015
1 CO contact	Standard	5ST3016

Fault signal contacts (FC)	Article No.
1 NO contact + 1 NC contact	5ST3020
2 NO contacts	5ST3021
2 NC contacts	5ST3022

Auxiliary switches and fault signal contacts (AS+FC)	Article No.
1 CO contact (AS) + 1 CO contact (FC)	5ST3062

Shunt trips (ST)	Article No.
110 ... 415 V AC, 110 ... 220 V DC	5ST3030
24 ... 48 V AC/DC	5ST3031
12 V DC	5ST3031-0XX01

Undervoltage releases (UR)		Article No.
With integrated auxiliary switch	230 V AC	5ST3040
	110 V DC	5ST3041
	24 V DC	5ST3042
Without integrated auxiliary switch	230 V AC	5ST3043
	110 V DC	5ST3044
	24 V DC	5ST3045

Remote controlled (RC) mechanisms		Article No.
Power	12 ... 30 V AC, 12 ... 48 V DC	5ST3055
	177 ... 270 V AC	5ST3056
Power with ARD	12 ... 30 V AC, 12 ... 48 V DC	5ST3057
	177 ... 270 V AC	5ST3058
Power with extended function	12 ... 30 V AC, 12 ... 48 V DC	5ST3070

Adapter for RC mechanism	Article No.
5SM2 with 5SY (4P)	5ST3820-3 + 5ST3820-2
5SM2 with 5SL (4P)	5ST3820-3 + 5ST3820-7

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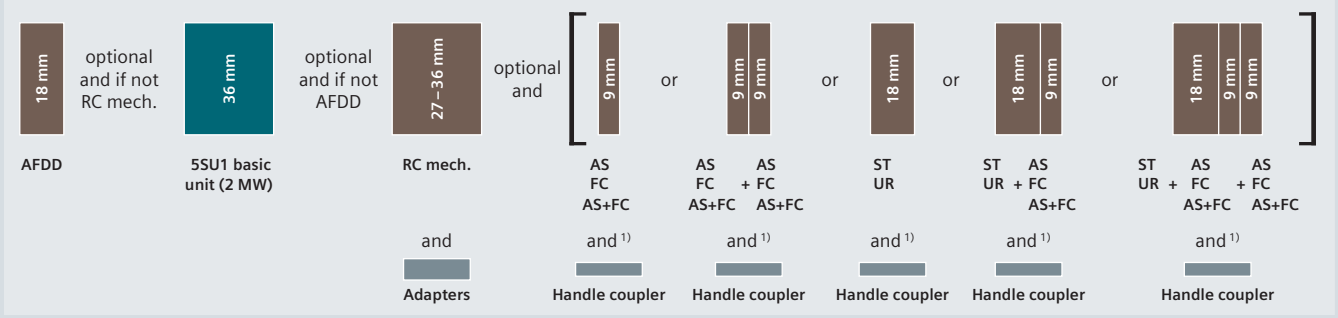
5SU1 RCBOs

Type A, 1P+N

			Instantaneous 230 V AC			
		Mounting width	2 MW	2 MW	2 MW	
		Short-circuit breaking capacity	4.5 kA	4.5 kA	6 kA	
		N connection	Right	Left	Right	
						
$I_{\Delta n}$	I_n	Bulk packaging (36 units)	Characteristic C	C	Characteristic B	C
Type A						
10 mA	6 A	–	–	–	–	–
	10 A	–	–	–	–	–
	13 A	–	–	–	–	–
	16 A	–	–	–	–	–
30 mA	6 A	–	5SU1353-7KK06	5SU1353-7KL06	5SU1356-6KK06	5SU1356-7KK06
		■	–	–	5SU1356-6GV06	5SU1356-7GV06
	8 A	–	5SU1353-7KK08	–	–	5SU1356-7KK08
	10 A	–	5SU1353-7KK10	5SU1353-7KL10	5SU1356-6KK10	5SU1356-7KK10
		■	–	–	5SU1356-6GV10	5SU1356-7GV10
	13 A	–	5SU1353-7KK13	–	5SU1356-6KK13	5SU1356-7KK13
	16 A	–	5SU1353-7KK16	5SU1353-7KL16	5SU1356-6KK16	5SU1356-7KK16
		■	–	–	5SU1356-6GV16	5SU1356-7GV16
	20 A	–	5SU1353-7KK20	5SU1353-7KL20	5SU1356-6KK20	5SU1356-7KK20
	25 A	–	5SU1353-7KK25	5SU1353-7KL25	5SU1356-6KK25	5SU1356-7KK25
	32 A	–	5SU1353-7KK32	5SU1353-7KL32	5SU1356-6KK32	5SU1356-7KK32
	40 A	–	5SU1353-7KK40	5SU1353-7KL40	5SU1356-6KK40	5SU1356-7KK40
300 mA	6 A	–	5SU1653-7KK06	–	5SU1656-6KK06	5SU1656-7KK06
	10 A	–	5SU1653-7KK10	–	5SU1656-6KK10	5SU1656-7KK10
	13 A	–	5SU1653-7KK13	–	5SU1656-6KK13	5SU1656-7KK13
	16 A	–	5SU1653-7KK16	–	5SU1656-6KK16	5SU1656-7KK16
	20 A	–	5SU1653-7KK20	–	5SU1656-6KK20	5SU1656-7KK20
	25 A	–	5SU1653-7KK25	–	5SU1656-6KK25	5SU1656-7KK25
	32 A	–	5SU1653-7KK32	–	5SU1656-6KK32	5SU1656-7KK32
	40 A	–	5SU1653-7KK40	–	5SU1656-6KK40	5SU1656-7KK40

Mounting concept



1) Handle couplers are required for direct attachment of the components to the 5SU1. No handle coupler is required for attaching the components to the RC mech.

AFDD	Arc fault detection device	See page 4/50
AS	Auxiliary switch	See page 4/54
FC	Fault signal contact	See page 4/56
AS+FC	Auxiliary switch and fault signal contact	See page 4/58
ST	Shunt trips	See page 4/59
UR	Undervoltage release	See page 4/60
RC mech.	Remote controlled mechanism	See page 4/61

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Instantaneous		Short-time delayed [G], Super resistant [K]	
230 V AC		230 V AC	
2 MW		2 MW	
10 kA		10 kA	
Right		Right	
			
Characteristic		Characteristic	
B	C	B	C
5SU1154-6KK06	5SU1154-7KK06	–	–
5SU1154-6KK10	5SU1154-7KK10	–	–
5SU1154-6KK13	5SU1154-7KK13	–	–
5SU1154-6KK16	5SU1154-7KK16	–	–
5SU1354-6KK06	5SU1354-7KK06	–	–
5SU1354-6GV06	5SU1354-7GV06	–	–
–	5SU1354-7KK08	–	–
5SU1354-6KK10	5SU1354-7KK10	5SU1354-6LB10	5SU1354-7LB10
5SU1354-6GV10	5SU1354-7GV10	–	–
5SU1354-6KK13	5SU1354-7KK13	5SU1354-6LB13	5SU1354-7LB13
5SU1354-6KK16	5SU1354-7KK16	5SU1354-6LB16	5SU1354-7LB16
5SU1354-6GV16	5SU1354-7GV16	–	–
5SU1354-6KK20	5SU1354-7KK20	5SU1354-6LB20	5SU1354-7LB20
5SU1354-6KK25	5SU1354-7KK25	5SU1354-6LB25	5SU1354-7LB25
5SU1354-6KK32	5SU1354-7KK32	5SU1354-6LB32	5SU1354-7LB32
5SU1354-6KK40	5SU1354-7KK40	5SU1354-6LB40	5SU1354-7LB40
5SU1654-6KK06	5SU1654-7KK06	–	–
5SU1654-6KK10	5SU1654-7KK10	–	–
5SU1654-6KK13	5SU1654-7KK13	–	–
5SU1654-6KK16	5SU1654-7KK16	–	–
5SU1654-6KK20	5SU1654-7KK20	–	–
5SU1654-6KK25	5SU1654-7KK25	–	–
5SU1654-6KK32	5SU1654-7KK32	–	–
5SU1654-6KK40	5SU1654-7KK40	–	–

Accessories

Auxiliary switches (AS)		Article No.
1 NO contact + 1 NC contact	Standard	5ST3010
	For low power	5ST3013
	For low power (with diode)	5ST3013-0XX01
2 NO contacts	Standard	5ST3011
	For low power	5ST3014
2 NC contacts	Standard	5ST3012
	For low power	5ST3015
1 CO contact	Standard	5ST3016

Fault signal contacts (FC)	Article No.
1 NO contact + 1 NC contact	5ST3020
2 NO contacts	5ST3021
2 NC contacts	5ST3022

Auxiliary switches and fault signal contacts (AS+FC)	Article No.
1 CO contact (AS) + 1 CO contact (FC)	5ST3062

Shunt trips (ST)	Article No.
110 ... 415 V AC, 110 ... 220 V DC	5ST3030
24 ... 48 V AC/DC	5ST3031
12 V DC	5ST3031-0XX01

Undervoltage releases (UR)		Article No.
With integrated auxiliary switch	230 V AC	5ST3040
	110 V DC	5ST3041
	24 V DC	5ST3042
Without integrated auxiliary switch	230 V AC	5ST3043
	110 V DC	5ST3044
	24 V DC	5ST3045

Handle couplers for AS, FC, AS+FC, ST and UR	Article No.
1 set = 5 units	5ST3805-1

Remote controlled (RC) mechanisms		Article No.
Basic	12 ... 30 V AC, 12 ... 48 V DC	5ST3053
	177 ... 270 V AC	5ST3054
Power	12 ... 30 V AC, 12 ... 48 V DC	5ST3055
	177 ... 270 V AC	5ST3056
Power with ARD	12 ... 30 V AC, 12 ... 48 V DC	5ST3057
	177 ... 270 V AC	5ST3058
Power with ext. function	12 ... 30 V AC, 12 ... 48 V DC	5ST3070

Adapter for RC mechanism	Article No.
2 MW	5ST3820-5

Arc fault detection devices (AFDD)		Article No.
For 5SU1 basic units	I_n up to 16 A	5SM6021-2
	I_n up to 40 A	5SM6024-2

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5SU1 RCBOs

Type F, 1P+N

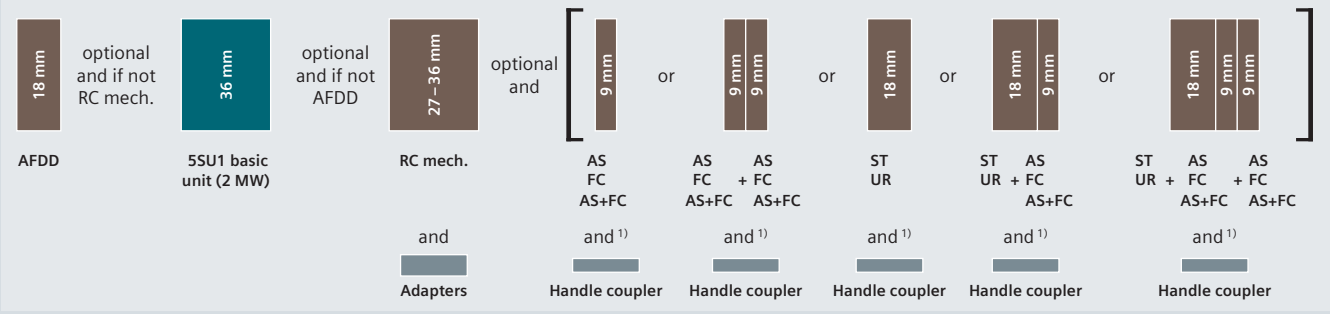
	Super resistant [K] 230 V AC
Mounting width	2 MW
Short-circuit breaking capacity	10 kA
N connection	Right



4

$I_{\Delta n}$	I_n	Characteristic B	Characteristic C
Type F			
30 mA	6 A	5SU1354-3KK06	5SU1354-4KK06
	10 A	5SU1354-3KK10	5SU1354-4KK10
	13 A	5SU1354-3KK13	5SU1354-4KK13
	16 A	5SU1354-3KK16	5SU1354-4KK16
	20 A	5SU1354-3KK20	5SU1354-4KK20
	25 A	5SU1354-3KK25	5SU1354-4KK25
	32 A	5SU1354-3KK32	5SU1354-4KK32
	40 A	5SU1354-3KK40	5SU1354-4KK40

Mounting concept



[1] Handle couplers are required for direct attachment of the components to the 5SU1. No handle coupler is required for attaching the components to the RC mech.

AFDD	Arc fault detection device	See page 4/50
AS	Auxiliary switch	See page 4/54
FC	Fault signal contact	See page 4/56
AS+FC	Auxiliary switch and fault signal contact	See page 4/58
ST	Shunt trips	See page 4/59
UR	Undervoltage release	See page 4/60
RC mech.	Remote controlled mechanism	See page 4/61

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Accessories

Auxiliary switches (AS)		Article No.
1 NO contact + 1 NC contact	Standard	5ST3010
	For low power	5ST3013
	For low power (with diode)	5ST3013-0XX01
2 NO contacts	Standard	5ST3011
	For low power	5ST3014
2 NC contacts	Standard	5ST3012
	For low power	5ST3015
1 CO contact	Standard	5ST3016

Fault signal contacts (FC)	Article No.
1 NO contact + 1 NC contact	5ST3020
2 NO contacts	5ST3021
2 NC contacts	5ST3022

Auxiliary switches and fault signal contacts (AS+FC)	Article No.
1 CO contact (AS) + 1 CO contact (FC)	5ST3062

Shunt trips (ST)	Article No.
110 ... 415 V AC, 110 ... 220 V DC	5ST3030
24 ... 48 V AC/DC	5ST3031
12 V DC	5ST3031-0XX01

Undervoltage releases (UR)		Article No.
With integrated auxiliary switch	230 V AC	5ST3040
	110 V DC	5ST3041
	24 V DC	5ST3042
Without integrated auxiliary switch	230 V AC	5ST3043
	110 V DC	5ST3044
	24 V DC	5ST3045

Handle couplers for AS, FC, AS+FC, ST and UR	Article No.
1 set = 5 units	5ST3805-1

Remote controlled (RC) mechanisms		Article No.
Basic	12 ... 30 V AC, 12 ... 48 V DC	5ST3053
	177 ... 270 V AC	5ST3054
Power	12 ... 30 V AC, 12 ... 48 V DC	5ST3055
	177 ... 270 V AC	5ST3056
Power with ARD	12 ... 30 V AC, 12 ... 48 V DC	5ST3057
	177 ... 270 V AC	5ST3058
Power with ext. function	12 ... 30 V AC, 12 ... 48 V DC	5ST3070

Adapter for RC mechanism	Article No.
2 MW	5ST3820-5

Arc fault detection devices (AFDD)		Article No.
For 5SU1 basic units	I_n up to 16 A	5SM6021-2
	I_n up to 40 A	5SM6024-2

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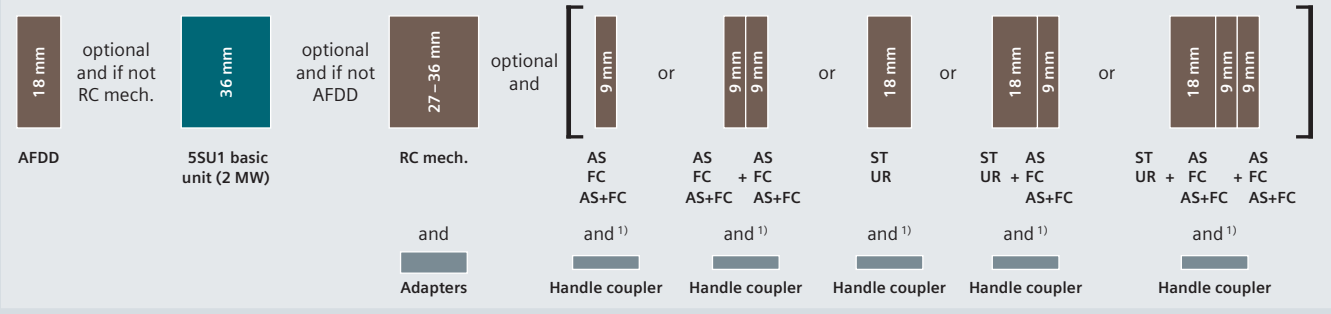
5SU1 RCBOs

Type AC, 1P+N

			Instantaneous 230 V AC			
		Mounting width	2 MW	2 MW	2 MW	
		Short-circuit breaking capacity	4.5 kA	4.5 kA	6 kA	
		N connection	Right	Left	Right	
						
$I_{\Delta n}$	I_n	Bulk packaging (36 units)	Characteristic C	C	Characteristic B	C
Type AC						
30 mA	6 A	–	5SU1353-1KK06	5SU1353-1KL06	5SU1356-0KK06	5SU1356-1KK06
	8 A	–	5SU1353-1KK08	–	–	5SU1356-1KK08
	10 A	–	5SU1353-1KK10	5SU1353-1KL10	5SU1356-0KK10	5SU1356-1KK10
		■	5SU1353-1GV10	–	–	–
	13 A	–	5SU1353-1KK13	5SU1353-1KL13	5SU1356-0KK13	5SU1356-1KK13
	16 A	–	5SU1353-1KK16	5SU1353-1KL16	5SU1356-0KK16	5SU1356-1KK16
		■	5SU1353-1GV16	–	–	5SU1356-1GV16
	20 A	–	5SU1353-1KK20	5SU1353-1KL20	5SU1356-0KK20	5SU1356-1KK20
	25 A	–	5SU1353-1KK25	5SU1353-1KL25	5SU1356-0KK25	5SU1356-1KK25
	32 A	–	5SU1353-1KK32	5SU1353-1KL32	5SU1356-0KK32	5SU1356-1KK32
	40 A	–	5SU1353-1KK40	5SU1353-1KL40	5SU1356-0KK40	5SU1356-1KK40
100 mA	6 A	–	–	–	–	–
	10 A	–	–	–	–	–
	13 A	–	–	–	–	–
	16 A	–	–	–	–	–
	20 A	–	–	–	–	–
	25 A	–	–	–	–	–
	32 A	–	–	–	–	–
	40 A	–	–	–	–	–
300 mA	6 A	–	5SU1653-1KK06	5SU1653-1KL06	5SU1656-0KK06	5SU1656-1KK06
	10 A	–	5SU1653-1KK10	5SU1653-1KL10	5SU1656-0KK10	5SU1656-1KK10
	13 A	–	5SU1653-1KK13	5SU1653-1KL16	5SU1656-0KK13	5SU1656-1KK13
	16 A	–	5SU1653-1KK16	–	5SU1656-0KK16	5SU1656-1KK16
		■	5SU1653-1GV16	–	–	–
	20 A	–	5SU1653-1KK20	5SU1653-1KL20	5SU1656-0KK20	5SU1656-1KK20
	25 A	–	5SU1653-1KK25	5SU1653-1KL25	5SU1656-0KK25	5SU1656-1KK25
	32 A	–	5SU1653-1KK32	5SU1653-1KL32	5SU1656-0KK32	5SU1656-1KK32
	40 A	–	5SU1653-1KK40	5SU1653-1KL40	5SU1656-0KK40	5SU1656-1KK40

Mounting concept



1) Handle couplers are required for direct attachment of the components to the 5SU1. No handle coupler is required for attaching the components to the RC mech.

AFDD	Arc fault detection device	See page 4/50	ST	Shunt trips	See page 4/59
AS	Auxiliary switch	See page 4/54	UR	Undervoltage release	See page 4/60
FC	Fault signal contact	See page 4/56	RC mech.	Remote controlled mechanism	See page 4/61
AS+FC	Auxiliary switch and fault signal contact	See page 4/58			

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Instantaneous 230 V AC		Short-time delayed [G], Super resistant [K] 230 V AC	
2 MW		2 MW	
10 kA		10 kA	
Right		Right	
			
Characteristic		**Characteristic**	
B	**C**	**B**	**C**
5SU1354-0KK06	5SU1354-1KK06	–	–
–	5SU1354-1KK08	–	–
5SU1354-0KK10	5SU1354-1KK10	5SU1354-0LB10	5SU1354-1LB10
–	–	–	–
5SU1354-0KK13	5SU1354-1KK13	5SU1354-0LB13	5SU1354-1LB13
5SU1354-0KK16	5SU1354-1KK16	5SU1354-0LB16	5SU1354-1LB16
–	–	–	–
5SU1354-0KK20	5SU1354-1KK20	5SU1354-0LB20	5SU1354-1LB20
5SU1354-0KK25	5SU1354-1KK25	5SU1354-0LB25	5SU1354-1LB25
5SU1354-0KK32	5SU1354-1KK32	5SU1354-0LB32	5SU1354-1LB32
5SU1354-0KK40	5SU1354-1KK40	5SU1354-0LB40	5SU1354-1LB40
–	5SU1454-1KK06	–	–
–	5SU1454-1KK10	–	–
–	5SU1454-1KK13	–	–
–	5SU1454-1KK16	–	–
–	5SU1454-1KK20	–	–
–	5SU1454-1KK25	–	–
–	5SU1454-1KK32	–	–
–	5SU1454-1KK40	–	–
5SU1654-0KK06	5SU1654-1KK06	–	–
5SU1654-0KK10	5SU1654-1KK10	–	–
5SU1654-0KK13	5SU1654-1KK13	–	–
5SU1654-0KK16	5SU1654-1KK16	–	–
–	–	–	–
5SU1654-0KK20	5SU1654-1KK20	–	–
5SU1654-0KK25	5SU1654-1KK25	–	–
5SU1654-0KK32	5SU1654-1KK32	–	–
5SU1654-0KK40	5SU1654-1KK40	–	–

Accessories

Auxiliary switches (AS)		Article No.
1 NO contact + 1 NC contact	Standard	5ST3010
	For low power	5ST3013
	For low power (with diode)	5ST3013-0XX01
2 NO contacts	Standard	5ST3011
	For low power	5ST3014
2 NC contacts	Standard	5ST3012
	For low power	5ST3015
1 CO contact	Standard	5ST3016
Fault signal contacts (FC)		**Article No.**
1 NO contact + 1 NC contact		5ST3020
2 NO contacts		5ST3021
2 NC contacts		5ST3022
Auxiliary switches and fault signal contacts (AS+FC)		**Article No.**
1 CO contact (AS) + 1 CO contact (FC)		5ST3062
Shunt trips (ST)		**Article No.**
110 ... 415 V AC, 110 ... 220 V DC		5ST3030
24 ... 48 V AC/DC		5ST3031
12 V DC		5ST3031-0XX01

Undervoltage releases (UR)		Article No.
With integrated auxiliary switch	230 V AC	5ST3040
	110 V DC	5ST3041
	24 V DC	5ST3042
Without integrated auxiliary switch	230 V AC	5ST3043
	110 V DC	5ST3044
	24 V DC	5ST3045
Handle couplers for AS, FC, AS+FC, ST and UR		**Article No.**
1 set = 5 units		5ST3805-1
Remote controlled (RC) mechanisms		**Article No.**
Basic	12 ... 30 V AC, 12 ... 48 V DC	5ST3053
	177 ... 270 V AC	5ST3054
Power	12 ... 30 V AC, 12 ... 48 V DC	5ST3055
	177 ... 270 V AC	5ST3056
Power with ARD	12 ... 30 V AC, 12 ... 48 V DC	5ST3057
	177 ... 270 V AC	5ST3058
Power with ext. function	12 ... 30 V AC, 12 ... 48 V DC	5ST3070
Adapter for RC mechanism		**Article No.**
2 MW		5ST3820-5
Arc fault detection devices (AFDD)		**Article No.**
For 5SU1 basic units	I_n up to 16 A	5SM6021-2
	I_n up to 40 A	5SM6024-2

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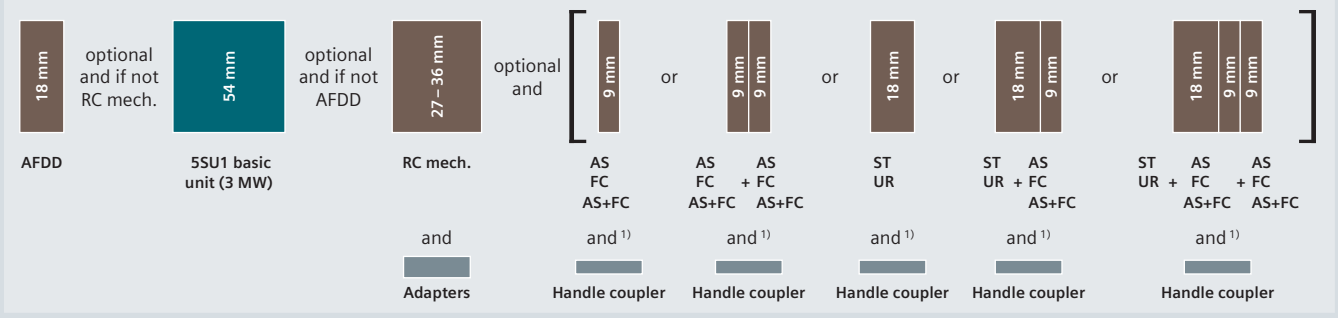
5SU1 RCBOs

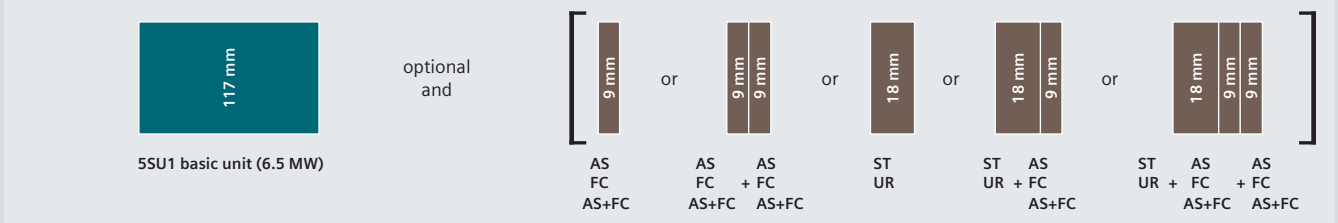
Type A and AC, 2-pole

		Instantaneous		
		110 V AC		230 V AC
Mounting width		3 MW		3 MW
Short-circuit breaking capacity		10 kA		10 kA
				
$I_{\Delta n}$	I_n	Characteristic		Characteristic
		B	C	B
Type A				
30 mA	6 A	5SU1324-6KX06	5SU1324-7KX06	5SU1324-6FA06
	10 A	5SU1324-6KX10	5SU1324-7KX10	5SU1324-6FA10
	13 A	5SU1324-6KX13	5SU1324-7KX13	5SU1324-6FA13
	16 A	5SU1324-6KX16	5SU1324-7KX16	5SU1324-6FA16
	20 A	5SU1324-6KX20	5SU1324-7KX20	5SU1324-6FA20
	25 A	5SU1324-6KX25	5SU1324-7KX25	5SU1324-6FA25
	32 A	5SU1324-6KX32	5SU1324-7KX32	5SU1324-6FA32
	40 A	5SU1324-6KX40	5SU1324-7KX40	5SU1324-6FA40
	125 A	–	–	–
300 mA	125 A	–	–	–
Type AC				
30 mA	125 A	–	–	–
300 mA	125 A	–	–	–

Mounting concept



1) Handle couplers are required for direct attachment of the components to the 5SU1. No handle coupler is required for attaching the components to the RC mech.



AFDD Arc fault detection device See page 4/50
AS Auxiliary switch See page 4/54
FC Fault signal contact See page 4/56
AS+FC Auxiliary switch and fault signal contact See page 4/58
ST Shunt trips See page 4/59
UR Undervoltage release See page 4/60
RC mech. Remote controlled mechanism See page 4/61

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			Selective [S] 230 V AC	
	6.5 MW		6.5 MW	
	10 kA		10 kA	
				
	Characteristic		Characteristic	
C	B	C	B	C
5SU1324-7FA06	–	–	–	–
5SU1324-7FA10	–	–	–	–
5SU1324-7FA13	–	–	–	–
5SU1324-7FA16	–	–	–	–
5SU1324-7FA20	–	–	–	–
5SU1324-7FA25	–	–	–	–
5SU1324-7FA32	–	–	–	–
5SU1324-7FA40	–	–	–	–
–	5SU1324-6KK82	5SU1324-7KK82	–	–
–	5SU1624-6KK82	5SU1624-7KK82	5SU1624-6WK82	5SU1624-7WK82
–	5SU1324-0KK82	5SU1324-1KK82	–	–
–	5SU1624-0KK82	5SU1624-1KK82	–	–

4

Accessories

Auxiliary switches (AS)		Article No.
1 NO contact + 1 NC contact	Standard	5ST3010
	For low power	5ST3013
	For low power (with diode)	5ST3013-0XX01
2 NO contacts	Standard	5ST3011
	For low power	5ST3014
2 NC contacts	Standard	5ST3012
	For low power	5ST3015
1 CO contact	Standard	5ST3016
Fault signal contacts (FC)		**Article No.**
1 NO contact + 1 NC contact		5ST3020
2 NO contacts		5ST3021
2 NC contacts		5ST3022
Auxiliary switches and fault signal contacts (AS+FC)		**Article No.**
1 CO contact (AS) + 1 CO contact (FC)		5ST3062
Shunt trips (ST)		**Article No.**
110 ... 415 V AC, 110 ... 220 V DC		5ST3030
24 ... 48 V AC/DC		5ST3031
12 V DC		5ST3031-0XX01

Undervoltage releases (UR)		Article No.
With integrated auxiliary switch	230 V AC	5ST3040
	110 V DC	5ST3041
	24 V DC	5ST3042
Without integrated auxiliary switch	230 V AC	5ST3043
	110 V DC	5ST3044
	24 V DC	5ST3045
Handle couplers for AS, FC, AS+FC, ST and UR		**Article No.**
1 set = 5 units		5ST3805-1
Remote controlled (RC) mechanisms		**Article No.**
Basic	12 ... 30 V AC, 12 ... 48 V DC	5ST3053
	177 ... 270 V AC	5ST3054
Power	12 ... 30 V AC, 12 ... 48 V DC	5ST3055
	177 ... 270 V AC	5ST3056
Power with ARD	12 ... 30 V AC, 12 ... 48 V DC	5ST3057
	177 ... 270 V AC	5ST3058
Power with ext. function	12 ... 30 V AC, 12 ... 48 V DC	5ST3070
Adapter for RC mechanism		**Article No.**
2 MW		5ST3820-5
Arc fault detection devices (AFDD)		**Article No.**
For 5SU1 basic units (3 MW)	I_n up to 16 A	5SM6021-2
	I_n up to 40 A	5SM6024-2

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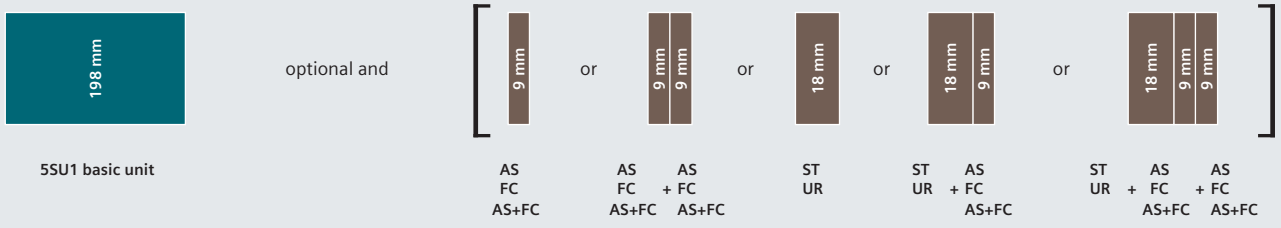
5SU1 RCBOs

Type A and AC, 4-pole

		Instantaneous 400 V AC		Selective [S] 400 V AC	
Mounting width		11 MW		11 MW	
Short-circuit breaking capacity		10 kA		10 kA	
					
$I_{\Delta n}$	I_n	Characteristic B	C	Characteristic B	C
Type A					
30 mA	125 A	5SU1344-6KK82	5SU1344-7KK82	–	–
300 mA	125 A	5SU1644-6KK82	5SU1644-7KK82	5SU1644-6WK82	5SU1644-7WK82
1000 mA	125 A	–	–	5SU1844-6WK82	5SU1844-7WK82
Type AC					
30 mA	125 A	5SU1344-0KK82	5SU1344-1KK82	–	–
300 mA	125 A	5SU1644-0KK82	5SU1644-1KK82	–	–

4

Mounting concept



AS Auxiliary switch See page 4/54
FC Fault signal contact See page 4/56
AS+FC Auxiliary switch and fault signal contact See page 4/58

ST Shunt trips See page 4/59
UR Undervoltage release See page 4/60

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Type B and B+, 4-pole

		Super resistant [K]			Selective [S]	
		400 V AC		480 V AC	400 V AC	
Mounting width		11 MW		11 MW	11 MW	
Short-circuit breaking capacity		10 kA		10 kA	10 kA	
						
$I_{\Delta n}$	I_n	Characteristic		Characteristic	Characteristic	
		C	D	C	C	D
Type B						
30 mA	100 A	5SU1374-7AK81	5SU1374-8AK81	–	–	–
	125 A	5SU1374-7AK82	–	–	–	–
300 mA	100 A	5SU1674-7AK81	5SU1674-8AK81	5SU1674-7CK81	–	5SU1674-8BK81
	125 A	5SU1674-7AK82	–	5SU1674-7CK82	5SU1674-7BK82	–
Type B+						
30 mA	100 A	5SU1374-7DK81	5SU1374-8DK81	–	–	–
	125 A	5SU1374-7DK82	–	–	–	–
300 mA	100 A	5SU1674-7DK81	5SU1674-8DK81	5SU1674-7FK81	–	5SU1674-8EK81
	125 A	5SU1674-7DK82	–	5SU1674-7FK82	5SU1674-7EK82	–

4

Accessories

Auxiliary switches (AS)		Article No.
1 NO contact + 1 NC contact	Standard	5ST3010
	For low power	5ST3013
	For low power (with diode)	5ST3013-0XX01
2 NO contacts	Standard	5ST3011
	For low power	5ST3014
2 NC contacts	Standard	5ST3012
	For low power	5ST3015
1 CO contact	Standard	5ST3016

Fault signal contacts (FC)	Article No.
1 NO contact + 1 NC contact	5ST3020
2 NO contacts	5ST3021
2 NC contacts	5ST3022

Auxiliary switches and fault signal contacts (AS+FC)	Article No.
1 CO contact (AS) + 1 CO contact (FC)	5ST3062

Shunt trips (ST)	Article No.
110 ... 415 V AC, 110 ... 220 V DC	5ST3030
24 ... 48 V AC/DC	5ST3031
12 V DC	5ST3031-0XX01

Undervoltage releases (UR)		Article No.
With integrated auxiliary switch	230 V AC	5ST3040
	110 V DC	5ST3041
	24 V DC	5ST3042
Without integrated auxiliary switch	230 V AC	5ST3043
	110 V DC	5ST3044
	24 V DC	5ST3045

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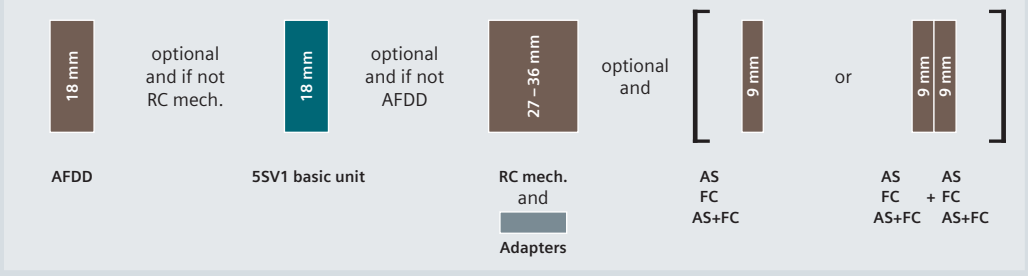
5SV1 RCBOs

Type A, 1P+N

			Instantaneous 230 V AC				Short-time delayed [G], Super resistant [K] new 230 V AC	
		Mounting width	1 MW		1 MW		1 MW	
		Short-circuit breaking capacity	4.5 kA		6 kA		6 kA	
		N connection	Right		Right		Right	
								
$I_{\Delta n}$	I_n	Bulk packaging (12 units)	Characteristic B	C	Characteristic B	C	Characteristic B	C
Type A								
30 mA	2 A	–	–	5SV1313-7KK02	–	5SV1316-7KK02	–	–
	4 A	–	–	5SV1313-7KK04	–	5SV1316-7KK04	–	–
	6 A	–	5SV1313-6KK06	5SV1313-7KK06	5SV1316-6KK06	5SV1316-7KK06	5SV1316-6LK06	5SV1316-7LK06
		■	–	–	5SV1316-6GV06	5SV1316-7GV06	–	–
	10 A	–	5SV1313-6KK10	5SV1313-7KK10	5SV1316-6KK10	5SV1316-7KK10	5SV1316-6LK10	5SV1316-7LK10
		■	–	–	5SV1316-6GV10	5SV1316-7GV10	–	–
	13 A	–	5SV1313-6KK13	5SV1313-7KK13	5SV1316-6KK13	5SV1316-7KK13	5SV1316-6LK13	5SV1316-7LK13
		■	–	–	5SV1316-6GV13	5SV1316-7GV13	–	–
	16 A	–	5SV1313-6KK16	5SV1313-7KK16	5SV1316-6KK16	5SV1316-7KK16	5SV1316-6LK16	5SV1316-7LK16
		■	–	–	5SV1316-6GV16	5SV1316-7GV16	–	–
300 mA new	2 A	–	–	5SV1613-7KK02	–	5SV1616-7KK02	–	–
	4 A	–	–	5SV1613-7KK04	–	5SV1616-7KK04	–	–
	6 A	–	5SV1613-6KK06	5SV1613-7KK06	5SV1616-6KK06	5SV1616-7KK06	–	–
	10 A	–	5SV1613-6KK10	5SV1613-7KK10	5SV1616-6KK10	5SV1616-7KK10	–	–
	13 A	–	5SV1613-6KK13	5SV1613-7KK13	5SV1616-6KK13	5SV1616-7KK13	–	–
	16 A	–	5SV1613-6KK16	5SV1613-7KK16	5SV1616-6KK16	5SV1616-7KK16	–	–

Mounting concept



AFDD Arc fault detection device See page 4/50
AS Auxiliary switch See page 4/54
FC Fault signal contact See page 4/56
AS+FC Auxiliary switch and fault signal contact See page 4/58
RC mech. Remote controlled mechanism See page 4/61

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Type F and AC, 1P+N

			Instantaneous 230 V AC			Super resistant [K] new 230 V AC	
		Mounting width	1 MW	1 MW		1 MW	
		Short-circuit breaking capacity	4.5 kA	6 kA		6 kA	
		N connection	Right	Right		Right	
							
$I_{\Delta n}$	I_n	Bulk packaging (12 units)	Characteristic C	Characteristic B	C	Characteristic B	C
Type F							
30 mA	6 A		–	–	–	5SV1316-3KK06	5SV1316-4KK06
	10 A		–	–	–	5SV1316-3KK10	5SV1316-4KK10
	13 A		–	–	–	5SV1316-3KK13	5SV1316-4KK13
	16 A		–	–	–	5SV1316-3KK16	5SV1316-4KK16
Type AC							
30 mA	2 A	–	5SV1313-1KK02	–	5SV1316-1KK02	–	–
	4 A	–	5SV1313-1KK04	–	5SV1316-1KK04	–	–
	6 A	–	5SV1313-1KK06	5SV1316-0KK06	5SV1316-1KK06	–	–
	10 A	–	5SV1313-1KK10	5SV1316-0KK10	5SV1316-1KK10	–	–
		■	5SV1313-1GV10	–	5SV1316-1GV10	–	–
	13 A	–	5SV1313-1KK13	5SV1316-0KK13	5SV1316-1KK13	–	–
	16 A	–	5SV1313-1KK16	5SV1316-0KK16	5SV1316-1KK16	–	–
		■	5SV1313-1GV16	–	5SV1316-1GV16	–	–
300 mA new	2 A	–	5SV1613-1KK02	–	5SV1616-1KK02	–	–
	4 A	–	5SV1613-1KK04	–	5SV1616-1KK04	–	–
	6 A	–	5SV1613-1KK06	5SV1616-0KK06	5SV1616-1KK06	–	–
	10 A	–	5SV1613-1KK10	5SV1616-0KK10	5SV1616-1KK10	–	–
	13 A	–	5SV1613-1KK13	5SV1616-0KK13	5SV1616-1KK13	–	–
	16 A	–	5SV1613-1KK16	5SV1616-0KK16	5SV1616-1KK16	–	–

Accessories

Auxiliary switches (AS)		Article No.
1 NO contact + 1 NC contact	Standard	5ST3010
	For low power	5ST3013
	For low power (with diode)	5ST3013-0XX01
2 NO contacts	Standard	5ST3011
	For low power	5ST3014
2 NC contacts	Standard	5ST3012
	For low power	5ST3015
1 CO contact	Standard	5ST3016

Fault signal contacts (FC)	Article No.
1 NO contact + 1 NC contact	5ST3020
2 NO contacts	5ST3021
2 NC contacts	5ST3022

Auxiliary switches and fault signal contacts (AS+FC)	Article No.
1 CO contact (AS) + 1 CO contact (FC)	5ST3062

Remote controlled (RC) mechanisms		Article No.
Basic	12 ... 30 V AC, 12 ... 48 V DC	5ST3053
	177 ... 270 V AC	5ST3054
Power	12 ... 30 V AC, 12 ... 48 V DC	5ST3055
	177 ... 270 V AC	5ST3056
Power with ARD	12 ... 30 V AC, 12 ... 48 V DC	5ST3057
	177 ... 270 V AC	5ST3058
Power with extended function	12 ... 30 V AC, 12 ... 48 V DC	5ST3070

Adapter for RC mechanism	Article No.
1 MW	5ST3820-6

Arc fault detection devices (AFDD)		Article No.
For 5SV1 basic units	I_n up to 16 A	5SM6011-2

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5SM6 arc fault detection devices

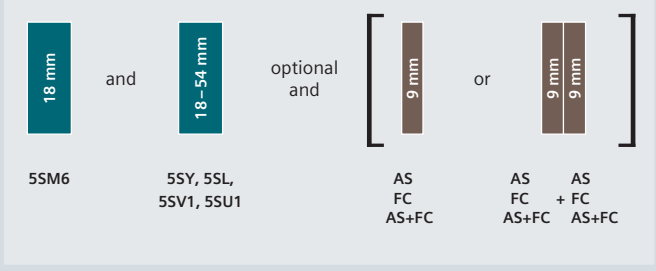
For combination with an MCB or RCBO



For combination with basic units			Rated current I_n	
Width of basic unit	Miniature circuit breakers	RCBO		
1 MW	5SL60 (no KL types)	5SV1	Up to 16 A	5SM6011-2
			Up to 40 A	5SM6014-2
2 MW	5SY [1], 5SL4 (only 1+N devices)	5SU1 (2 MW, 3 MW)	Up to 16 A	5SM6021-2
			Up to 40 A	5SM6024-2

[1] but not for 5SY5 or 5SY8

Mounting concept



AS	Auxiliary switch	See page 4/54
FC	Fault signal contact	See page 4/56
AS+FC	Auxiliary switch and fault signal contact	See page 4/58

The mounting concept shown is only one example of how devices and accessories can be combined.

Accessories

Auxiliary switches (AS)		Article No.
1 NO contact + 1 NC contact	Standard	5ST3010
	For low power	5ST3013
	For low power (with diode)	5ST3013-0XX01
2 NO contacts	Standard	5ST3011
	For low power	5ST3014
2 NC contacts	Standard	5ST3012
	For low power	5ST3015
1 CO contact	Standard	5ST3016
Fault signal contacts (FC)		**Article No.**
1 NO contact + 1 NC contact		5ST3020
2 NO contacts		5ST3021
2 NC contacts		5ST3022
Auxiliary switches and fault signal contacts (AS+FC)		**Article No.**
1 CO contact (AS) + 1 CO contact (FC)		5ST3062

See suitable busbars, page 4/64 onwards
See suitable terminals and end caps, page 4/64 onwards

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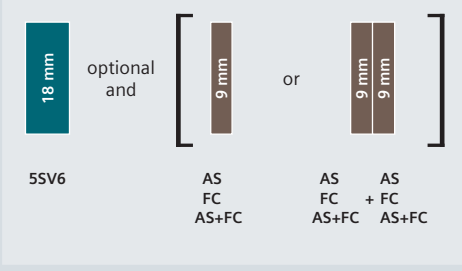
5SV6 arc fault detection devices

With integrated miniature circuit breaker

Mounting width	1 MW		1 MW pigtail	
				
Rated current I_n	**Bulk packaging (12 units)**	**Characteristic B**	**Characteristic C**	**Characteristic B**	**Characteristic C**
6 A	–	5SV6016-6KK06	5SV6016-7KK06	5SV6016-6KP06 new	5SV6016-7KP06 new
	■	5SV6016-6GV06	5SV6016-7GV06	–	–
10 A	–	5SV6016-6KK10	5SV6016-7KK10	5SV6016-6KP10 new	5SV6016-7KP10 new
	■	5SV6016-6GV10	5SV6016-7GV10	–	–
13 A	–	5SV6016-6KK13	5SV6016-7KK13	5SV6016-6KP13 new	5SV6016-7KP13 new
	■	5SV6016-6GV13	–	–	–
16 A	–	5SV6016-6KK16	5SV6016-7KK16	5SV6016-6KP16 new	5SV6016-7KP16 new
	■	5SV6016-6GV16	5SV6016-7GV16	–	–
20 A	–	5SV6016-6KK20	5SV6016-7KK20	5SV6016-6KP20 new	5SV6016-7KP20 new
25 A	–	5SV6016-6KK25	5SV6016-7KK25	5SV6016-6KP25 new	5SV6016-7KP25 new
	■	5SV6016-6GV25	–	–	–
32 A	–	5SV6016-6KK32	5SV6016-7KK32	5SV6016-6KP32 new	5SV6016-7KP32 new
40 A	–	5SV6016-6KK40	5SV6016-7KK40	5SV6016-6KP40 new	5SV6016-7KP40 new

4

Mounting concept



AS	Auxiliary switch	See page 4/54
FC	Fault signal contact	See page 4/56
AS+FC	Auxiliary switch and fault signal contact	See page 4/58

Accessories

Auxiliary switches (AS)		Article No.
1 NO contact + 1 NC contact	Standard	5ST3010
	For low power	5ST3013
	For low power (with diode)	5ST3013-0XX01
2 NO contacts	Standard	5ST3011
	For low power	5ST3014
2 NC contacts	Standard	5ST3012
	For low power	5ST3015
1 CO contact	Standard	5ST3016
Fault signal contacts (FC)		**Article No.**
1 NO contact + 1 NC contact		5ST3020
2 NO contacts		5ST3021
2 NC contacts		5ST3022
Auxiliary switches and fault signal contacts (AS+FC)		**Article No.**
1 CO contact (AS) + 1 CO contact (FC)		5ST3062

See suitable busbars, page 4/64 onwards
See suitable terminals and end caps, page 4/64 onwards

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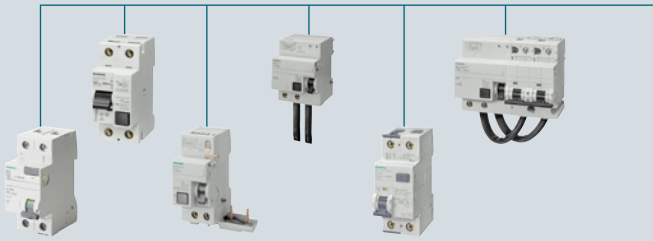
Overview of modular system

Residual current protective devices



				5SV	5SM3	5SM2 + LS	5SM2 + 5SP4	5SU1	5SU1 (125 A)
5SM6 arc fault detection devices			**Article No.**						
	Rated current up to 16 A	Standard	5SM6021-2	–	–	–	–	■	–
		For compact devices 1P+N in 1 MW	5SM6011-2	–	–	–	–	–	–
	Rated current up to 40 A	Standard	5SM6024-2	–	–	–	–	■	–
		For compact devices 1P+N in 1 MW	5SM6014-2	–	–	–	–	–	–
Auxiliary switches (AS)			**Article No.**						
	1 NO contact + 1 NC contact	Standard	5ST3010	■	–	■	■	■	■
		For low power	5ST3013	■	–	■	■	■	■
		For low power (with diode)	5ST3013-0XX01	■	–	■	■	■	■
	2 NO contacts	Standard	5ST3011	■	–	■	■	■	■
		For low power	5ST3014	■	–	■	■	■	■
	2 NC contacts	Standard	5ST3012	■	–	■	■	■	■
		For low power	5ST3015	■	–	■	■	■	■
	1 CO contact	Standard	5ST3016	■	–	■	■	■	■
Fault signal contacts (FC)			**Article No.**						
	1 NO contact + 1 NC contact		5ST3020	■	–	■	■	■	■
	2 NO contacts		5ST3021	■	–	■	■	■	■
	2 NC contacts		5ST3022	■	–	■	■	■	■
Auxiliary switches and fault signal contacts (AS+FC)			**Article No.**						
	1 CO contact (AS) + 1 CO contact (FC)	Standard	5ST3062	■	–	■	■	■	■
Shunt trips (ST)			**Article No.**						
	110 ... 415 V AC, 110 ... 220 V DC		5ST3030	■	–	■	■	■	■
	24 ... 48 V AC/DC		5ST3031	■	–	■	■	■	■
	12 V DC		5ST3031-0XX01	■	–	■	■	■	■
Undervoltage releases (UR)			**Article No.**						
	With integrated auxiliary switch	230 V AC	5ST3040	■	–	■	■	■	■
		110 V DC	5ST3041	■	–	■	■	■	■
		24 V DC	5ST3042	■	–	■	■	■	■
	Without integrated auxiliary switch	230 V AC	5ST3043	■	–	■	■	■	■
		110 V DC	5ST3044	■	–	■	■	■	■
		24 V DC	5ST3045	■	–	■	■	■	■
Remote controlled (RC) mechanisms			**Article No.**						
	Basic	12 ... 30 V AC, 12 ... 48 V DC	5ST3053	–	–	–	–	■	–
		177 ... 270 V AC	5ST3054	–	–	–	–	■	–
	Power	12 ... 30 V AC, 12 ... 48 V DC	5ST3055	■	–	■	–	■	–
		177 ... 270 V AC	5ST3056	■	–	■	–	■	–
	Power with ARD	12 ... 30 V AC, 12 ... 48 V DC	5ST3057	■	–	■	–	■	–
		177 ... 270 V AC	5ST3058	■	–	■	–	■	–
	Power with extended function	12 ... 30 V AC, 12 ... 48 V DC	5ST3070	■	–	■	–	■	–
Standard busbars			**Article No.**						
	Cannot be cut		5ST36..	■	–	■	■	■	■
	Can be cut		5ST37..	■	–	■	■	■	■
Compact busbars			**Article No.**						
	Cannot be cut		5ST36..	■	–	–	–	–	–
	Can be cut		5ST37..	■	–	–	–	–	–

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■ Suitable for all versions □ Suitable for some versions

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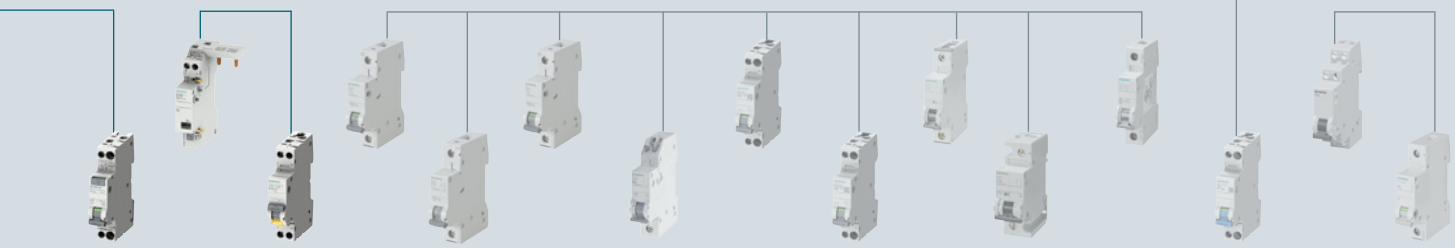
Device protection switches

Arc fault detection devices | Miniature circuit breakers | Switching devices



5SV1	5SM6	5SV6	5SL3	5SL6	5SL4	5SJ6...-.KS	5SL30	5SL60	5SY	5SP4	5SJ4..HG..	5SY17	5TE8	5TL
–	–	–	–	–	□	–	–	–	□	–	–	–	–	–
■	–	–	–	–	–	–	–	□	–	–	–	–	–	–
–	–	–	–	–	□	–	–	–	□	–	–	–	–	–
■	–	–	–	–	–	–	–	□	–	–	–	–	–	–
■	□	■	■	■	■	–	■	■	■	■	...-0HG	■	■	■
■	□	■	■	■	■	–	■	■	■	■	–	■	■	■
■	□	■	■	■	■	–	■	■	■	■	–	■	■	■
■	□	■	■	■	■	–	■	■	■	■	...-0HG	■	■	■
■	□	■	■	■	■	–	■	■	■	■	–	■	■	■
■	□	■	■	■	■	–	■	■	■	■	...-0HG	■	■	■
■	□	■	■	■	■	–	■	■	■	■	–	■	■	■
■	□	■	■	■	■	–	■	■	■	■	–	■	■	■
■	□	■	■	■	■	–	■	■	■	■	...-0HG	■	–	–
■	□	■	■	■	■	–	■	■	■	■	...-0HG	■	–	–
■	□	■	■	■	■	–	■	■	■	■	...-0HG	■	–	–
■	□	■	■	■	■	–	■	■	■	■	–	■	–	–
–	□	–	–	–	■	–	–	–	■	■	...-0HG	–	–	–
–	□	–	–	–	■	–	–	–	■	■	...-0HG	–	–	–
–	□	–	–	–	■	–	–	–	■	■	–	–	–	–
–	□	–	–	–	■	–	–	–	■	■	–	–	–	–
–	□	–	–	–	■	–	–	–	■	■	–	–	–	–
–	□	–	–	–	■	–	–	–	■	■	–	–	–	–
–	□	–	–	–	■	–	–	–	■	■	–	–	–	–
■	–	–	■	■	□	–	–	□	□	■	–	■	–	■
■	–	–	■	■	□	–	–	□	□	■	–	■	–	■
■	–	–	■	■	□	–	–	□	□	■	–	■	–	■
■	–	–	■	■	□	–	–	□	□	■	–	■	–	■
■	–	–	■	■	□	–	–	□	□	■	–	■	–	■
■	–	–	■	■	□	–	–	□	□	■	–	■	–	■
■	□	■	■	■	■	■	■	■	■	■	■	■	□	■
■	□	■	■	■	■	■	■	■	■	■	■	■	□	■
■	■	■	□	□	□	–	■	■	–	–	–	■	–	–
■	■	■	□	□	□	–	■	■	–	–	–	–	–	–
	from page 4/50		from page 3/12									from page 3/40	from page 5/6	

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Electrical accessories



Auxiliary switches (AS)

- Signals contact point of the mounted device
- Version for the switching of small currents and voltages for the control of programmable control systems (PLCs) according to EN 61131-2
- Test button enables the testing of control circuits without the need to switch the mounted device

For combination with basic units						Contacts	Version	Width (1 MW = 18 mm)	Article No.
Miniature circuit breakers	Device protection switches	RCCBs	RCBOs	Arc fault detection devices	ON/OFF switches				
Auxiliary switches (AS)									
–	–	5SM3 (3P+N, 100/125 A)	–	–	–	1 NO contact + 1 NC contact	Standard	0.5 MW	5SW3330
5SL, 5SY, 5SP4	5SY17	5SV	5SU1 [1], 5SV1	5SV6	5TL1, 5TE8	1 NO contact + 1 NC contact	Standard	0.5 MW	5ST3010
							For low power	0.5 MW	5ST3013
							For low power (with diode)	0.5 MW	5ST3013-0XX01
						2 NO contacts	Standard	0.5 MW	5ST3011
							For low power	0.5 MW	5ST3014
						2 NC contacts	Standard	0.5 MW	5ST3012
							For low power	0.5 MW	5ST3015
						1 CO contact	Standard	0.5 MW	5ST3016
Auxiliary switches (AS) with TEST button									
5SL, 5SY, 5SP4	5SY17	5SV	5SU1 [1], 5SV1	5SV6	5TL1, 5TE8	1 NO contact + 1 NC contact	Standard	0.5 MW	5ST3010-2
							For low power	0.5 MW	5ST3013-2
						2 NO contacts	Standard	0.5 MW	5ST3011-2
							For low power	0.5 MW	5ST3014-2
						2 NC contacts	Standard	0.5 MW	5ST3012-2
							For low power	0.5 MW	5ST3015-2

[1] Handle coupler 5ST3805-1 required

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Further technical specifications

		5ST3010, 5ST3010-2, 5ST3011, 5ST3011-2, 5ST3012, 5ST3012-2, 5ST3016	5ST3013, 5ST3014, 5ST3015, 5ST3013-0XX01	5ST3013-2 5ST3014-2 5ST3015-2
Standards				
Standards	IEC/EN	IEC/EN 62019, IEC/EN 60947-5-1		
	UL, CSA	UL 1077, CSA C22.2 No. 235		
Contacts				
Minimum contact load		50 mA, 24 V	1 mA, 5 V DC	5 mA, 5 V DC
Maximum contact load		–	100 mA, 30 V DC	30 mA, 30 V DC
Contact load according to IEC/EN 62019 and IEC/EN 60947-5-1	230 V AC, AC-13	6 A	–	
	400 V AC, AC-14	2 A	–	
	24 V DC, DC-13	6 A	–	
	60 V DC, DC-13	3 A	–	
	110 V DC, DC-13	1 A	–	
	220 V DC, DC-13	1 A	–	
Service life, on average, with rated load		20 000 actuations		
Safety				
Short-circuit protection		Miniature circuit breakers or gG 6 A fuse		
Connections				
Conductor cross-sections		0.5 ... 2.5 mm^2 (AWG 22 ... 14)		
Terminals	Max. tightening torque	0.5 Nm [4.5 lb-in]		
Environmental conditions				
Permissible ambient temperature		–25 ... +55 °C		
Permissible storage temperature		–40 ... +75 °C		
Resistance to climate	Acc. to IEC 60068-2-30	28 cycles		
Mounting position		Any		
Shock at 11 ms half-sine	Acc. to IEC 60068-2-27	50 m/s^2		
Vibration resistance at 10 ... 150 Hz	Acc. to IEC 60068-2-6	50 m/s^2		

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Electrical accessories



Fault signal contacts (FC)

- Signals the automatic tripping of the protective device in the event of a fault, such as an overload or a short circuit
- If the fault signal contact is activated, the contact position does not change if the in-built protective device is tripped manually
- Version with TEST and RESET buttons enables the testing of control circuits without the need to trip the protective device
- Red RESET button in the operating handle indicates automatic shutdown of the mounted protective device

For combination with basic units					Contacts	Width (1 MW = 18 mm)	Article No.
Miniature circuit breakers	Device protection switches	RCCBs	RCBO	Arc fault detection devices			
Fault signal contacts (FC)							
5SL, 5SY, 5SP4	5SY17	5SV	5SU1 [1], 5SV1	5SV6	1 NO contact + 1 NC contact	0.5 MW	5ST3020
					2 NO contacts	0.5 MW	5ST3021
					2 NC contacts	0.5 MW	5ST3022
Fault signal contacts (FC) with Test and Reset buttons							
5SL, 5SY, 5SP4	5SY17	5SV	5SU1 [1], 5SV1	5SV6	1 NO contact + 1 NC contact	0.5 MW	5ST3020-2
					2 NO contacts	0.5 MW	5ST3021-2
					2 NC contacts	0.5 MW	5ST3022-2

[1] Handle coupler 5ST3805-1 required

Further technical specifications

		5ST3020, 5ST3020-2 5ST3021, 5ST3021-2 5ST3022, 5ST3022-2
Standards		
Standards	IEC/EN	IEC/EN 62019, IEC/EN 60947-5-1
	UL, CSA	UL 1077, CSA C22.2 No. 235
Contacts		
Minimum contact load		50 mA, 24 V
Contact load according to IEC/EN 62019 and IEC/EN 60947-5-1	230 V AC, AC-13	6 A
	400 V AC, AC-14	2 A
	24 V DC, DC-13	6 A
	60 V DC, DC-13	3 A
	110 V DC, DC-13	1 A
	220 V DC, DC-13	1 A
Service life, on average, with rated load		20 000 actuations
Safety		
Short-circuit protection		Miniature circuit breakers or gG 6 A fuse
Connections		
Conductor cross-sections		0.5 ... 2.5 mm^2 (AWG 22 ... 14)
Terminals	Max. tightening torque	0.5 Nm [4.5 lb-in]
Environmental conditions		
Permissible ambient temperature		–25 ... +55 °C
Permissible storage temperature		–40 ... +75 °C
Resistance to climate	Acc. to IEC 60068-2-30	28 cycles
Mounting position		Any
Shock at 11 ms half-sine	Acc. to IEC 60068-2-27	50 m/s^2
Vibration resistance at 10 ... 150 Hz	Acc. to IEC 60068-2-6	50 m/s^2

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Electrical accessories



Auxiliary switches and fault signal contacts (AS+FC)

- Combine the properties of both switches in a width of only 0.5 MW (9 mm)
- Signal contact point of the mounted device
- Signal the automatic tripping of the protective device in the event of a fault, such as an overload, short circuit or residual current
- If the fault signal contact is activated, the contact position does not change if the in-built protective device is tripped manually

For combination with basic units					Contacts	Width (1 MW = 18 mm)	Article No.
Miniature circuit breakers	Device protection switches	RCCBs	RCBO	Arc fault detection devices			
Auxiliary switches and fault signal contacts (AS+FC)							
5SL, 5SY, 5SP4	5SY17	5SV	5SU1 [1], 5SV1	5SV6	1 CO contact (AS) + 1 CO contact (FC)	0.5 MW	5ST3062

[1] Handle coupler 5ST3805-1 required

Further technical specifications

		5ST3062
Standards		
Standards	IEC/EN	IEC/EN 62019, IEC/EN 60947-5-1
	UL, CSA	UL 1077, CSA C22.2 No. 235
Contacts		
Minimum contact load		50 mA, 24 V
Maximum contact load		–
Contact load according to IEC/EN 62019 and IEC/EN 60947-5-1	230 V AC, AC-13	6 A
	400 V AC, AC-14	2 A
Contact load according to IEC/EN 62019 (acc. to IEC/EN 60947-5-1)	24 V DC, DC-13	3 A (3 A)
	60 V DC, DC-13	3 A (1 A)
	110 V DC, DC-13	0.5 A (0.5 A)
	220 V DC, DC-13	0.5 A (0.3 A)
Service life, on average, with rated load		20 000 actuations
Safety		
Short-circuit protection		Miniature circuit breakers or gG 6 A fuse
Connections		
Conductor cross-sections		0.5 ... 2.5 mm^2 (AWG 22 ... 14)
Terminals	Max. tightening torque	0.5 Nm [4.5 lb-in]
Environmental conditions		
Permissible ambient temperature		–25 ... +55 °C
Permissible storage temperature		–40 ... +75 °C
Resistance to climate	Acc. to IEC 60068-2-30	28 cycles
Mounting position		Any
Shock at 11 ms half-sine	Acc. to IEC 60068-2-27	50 m/s^2
Vibration resistance at 10 ... 150 Hz	Acc. to IEC 60068-2-6	50 m/s^2

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Shunt trips (ST)

- For remote-controlled tripping of the mounted device

For combination with basic units Miniature circuit breakers	RCCBs	RCBO	Rated voltage U_n	Width (1 MW = 18 mm)	Article No.
Shunt trips (ST)					
5SL4, 5SY, 5SP4	5SV	5SU1 [1]	110 ... 415 V AC, 110 ... 220 V DC	1 MW	5ST3030
			AC/24 ... 48 V DC	1 MW	5ST3031
			12 V DC new	1 MW	5ST3031-0XX01

[1] Handle coupler 5ST3805-1 required

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Further technical specifications

		5ST3030	5ST3031	5ST3031-0XX01
Standards				
Standards	IEC/EN	EN 60947-1		
Supply				
Primary operating range		0.7 ... 1.1 × U_n		
Rated frequency f_n		50 ... 60 Hz		–
Contacts				
Minimum contact load		50 mA, 24 V		1 mA, 5 V
Tripping operations		Max. 2000		
Service life, on average, with rated load	Actuations	20000		
Safety				
Short-circuit protection		Miniature circuit breakers B/C 6 A or fuse gG 6 A		
Connections				
Conductor cross-sections		0.5 ... 2.5 mm² (AWG 22 ... 14)		
Terminals	Max. tightening torque	0.8 Nm [6.8 lb-in]		
Environmental conditions				
Permissible ambient temperature		–25 ... +55 °C		–40 ... +70 °C
Permissible storage temperature		–40 ... +75 °C		
Resistance to climate	Acc. to IEC 60068-2-30	28 cycles		
Mounting position		Any		
Shock at 11 ms half-sine	Acc. to IEC 60068-2-27	50 m/s²		
Vibration resistance at 10 ... 150 Hz	Acc. to IEC 60068-2-6	50 m/s²		

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Electrical accessories



Undervoltage releases (UR)

- Integrated, for example, in EMERGENCY-OFF loops
- Ensure that the mounted device trips in the event of an emergency, guaranteeing disconnection of the control circuit according to EN 60204.
- Trip the mounted device if the voltage is interrupted or too low, i.e. prevents activation of the mounted device

For combination with basic units Miniature circuit breakers	RCCBs	RCBO	Rated voltage U_n	Width (1 MW = 18 mm)	Article No.
With integrated auxiliary switch					
5SL4, 5SY, 5SP4	5SV	5SU1 [1]	230 V AC	1 MW	5ST3040
			110 V DC	1 MW	5ST3041
			24 V DC	1 MW	5ST3042
Without integrated auxiliary switch					
5SL4, 5SY, 5SP4	5SV	5SU1 [1]	230 V AC	1 MW	5ST3043
			110 V DC	1 MW	5ST3044
			24 V DC	1 MW	5ST3045

[1] Handle coupler 5ST3805-1 required

Further technical specifications		5ST304.
Standards		
Standards	IEC/EN	EN 60947-1
Supply		
Primary operating range		0.85 ... 1.1 × U_n
Rated frequency f_n		50/60 Hz
Contacts		
Minimum contact load		50 mA, 24 V
Tripping operations		Max. 2000
Service life, on average, with rated load	Actuations	20000
Safety		
Short-circuit protection		Miniature circuit breakers B/C 6 A or fuse gG 6 A
Connections		
Conductor cross-sections		0.5 ... 2.5 mm² (AWG 22 ... 14)
Terminals	Max. tightening torque	0.8 Nm [6.8 lb-in]
Environmental conditions		
Permissible ambient temperature		–25 ... +55 °C
Permissible storage temperature		–40 ... +75 °C
Resistance to climate	Acc. to IEC 60068-2-30	28 cycles
Mounting position		Any
Shock at 11 ms half-sine	Acc. to IEC 60068-2-27	50 m/s²
Vibration resistance at 10 ... 150 Hz	Acc. to IEC 60068-2-6	50 m/s²

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5ST3 remote controlled (RC) mechanisms

- For operating facilities that are extensive or not continuously staffed
- Allow direct and immediate access to the plant even if it is remote or in a location that is hard to reach
- Permit fast restarts following a fault
- Version with ARD with automatic restart
- Versions with ARD and Power with integrated auxiliary switches and fault signal contacts

Remote controlled type	Display	Ambient temperature	Vibration and shock requirements	Rated voltage U_n	Width (1 MW = 18 mm)	Article No.
Basic	–	–25 °C ... +45 °C	–	12 ... 30 V AC, 12 ... 48 V DC	1.5 MW	5ST3053
				177 ... 270 V AC	2 MW	5ST3054
Power	LED	–25 °C ... +45 °C	–	12 ... 30 V AC, 12 ... 48 V DC	2 MW	5ST3055
				177 ... 270 V AC	2 MW	5ST3056
Power with ARD	LED	–25 °C ... +45 °C	–	12 ... 30 V AC, 12 ... 48 V DC	2 MW	5ST3057
				177 ... 270 V AC	2 MW	5ST3058
Power with extended function	LED	–40 °C ... +70 °C	Acc. to EN 61373 / EN 50155 "1B"	12 ... 30 V AC, 12 ... 48 V DC	2 MW	5ST3070

Further technical specifications

	5ST3053	5ST3054	5ST3055	5ST3056	5ST3057	5ST3058	5ST3070
Standards							
Standards	EN 50557 (VDE 0640-20)						
Supply							
Rated frequency f_n	50 ... 60 Hz						
Rated power dissipation on standby	≤1 VA						
Contacts							
Service life, on average, with rated load Actuations	10000						
Number of remote switching operations per minute	2						
Number of automatic reclose attempts	–				3		–
Cable length in the control circuit	≤1500 m						
Sliding selector with locking device	–	■					
Integrated auxiliary switches	–		1CO; 2 A; 250 V				
Integrated fault signal contacts	–		1CO; 2 A; 250 V				
Connections							
Conductor cross-sections	0.5 ... 1.5 mm² (AWG 14 ... 30)						
Terminal tightening torque	0.2 ... 0.25 Nm (2.0 lb-in)						
Environmental conditions							
Permissible storage temperature	–40 ... +55 °C						–40 ... +70 °C
Degree of protection	IP20						
Pollution degree for overvoltage category	3/II						

Suitable adapters for combination with basic units



Basic units	Mounting width							Adapters
	1 MW	2 MW	3 MW	4 MW	2-pole	3-pole	4-pole	
5SU1	–	■	■	–	–	–	–	5ST3820-5
5SV1	■	–	–	–	–	–	–	5ST3820-6
5SV3	–	■	–	■	–	–	–	5ST3820-6
5SM2 with 5SY	–	–	–	–	■	–	–	5ST3820-3 + 5ST3820-1
	–	–	–	–	–	■	■	5ST3820-3 + 5ST3820-2
5SM2 with 5SL	–	–	–	–	■	–	–	5ST3820-3 + 5ST3820-6
	–	–	–	–	–	■	■	5ST3820-3 + 5ST3820-7

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Mechanical accessories

Handle couplers for additional components



- Necessary for mounting the additional components auxiliary switches, fault signal contacts, shunt trips and undervoltage releases onto the 5SU1 RCBO
- 1 set = 5 units

	Article No.
	5ST3805-1

Handle locking devices

- To prevent undesired mechanical ON/OFF switching
- Sealable and lockable
- For padlock with 3 ... 6 mm shackle





Version	Article No.
For 5SV RCCBs, 5SV1 RCBOs, 5SV6 arc fault detection devices	5ST3806
For 5SU1 RCBOs	5ST3801-1

Locking device

- For 5SV RCCBs, 5SV1 RCBOs, 5SV6 arc fault detection devices

Comprising:	Article No.
5ST3806 handle locking device and 5ST3802 padlock	5ST3807

Padlock



- For 5ST3801 and 5ST3806 handle locking devices and remote operating mechanisms 5ST3054 ... 58, 5ST3070

	Article No.
	5ST3802

Device labels

- For adhesive attachment
- For modular installation devices, such as 5SY, 5SL, 5TL1

Versions	Article No.
15 mm x 6 mm, white (WIN 098)	8WH8210-0AA35
15 mm x 6 mm, yellow (WIN 099)	8WH8210-0AA36

Covers for connection terminals



- For 5SV3 and 5SV4 residual current operated circuit breakers, sealable (2 units in plastic bag)

Mounting width	Article No.
2 MW	5SW3010
4 MW	5SW3008

Terminal covers, gray



- For surface mounting, IP40 degree of protection
- Sealable
- Can be used with 35 mm DIN rail

For width up to	Article No.
2.5 MW	5SW3004
4.5 MW	5SW3005

Wall enclosures, gray



- For flush mounting, IP40 degree of protection
- Can be used with 35 mm DIN rail

For width up to	Article No.
2.5 MW	5SW3006
4.5 MW	5SW3007

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RCCB protective socket outlets

Acc. to VDE 0664

Covers



- Can be assembled as mini-distribution board
- Suitable for all devices
- Cover parts prepared for rail mounting of conventional label caps

Comprising:	Article No.
End plates	5ST2134
Angled profile	5ST2135
Flat profile as alternative	5ST2136

RCCB protective socket outlets in molded-plastic enclosures



- Equipped with RCCB and flush-mounted SCHUKO® socket outlet
- IP54 degree of protection

Rated residual current $I_{\Delta n}$	Rated current I_n	Article No.
10 mA	16 A	5SZ9206
30 mA	16 A	5SZ9216

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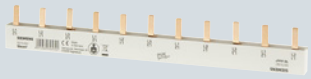
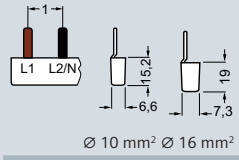
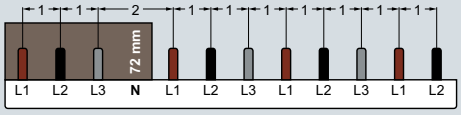
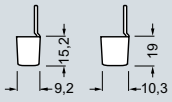
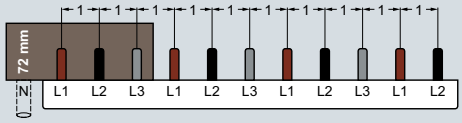
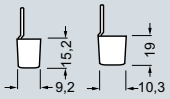
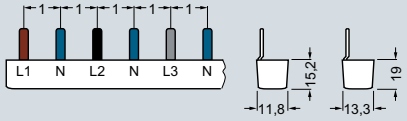
Standard busbars



5ST36, fixed lengths, cannot be cut

Pin spacings in MW (1 MW = 18 mm)	Application	Number of MWs	Length	Conductor cross-section 10 mm²	16 mm²
Two-phase / single-phase + N				Article No.	Article No.
 Ø 10 mm² Ø 16 mm²	For 6× 2MW devices (2P)	12 MW	210 mm	5ST3608	5ST3638
Three-phase, for MCBs with RCCB				Article No.	Article No.
  Ø 10 mm² Ø 16 mm²	For 8 MCBs 1P with 1 RCCB 3P+N, N right	12 MW	210 mm	5ST3624	5ST3654
  Ø 10 mm² Ø 16 mm²	For 8 MCBs 1P with 1 RCCB 3P+N, N left	11 MW	192 mm	5ST3667	5ST3668
Four-phase / three-phase + N				Article No.	Article No.
 Ø 10 mm² Ø 16 mm²	For 6× 2MW devices (1P+N)	12 MW	215 mm	5ST3623	5ST3653

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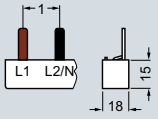
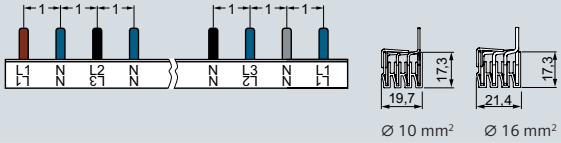
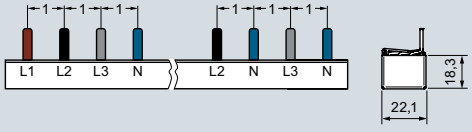
5ST37, schneidbar

Pin spacings in MW (1 MW = 18 mm)	Application	Number of MWs	Length	End caps included	Conductor cross-section 10 mm²	16 mm²
Two-phase / single-phase + N					**Article No.**	**Article No.**
	For 2 MW units (2P / 1+N)	12 MW	214 mm	■	5ST3734	5ST3704
		56 MW	1016 mm	–	5ST3735	5ST3705
Four-phase / three-phase + N, for MCBs with RCCB					**Article No.**	**Article No.**
	For MCBs 2P with 1 RCCB 1P+N	56 MW	1000 mm	–	5ST3770-2	5ST3770-3
	For 6 MCBs 1P+N with 1 RCCB 4P+N right	16 MW	292 mm	■	5ST3770-4	5ST3770-5

Accessories for busbars 5ST36 and 5ST37

End caps for 5ST37



Version	Article No.
For two-phase and three-phase busbars	5ST3750
For 4-phase busbars	5ST3718

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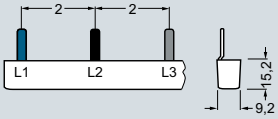
Standard busbars

5ST36 and 5ST37

Fixed lengths, cannot be cut, for devices with add-on 5SM6 arc fault detection devices

Pin spacings in MW (1 MW = 18 mm)	Application	Number of MWs	Length	Endkappen inkl.	Color	Conductor cross-section 10 mm²
Three-phase						**Article No.**
	For 5SM601	12 MW	210 mm	–	Gray	5ST3615-1

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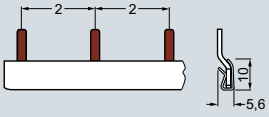
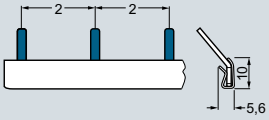
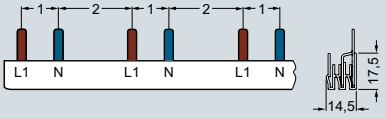
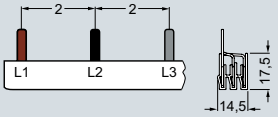
Can be cut, for devices with add-on 5SM6 arc fault detection devices

Pin spacings in MW (1 MW = 18 mm)	Application	Number of MWs	Length	Endkappen inkl.	Color	Conductor cross-section 10 mm²
Single-phase, straight						**Article No.**
	For 5SM601.	56 MW	1000 mm	–	Gray	5ST3764-1
					Blue	5ST3765-2
Single-phase, angled 45°						**Article No.**
	For 5SM601.	56 MW	1000 mm	–	Blue	5ST3765-1
Two-phase / single-phase + N						**Article No.**
	For 5SM602. (1P+N)	56 MW	1000 mm	–	Gray	5ST3735-1
Three-phase						**Article No.**
	For 5SM601.	60 MW	1050 mm	–	Gray	5ST3740-1
Four-phase / three-phase + N						**Article No.**
	For 5SM602.	52 MW	950 mm	–	Gray	5ST3746-1

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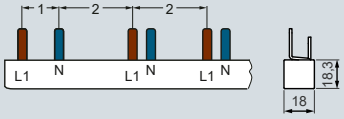
Can be cut, for devices with add-on 5SM6 arc fault detection devices and infeed via RCCB

Pin spacings in MW (1 MW = 18 mm)	Application	Number of MWs	Length	End caps included	Color	Conductor cross-section 16 mm²
Two-phase / single-phase + N						**Article No.**
	For RCCB 2P N-right and 5 AFDD (5SM601.) + compact device	12 MW	214 mm	■	Gray	5ST3772

4

Accessories

Terminals for infeed at side		Article No.
For conductors up to 25 mm²	Short	5ST3768
	Short, IP20	5ST3771-2
	Long	5ST3771-1
End caps		**Article No.**
For single-phase busbars	Gray	5ST3766
	Blue	5ST3767
For two- and three-phase busbars		5ST3750
For four-phase busbars		5ST3718
Touch protection		**Article No.**
For free connections, yellow (RAL 1004) 5× 1 pin		5ST3655

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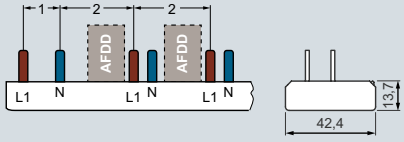
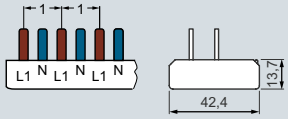
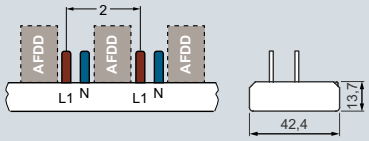
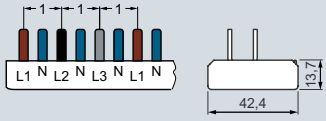
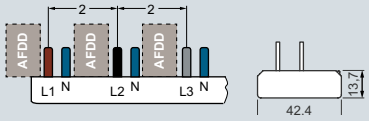
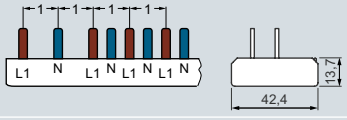
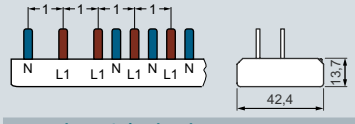
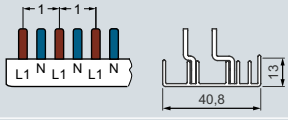
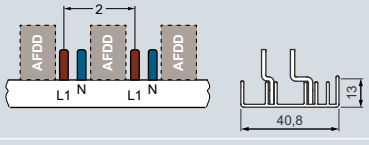
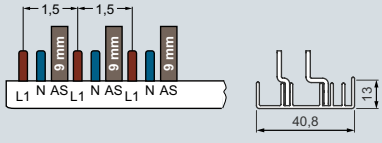
Compact busbars

5ST36, fixed lengths, cannot be cut

Pin spacings in MW (1 MW = 18 mm)	Application	Number of MWs	Length	End caps included	Conductor cross-section 10 mm²
Two-phase / single-phase + N, for infeed via RCCB					**Article No.**
	For 1 x RCCB 1P+N and 5 x compact devices equipped with 5SM6 arc fault detection device	12 MW	216 mm	■	5ST3685-0
Two-phase / single-phase + N					**Article No.**
	For compact devices	6 MW	113 mm	■	5ST3674-6 new
		9 MW	166 mm	■	5ST3674-7 new
		12 MW	218 mm	■	5ST3674-0
	For 6 compact devices equipped with 5SM6 arc fault detection device	12 MW	200 mm	■	5ST3676-0
Four-phase / three-phase + N					**Article No.**
	For compact devices	6 MW	113 mm	■	5ST3673-6 new
		9 MW	166 mm	■	5ST3673-7 new
		12 MW	218 mm	■	5ST3673-0
		14 MW	254 mm	■	5ST3673-4 new
	For 6 compact devices equipped with 5SM6 arc fault detection device	11 MW	200 mm	■	5ST3675-0

5ST37, can be cut

Pin spacings in MW (1 MW = 18 mm)	Application	Number of MWs	Length	End caps included	Conductor cross-section 10 mm²
Two-phase / single-phase + N, for infeed via RCCB					**Article No.**
	For 1 x RCCB 1P+N and 10 x compact devices	12 MW	215 mm	■	5ST3784-0
	For 1 x RCCB 1P+N (RCCB N left only) and 10 x compact devices	12 MW	215 mm	■	5ST3784-0KL
Two-phase / single-phase + N					**Article No.**
	For compact devices	60 MW	1060 mm	■	5ST3774-0
	For compact devices equipped with 5SM6 arc fault detection device	59 MW	1042 mm	–	5ST3776-0
	For compact devices equipped with auxiliary switch	59.5 MW	1055 mm	–	5ST3778-0

4

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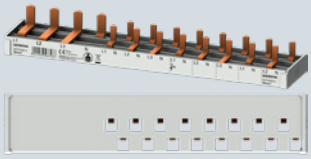
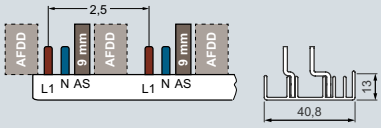
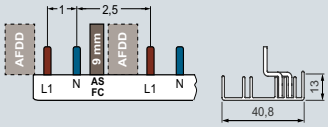
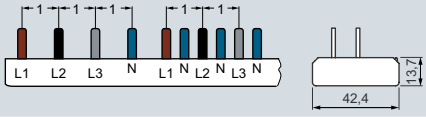
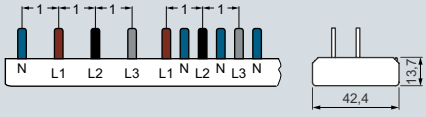
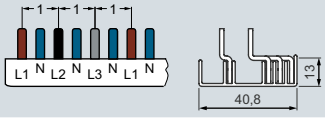
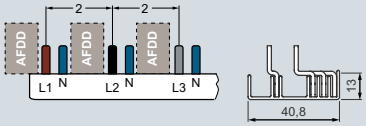
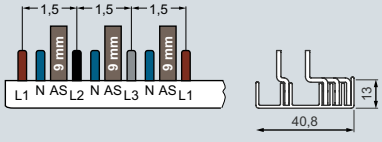


5ST37, can be cut

Pin spacings in MW (1 MW = 18 mm)	Application	Number of MWs	Length	End caps included	Conductor cross-section 10 mm²
Two-phase / single-phase + N					**Article No.**
	For compact devices equipped with 5SM6 arc fault detection device and auxiliary switch	58.5 MW	1036 mm	–	5ST3780-0
	For 2 MW units (MCBs or RCBOs) with 5SM6 arc fault detection device and auxiliary switch	54 MW	956 mm	–	5ST3786-0
Four-phase / three-phase + N, for infeed via RCCB					**Article No.**
	For 1× RCCB 3P+N and 8× compact devices	12 MW	216 mm	■	5ST3783-0
	For 1× RCCB 3P+N (RCCB N left only) and 8× compact devices	12 MW	216 mm	■	5ST3783-0KL
Four-phase / three-phase + N					**Article No.**
	For compact devices	60 MW	1060 mm	–	5ST3773-0
	For compact devices equipped with 5SM6 arc fault detection device	59 MW	1042 mm	–	5ST3775-0
	For compact devices equipped with auxiliary switch	59.5 MW	1055 mm	–	5ST3777-0

Accessories for 5ST3 compact busbars, versions that can and cannot be cut

Touch protection for 5ST3



Version	Color	Article No.
For free connections, for pins L1, N	Yellow (RAL1004)	5ST3655
For pins L2 / L3	Yellow (RAL1004)	5ST3655-0HG

End caps for 5ST3



Version	Color	Article No.
For two-phase and four-phase busbars	Gray	5ST3788-0

Terminals, short, IP20



Version	For conductors	Infeed	Article No.
Infeed terminal for connection of larger cross section	Up to 25 mm²	Lateral	5ST3771-2

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Electrical switching – on the safe side

Control and automatic functions always employ electrical switching.

Remote control switches for pulse controls, switching relays, or Insta contactors switch electrical loads.

Our low-voltage circuit protection technology offers a wide variety of contact versions and rated currents for the different requirements of these devices.

Safety, convenience and energy savings – these characterize automatic switching.

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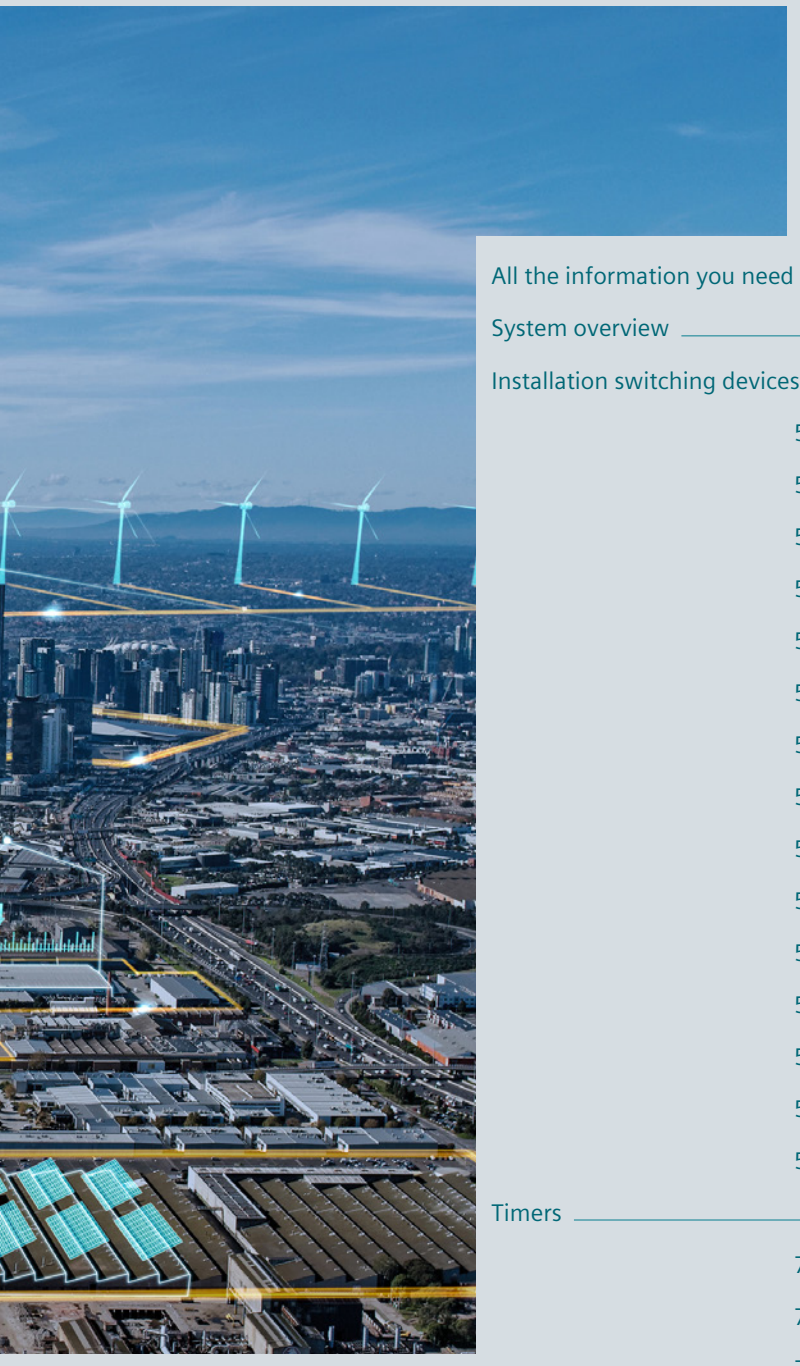
Switching Devices



All the information you need 5/2

System overview 5/4

Installation switching devices 5/6

- 5TE8 control switches 5/6
- 5TE48 pushbuttons 5/8
- 5TE58 light indicators 5/10
- 5TE81/82 On/Off switches 5/12
- 5TL1 On/Off switches 5/14
- 5TE DC isolator 5/16
- 5TE busbars 5/18
- 5TT41 remote control switches 5/20
- 5TT44 remote control switches 5/24
- 5TT4 auxiliary switches 5/26
- 5TT42 switching relays 5/28
- 5TT50 Insta contactors 5/30
- 5TT58 Insta contactors 5/32
- 5TT5 auxiliary switches 5/34
- 5TT3 soft-starting devices 5/35

Timers 5/36

- 7LF4 digital time switches 5/36
- 7LF5 mechanical time switches 5/42
- 7LF6 timers for buildings 5/46
- 5TT3 timers for industrial applications 5/47

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A multitude of additional information ...

Information + ordering

All the important things at a glance

Information to get you started

For information about switching devices, please visit our website
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Contact persons in your region

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Manuals

Manuals are available for downloading in Siemens Industry Online Support at
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- Configuration manual – Switching devices (45315361)

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We offer a comprehensive portfolio of services.
You can find your local contacts at
www.siemens.com/lowvoltage/contact

You can find further information on services at
www.siemens.com/service-catalog

Technical overview – Switching devices

The fast way to get you to our online services

This page provides you with comprehensive information and links on switching devices
www.siemens.com/lowvoltage/product-support (109769083)

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System overview

Basic units and accessories

Installation switching devices



5TE8
control switches



5TE48
pushbuttons



5TE58
light indicators



5TE81/82, 5TL1
On/Off switches, 5TE2



5TE
DC isolators



5TE
busbars



5TT41, 5TT44
remote control switches



5TT4, 5TT5
auxiliary switches



5TT42
switching relays



5TT50, 5TT58
Insta contactors



5TT3
soft-starting devices

Accessories



Auxiliary switches (AS)



Shunt trips (ST)



Undervoltage releases (UR)



Handle locking devices



LEDs



Caps/covers



Connectors

Timers



7LF4 digital time switches



7LF5 mechanical time switches



7LF6 timers for buildings



5TT3 timers for industrial applications

Accessories



Holders

Note:
You will find a detailed range of accessories with the basic units.

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5TE8 control switches

	Control switches		Two-way switches		Group switches with center position
Rated operational current I_e per conducting path	20 A		20 A		20 A
Rigid conductor cross-section	1 ... 6 mm²		1 ... 6 mm²		1 ... 6 mm²
Flexible conductor cross-section, with end sleeve	1 ... 6 mm²		1 ... 6 mm²		1 ... 6 mm²
					

5

Contacts	U_e AC	Mounting width	Auxiliary switches		Auxiliary switches		Auxiliary switches
			Cannot be retrofitted	Mounted	Cannot be retrofitted	Mounted	Cannot be retrofitted
1 NO	48 V	1 MW	5TE8101-3	–	–	–	–
	230 V	1 MW	5TE8101	–	–	–	–
2 NO	400 V	1 MW	5TE8102	–	–	–	–
3 NO	400 V	1 MW	5TE8103	–	–	–	–
		1.5 MW	–	5TE8108	–	–	–
1 NO + 1 NC	400 V	1 MW	–	–	–	5TE8151	–
2 NO + 2 NC	400 V	1 MW	–	–	5TE8152	–	–
3 NO + 1 NC	400 V	1 MW	–	–	5TE8153	–	–
1 CO	230 V	1 MW	–	–	5TE8161	–	–
2 CO	400 V	1 MW	–	–	5TE8162	–	–
1 toggle switch	230 V	1 MW	–	–	–	–	5TE8141
2 toggle switches	400 V	1 MW	–	–	–	–	5TE8142

Further technical specifications

		5TE8
Standards		
Standards		IEC/EN 60947-3 (VDE 0660-107), IEC/EN 60669-1 (VDE 0632-1)
Approvals		IEC/EN 60947-3 (VDE 0660-107), GB14048.3-2008 CCC
Supply		
Rated power dissipation P_v	Per pole	0.7 VA
Contacts		
Minimum contact load		10 V; 300 mA
Rated making/rated breaking capacity	At p.f. = 0.65	60 A / 60 A
Rated short-time withstand current I_{cw} per conducting path at p.f. = 0.7	Up to 0.2 s	650 A
	Up to 0.5 s	400 A
	Up to 1 s	290 A
	Up to 3 s	170 A
Thermal rated current I_{th}		20 A
Electrical/mechanical service life	Actuations	10000 / 25000
Safety		
Clearances	Open contacts	2× >2 mm
	Between the poles	>7 mm
Creepage distances		>7 mm
Sealable switch position		Yes
Separate handle locking device		Yes
Rated short-circuit making capacity I_{cm}		10 kA
Rated impulse withstand voltage U_{imp}		>5 kV
Connections		
Terminals	± Screw (Pozidriv)	PZ 1
	Max. tightening torque	0.8 ... 1.0 Nm
Environmental conditions		
Permissible ambient temperature		–5 ... +40 °C
Resistance to climate at 95% relative humidity	Acc. to DIN 50015	45 °C

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Accessories

Auxiliary switches (AS)



- For right-hand-side retrofitting with factory-fitted brackets

Contacts	Version	Article No.
1 NO + 1 NC	Standard	5ST3010
	For low power	5ST3013
	For low power (with diode)	5ST3013-0XX01
2 NO	Standard	5ST3011
	For low power	5ST3014
2 NC	Standard	5ST3012
	For low power	5ST3015
1 CO	Standard	5ST3016

Handle locking device



- To prevent undesired mechanical On/Off switching
- Sealable
- For padlock with max. 3 mm shackle

Article No.
5ST3801

Spacer



- Contour for modular devices with a mounting depth of 70 mm
- Can be snapped onto either side of the busbar for convenient cable routing
- Spacer is recommended for better heat dissipation

Article No.
5TG8240

Set of mixed caps



- For manual changing of the luminous plates for the control switches

Article No.
5TG8068

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System overview, page 5/4

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5TE48 pushbuttons

With/without LED

	Pushbuttons without maintained-contact function		Pushbuttons with maintained-contact function		Control pushbuttons with maintained-contact function or momentary-contact function	
	Without LED		Without LED		With LED	
Rated operational current I_e per conducting path	20 A		20 A		20 A	
Rigid/flexible conductor cross-section	1 ... 6 mm²		1 ... 6 mm²		1 ... 6 mm²	
Max. cable length	Standard		Standard		Standard	
						
Contacts	**U_e AC**	**Mounting width**				
1 NO	230 V	1 MW		–		–	1× red	5TE4821
				–		–		–
2x 1 NO	400 V	1 MW	1× green, 1× blue	5TE4804		–		–
2 NO	400 V	1 MW		–	1× gray	5TE4811	1× red	5TE4823
1 NO + 1 NC	400 V	1 MW	1× gray	5TE4800	1× gray	5TE4810		–
			1× red	5TE4805		–	1× red	5TE4820
			1× green	5TE4806		–		–
			1× yellow	5TE4807		–		–
			1× blue	5TE4808		–		–
2x (1 NO + 1 NC)	400 V	1 MW		–		–		–
2 NO + 2 NC	400 V	1 MW	1× gray	5TE4801-2	1× gray	5TE4811-2		–
3 NO + 1 NC	400 V	1 MW	1× gray	5TE4802	1× gray	5TE4812-1		–
3 NO + N	400 V	1 MW		–	1× gray	5TE4812		–
2 NC	400 V	1 MW		–		–	1× red	5TE4824
4 NC	400 V	1 MW		–	1× gray	5TE4813		–
2 CO	400 V	1 MW		–	1× gray	5TE4814		–

Further technical specifications

		5TE48
Standards		
Standards		IEC/EN 60947-3 (VDE 0660-107), IEC/EN 60669-1 (VDE 0632-1)
Approvals		IEC/EN 60947-3 (VDE 0660-107)
Supply		
Rated power dissipation P_v	Per pole	0.6 VA
Contacts		
Minimum contact load		10 V; 300 mA
Rated making/rated breaking capacity	At p.f. = 0.65	60 A / 60 A
Rated short-time withstand current I_{cw} per conducting path at p.f. = 0.7	Up to 0.2 s	650 A
	Up to 0.5 s	400 A
	Up to 1 s	290 A
	Up to 3 s	170 A
Thermal rated current I_{th}		20 A
Mechanical service life	Actuations	25000
Safety		
Clearances	Open contacts	2× >2 mm
	Between the poles	>7 mm
Creepage distances		>7 mm
Rated impulse withstand voltage U_{imp}		>5 kV
Connections		
Terminals	± Screw (Pozidriv)	PZ 1
	Max. tightening torque	0.8 ... 1.0 Nm
Environmental conditions		
Permissible ambient temperature		–5 ... +40 °C
Resistance to climate at 95% relative humidity	Acc. to DIN 50015	45 °C

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		Double pushbuttons with maintained-contact function and/or momentary-contact function			
With LED		**Without LED**		**With LED**	
20 A		20 A		20 A	
1 ... 6 mm²		1 ... 6 mm²		1 ... 6 mm²	
150 m		Standard		Standard	
					
1× red	5TE4822	–		–	
1× blue	5TE4822-1	–		–	
–		–		1× green, 1× red	5TE4840
–		–		–	
–		–		–	
–		–		–	
–		1× green, 1× red	5TE4830	1× green, 1× red	5TE4841
–		–		–	
–		–		–	
–		1× green, 1× red	5TE4831	–	
–		–		–	
–		–		–	
–		–		–	
–		–		–	
–		–		–	
–		–		–	

Accessories

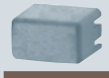
LEDs for manual replacement



I_e	U_e	Color	Article No.
0.4 A	12 ... 60 V AC/DC	White	5TG8056-0
		Red	5TG8056-1
		Yellow	5TG8056-2
		Green	5TG8056-3
		Blue	5TG8056-4
	115 V AC/DC	White	5TG8057-0
		Red	5TG8057-1
		Yellow	5TG8057-2
		Green	5TG8057-3
		Blue	5TG8057-4
	230 V AC	White	5TG8058-0
		Red	5TG8058-1
		Yellow	5TG8058-2
		Green	5TG8058-3
		Blue	5TG8058-4

Cap sets

- For manual changing of colored caps with or without lamps
- 1 set = 5 units

	Color	Article No.
	Red, transparent	5TG8061
	Green, transparent	5TG8062
	Yellow, transparent	5TG8063
	Blue, transparent	5TG8064
	Black, non-transparent	5TG8065
	White, transparent	5TG8066
	Gray, non-transparent	5TG8060

Sets of mixed caps



- For manual changing of colored caps with or without lamps

Color	Article No.
10× each of red/green + 5× each of yellow/blue/white	5TG8067
1× each of red/green/yellow	5TG8070

Color coding according to IEC 60073

Color	Safety of people/ environment	Process state	System state
Red	Danger	Emergency	Faulty
Green	Safety	Normal	Normal
Yellow	Warning/Caution	Abnormal	Abnormal
Blue	Stipulation		
Black, white, gray	No special significance assigned		

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5TE58 light indicators

With LED

	5TE58 light indicators			
Rigid conductor cross-section	1.5 ... 6 mm²		1.5 ... 6 mm²	
Flexible conductor cross-section, with end sleeve	1 ... 6 mm²		1 ... 6 mm²	
Max. cable length	Standard		250 m	
				
U_e AC	**Mounting width**			
230 V	1 MW	1× red	5TE5800	1× red	5TE5804
		1× green, 1× red	5TE5801		–
		3× green	5TE5802		–
		1× red, 1× yellow, 1× green	5TE5803		–
12 ... 60 V	1 MW	1× red	5TE5810		–
		1× green	5TE5810-1		–
		1× green, 1× red	5TE5811		–
		3× green	5TE5812		–
		1× red, 1× yellow, 1× green	5TE5812-1		–

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Further technical specifications

		5TE58
Standards		
Standards		DIN VDE 0710-1-11
Supply		
Rated power dissipation P_v	LED	0.4 VA
Safety		
Clearances	Between the terminals	>7 mm
Connections		
Terminals	± Screw (Pozidriv)	PZ 1
	Max. tightening torque	1.2 Nm
Environmental conditions		
Permissible ambient temperature		–5 ... +40 °C
Resistance to climate at 95% relative humidity	Acc. to DIN 50015	45 °C

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Accessories

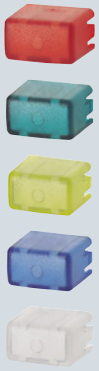
LEDs for manual replacement



I_e	U_e	Color	Article No.
0.4 A	12 ... 60 V AC/DC	White	5TG8056-0
		Red	5TG8056-1
		Yellow	5TG8056-2
		Green	5TG8056-3
		Blue	5TG8056-4
	115 V AC/DC	White	5TG8057-0
		Red	5TG8057-1
		Yellow	5TG8057-2
		Green	5TG8057-3
		Blue	5TG8057-4
	230 V AC	White	5TG8058-0
		Red	5TG8058-1
		Yellow	5TG8058-2
		Green	5TG8058-3
		Blue	5TG8058-4

Cap sets

- For manual changing of colored caps
- 1 set = 5 units



Color	Article No.
Red, transparent	5TG8061
Green, transparent	5TG8062
Yellow, transparent	5TG8063
Blue, transparent	5TG8064
White, transparent	5TG8066

Sets of mixed caps

- For manual changing of colored caps



Color	Article No.
10× each of red/green + 5× each of yellow/blue/white	5TG8067
1× each of red/green/yellow	5TG8070

Color coding according to IEC 60073

Color	Safety of people/ environment	Process state	System state
Red	Danger	Emergency	Faulty
Green	Safety	Normal	Normal
Yellow	Warning/Caution	Abnormal	Abnormal
Blue	Stipulation		
Black, white, gray	No special significance assigned		

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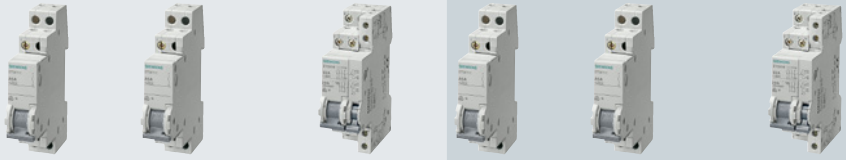
5TE81/82 On/Off switches

	5TE81 On/Off switches	5TE82 On/Off switches
Rated operational current I_e per conducting path	20 A	32 A
Rigid conductor cross-section	1.5 ... 6 mm²	1.5 ... 6 mm²
Flexible conductor cross-section, with end sleeve	1 ... 6 mm²	1 ... 6 mm²



Contacts	U_e AC	Mounting width	Auxiliary switches			Auxiliary switches		
			Can be retrofitted	Cannot be retrofitted	Mounted	Can be retrofitted	Cannot be retrofitted	Mounted
1 NO	230 V	1 MW	5TE8111	–	–	5TE8211	–	–
2 NO	400 V	1 MW	5TE8112	–	–	5TE8212	–	–
3 NO	400 V	1 MW	5TE8113	–	–	5TE8213	–	–
3 NO + N	400 V	1 MW	–	5TE8114	–	–	5TE8214	–
		1.5 MW	–	–	5TE8118	–	–	5TE8218

Further technical specifications

		5TE81	5TE82
Standards			
Standards		IEC/EN 60947-3 (VDE 0660-107), IEC/EN 60669-1	IEC/EN 60947-3 (VDE 0660-107)
Approvals		IEC/EN 60947-3 (VDE 0660-107)	
Supply			
Rated power dissipation P_v	Per pole	0.7 VA	
Contacts			
Minimum contact load		10 V; 300 mA	
Rated making/rated breaking capacity	At p.f. = 0.65	60 A / 60 A	96 A / 96 A
Rated short-time withstand current I_{cw} per conducting path at p.f. = 0.7	Up to 0.2 s	650 A	1000 A
	Up to 0.5 s	400 A	630 A
	Up to 1 s	290 A	450 A
	Up to 3 s	170 A	250 A
Thermal rated current I_{th}		20 A	32 A
Electrical/mechanical service life	Actuations	10000 / 25000	
Safety			
Clearances	Open contacts	2× >2 mm	
	Between the poles	>7 mm	
Creepage distances		>7 mm	
Rated short-circuit making capacity I_{cm}		10 kA	
Rated impulse withstand voltage U_{imp}		>5 kV	
Connections			
Terminals	± Screw (Pozidriv)	PZ 1	
	Max. tightening torque	1.2 Nm	
Environmental conditions			
Permissible ambient temperature		–5 ... +40 °C	
Resistance to climate at 95% relative humidity	Acc. to DIN 50015	45 °C	

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Accessories

Auxiliary switches (AS)



- For right-hand-side retrofitting with factory-fitted brackets

Contacts	Version	Article No.
1 NO + 1 NC	Standard	5ST3010
	For low power	5ST3013
	For low power (with diode)	5ST3013-0XX01
2 NO	Standard	5ST3011
	For low power	5ST3014
2 NC	Standard	5ST3012
	For low power	5ST3015
1 CO	Standard	5ST3016

Handle locking device



- To prevent undesired mechanical On/Off switching
- Sealable
- For padlock with max. 3 mm shackle

Article No.
5ST3801

Terminal cover



- For covering screw openings
- Sealable

Article No.
5ST3800

Spacer



- Contour for modular devices with a mounting depth of 70 mm
- Can be snapped onto either side of the busbar for convenient cable routing
- Spacer is recommended for better heat dissipation

Article No.
5TG8240

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System overview, page 5/4

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5TL1 On/Off switches

	Rated operational current I_e per conducting path					
	32 A	40 A	63 A		80 A	100 A
Rigid conductor cross-section	1 ... 35 mm²	1 ... 35 mm²	1 ... 35 mm²		2.5 ... 50 mm²	2.5 ... 50 mm²
Flexible conductor cross-section, with end sleeve	1 ... 25 mm²	1 ... 25 mm²	1 ... 25 mm²		2.5 ... 50 mm²	2.5 ... 50 mm²
						

Contacts	Rated operational voltage U_e AC	Mounting width	Gray handle	Gray handle	Gray handle	Red handle	Gray handle	Gray handle
1 NO	230 V	1 MW	5TL1132-0	5TL1140-0	5TL1163-0	5TL1163-1	5TL1180-0	5TL1191-0
2 NO	400 V	2 MW	5TL1232-0	5TL1240-0	5TL1263-0	5TL1263-1	5TL1280-0	5TL1291-0
3 NO	400 V	3 MW	5TL1332-0	5TL1340-0	5TL1363-0	5TL1363-1	5TL1380-0	5TL1391-0
4 NO	400 V	4 MW	5TL1432-0	5TL1440-0	5TL1463-0	–	5TL1480-0	5TL1491-0
3 NO + N	400 V	4 MW	5TL1632-0	5TL1640-0	5TL1663-0	5TL1663-1	5TL1680-0	5TL1691-0

Further technical specifications

		5TL1.32	5TL1.40	5TL1.63	5TL1.80	5TL1.91	5TL1.92
Standards							
Standards		IEC/EN 60947-3 (VDE 0660-107)					
Approvals		IEC/EN 60947-3 (VDE 0660-107)					
Supply							
Rated power dissipation P_v	Per pole, max.	0.7 VA	0.9 VA	2.2 VA	3.5 VA	5.5 VA	8.6 VA
Contacts							
Minimum contact load		24 V; 300 mA					
Rated making/rated breaking capacity AC-22A	At p.f. = 0.65	96 A / 96 A	120 A / 120 A	196 A / 196 A	240 A / 240 A	300 A / 300 A	375 A / 375 A
Rated short-time withstand current I_{cw} per conducting path at p.f. = 0.7 [1]	Up to 0.2 s	760 A	950 A	1500 A	2700 A	3400 A	
	Up to 0.5 s	500 A	630 A	1000 A	1650 A	2100 A	
	Up to 1 s	400 A	500 A	800 A	1350 A	1700 A	
	Up to 3 s	280 A	350 A	560 A	800 A	1000 A	
Thermal rated current I_{th}		32 A	40 A	63 A	80 A	100 A	125 A
Electrical/mechanical service life	Switching cycles	10000 / 20000	10000	5000	2000		
Rated power for the switching of resistive load including moderate overload AC-21	1-pole	5 kW	6.5 kW	10 kW	13 kW	16 kW	
	2-pole	9 kW	11 kW	18 kW	22 kW	28 kW	
	3-/4-pole	15 kW	15 kW	30 kW	39 kW	48 kW	
Safety							
Creepage distances		>7 mm					
Clearances	Open contacts	>7 mm					
	Between the poles	>7 mm					
Rated short-circuit making capacity I_{cm} (in conjunction with fuse of the same rated operational current EN 60269 gL/gG)		10 kA					
Rated impulse withstand voltage U_{imp}		6 kV					
Connections							
Terminals	± Screw (Pozidriv)	PZ 2					
	Max. tightening torque	3.5 Nm					
Environmental conditions							
Permissible ambient temperature		–5 ... +40 °C					
Resistance to climate at 95% relative humidity	Acc. to DIN 50015	45 °C					

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	125 A	
	2.5 ... 50 mm²	
	2.5 ... 50 mm²	
		
	Red handle	**Gray handle**
	5TL1191-1	5TL1192-0
	5TL1291-1	5TL1292-0
	5TL1391-1	5TL1392-0
	–	5TL1492-0
	5TL1691-1	5TL1692-0

Accessories

Auxiliary switches (AS)



- For right-hand-side retrofitting with factory-fitted brackets

Contacts	Version	Article No.
1 NO + 1 NC	Standard	5ST3010
	For low power	5ST3013
	For low power (with diode)	5ST3013-0XX01
2 NO	Standard	5ST3011
	For low power	5ST3014
2 NC	Standard	5ST3012
	For low power	5ST3015
1 CO	Standard	5ST3016

Handle locking device



- To prevent undesired mechanical On/Off switching
- Sealable
- For padlock with max. 3 mm shackle

Article No.
5ST3806

Terminal cover



- For covering screw openings
- Sealable

Article No.
5ST3800

Spacer



- Contour for modular devices with a mounting depth of 70 mm
- Can be snapped onto either side of the busbar for convenient cable routing
- Spacer is recommended for better heat dissipation

Article No.
5TG8240

Phase connectors



- For easy wiring in various circuit versions and bus mountings
- As a support terminal for conductors from 2.5 to 50 mm²

Number of poles	I_e	U_e AC	Mounting width	Article No.
1-pole	125 A	230 V	1 MW	5TL1192-4

N conductor connectors



- For easy wiring in various circuit versions and bus mountings
- As a support terminal for N conductors from 2.5 to 50 mm² with blue color marking

Number of poles	I_e	U_e AC	Mounting width	Article No.
1-pole	125 A	230 V	1 MW	5TL1192-3

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5TE DC isolator

Can be used as switch disconnectors according to EN 60947-3

	Rated operational current I_e 63 A
Rigid conductor cross-section	0.75 ... 35 mm²
Flexible conductor cross-section, with end sleeve	0.75 ... 25 mm²



Contacts	Max. operational voltage U_{max} DC	Mounting width	Auxiliary switches can be retrofitted
4 NO	1000 V	4 MW	5TE2515-1

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Further technical specifications

Standards		
Standards		IEC/EN 60947-3; IEC/EN 60669-1; GB14048.3-2008 CCC
Supply		
Rated operational voltage U_e	For 4 poles in series	880 V DC
Rated power dissipation P_v	Per pole, max.	4.4 W
Contacts		
Minimum contact load		24 V; 300 mA
Rated short-time withstand current I_{cw}	1000 V DC, 4-pole	760 A
Electrical/mechanical service life	Actuations	5000 / 10000
Safety		
Rated short-circuit making capacity I_{cm}	1000 V DC, 4-pole	500 A
Rated impulse withstand voltage U_{imp}		>5 kV
Overvoltage category	At U = 440 ... 880 V	II
	At U = 1000 V	I
Utilization category		DC-21B
Connections		
Terminals	± Screw (Pozidriv)	PZ 2
	Max. tightening torque	2.5 ... 3 Nm
Environmental conditions		
Permissible ambient temperature		–25 ... +40 °C
Resistance to climate at 95% relative humidity	Acc. to DIN 50015	45 °C

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Accessories

Auxiliary switches (AS)



- For right-hand-side retrofitting with factory-fitted brackets

Contacts	Version	Article No.
1 NO + 1 NC	Standard	5ST3010
	For low power	5ST3013
	For low power (with diode)	5ST3013-0XX01
2 NO	Standard	5ST3011
	For low power	5ST3014
2 NC	Standard	5ST3012
	For low power	5ST3015
1 CO	Standard	5ST3016

Shunt trips (ST)



Rated operational voltage U_n	Article No.
110 ... 415 V AC, 110 ... 220 V DC	5ST3030
24 ... 48 V AC/DC	5ST3031
12 V AC/DC	5ST3031-0XX01

Undervoltage releases (UR)



Version	Rated operational voltage U_n	Article No.
With integrated auxiliary switch	230 V AC	5ST3040
	110 V DC	5ST3041
	24 V DC	5ST3042
Without integrated auxiliary switch	230 V AC	5ST3043
	110 V DC	5ST3044
	24 V DC	5ST3045

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5TE busbars

For modular installation devices

Single-phase busbar



- For all 5TE8 switches, 20 A and 32 A
- For the cutting of unused terminal lugs and to ensure insulation clearances if one device terminal is to be supplied separately despite being mounted on the bus
- Infeed to unit terminal with conductor cross-section of 6 mm² up to 32 A
- Can be mounted from either top or bottom, in the front or rear terminal area
- An end cap is not required on single-phase busbars

Length	Division	Article No.
210 mm	12 MW version with 1 MW modular clearance	5TE9100

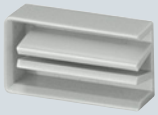
Two-phase busbar



- For all 5TE8 switches, 20 A and 32 A
- Infeed to unit terminal with conductor cross-section of 6 mm² Up to 32 A
- Can be mounted from either top or bottom, in the front and/or rear terminal area, thus allowing realization of a 4-conductor connection using 2 two-phase busbars
- Both copper conductors of the two-phase busbar are insulated together

Length	Division	Article No.
220 mm	12 MW version each with 1 MW modular clearance, phases offset by 0.5 MW	5TE9101

End caps for two-phase busbars



- End caps for 5TE9101 two-phase busbars to maintain insulation clearances when the bar is being cut
- 1 set = 10 units

Article No.
5TE9102

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5TT41 remote control switches

Rated current 16 A

	Rated operational current I_e 16 A
Rigid conductor cross-section	1 ... 6 mm²
Flexible conductor cross-section, with end sleeve	1 ... 6 mm²



Contacts	U_e	U_c AC	U_c DC	Mounting width 1 MW	Mounting width 2 MW	Auxiliary switches can be retrofitted
1 NO	250 V	230 V	–	■	–	5TT4101-0
		115 V	–	■	–	5TT4101-1
		24 V	–	■	–	5TT4101-2
		12 V	–	■	–	5TT4101-3
		8 V	–	■	–	5TT4101-4
		–	110 V	■	–	5TT4111-1
			24 V	■	–	5TT4111-2
			12 V	■	–	5TT4111-3
1 NO + 1 NC	250 V	230 V	–	■	–	5TT4105-0
		115 V	–	■	–	5TT4105-1
		24 V	–	■	–	5TT4105-2
		12 V	–	■	–	5TT4105-3
		8 V	–	■	–	5TT4105-4
		–	110 V	■	–	5TT4115-1
			24 V	■	–	5TT4115-2
			12 V	■	–	5TT4115-3
2 NO	400 V	230 V	–	■	–	5TT4102-0
		115 V	–	■	–	5TT4102-1
		24 V	–	■	–	5TT4102-2
		12 V	–	■	–	5TT4102-3
		8 V	–	■	–	5TT4102-4
		–	110 V	■	–	5TT4112-1
			24 V	■	–	5TT4112-2
			12 V	■	–	5TT4112-3
3 NO	400 V	230 V	–	–	■	5TT4103-0
		24 V	–	–	■	5TT4103-2
4 NO	400 V	230 V	–	–	■	5TT4104-0
		24 V	–	–	■	5TT4104-2
		–	110 V	–	■	5TT4114-1
			24 V	–	■	5TT4114-2

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Further technical specifications

		5TT4101 5TT4102 5TT4105	5TT4111 5TT4112 5TT4115	5TT4103 5TT4104 5TT4114
Standards				
Standards		IEC 60669-1, IEC 60669-2, IEC 60669-3, EN 60669 (VDE 0632), EN 60669-2-2, EN 60669-2-2/A1		
Approvals		VDE		
Supply				
Rated operational current I_e	At p.f. = 0.6 ... 1 (AC-15)	16 A		
Primary operating range		0.8 ... 1.1 × U_c		
Rated frequency f_c		50 Hz		
Rated power dissipation P_v	Magnet coil, only pulse	4.5 W / 7 VA		9 W / 13 VA
	Per pole, max.	1.2 W		
Contacts				
Contact gap		>1.2 mm		
Minimum contact load		10 V; 100 mA		
Electrical service life at I_e/U_e, p.f. = 0.6, incandescent lamp load 600 W	Switching cycles	50000		
Incandescent lamp load (switching of incandescent lamps for 15000 switching cycles)	At AC-5b (230 V)	1200 W		
Glow lamp load at 230 V		5 mA		
	With 1 5TT4920 compensator	25 mA		
	With 2 5TT4920 compensators	45 mA		
Minimum pulse duration		50 ms		
Safety				
Different phases between magnet coil and contact		Permissible		
Clearances	Between magnet coil and contact	>6 mm		
Creepage distances	Between magnet coil and contact	>6 mm		
Rated impulse withstand voltage U_{imp}		4 kV		
Function				
Manual operation		Yes		
Switching position indication		Yes		
Connections				
Terminals	± Screw (Pozidriv)	PZ 1		
	Max. tightening torque	0.8 ... 1 Nm		
Environmental conditions				
Permissible ambient temperature		–10 ... +40 °C		
Resistance to climate at 95% relative humidity	Acc. to DIN 50015	35 °C		
Degree of protection	Acc. to EN 60529	IP20, with connected conductors		

Accessories

Auxiliary switches



- One device per remote control switch can be retrofitted

Contacts	Version	I_e	U_e	Mounting width	Article No.
1 CO	Standard	5 A	250 V AC	0.5 MW	5TT4900
	For low power	0.1 A	30 V AC/DC	0.5 MW	5TT4901

Compensator



- For increasing the glow lamp load by 20 mA

U_e	Mounting width	Article No.
250 V AC	1 MW	5TT4920

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5TT41 remote control switches

For special applications, rated current 16 A

				Remote control switches with central On/Off switching	Remote control switches with central and group On/Off switching
			Rigid conductor cross-section	1 ... 6 mm²	1 ... 6 mm²
			Flexible conductor cross-section, with end sleeve	1 ... 6 mm²	1 ... 6 mm²
					
Contacts	U_e	U_c AC	Mounting width	Auxiliary switches cannot be retrofitted	Auxiliary switches cannot be retrofitted
1 NO	250 V	230 V	1.5 MW	5TT4121-0	5TT4151-0
		24 V	1.5 MW	5TT4121-2	5TT4151-2
2 NO	400 V	230 V	1.5 MW	5TT4122-0	5TT4152-0
		24 V	1.5 MW	5TT4122-2	5TT4152-2
3 NO	400 V	230 V	2.5 MW	5TT4123-0	–
1 NO + 1 NC	250 V	115 V	1.5 MW	5TT4125-0	–

				Series remote control switch contact sequence 1 – 2 – 1+2 – 0	Shutter/blind remote control switch contact sequence 1 – 0 – 2 – 0
			Rigid conductor cross-section	1 ... 6 mm²	1 ... 6 mm²
			Flexible conductor cross-section, with end sleeve	1 ... 6 mm²	1 ... 6 mm²
					
Contacts	U_e	U_c AC	Mounting width	Auxiliary switches cannot be retrofitted	Auxiliary switches cannot be retrofitted
2 NO	250 V	230 V	1 MW	5TT4132-0	5TT4142-0
		24 V	1 MW	–	5TT4142-2
		12 V	1 MW	5TT4132-3	5TT4142-3

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Further technical specifications

		5TT412 5TT415	5TT413 5TT414
Standards			
Standards		IEC 60669-1, IEC 60669-2, IEC 60669-3, EN 60669 (VDE 0632), EN 60669-2-2, EN 60669-2-2/A1	
Approvals		VDE	
Supply			
Rated operational current I_e	At p.f. = 0.6 ... 1 (AC-15)	16 A	
Primary operating range		0.8 ... 1.1 × U_c	
Rated frequency f_c		50 Hz	
Rated power dissipation P_v	Magnet coil, only pulse	4.5 W / 7 VA	
	Per pole, max.	1.2 W	
Contacts			
Contact gap		>1.2 mm	
Minimum contact load		10 V; 100 mA	
Electrical service life at I_e/U_e, p.f. = 0.6, incandescent lamp load 600 W	Switching cycles	50000	
Incandescent lamp load (switching of incandescent lamps for 15000 switching cycles)	At AC-5b (230 V)	1200 W	
Glow lamp load at 230 V		5 mA	
	With 1 5TT4920 compensator	25 mA	
	With 2 5TT4920 compensators	45 mA	
Minimum pulse duration		50 ms	
Safety			
Different phases between magnet coil and contact		Permissible	
Clearances	Between magnet coil and contact	>6 mm	
Creepage distances	Between magnet coil and contact	>6 mm	
Rated impulse withstand voltage U_{imp}		4 kV	
Function			
Manual operation		Yes	
Switching position indication		Yes	–
Connections			
Terminals	± Screw (Pozidriv)	PZ 1	
	Max. tightening torque	0.8 ... 1 Nm	
Environmental conditions			
Permissible ambient temperature		–10 ... +40 °C	
Resistance to climate at 95% relative humidity	Acc. to DIN 50015	35 °C	
Degree of protection	Acc. to EN 60529	IP20, with connected conductors	

Accessories

Auxiliary switches



- One device per remote control switch can be retrofitted

Contacts	Version	I_e	U_e	Mounting width	Article No.
1 CO	Standard	5 A	250 V AC	0.5 MW	5TT4900
	For low power	0.1 A	30 V AC/DC	0.5 MW	5TT4901

Compensator



- For increasing the glow lamp load by 20 mA

U_e	Mounting width	Article No.
250 V AC	1 MW	5TT4920

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5TT44 remote control switches

Rated current 20 A – 63 A

	Rated operational current I_e				
	20 A	25 A	32 A	40 A	63 A
Rigid conductor cross-section	1 ... 10 mm²	1 ... 10 mm²	1 ... 10 mm²	2.5 ... 25 mm²	2.5 ... 25 mm²
Flexible conductor cross-section, with end sleeve	1 ... 10 mm²	1 ... 10 mm²	1 ... 10 mm²	2.5 ... 25 mm²	2.5 ... 25 mm²
					

Contacts	U_e	U_c AC	U_c DC	Mounting width					
For AC applications – auxiliary switches can be retrofitted									
1 NO + 1 NC	440 V	230 V	–	1 MW	5TT4405-0	5TT4425-0	5TT4455-0	–	–
				2 MW	–	–	–	5TT4465-0	5TT4475-0
		24 V	–	1 MW	5TT4405-2	5TT4425-2	5TT4455-2	–	–
				2 MW	–	–	–	5TT4465-2	5TT4475-2
1 CO	250 V	230 V	–	1 MW	5TT4407-0	–	–	–	–
		24 V	–	1 MW	5TT4407-2	–	–	–	–
2 NO	440 V	230 V	–	1 MW	5TT4402-0	5TT4422-0	5TT4452-0	–	–
				2 MW	–	–	–	5TT4462-0	5TT4472-0
		24 V	–	1 MW	5TT4402-2	5TT4422-2	5TT4452-2	–	–
				2 MW	–	–	–	5TT4462-2	5TT4472-2
2 CO	440 V	230 V	–	2 MW	–	5TT4428-0	5TT4458-0	5TT4468-0	5TT4478-0
		24 V	–	2 MW	–	5TT4428-2	5TT4458-2	5TT4468-2	5TT4478-2
4 NO	440 V	230 V	–	2 MW	–	5TT4424-0	5TT4454-0	–	–
				4 MW	–	–	–	5TT4464-0	5TT4474-0
		24 V	–	2 MW	–	5TT4424-2	5TT4454-2	–	–
				4 MW	–	–	–	5TT4464-2	5TT4474-2
2 NO + 2 NC	440 V	230 V	–	2 MW	–	5TT4426-0	5TT4456-0	–	–
				4 MW	–	–	–	5TT4466-0	5TT4476-0
		24 V	–	2 MW	–	5TT4426-2	5TT4456-2	–	–
				4 MW	–	–	–	5TT4466-2	5TT4476-2
For DC applications									
1 NO	250 V	–	24 V	1 MW	5TT4411-5	5TT4431-5	5TT4451-5	–	–
2 NO	440 V	–	24 V	1 MW	5TT4412-5	5TT4432-5	5TT4452-5	–	–
1 NO + 1 NC	440 V	–	24 V	1 MW	5TT4415-5	5TT4435-5	5TT4455-5	–	–
1 CO	250 V	–	24 V	1 MW	5TT4417-5	5TT4437-5	5TT4457-5	–	–

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Further technical specifications

		5TT440	5TT442	5TT445	5TT446	5TT447
Standards						
Standards		IEC 60669-2-2			IEC/EN 60947-4-1	
Approvals		CE				
Supply						
Rated operational current I_e	At p.f. = 0.6 ... 1 (AC-15)	20 A	25 A	32 A	40 A	63 A
Rated frequency f_c		50/60 Hz				
Rated power dissipation P_v	Magnet coil, "On" pulse	13 W / 18 VA			12 W / 26 VA	
	Per pole, max.	1.5 W	2 W	3 W		3.5 W
Rated operational power (AC-3)	1-phase, at 230 V	0.5 kW	0.75 kW	1.1 kW	2.2 kW	4 kW
	3-phase, at 230 V	1.5 kW	2.2 kW	3 kW	5.5 kW	11 kW
	3-phase, at 400 V	3 kW	4 kW	5.5 kW	11 kW	18.5 kW
Contacts						
Contact gap		>3 mm				
Minimum contact load AC		10 V; 100 mA				
Electrical service life at I_e/U_e, p. f. = 0.6, incandescent lamp load 600 W	Switching cycles	50000				
Incandescent lamp load (switching of incandescent lamps for 15000 switching cycles)	At AC-5b (230 V)	4400 W	5500 W	7000 W	8800 W	13800 W
Max. switching speed	In switching cycles per hour	600 h^{-1}	450 h^{-1}		360 h^{-1}	
Safety						
Different phases between magnet coil and contact		Permissible				
Rated impulse withstand voltage U_{imp}		3 kV				
Function						
Manual operation		Yes				
Switching position indication		Yes				
Connections						
Terminals	± Screw (Pozidriv)	Coil: PZ 1, contact: PZ 2				
	Max. tightening torque	Coil: 0.6 Nm, contact: 1.2 Nm			Coil: 0.6 Nm, contact: 2 Nm	
Coil conductor cross-sections		1 ... 4 mm^2				
Environmental conditions						
Permissible ambient temperature	For operation/for storage	–25 ... +55 °C / –30 ... +80 °C				
Resistance to climate at 95% relative humidity	Acc. to DIN 50015	55 °C				
Degree of protection	Acc. to EN 60529	IP20				
Mounting position		Any (not upside down)				

Accessories

Auxiliary switch



Contacts	U_e	I_e	Mounting width	Article No.
1 NO + 1 NC	250 V AC	16 A	0.5 MW	5TT4930

Auxiliary switches, central with diode



- For central function (no auxiliary switch)

U_e	Mounting width	Article No.
250 V AC	0.5 MW	5TT4931

Auxiliary switches, group with several diodes



- For group function (no auxiliary switch)

U_e	Mounting width	Article No.
250 V AC	0.5 MW	5TT4932

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5TT4 auxiliary switches

For 5TT4 remote control switches

	Auxiliary switches for 5TT41	Auxiliary switches for 5TT44
Rigid conductor cross-section	0.5 ... 2.5 mm²	1 ... 4 mm²
Flexible conductor cross-section, with end sleeve	0.5 ... 2.5 mm²	1 ... 4 mm²
		

Contacts	Version	I_e	U_e	Mounting width		
Auxiliary switches						
1 NO + 1 NC	Standard	16 A	250 V AC	0.5 MW	–	5TT4930
1 CO	Standard	5 A	250 V AC	0.5 MW	5TT4900	–
	For low power	0.1 A	30 V AC/DC	0.5 MW	5TT4901	–
Auxiliary switches, central with diode for central function (no auxiliary switch)						
			250 V AC	0.5 MW	–	5TT4931
Auxiliary switches, group with several diodes for group function (no auxiliary switch)						
			250 V AC	0.5 MW	–	5TT4932

Further technical specifications

		Auxiliary switches for 5TT41	Auxiliary switches for 5TT44		
		5TT4900 5TT4901	5TT4930	5TT4931	5TT4932
Standards					
Standards		EN 60947-1 (VDE 0660 Part 100) EN 60947-5-1 (VDE 0660 Part 200)	IEC/EN 60947-5-1		
Approvals		–	CE, EAC		
Supply					
Rated operational current I_e	At p.f. = 0.6 ... 1 (AC-15)	16 A	4 A	–	
Rated frequency f_c		–	50/60 Hz		
Rated power dissipation P_v	Per pole, max.	–	0.3 W		
Contacts					
Contact gap		<1.2 mm	>3 mm		
Minimum contact load		5 V; 1 mA	12 V; 5 mA		
Electrical service life at I_e/U_e, p.f. = 0.6, incandescent lamp load 600 W	Switching cycles	–	100000	–	
Safety					
Clearances	Between magnet coil and contact	>6 mm	–		
Creepage distances	Between magnet coil and contact	>6 mm	–		
Rated impulse withstand voltage U_{imp}		1 kV	1 kV		
Pushbutton malfunction protected against continuous voltage, safe due to design		Yes	–		
Function					
Manual operation		–	No		
Switching position indication		–	No		
Connections					
Terminals	± Screw (Pozidriv)	PZ 1	PZ 1		
	Max. tightening torque	0.5 Nm	0.8 Nm		
Environmental conditions					
Permissible ambient temperature	For operation/for storage	–10 ... +40 °C / –10 ... +40 °C	–25 ... +70 °C / –30 ... +80 °C		
Resistance to climate at 95% relative humidity	Acc. to DIN 50015	35 °C	55 °C		
Degree of protection	Acc. to EN 60529	IP20, with connected conductors	IP20		
Mounting position		Any	Any (not upside down)		

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Accessories

Compensator



- For increasing the glow lamp load by 20 mA

U_e	Mounting width	Article No.
250 V AC	1 MW	5TT4920

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5TT42 switching relays

Rated current 16 A

	Rated operational current I_e 16 A
Rigid conductor cross-section	1 ... 6 mm²
Flexible conductor cross-section, with end sleeve	1 ... 6 mm²



Contacts	U_e	U_c AC	U_c DC	Mounting width	
1 NO	250 V	230 V	–	1 MW	5TT4201-0
		115 V	–	1 MW	5TT4201-1
		24 V	–	1 MW	5TT4201-2
		12 V	–	1 MW	5TT4201-3
		8 V	–	1 MW	5TT4201-4
2 NO	400 V	230 V	–	1 MW	5TT4202-0
		115 V	–	1 MW	5TT4202-1
		24 V	–	1 MW	5TT4202-2
		12 V	–	1 MW	5TT4202-3
		8 V	–	1 MW	5TT4202-4
4 NO	400 V	230 V	–	1 MW	5TT4204-0
		115 V	–	1 MW	5TT4204-1
		24 V	–	1 MW	5TT4204-2
		12 V	–	1 MW	5TT4204-3
		8 V	–	1 MW	5TT4204-4
1 NO + 1 NC	400 V	230 V	–	1 MW	5TT4205-0
		115 V	–	1 MW	5TT4205-1
		24 V	–	1 MW	5TT4205-2
		12 V	–	1 MW	5TT4205-3
		8 V	–	1 MW	5TT4205-4
1 CO	250 V	230 V	–	1 MW	5TT4206-0
		115 V	–	1 MW	5TT4206-1
		24 V	–	1 MW	5TT4206-2
		12 V	–	1 MW	5TT4206-3
		8 V	–	1 MW	5TT4206-4
2 CO	400 V	230 V	–	1 MW	5TT4207-0
		115 V	–	1 MW	5TT4207-1
		24 V	–	1 MW	5TT4207-2
		12 V	–	1 MW	5TT4207-3
		8 V	–	1 MW	5TT4207-4
		–	110 V	1 MW	5TT4217-1
			30 V	1 MW	5TT4217-6
			24 V	1 MW	5TT4217-2
			12 V	1 MW	5TT4217-3

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Further technical specifications

		5TT4201-.	5TT4202-.	5TT4204-.	5TT4205-.	5TT4206-.	5TT4207-.	5TT4217-.
Standards								
Standards		EN 60947-5-1, EN 60669-2-2						
Approvals		VDE, CCC						
Supply								
Rated operational current I_e	At p.f. = 0.6 ... 1	16 A						
Primary operating range		0.8...1.1×U_c						
Rated frequency f_c		50 Hz						
Rated power dissipation P_v	Magnet coil	2.4 W 3.0 VA		4.8 W 6.0 VA	2.4 W 3.0 VA			1.7 W 1.7 VA
	Per pole, max.	1.0 W						
Contacts								
Contact gap		>1.2 mm						
Minimum contact load		10 V AC; 100 mA						
Electrical service life at I_e/U_e, p.f. = 0.6, incandescent lamp load 600 W	Switching cycles	50000						
Safety								
Different phases between magnet coil and contact		Permissible						
Safe separation		>6 mm						
Rated impulse withstand voltage U_{imp}		4 kV						
Function								
Manual operation		Yes						
Connections								
Terminals	± Screw (Pozidriv)	PZ 1						
	Max. tightening torque	0.8 ... 1 Nm						
Environmental conditions								
Permissible ambient temperature		–10 ... +40 °C						
Resistance to climate at 95% relative humidity	Acc. to DIN 50015	35 °C						
Degree of protection	Acc. to EN 60529	IP20, with connected conductors						

Accessories

Spacer



- Contour for modular devices with a mounting depth of 70 mm
- Can be snapped onto either side of the busbar for convenient cable routing
- Spacer is recommended for better heat dissipation

Article No.
5TG8240

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5TT50 Insta contactors

AC/DC technology

	Rated operational current I_e			
	20 A	25 A	40 A	63 A
Main connection conductor cross-section, solid	1.0 ... 10 mm²	1.5 ... 25 mm²	1.5 ... 25 mm²	1.5 ... 25 mm²
Main connection conductor cross-section, stranded with end sleeve	1.0 ... 6 mm²	1.5 ... 16 mm²	1.5 ... 16 mm²	1.5 ... 16 mm²
Main connection conductor cross-section, AWG	16 ... 8	16 ... 4	16 ... 4	16 ... 4
				

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Contacts	U_e	U_c AC	U_c DC	Mounting width				
Insta contactors with manual switch								
2 NO	230 V	230 V	220 V	1 MW	5TT5000-0	–	–	–
		24 V	24 V	1 MW	5TT5000-2	–	–	–
4 NO	400 V	230 V	220 V	2 MW	–	5TT5030-0	–	–
				3 MW	–	–	5TT5040-0	5TT5050-0
		115 V	110 V	2 MW	–	5TT5030-1	–	–
		24 V	24 V	2 MW	–	5TT5030-2	–	–
				3 MW	–	–	5TT5040-2	5TT5050-2
2 NC	230 V	230 V	220 V	1 MW	5TT5002-0	–	–	–
		24 V	24 V	1 MW	5TT5002-2	–	–	–
4 NC	400 V	230 V	220 V	2 MW	–	5TT5033-0	–	–
				3 MW	–	–	5TT5043-0	–
		24 V	24 V	2 MW	–	5TT5033-2	–	–
				3 MW	–	–	5TT5043-2	–
1 NO + 1 NC	230 V	230 V	220 V	1 MW	5TT5001-0	–	–	–
		24 V	24 V	1 MW	5TT5001-2	–	–	–
2 NO + 2 NC	400 V	230 V	220 V	2 MW	–	5TT5032-0	–	–
				3 MW	–	–	5TT5042-0	5TT5052-0
		24 V	24 V	2 MW	–	5TT5032-2	–	–
				3 MW	–	–	5TT5042-2	5TT5052-2
3 NO + 1 NC	400 V	230 V	220 V	2 MW	–	5TT5031-0	–	–
				3 MW	–	–	5TT5041-0	5TT5051-0
		24 V	24 V	2 MW	–	5TT5031-2	–	–
				3 MW	–	–	5TT5041-2	5TT5051-2
Insta contactors with O/I/Automatic								
2 NO	230 V	230 V	220 V	1 MW	5TT5000-6	–	–	–
		24 V	24 V	1 MW	5TT5000-8	–	–	–
4 NO	400 V	230 V	220 V	2 MW	–	5TT5030-6	–	–
		24 V	24 V	2 MW	–	5TT5030-8	–	–
1 NO + 1 NC	230 V	230 V	220 V	1 MW	5TT5001-6	–	–	–
		24 V	24 V	1 MW	5TT5001-8	–	–	–
3 NO + 1 NC	400 V	230 V	220 V	2 MW	–	5TT5031-6	–	–
		24 V	24 V	2 MW	–	5TT5031-8	–	–

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Further technical specifications

		5TT500	5TT503	5TT504	5TT505
Standards					
Standards		EN 60947-4-1; EN 60947-5-1; EN 61095			
Approvals		UL 508; UL File No. E303328			
Supply					
Rated operational current I_e	AC-1/AC-7a, NO contacts / NC contacts	20 A / 20 A	25 A / 25 A	40 A / 40 A	63 A / 63 A
	AC-3/AC-7b, NO contacts / NC contacts	9 A / 6 A	8.5 A / 8.5 A	22 A / 22 A	30 A / 30 A
Primary operating range		0.85 ... 1.1 × U_c			
Rated frequency f_c at AC		50/60 Hz			
Rated power dissipation P_v	Pick-up power (without manual switch or with manual switch in "I" position)	2.1 VA / 2.1 W	2.6 VA / 2.6 W	5 VA / 5 W	
	Pick-up power (with manual switch in "AUTO" position)	2.1 VA / 4.1 W	2.6 VA / 2.6 W	5 VA / 5 W	
	Holding power	2.1 VA / 2.1 W	2.6 VA / 2.6 W	5 VA / 5 W	
	Per contact AC-1/AC-7a	1.7 VA	2.2 VA	4 VA	8 VA
Contacts					
Contact gap (NO contacts)	Min.	3.6 mm			
Minimum switching capacity	(= minimum contact load)	≥17 V; 50 mA			
Electrical service life at I_e and load	AC-1/AC-7a switching cycles	200000		100000	
	AC-3/AC-7b switching cycles	300000	500000		150000
Mechanical service life	Switching cycles	3 million			
Switching of resistive loads AC-1 at rated operational power P_s	Single-phase (NO contacts)	4 kW (230 V)	5.4 kW (400 V)	8.7 kW (400 V)	13.3 kW (400 V)
	Three-phase (NO contacts)	–	16 kW (400 V)	26 kW (400 V)	40 kW (400 V)
Switching of three-phase asynchronous motors AC-3 at rated operational power P_s	Single-phase (NO contacts)	1.3 kW / 0.75 kW	1.3 kW / 1.3 kW	3.7 kW / 3.7 kW	5/5 kW
	Three-phase (NO contacts)	–	4 kW	11 kW	15 kW
Maximum switching frequency at load	AC-1/AC-7a / AC-3/AC-7b	600 h^{-1}			
Safety					
Rated impulse withstand voltage U_{imp}		≤4 kV			
Short-circuit protection, according to coordination type 1	Back-up fuse characteristic gL/gG	20 A	25 A	63 A	80 A
Overload withstand capability at 10 s	Per conducting path (NO contacts only)	72 A	68 A	176 A	240 A
Function					
Switching times	Closing (NO contacts)	15 ... 45 ms		15 ... 20 ms	
	Opening (NO contacts)	20 ... 50 ms	20 ... 70 ms	35 ... 45 ms	
Connections					
Coil/main connection terminals	± Screw (Pozidriv)	PZ 1 / PZ 1	PZ 1 / PZ 2		
Coil connection conductor cross-section	Solid	1.0 ... 2.5 mm^2			
	Stranded, with end sleeve	1.0 ... 2.5 mm^2			
	AWG cables	16 ... 10			
Main connection conductor cross-section	Solid	1.0 ... 10 mm^2	1.5 ... 25 mm^2		
	Stranded, with end sleeve	1.0 ... 6 mm^2	1.5 ... 16 mm^2		
	AWG cables	16 ... 8	16 ... 4		
Tightening torque	Coil connection	0.6 Nm / 8 lbs/in.			
	Main connection	1.2 Nm / 9 lbs/in.	3.5 Nm / 20 lbs/in.		
Environmental conditions					
Permissible ambient temperature	For operation [1] / For storage	–15 ... +55 °C / –50 ... +80 °C			
Degree of protection	Acc. to EN 60529	IP 20, with connected conductors			
Characteristics according to UL 508					
Rated operational current I_n		20 A	25 A	40 A	63 A
UL 508 General Use 240 V/480 V	FLA	20 A	25 A	40 A	63 A
UL 508 AC discharge lamps		20 A	25 A	30 A	40 A
UL 508 motor load	Power 240 V / 480 V	1 hp / –	3 hp / 5 hp	7.5 hp / 15 hp	10 hp / 20 hp
UL 508 short-circuit at 480 V	K5 fuses	20 A	25 A	60 A	70 A

[1] Contactors can be operated at ambient temperatures of between -25 °C and +70 °C, but only under special conditions.
For more information, please contact Siemens Support. For questions concerning heat dissipation, please refer to the instructions in the Configuration Manual "Switching Devices".

Accessories

Auxiliary switches



- For right-hand-side retrofitting
- Max. one auxiliary switch per Insta contactor

Contacts	Mounting width	Article No.
2 NO	0.5 MW	5TT5910-0
1 NO + 1 NC	0.5 MW	5TT5910-1

Sealable terminal covers



For Insta contactor	Mounting width	Article No.
20 A	1 MW	5TT5910-5
25 A	2 MW	5TT5910-6
40 A and 63 A	3 MW	5TT5910-7

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5TT58 Insta contactors

AC technology

					Rated operational current I_e			
					20 A	25 A	40 A	63 A
Main connection conductor cross-section, rigid					1.0 ... 10 mm²	1.0 ... 10 mm²	1 ... 25 mm²	1 ... 25 mm²
Main connection conductor cross-section, flexible with end sleeve					1.0 ... 6 mm²	1.0 ... 6 mm²	1 ... 16 mm²	1 ... 16 mm²
								
Contacts	**U_e**	**U_c AC**		**Mounting width**				
Insta contactors without manual switch								
2 NO	230 V	230 V		1 MW	5TT5800-0	–	–	–
		24 V		1 MW	5TT5800-2	–	–	–
4 NO	400 V	230 V	Standard	2 MW	–	5TT5830-0	–	–
				3 MW	–	–	5TT5840-0	5TT5850-0
			Capacitive loads up to 150 µF	2 MW	–	5TT5820-0	–	–
		115 V		2 MW	–	5TT5830-1	–	–
		24 V		2 MW	–	5TT5830-2	–	–
				3 MW	–	–	5TT5840-2	5TT5850-2
2 NC	230 V	230 V		1 MW	5TT5802-0	–	–	–
		24 V		1 MW	5TT5802-2	–	–	–
4 NC	400 V	230 V		2 MW	–	5TT5833-0	–	–
				3 MW	–	–	5TT5843-0	5TT5853-0
		24 V		2 MW	–	5TT5833-2	–	–
				3 MW	–	–	5TT5843-2	5TT5853-2
1 NO + 1 NC	230 V	230 V		1 MW	5TT5801-0	–	–	–
		24 V		1 MW	5TT5801-2	–	–	–
2 NO + 2 NC	400 V	230 V		2 MW	–	5TT5832-0	–	–
				3 MW	–	–	5TT5842-0	5TT5852-0
		24 V		2 MW	–	5TT5832-2	–	–
				3 MW	–	–	5TT5842-2	5TT5852-2
3 NO + 1 NC	400 V	230 V		2 MW	–	5TT5831-0	–	–
				3 MW	–	–	5TT5841-0	5TT5851-0
		115 V		2 MW	–	5TT5831-1	–	–
		24 V		2 MW	–	5TT5831-2	–	–
				3 MW	–	–	5TT5841-2	5TT5851-2
Insta contactors with manual switch O/I/Automatic								
2 NO	230 V	230 V		1 MW	5TT5800-6	–	–	–
		24 V		1 MW	5TT5800-8	–	–	–
4 NO	400 V	230 V		2 MW	–	5TT5830-6	–	–
				3 MW	–	–	5TT5840-6	5TT5850-6
		24 V		2 MW	–	5TT5830-8	–	–
				3 MW	–	–	5TT5840-8	–
1 NO + 1 NC	230 V	230 V		1 MW	5TT5801-6	–	–	–
		24 V		1 MW	5TT5801-8	–	–	–
3 NO + 1 NC	400 V	230 V		2 MW	–	5TT5831-6	–	–
				3 MW	–	–	5TT5841-6	–
		24 V		2 MW	–	5TT5831-8	–	–
				3 MW	–	–	5TT5841-8	–

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Further technical specifications

		5TT580.	5TT582. 5TT583.	5TT584.	5TT585.
Standards					
Standards		IEC 60947-4-1, IEC 60947-5-1, IEC 61095; EN 60947-4-1, EN 60947-5-1, EN 61095, VDE 0660			
Supply					
Number of poles		2	4		
Rated operational current I_e		20 A	25 A	40 A	63 A
Primary operating range		0.85 ... 1.1 × U_c			
Rated frequency f_c at AC		50/60 Hz			
Rated power dissipation P_v	Pick-up power (without manual switch or manual switch in "I" position)	6 VA / 3.8 W	10 VA / 5 W	15.4 VA / 4.6 W	
	Pick-up power (with manual switch in "AUTO" position)	12 VA / 10 W	33 VA / 25 W	62 VA / 50 W	
	Holding power	2.8 VA / 1.2 W	5.5 VA / 1.6 W	7.7 VA / 3 W	
	Per contact AC-1/AC-7a	1.7 VA	2.2 VA	4 VA	8 VA
Contacts					
Contact gap	Minimum	3.6 mm		3.4 mm	
Minimum switching capacity	(= minimum contact load)	≥17 V; 50 mA			
Electrical service life at I_e and load	AC-1/AC-7a switching cycles	200000		100000	
	AC-3/AC-7b switching cycles	300000	500000	150000	
Mechanical service life	Switching cycles	3 million			
Switching of resistive loads AC-1/AC-7a for rated operational power P_s	Single-phase (230 V) (NO contacts)	4 kW	5.4 kW	8.7 kW	13.3 kW
	Three-phase (400 V) (NO contacts)	–	16 kW	26 kW	40 kW
Switching of three-phase asynchronous motors AC-3/AC-7b for rated operational power P_s	Single-phase (230 V) (NO contacts)	1.3 kW [1]	1.3 kW	3.7 kW	5 kW
	Three-phase (400 V) (NO contacts)	–	4 kW	11 kW	15 kW
Maximum switching frequency at load		600 h^{-1}			
Safety					
Rated insulation voltage U_i		440 V		500 V	
Rated impulse withstand voltage U_{imp}		4 kV			
Short-circuit protection, according to coordination type 1	Back-up fuse characteristic gL/gG	20 A	25 A	63 A	80 A
Overload withstand capability at 10 s	Per conducting path (NO contacts only)	72 A	68 A	176 A	240 A
Function					
Switching times	Closing (NO contacts)	15 ... 25 ms	10 ... 20 ms	15 ... 20 ms	
	Opening (NO contacts)	20 ms		10 ms	
	Closing (NC contacts)	20 ... 30 ms		5 ... 10 ms	
	Opening (NC contacts)	10 ms		10 ... 15 ms	
Connections					
Coil connection terminals	± Screw (Pozidriv)	PZ 1			
Main connection terminals	± Screw (Pozidriv)	PZ 1		PZ 2	
Coil connection conductor cross-section	Rigid	1.0 ... 2.5 mm^2			
	Flexible, with end sleeve	1.0 ... 2.5 mm^2			
Main connection conductor cross-section	Rigid	1.0 ... 10 mm^2		1 ... 25 mm^2	
	Flexible, with end sleeve	1.0 ... 6 mm^2		1 ... 16 mm^2	
Tightening torque	Coil connection	0.6 Nm			
	Main connection	1.2 Nm		3.5 Nm	
Environmental conditions					
Permissible ambient temperature	For operation/for storage	–5 ... +55 °C / –30 ... +80 °C			
Degree of protection	Acc. to EN 60529	IP 20, with connected conductors			

[1] For NO contacts only.

Accessories

Auxiliary switches



- For right-hand-side retrofitting
- Max. one auxiliary switch per Insta contactor

Contacts	Mounting width	Article No.
2 NO	0.5 MW	5TT5910-0
1 NO + 1 NC	0.5 MW	5TT5910-1

Sealable terminal covers



For Insta contactor	Mounting width	Article No.
20 A	1 MW	5TT5910-5
25 A	2 MW	5TT5910-6
40 A and 63 A	3 MW	5TT5910-7

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5TT5 auxiliary switches

For 5TT5 Insta contactor

Rigid conductor cross-section	1 ... 2.5 mm²
Flexible conductor cross-section, with end sleeve	1 ... 2.5 mm²



Contacts	U_e AC	Mounting width	
2 NO	230 V / 400 V	0.5 MW	5TT5910-0
1 NO + 1 NC	230 V / 400 V	0.5 MW	5TT5910-1

5

Further technical specifications

		5TT5910
Standards		
Standards		IEC 60947-5-1
Approvals		CCC
Supply		
Number of poles		2
Rated operational current I_e	230 V	6 A
	400 V	4 A
Rated frequency f_c at AC		50/60 Hz
Contacts		
Contact gap	Minimum	4 mm
Minimum switching capacity	(= minimum contact load)	≥12 V; 5 mA
Mechanical service life	Switching cycles	3 million
Maximum switching frequency at load		600 h^{-1}
Safety		
Rated insulation voltage U_i		500 V
Rated impulse withstand voltage U_{imp}		4 kV
Short-circuit protection, according to coordination type 1	Back-up fuse characteristic gL/gG	6 A
Connections		
Terminals	± Screw (Pozidriv)	PZ 1
Conductor cross-section	Rigid	1 ... 2.5 mm²
	Flexible, with end sleeve	1 ... 2.5 mm²
Tightening torque		0.8 Nm
Environmental conditions		
Permissible ambient temperature	For operation/for storage	–5 ... +55 °C / –30 ... +80 °C
Degree of protection	Acc. to EN 60529	IP 20, with connected conductors

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5TT3 soft-starting devices

For two-phase motor control

Rigid conductor cross-section	Max. 2× 2.5 mm²
Flexible conductor cross-section, with end sleeve	Min. 1× 0.5 mm²



Version	U_e AC	Mounting width	
Three-phase	400 V	6 MW	5TT3440

Further technical specifications		5TT3440
Standards		
Standards		EN 60947-4-2 (VDE 0660-117)
Supply		
Line/motor voltage		400 V AC
Primary operating range		0.8 ... 1.1 × U_c
Rated frequency f_c at AC		50/60 Hz
Rated power		3.5 VA
Rated power dissipation P_v at rated operational current	Coil/drive	3.5 VA
	Per contact	4.6 VA
Rated output of motor at 400 V	Max.	5500 VA
	Min.	300 VA
Startup voltage		30 ... 70%
Starting ramp		0.1 ... 10 s
Safety		
Quick-acting semiconductor fuse		35 A
Function		
Switching frequency 3× I_N, T_{AN} = 10 s, v_u = 20%	Switching cycles (up to 3 kW)	36 h^{-1}
	Switching cycles (from 3 ... 5.5 kW)	20 h^{-1}
Recovery time		100 ms
Connections		
Conductor cross-section	Rigid	Max. 2× 2.5 mm²
	Flexible, with end sleeve	Min. 1× 0.5 mm²
Environmental conditions		
Permissible ambient temperature		–20 ... +60 °C
Resistance to climate	Acc. to EN 60068-1	20/60/4

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7LF4 digital time switches

Mini



- Weekly program
- 28 programs
- Automatic daylight-saving adjustment

Contacts	U_c	Channels	Mounting width	
1 NO	230 V AC	1	1 MW	7LF4501-5

Further technical specifications

		Mini
Standards		
Standards		EN 60730-1, -2-7; VDE 0631-1, -2-7
Supply		
Primary operating range		0.85 ... 1.1 × U_c
Frequency range		50/60 Hz
Rated power dissipation P_v		0.9 VA
Channels		
Rated operational voltage U_e		250 V AC
Rated operational current I_e	At p.f. = 1	16 A
	At p.f. = 0.6	10 A
Contacts		
Minimum contact load		12 V / 100 mA
Electrical switching cycles	At p.f. = 1	6000 (20 A)
Mechanical switching cycles		>5 million
Incandescent lamp load		5 A
Energy-saving lamp load		300 W
Fluorescent lamp load	Parallel p.f. correction 70 µF	60 VA
	Uncorrected	2500 VA
Safety		
Different phases between operating mechanism and contact		Permissible
Rated impulse withstand voltage U_{imp}		4 kV
Electrostatic discharge	Acc. to IEC 61000-4-2	>8.0 kV
EMC: Burst	Acc. to IEC 61000-4-4	>4.4 kV
EMC: Surge	Acc. to IEC 61000-4-5	>2.0 kV
Overvoltage category	Acc. to EN 61010-1	III
Function		
Clock errors per day	Typical	±1 s/day
Power reserve storage	Battery	3 years
Make and break cycles		1 min
Minimum switching sequences		1 min
Control input	Terminal S	–
Programs [1]		28
Battery type		Li primary cell
Connections		
Terminals	± Screw (Pozidriv)	PZ 1
Conductor cross-sections of main current path	Rigid	1.5 ... 4 mm²
	Flexible, with end sleeve	Max. 2.5 mm²
Environmental conditions		
Permissible ambient temperature	For operation/ for storage	–10 ... +55 °C / –20 ... +60 °C
Resistance to climate	Acc. to EN 60068-1	10/055/21
Degree of protection	Acc. to EN 60529	IP20, with connected conductors
Safety class	Acc. to EN 61140	II

[1] A program consists of an ON time, an OFF time and assigned ON and OFF days or day blocks.

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Top



- Weekly program
- 28 programs
- Text-assisted programming concept
  - Language: English
- Manual daylight-saving adjustment

Contacts	U_c	Channels	Mounting width	
1 CO	230 V AC	1	2 MW	7LF4511-0
2 CO	230 V AC	2	2 MW	7LF4512-0

Further technical specifications

		Top
Standards		
Standards		EN 60730-1, -2-7; VDE 0631-1, -2-7
Supply		
Primary operating range		0.85 ... 1.1 × U_c
Frequency range		50/60 Hz
Rated power dissipation P_v		2 VA
Channels		
Rated operational voltage U_e		250 V AC
Rated operational current I_e	At p.f. = 1	16 A
	At p.f. = 0.6	10 A
Contacts		
Minimum contact load		12 V / 100 mA
Electrical switching cycles	At p.f. = 1	100000
Mechanical switching cycles		10 million
Incandescent lamp load		8 A
Energy-saving lamp load		60 VA
Fluorescent lamp load	Parallel p.f. correction 70 µF	60 VA
	Uncorrected	2300 VA
Safety		
Different phases between operating mechanism and contact		Permissible [2]
Rated impulse withstand voltage U_{imp}		4 kV
Electrostatic discharge	Acc. to IEC 61000-4-2	>8.0 kV
EMC: Burst	Acc. to IEC 61000-4-4	>4.4 kV
EMC: Surge	Acc. to IEC 61000-4-5	>2.0 kV
Overvoltage category	Acc. to EN 61010-1	III
Function		
Clock errors per day	Typical	±1.5 s/day
Power reserve storage	Battery	3 years
Make and break cycles		1 min
Minimum switching sequences		1 min
Control input	Terminal S	No
Programs [1]		28 (14 per channel)
Program memory	Captive	No
Battery type		Li primary cell
Connections		
Terminals	± Screw (Pozidriv)	PZ 1
Conductor cross-sections of main current path	Rigid	1.5 ... 4 mm²
	Flexible, with end sleeve	Max. 2.5 mm²
Environmental conditions		
Permissible ambient temperature	For operation/ for storage	–20 ... +55 °C / –20 ... +60 °C
Resistance to climate	Acc. to EN 60068-1	20/055/21
Degree of protection	Acc. to EN 60529	IP20, with connected conductors
Safety class	Acc. to EN 61140	II

[1] A program consists of an ON time, an OFF time and assigned ON and OFF days or day blocks.
[2] The combination of line voltage (230 V) and SELV is not permissible in conjunction with a 2-channel time switch. This requirement is, however, admissible in the case of 1-channel time switch.

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7LF4 digital time switches

Profi



- Weekly program
- Vacation program
- Random program
- Expert mode
- Cycle function
- Text-assisted programming concept
  – 15 languages
- Simple program creation on a PC
  using the supplied software, with 7LF4941-0 USB adapter
- Automatic daylight-saving adjustment
- Operating hours counter, counting range: 65535 h
- Accurate to the second hh:mm:ss
- Synchronization 50/60 Hz

Contacts	U_c	Channels	Mounting width	
1 CO	230 V AC	1	2 MW	7LF4521-0
	24 V AC/DC	1	2 MW	7LF4521-2
2 CO	230 V AC	2	2 MW	7LF4522-0
	24 V AC/DC	2	2 MW	7LF4522-2

Further technical specifications

		Profi
Standards		
Standards		EN 60730-1, -2-7; VDE 0631-1, -2-7
Approvals		UL File No. E301698
Supply		
Primary operating range	U_c 230 V	0.85 ... 1.1 × U_c
	U_c 24 V	0.9 ... 1.1 × U_c
Frequency range	U_c 230 V	50/60 Hz
	U_c 24 V	50/60 Hz
Rated power dissipation P_v	U_c 230 V	2 VA
	U_c 24 V	2 VA
Channels		
Rated operational voltage U_e		250 V AC
Rated operational current I_e	At p.f. = 1	16 A
	At p.f. = 0.6	10 A
Contacts		
Minimum contact load		12 V / 100 mA
Electrical switching cycles	At p.f. = 1	100000
Mechanical switching cycles		10 million
Incandescent lamp load		8 A
Energy-saving lamp load		1000 W
Fluorescent lamp load	Parallel p.f. correction 70 µF	600 VA
	Uncorrected	2000 VA
Safety		
Different phases between operating mechanism and contact		Permissible [2]
Rated impulse withstand voltage U_{imp}		4 kV
Electrostatic discharge	Acc. to IEC 61000-4-2	>8.0 kV
EMC: Burst	Acc. to IEC 61000-4-4	>4.4 kV
EMC: Surge	Acc. to IEC 61000-4-5	>2.0 kV
Overvoltage category	Acc. to EN 61010-1	III
Function		
Clock errors per day	Typical	±0.1 s/day
Power reserve storage	Battery	5 years
Make and break cycles		1 s
Minimum switching sequences		1 s
Control input	Terminal S	No
Programs [1]		28
Program memory	Captive	Yes
Battery type		Li primary cell
Connections		
Terminals	± Screw (Pozidriv)	PZ 1
Conductor cross-sections of main current path	Rigid	1.5 ... 4 mm²
	Flexible, with end sleeve	Max. 2.5 mm²
Environmental conditions		
Permissible ambient temperature	For operation/for storage	–20 ... +55 °C / –20 ... +60 °C
Resistance to climate	Acc. to EN 60068-1	20/055/21
Degree of protection	Acc. to EN 60529	IP20, with connected conductors
Safety class	Acc. to EN 61140	II

[1] A program consists of an ON time, an OFF time and assigned ON and OFF days or day blocks.
[2] The combination of line voltage (230 V) and SELV is not permissible in conjunction with a 2-channel time switch. This requirement is, however, admissible in the case of 1-channel time switch.

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Astro



- Weekly program
- Vacation program
- Random program
- Expert mode
- Astro function
- Text-assisted programming concept
  – 15 languages
- Simple program creation on a PC using the supplied software, with 7LF4941-0 USB adapter
- Automatic daylight-saving adjustment
- Operating hours counter, counting range: 65535 h
- Accurate to the second hh:mm:ss
- Synchronization 50/60 Hz
- Input disable via PIN code
- Daylight-saving correction
- 1 h test

Contacts	U_c	Channels	Mounting width	
1 CO	230 V AC	1	2 MW	7LF4531-0
2 CO	230 V AC	2	2 MW	7LF4532-0

Further technical specifications

		Astro
Standards		
Standards		EN 60730-1, -2-7; VDE 0631-1, -2-7
Approvals		UL File No. E301698
Supply		
Primary operating range		0.85 ... 1.1 × U_c
Frequency range		50/60 Hz
Rated power dissipation P_v		2 VA
Channels		
Rated operational voltage U_e		250 V AC
Rated operational current I_e	At p.f. = 1	16 A
	At p.f. = 0.6	10 A
Contacts		
Minimum contact load		12 V / 100 mA
Electrical switching cycles	At p.f. = 1	100000
Mechanical switching cycles		10 million
Incandescent lamp load		8 A
Energy-saving lamp load		1000 W
Fluorescent lamp load	Parallel p.f. correction 70 µF	600 VA
	Uncorrected	2000 VA
Safety		
Different phases between operating mechanism and contact		Permissible [2]
Rated impulse withstand voltage U_{imp}		4 kV
Electrostatic discharge	Acc. to IEC 61000-4-2	>8.0 kV
EMC: Burst	Acc. to IEC 61000-4-4	>4.4 kV
EMC: Surge	Acc. to IEC 61000-4-5	>2.0 kV
Overvoltage category	Acc. to EN 61010-1	III
Function		
Clock errors per day	Typical	±0.1 s/day
Power reserve storage	Battery	5 years
Make and break cycles		1 s
Minimum switching sequences		1 s
Control input	Terminal S	Yes (with 1K clock)
Programs [1]		56 (2 × 28)
Program memory	Captive	Yes
Battery type		Li primary cell
Connections		
Terminals	± Screw (Pozidriv)	PZ 1
Conductor cross-sections of main current path	Rigid	1.5 ... 4 mm²
	Flexible, with end sleeve	Max. 2.5 mm²
Environmental conditions		
Permissible ambient temperature	For operation/ for storage	–20 ... +55 °C / –20 ... +60 °C
Resistance to climate	Acc. to EN 60068-1	20/055/21
Degree of protection	Acc. to EN 60529	IP20, with connected conductors
Safety class	Acc. to EN 61140	II

[1] A program consists of an ON time, an OFF time and assigned ON and OFF days or day blocks.
[2] The combination of line voltage (230 V) and SELV is not permissible in conjunction with a 2-channel time switch. This requirement is, however, admissible in the case of 1-channel time switch.

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7LF4 digital time switches

Accessories

Data keys



- For Profi and Astro digital time switches
- Programming at the PC (7LF4941-0 USB adapter and software required)
- Read-in of programs to the time switch
- Writing of programs from the time switch
- Transfer of programs
  - From PC to time switch and vice versa
  - From time switch to time switch

Article No.	Mini	Top	Profi	Astro
7LF4941-1	–	–	■	■

USB adapter and software



- For Profi and Astro digital time switches
- For the reading and writing of data keys at the PC
- Including programming software
- Including 7LF4941-1 data key for Profi and Astro
- Compatible with 7LF4940-1 data key (predecessor model) and 7LF4940-2 data key
- Can be connected via USB interface
- System requirements:
  - Windows 7, Windows Vista, Windows 2000, Windows ME, Windows XP or Windows 98 Second Edition
  - USB connection
  - 40 MB free disk space

Article No.	Mini	Top	Profi	Astro
7LF4941-0	–	–	■	■

Holders for front panel installation



- Universal application for devices from 1 MW ... 6 MW
- Cutout dimensions:
  - Height $45^{+0.5}$ mm
  - Width 23 mm, 41 mm, 59 mm, 77 mm, 95 mm or 113 mm

Article No.	Mini	Top	Profi	Astro
7LF9006	■	■	■	■

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7LF5 mechanical time switches

Time switches without power reserve

		For standard mounting rail		For wall mounting (surface mounting)
				
Contacts	**Mounting width**			
With day disk				
1 NO	1 MW	7LF5300-1	–	–
1 CO	3 MW	–	7LF5300-5	–
	–	–	–	7LF5301-0
With week disk				
1 CO	3 MW	–	7LF5300-6	–

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Further technical specifications

		7LF5300-1	7LF5300-5	7LF5300-6	7LF5301-0
Standards					
Standards		EN 60730-1, -2-7, UL 917, UL 917, CSA C22.2 No. 14 and 177			
Approvals		VDE, UL file: E301698			
Supply					
Rated control supply voltage U_c		230 V AC			
Primary operating range	U_c 230 V AC	0.85 ... 1.1 × U_c			
Rated frequency		50 Hz			
Frequency range		50 Hz			
Rated power dissipation P_v		1 VA			
Channels					
Rated operational voltage U_e		250 V AC			
Rated operational current I_e	At p.f. = 1	16 A			
	At p.f. = 0.6	4 A			
Contacts					
Minimum contact load		4 V / 1 mA			
Electrical switching cycles	At p.f. = 1	100000			
Mechanical switching cycles		20 million			
Incandescent lamp load		5 A			
Fluorescent lamp load	Parallel p.f. correction 70 µF	60 VA			
	Uncorrected	1400 VA			
Safety					
Different phases between operating mechanism and contact		Permissible			
Electrical isolation, creepage distances and clearances	Operating mechanism	8 mm			
	Contact	6 mm			
Rated impulse withstand voltage U_{imp}		4 kV			
Electrostatic discharge	Acc. to IEC 61000-4-2	>8.0 kV			
EMC: Burst	Acc. to IEC 61000-4-4	>4.4 kV			
EMC: Surge	Acc. to IEC 61000-4-5	>2.0 kV			
Overvoltage category	Acc. to EN 61010-1	III			
Function					
Switching accuracy		±5 min		±30 min	±5 min
Clock errors		System-synchronized			
Make and break cycles		15 min		120 min	10 min
Minimum switching sequences		30 min		240 min	30 min
Connections					
Terminals	± Screw (Pozidriv)	PZ 1			
Conductor cross-sections of main current path	Rigid	1.5 ... 4 mm²			
	Flexible, with end sleeve	Max. 2.5 mm²			
	Flexible, without end sleeve	Max. 4 mm²			
Environmental conditions					
Permissible ambient temperature	For operation/for storage	–10 ... +55 °C / –10 ... +60 °C			
Resistance to climate	Acc. to EN 60068-1	10/055/21			
Degree of protection	Acc. to EN 60529	IP20, with connected conductors			
Safety class	Acc. to EN 61140	II			

Accessories

Holders for front panel installation



- Universal application for devices from 1 MW ... 6 MW
- Cutout dimensions:
  - Height $45^{+0.5}$ mm
  - Width 23 mm, 41 mm, 59 mm, 77 mm, 95 mm or 113 mm

Article No.
7LF9006

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7LF5 mechanical time switches

Time switches with power reserve

	For standard mounting rail			For wall mounting (surface mounting)
Time buffering in the event of a power failure	–	–	■	–
Automatic daylight-saving adjustment	–	–	■	–
Automatic time setting for Central European time zone during commissioning	–	–	■	–
				
Contacts	**Mounting width**				
With day disk					
1 NO	1 MW	7LF5301-1	–	–	–
1 CO	3 MW	–	7LF5301-6	7LF5301-4	–
	–	–	–	–	7LF5305-0
With week disk					
1 CO	3 MW	–	7LF5301-7	7LF5301-5	–

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Further technical specifications

		7LF5301-1	7LF5301-4	7LF5301-5	7LF5301-6	7LF5301-7	7LF5305-0
Standards							
Standards		EN 60730-1, -2-7, UL 917, UL 917, CSA C22.2 No. 14 and 177					
Approvals		VDE, UL file: E301698					
Supply							
Rated control supply voltage U_c		230 V AC					
Primary operating range		0.85 ... 1.1 × U_c					
Rated frequency		50 Hz					
Frequency range		50/60 Hz					
Rated power dissipation P_v		1 VA	0.2 VA		1 VA		
Channels							
Rated operational voltage U_e		250 V AC					
Rated operational current I_e	At p.f. = 1	16 A					
	At p.f. = 0.6	4 A					
Contacts							
Minimum contact load		4 V / 1 mA					
Electrical switching cycles	At p.f. = 1	100000					
Mechanical switching cycles		20 million					
Incandescent lamp load		5 A					
Fluorescent lamp load	Parallel p.f. correction 70 µF	60 VA					
	Uncorrected	1400 VA					
Safety							
Different phases between operating mechanism and contact		Permissible					
Electrical isolation, creepage distances and clearances	Operating mechanism	8 mm					
	Contact	6 mm					
Rated impulse withstand voltage U_{imp}		4 kV					
Electrostatic discharge	Acc. to IEC 61000-4-2	>8.0 kV					
EMC: Burst	Acc. to IEC 61000-4-4	>4.4 kV					
EMC: Surge	Acc. to IEC 61000-4-5	>2.0 kV					
Overvoltage category	Acc. to EN 61010-1	III					
Function							
Switching accuracy		±5 min		±30 min	±5 min	±30 min	±5 min
Clock errors		±2.5 s/day	±0.2 s/day	±60 s/day	±2.5 s/day		
Power reserve storage		100 h	6 years		100 h		
Make and break cycles		15 min		120 min	15 min	120 min	15 min
Minimum switching sequences		30 min		240 min	30 min	240 min	30 min
Battery type		NiMH cell	Li primary cell		NiMH cell		
Minimum loading time		48 h	–		48 h		
Service life of battery	At 20 °C	6 years	10 years		6 years		
	At 40 °C	5 years					
Connections							
Terminals	± Screw (Pozidriv)	PZ 1					
Conductor cross-sections of main current path	Rigid	1.5 ... 4 mm²					
	Flexible, with end sleeve	Max. 2.5 mm²					
	Flexible, without end sleeve	Max. 4 mm²					
Environmental conditions							
Permissible ambient temperature	Storage/operation	–10 ... +60 °C / –10 ... +55 °C					
Resistance to climate	Acc. to EN 60068-1	10/055/21					
Degree of protection	Acc. to EN 60529	IP20, with connected conductors					
Safety class	Acc. to EN 61140	II					

Accessories

Holders for front panel installation



- Universal application for devices from 1 MW ... 6 MW
- Cutout dimensions:
  - Height $45^{+0.5}$ mm
  - Width 23 mm, 41 mm, 59 mm, 77 mm, 95 mm or 113 mm

Article No.
7LF9006

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7LF6 timers for buildings

	Standard stairwell lighting timers	Multi stairwell lighting timers
3-wire circuit	■	■
4-wire circuit	■	■
Zero crossing circuit	■	■
Operation	Resettable	Resettable
		

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Contacts	Warning of impending switch-off	Mounting width		
1 NO	–	1 MW	7LF6310	–
	Flickering	1 MW	–	7LF6311

Further technical specifications

		7LF6310	7LF6311
Supply			
Rated operational current I_e	At p.f. = 1	16 A	
Rated operational voltage U_e		250 V AC	
Rated control supply voltage U_c		230 V AC	
Frequency range		50/60 Hz	
Rated power dissipation P_v		1 W	
Rated impulse withstand voltage		4 kV	
Contacts			
Channels		1	
Max. glow lamp load		25 mA	50 mA
Separate multi-voltage input		–	8 ... 230 V AC/DC
Switching capacity	Inductive p.f. = 0.6	2000 VA	
Incandescent lamp load	Max.	3680 W	
Fluorescent lamp load	Series p.f. correction	2000 VA	
	Parallel p.f. correction at 70 µF	1000 W	
Compact fluorescent lamp load		1000 W	
LED		1000 W	
Electronic transformers		2000 VA	
Conventional transformers		2000 VA	
Function			
Setting range		0.5 ... 10 min	0.5 ... 12 min
Manual switches		Yes	
Programs		–	7 [1]
Environmental conditions			
Permissible ambient temperature	For operation	–20 ... +55 °C	
	For storage	–20 ... +60 °C	
Degree of protection	Installed	IP30	
Pollution degree		2	

[1] 7 functions, can be selected using selector switch on the device

System overview, page 5/4

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5TT3 timers for industrial applications

	Multifunction timers	Delay timers
Programmable for:	• Response delay • Passing make contact function • Pulse generator, delayed • Clock generator, starting with impulse • OFF-delay • Pulse converter • Passing break contact function • Response delay/OFF-delay	–
		

Contacts	Mounting width		
1 CO	1 MW	5TT3185	5TT3181

Further technical specifications

		5TT3185	5TT3181
Standards			
Standards		EN 60255; DIN VDE 0435-110	
Supply			
Rated operational current I_e		4 A	8 A
Rated operational voltage U_e		250 V AC	
Rated control supply voltage U_c		12 ... 240 V AC	220 ... 240 V AC
		12 ... 240 V DC	–
Primary operating range	U_c 230 V AC, 50/60 Hz	0.8 ... 1.1 × U_c	
Rated frequency f_n		45 ... 400 Hz	50/60 Hz
Rated power dissipation P_v		Approx. 1.5 VA	Approx. 5 VA
Contacts			
Contact gap		µm contact	
Minimum contact load		10 V / 300 mA	
Electrical service life	Switching cycles	1.5×10^5	–
	At AC-15	–	1.5×10^5
Safety			
Rated impulse withstand voltage U_{imp}	Input / output	>4 kV	
Function			
Setting range		1 s ... 300 h	
Recovery time		15 ... 80 ms	Approx. 40 ms
Connections			
Terminals	± Screw (Pozidriv)	PZ 2	
Conductor cross-sections of main current path	Rigid	Max. 2× 2.5 mm²	
	Flexible, with end sleeve	Min. 2× 1.5 mm²	
Environmental conditions			
Permissible ambient temperature		–40 ... +60 °C	
Resistance to climate	Acc. to EN 60068-1	40/60/4	

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Overvoltage protection devices

The more than one million lightning strikes in Germany every year pose a considerable risk for buildings and systems that can be damaged due to the unhindered effect of lightning currents, overvoltage and power surges. In many cases however, it is not apparent that such damage has been caused by lightning currents, overvoltage and power surges.

Overvoltage results in considerable damage to electrical and electronic equipment.
Even brief transients in power supply lines or between electrical lines and other conductive parts (e.g. grounded metallic parts, ground) are sufficient to cause such damage. The damage patterns of destroyed lines, circuit boards or switchgear demonstrate this. Such damage can be prevented employing suitable overvoltage protection means.

Reliably protected by Siemens lightning and surge arresters!

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Overvoltage Protection Devices



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5SD74 lightning arresters, type 1 6/6

5SD74 combination surge arresters, type 1 + type 2 6/8

5SD74 combination surge arresters, type 1 / type 2 6/10

5SD74 surge arresters, type 2 6/12

5SD74 surge arresters, type 3 6/16

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A multitude of additional information ...

Information + ordering

All the important things at a glance

Information to get you started

For information about overvoltage protection devices, please visit our website
www.siemens.com/overvoltage-protection

Contact persons in your region

We are there when you need us

You can find your local contacts at
www.siemens.com/lowvoltage/contact

Your product in detail

The Siemens Industry Online Support portal provides comprehensive information
www.siemens.com/lowvoltage/product-support

- Technology primer – Overvoltage protection devices (109756965)

The relevant tender specifications can be found at
www.siemens.com/lowvoltage/tenderspecifications

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- Overvoltage protection devices sie.ag/2kTfytV

Direct forwarding to the individual products in the Industry Mall by clicking on the Article No. in the catalog or by entering this web address incl. Article No.
www.siemens.com/product?Article No.

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… can be found in our online services

Commissioning + operation

Your product in detail

The Siemens Industry Online Support portal provides detailed technical information
www.siemens.com/lowvoltage/product-support

- Operating instructions
- Certificates

Engineering data for CAD or CAE systems are available in the CAx Download Manager at
www.siemens.com/lowvoltage/cax

Manuals

Manuals are available for downloading in Siemens Industry Online Support at
www.siemens.com/lowvoltage/manuals

- Configuration manual – Overvoltage protection devices (45315289)

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Our training courses can be found at
www.siemens.com/sitrain-lowvoltage

- Protection concept (WT-LVBPC)

Technical overview – Overvoltage protection devices

The fast way to get you to our online services

This page provides you with comprehensive information and links on overvoltage protection devices
www.siemens.com/lowvoltage/product-support (109769084)

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System overview

Basic units



5SD74 lightning arresters type 1



5SD74 combination surge arresters type 1 + type 2



5SD74 combination surge arresters type 1 / type 2



5SD74 surge arresters type 2 (standard design)



5SD74 surge arresters type 3

Replacement plugs



N-PE



L-N, L-PEN (type 1)



L-PEN

Note:
You will find a detailed range of accessories with the basic units.

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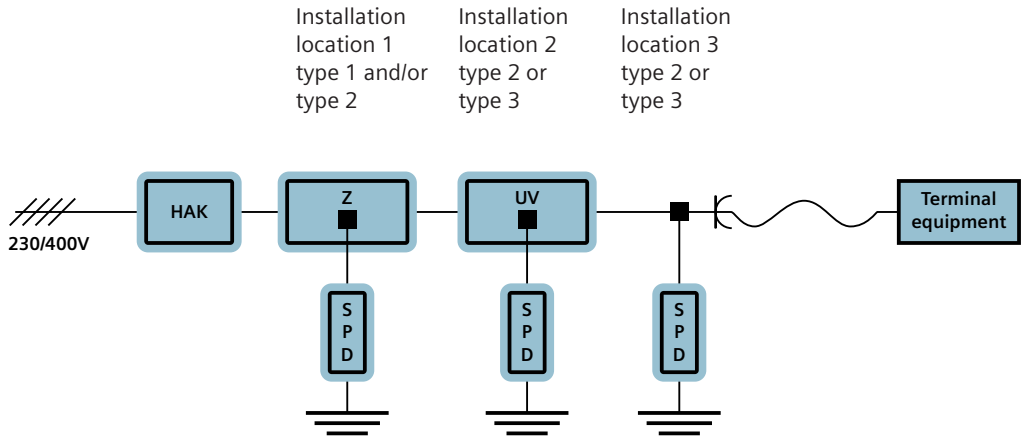
Installation locations for surge protection devices (SPDs)



HAK: Main terminal box Z/HV: In or close to the central meter system / main distribution board UV: Subdistribution board

Installation location 1 must be as close as possible to the supply point for the electrical system, so that the downstream installations are protected. The SPDs at installation locations 2 and 3 shall not be used without SPDs at installation location 1, and they must be coordinated with these SPDs (i.e. SPDs all from the same manufacturer).

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5SD74 lightning arresters, type 1

	For TN-C and IT systems	For TN-C systems	For TN-S and TT systems	
Protection paths	L-PE	L-PEN	L-N, L-PE and N-PE	L-N, L-PE and N-PE
Rated voltage U_n	690 V AC	240/415 V AC	240 V AC	240/415 V AC
Maximum continuous voltage U_c	800 V AC	350 V AC	350 V AC	350 V AC
				

Circuit	Mounting width				
With remote signaling					
1 + 0	–[1]	5SD7411-2	–	–	–
1 + 1	4 MW	–	–	5SD7412-1	–
3 + 0	6 MW	–	5SD7413-1	–	–
3 + 1	8 MW	–	–	–	5SD7414-1

[1] No modular installation device.

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Further technical specifications

		5SD7411-2	5SD7412-1	5SD7413-1	5SD7414-1
Standards					
Standards		IEC 61643-11, EN 61643-11			
Approvals		–	KEMA, UL/cUL		
Voltage					
Protection level U_p	L-N and L-PEN	≤4.50 kV	≤1.50 kV		
	L-PE	–	≤2.50 kV	–	≤2.50 kV
	N-PE	–	≤1.50 kV	–	≤1.50 kV
Current					
Lightning impulse current I_{imp} (10/350 µs)	L-N and L-PEN, 1P/3P	35 kA	25 kA	25/75 kA	
	N-PE	–	100 kA	–	100 kA
Rated discharge surge current I_n (8/20 µs)	L-N and L-PEN, 1P/3P	35 kA	25 kA	25/75 kA	
	N-PE	–	100 kA	–	100 kA
Follow current discharge capacity I_{fi} (AC)	L-N and L-PEN for 264/350 V	–	50/25 kA		
	N-PE	–	100 A	–	100 A
Function					
Response time t_A	L-N and L-PEN	≤100 ns			
	L-N and N-PE	–	≤100 ns	–	≤100 ns
Connections					
Conductor cross-section	Finely stranded	16 ... 50 mm²	2.5 ... 25 mm²		
	Solid	16 ... 50 mm²	2.5 ... 35 mm²		
Protection devices					
Max. back-up fuse acc. to IEC 61643-1	For stub wiring (gL/gG)	400 A	315 A		
	For V wiring (gL/gG)	125 A	125 A		
Short-circuit withstand current	With max. back-up fuse	50 kA	50 kA		
Environmental conditions					
Degree of protection		IP20, with connected conductors			
Temperature range		–40 ... +80 °C			

System overview, page 6/4

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Accessories

Replacement plugs





Protection paths	Basic units	Article No.
N-PE	5SD7412-1 and 5SD7414-1	5SD7418-0
L-N and L-PEN	For 5SD7412-1, 5SD7413-1 and 5SD7414-1	5SD7418-1

System overview, page 6/4

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5SD74 combination surge arresters, type 1 + type 2

	For TN-C systems	For TN-S and TT systems	
Protection paths	L-PEN	L-N, L-PE and N-PE	L-N, L-PE and N-PE
Rated voltage U_n	240/415 V AC	240 V AC	240 V AC
Maximum continuous voltage U_c	350 V AC	350 V AC	350 V AC
			

Circuit	Mounting width			
With remote signaling				
1 + 1	4 MW	–	5SD7442-1	–
3 + 0	6 MW	5SD7443-1	–	–
3 + 1	8 MW	–	–	5SD7444-1

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Further technical specifications

		5SD7442-1	5SD7443-1	5SD7444-1
Standards				
Standards		IEC 61643-11; EN 61643-11		
Approvals		KEMA, UL/cUL		
Voltage				
Protection level U_p	L-N and L-PEN	≤1.50 kV		
	L-PE	≤2.20 kV	–	≤2.20 kV
	N-PE	≤1.50 kV	–	≤1.50 kV
Current				
Lightning impulse current I_{imp} (10/350 µs)	L-N and L-PEN	25 kA		
	N-PE	100 kA	–	100 kA
Rated discharge surge current I_n (8/20 µs)	L-N and L-PEN	25 kA		
	N-PE	100 kA	–	100 kA
Follow current discharge capacity I_{fi} (AC)	L-N and L-PEN	25 kA		
	N-PE	100 A	–	100 A
Function				
Response time t_A	L-N and L-PEN	≤25 ns		
	L-N and N-PE	≤100 ns	–	≤100 ns
Connections				
Conductor cross-section	Finely stranded	2.5 … 25 mm²		
	Solid	2.5 … 35 mm²		
Protection devices				
Max. back-up fuse acc. to IEC 61643-1	For stub wiring (gL/gG)	315 A		
	For V wiring (gL/gG)	125 A		
Short-circuit withstand current	With max. back-up fuse	25 kA		
Environmental conditions				
Degree of protection		IP20, with connected conductors		
Temperature range		–40 … +80 °C		
Display				
Visual function/fault indication		Yes		

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Accessories

Replacement plugs







Protection paths	Type	Basic units	Article No.
N-PE	–	5SD7442-1 and 5SD7444-1	5SD7418-0
L-N and L-PEN	1	5SD7442-1, 5SD7443-1 and 5SD7444-1	5SD7448-1
	2	5SD7442-1, 5SD7443-1 and 5SD7444-1	5SD7428-1

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5SD74 combination surge arresters, type 1 / type 2

	For TN-C and IT systems	For TN-C systems	For TN-S and TT systems		For photovoltaic systems
Protection paths	L-PE	L-PEN	L-N, L-PE and N-PE	L-N, L-PE and N-PE	(L+) – (L–)
Rated voltage U_n	690 V AC	240/415 V AC	240 V AC	240/415 V AC	–
Maximum continuous voltage U_c	800 V AC	335 V AC	335 V AC	335 V AC	1000 V DC
					

Circuit	Mounting width					Plug-in
With remote signaling						
1 + 0	–[1]	5SD7411-2	–	–	–	–
3 + 0	3 MW	–	5SD7413-3	–	–	
3 + 1	4 MW	–	–	–	5SD7414-3	–
Without remote signaling						
1 + 1	2 MW	–	–	5SD7412-2	–	–
3 + 0	3 MW	–	5SD7413-2	–	–	5SD7483-6
3 + 1	4 MW	–	–	–	5SD7414-2	–

[1] No modular installation device.

Further technical specifications

		5SD7411-2	5SD7412-2	5SD7413-2 5SD7413-3	5SD7414-2 5SD7414-3	5SD7483-6
Standards						
Standards		IEC 61643-11				EN 50539
Approvals		–	KEMA			
Voltage						
Protection level U_p	L-N and L-PEN	≤4.50 kV	≤1.20 kV			≤3.50 kV
	L-PE	–			≤2.0 kV	–
	N-PE	–	≤1.70 kV	–	≤1.70 kV	–
Current						
Lightning impulse current I_{imp} (10/350 µs)	L-N and L-PEN	35 kA	12.5 kA			≤5 kA
	N-PE	–	50 kA	–	50 kA	–
Rated discharge surge current I_n (8/20 µs)	L-N and L-PEN	35 kA	12.5 kA			15 kA
	N-PE	–	50 kA	–		
Max. discharge surge current $I_{max.}$ (8/20 µs)	L-N	100 kA	12.5 kA	50 kA		40 kA
	N-PE	–	50 kA	–	50 kA	–
Function						
Response time t_A	L-N and L-PEN	<100 ns	≤25 ns			
	L-N and N-PE	–	≤100 ns	–	≤100 ns	≤25 ns
Connections						
Conductor cross-section	Finely stranded	16 ... 50 mm²	1.5 ... 25 mm²			
	Solid	16 ... 50 mm²	1.5 ... 35 mm²			
Protection devices						
Max. back-up fuse acc. to IEC 61643-1	For stub wiring (gL/gG)	400 A	160 A			–
	For V wiring (gL/gG)	125 A	80 A			–
Short-circuit withstand current	With max. back-up fuse	50 kA	25 kA			–
Environmental conditions						
Degree of protection		IP20, with connected conductors				
Temperature range		–40 ... +80 °C				

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Accessories

Replacement plugs

	Protection paths	Type	Basic units	Article No.
	N-PE	–	5SD7412-2, 5SD7412-3, 5SD7414-2 and 5SD7414-3	5SD7418-2
	L-N and L-PEN	1	5SD7412-2, 5SD7412-3, 5SD7413-2, 5SD7413-3, 5SD7414-2 and 5SD7414-3	5SD7418-3
	L-PE (PV)	2	5SD7483-6	5SD7498-3

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5SD74 surge arresters, type 2

Standard design

	For TN and TT systems		For TN-C and IT systems	For TN-C systems	For IT systems		For TN-S and TT systems
Protection paths	N-PE	L-PEN and L-N	L-PEN and L-N	L-PEN	L-PEN and L-PE	L-PEN and L-PE	L-N, L-PE and N-PE
Rated voltage U_n	240/415 V AC	240/415 V AC	400/690 V AC	240/415 V AC	400/690 V AC	554/960 V AC	240/415 V AC
Maximum continuous voltage U_c	260 V AC	350 V AC	800 V AC	350 V AC	580 V AC	760 V AC	350 V AC (L-N, L-PE) 260 V AC (N-PE)
							
Circuit	**Mounting width**						
With remote signaling							
1 + 0	1 MW	–	5SD7461-1	–	–	–	–	–
	2 MW	–	–	5SD7481-1	–	–	–	–
3 + 0	3 MW	–	–	–	5SD7463-1	5SD7473-1	5SD7483-5	–
3 + 1	4 MW	–	–	–	–	–	–	5SD7464-1
Without remote signaling							
1 + 0	1 MW	5SD7481-0	5SD7461-0	–	–	–	–	–
3 + 0	3 MW	–	–	–	5SD7463-0	–	–	–
3 + 1	4 MW	–	–	–	–	–	–	5SD7464-0

Further technical specifications

		5SD7481-0	5SD7461-0 5SD7461-1	5SD7481-1	5SD7463-0 5SD7463-1	5SD7464-0 5SD7464-1	5SD7473-1	5SD7483-5
Standards								
Standards		IEC 61643-11; EN 61643-11						
Approvals		KEMA					–	KEMA, UL/cUL
Voltage								
Protection level U_p	L-N and L-PEN	–	≤1.50 kV	≤5 kV	≤1.50 kV	≤1.60 kV	≤2.50 kV	≤2.90 kV
	L-PE	–				≤1.90 kV	–	
	N-PE	≤1.50 kV	–			≤1.50 kV	–	
Current								
Rated discharge surge current I_n (8/20 µs)	L-N and L-PEN	–	20 kA	15 kA	20 kA		15 kA	
	N-PE	20 kA	–			20 kA	–	
Max. discharge surge current $I_{max.}$ (8/20 µs)	L-N	–	40 kA	30 kA	40 kA		30 kA	
	N-PE	40 kA	–			40 kA	–	
Function								
Response time t_A	L-N and L-PEN	–	≤25 ns	≤100 ns	≤25 ns			
	L-N and N-PE	≤100 ns	–			≤100 ns	–	
Connections								
Conductor cross-section	Finely stranded	1.5 ... 25 mm²						
	Solid	1.5 ... 35 mm²						
Protection devices								
Max. back-up fuse acc. to IEC 61643-1	For stub wiring (gL/gG)	–	125 A	100 A	125 A			100 A
	For V wiring (gL/gG)	–		80 A				
Short-circuit withstand current	With max. back-up fuse	25 kA						
Environmental conditions								
Degree of protection		IP20, with connected conductors						
Temperature range		–40 ... +80 °C						

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Accessories

Replacement plugs

	Protection paths	Basic units	Article No.
	N-PE	5SD7481-0, 5SD7464-0 and 5SD7464-1	5SD7488-0
	L-N and L-PEN	5SD7461-0, 5SD7461-1, 5SD7463-0, 5SD7463-1, 5SD7464-0 and 5SD7464-1	5SD7468-1
	L-PEN	5SD7481-1 and 5SD7483-5	5SD7488-2
		5SD7481-1	5SD7488-4

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5SD74 surge arresters, type 2

Narrow design

	For TN-S and TT systems	
Protection paths	L-N and N-PE	L-N and N-PE
Rated voltage U_n	240 V AC	240/415 V AC
Rated arrester voltage U_C; L-N, N-PE, L-(PE)N	350 V AC	350 V AC
Rated arrester voltage U_C; N-PE	264 V AC	264 V AC
		

Circuit	Mounting width	Rated discharge surge current I_n (8/20 µs)			
		L-N or L-(PE)N	N-PE		
With remote signaling					
1 + 1	24 mm (1 1/3 MW)	20 kA	20 kA	5SD7422-1	–
3 + 1	48 mm (2 2/3 MW)	20 kA	20 kA	–	5SD7424-1
		20 kA	40 kA	–	–
Without remote signaling					
1 + 1	24 mm (1 1/3 MW)	20 kA	20 kA	5SD7422-0	–
3 + 1	48 mm (2 2/3 MW)	20 kA	20 kA	–	5SD7424-0
		20 kA	40 kA	–	–

Further technical specifications

		5SD7422-0 5SD7422-1	5SD7424-0 5SD7424-1
Standards			
Standards		IEC 61643-11, EN 61643-11	
Approvals		KEMA/UL/cUL	
Voltage			
Protection level U_p	L-N and L-PEN	≤1.50 kV	
	L-PE	≤1.90 kV	
	N-PE	≤1.50 kV	
Current			
Rated discharge surge current I_n (8/20 µs)	L-N and L-PEN	20 kA	
	N-PE	20 kA	
Max. discharge surge current $I_{max.}$ (8/20 µs)	L-N	40 kA	
	N-PE	40 kA	
Function			
Response time t_A	L-N and L-PEN	≤25 ns	
	L-N and N-PE	≤100 ns	
Connections			
Conductor cross-section	Finely stranded	2.5 ... 16 mm²	
	Solid	2.5 ... 25 mm²	
Protection devices			
Max. back-up fuse acc. to IEC 61643-1	For stub wiring (gL/gG)	315 A	
	For V wiring (gL/gG)	63 A	
Short-circuit withstand current	With max. back-up fuse	25 kA	
Environmental conditions			
Degree of protection		IP20, with connected conductors	
Temperature range		–40 ... +80 °C	

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Accessories

Replacement plugs





Protection paths	Basic units	Article No.
N-PE	5SD7422-0, 5SD7422-1, 5SD7424-0 and 5SD7424-1	5SD7428-0
L-N and L-PEN	5SD7422-0, 5SD7422-1, 5SD7424-0 and 5SD7424-1	5SD7428-1

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5SD74 surge arresters, type 3

		For TN-S and TT systems		
Protection paths		L-N, L-PE, N-PE, (L+) – (L–) and (L+/L–) – PE	L-N, L-PE, N-PE, (L+) – (L–) and (L+/L–) – PE	L-N, L-PE, N-PE, (L+) – (L–) and (L+/L–) – PE
Rated voltage U_n		24 V AC	120 V AC	230 V AC
Rated arrester voltage U_C		34 V AC	150 V AC	264 V AC
				
Circuit	**Mounting width**			
With remote signaling				
1 + 0	1 MW	5SD7432-5 new	5SD7432-6 new	5SD7432-7 new

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Further technical specifications

		5SD7432-5	5SD7432-6	5SD7432-7
Standards				
Standards		IEC 61643-11; EN 61643-11		
Approvals		KEMA/UL/cUL		
Voltage				
Protection level U_p	L-N, L-PE and N-PE	≤200/≤600 V	≤750/≤850 V	≤1250/≤1400 V
Current				
Rated load current I_L (at 30 °C)		26 A		
Rated discharge surge current I_n (8/20 µs)		1 kA	5 kA	
Combined surge $U_{open\ collector}$		2 kV	6 kV	
Function				
Response time t_A		≤100 ns		
Connections				
Conductor cross-section	Finely stranded	0.2 ... 2.5 mm²		
	Solid	0.2 ... 4 mm²		
Protection devices				
Required back-up fuse, max.	(gG/B/C)	25 A		
Environmental conditions				
Degree of protection		IP20, with connected conductors		
Temperature range		–40 ... +80 °C		
Display				
Visual function/fault indication		Yes		

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Mandatory basic protection in electrical installations

Overcurrents in electrical installations occur as a result of excessive load or short-circuits and can cause serious accidents, fires and financial damage. Appropriate protection devices have therefore been mandatory ever since electricity was first harnessed to power equipment. As a pioneer in fuse systems, we offer you the complete range of devices for the protection of cables as well as electrical devices and installations in the event of overloads and short-circuits.

Fuses are capable of safely switching off circuits as soon as an overload or short-circuit occurs. This prevents damage to electrical equipment or extended power failures. Specific variants of fuse systems are used for different applications.

Among other things, our fuses are used for protecting cables and lines, switching devices and semiconductors as well as in photovoltaics and wind power.

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Fuse Systems



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Information + ordering

All the important things at a glance

Information to get you started

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- Planning manual – Planning with SIVACON 8PS (109478425)

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System overview

Fuse holders and bases

IEC fuse holders and bases


MINIZED


NEOZED


DIAZED


Bus-mounting bases for busbars


Photovoltaic cumulative fuses

IEC/UL fuse holders and bases


LV HRC fuses


Cylindrical fuses


SITOR semiconductor fuses (LV HRC design)


SITOR semiconductor fuses (cylindrical fuse design)

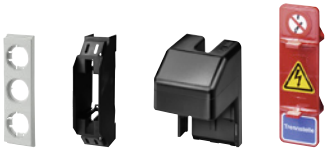

Photovoltaic cylindrical fuses

UL fuse holders and bases


Class CC


Class J

Accessories for fuse holders and bases


Covers


Screw caps


Adapter sleeves


Isolating blades

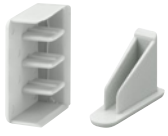

LV HRC signal detectors

Busbars and accessories


Can be cut


Terminals


Touch protection


End caps

Note:
You will find a detailed range of accessories with the basic units.

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Fuse links

IEC fuse links



NEOZED



DIAZED



LV HRC



Cylindrical fuses





SILIZED



Photovoltaic cumulative fuses



Photovoltaic cylindrical fuses

IEC/UL fuse links



SITOR semiconductor fuses (LV HRC design)



SITOR semiconductor fuses (cylindrical fuse design)

UL fuse links



Class CC

Note:
You will find a detailed range of accessories with the basic units.

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Overview of fuse systems according to IEC

Fuse links





Standard	IEC	IEC
Rated current I_n	2 ... 100 A	2 ... 100 A
Voltage U_n (AC)	400 V	500 ... 750 V
Voltage U_n (DC)	250 V	500 ... 750 V
Design / application	NEOZED / SILIZED	DIAZED / SILIZED

Selection according to protection task

Cables and lines, general (gG)	■	■
Motor protection (aM)	–	–
Power semiconductor (aR, gR, gS)	■	■
Photovoltaic protection (gPV)	–	–
Battery protection (aR, gR, gBAT)	–	–

Type	5SE	5SA, 5SB, 5SC, 5SD
More information	See page 7/32 See page 7/34	See page 7/33 See page 7/34

Fuse holders and bases

For protection tasks

Overview, see page 7/1

	Floor fixation	Standard mounting rail	Busbar	Type	Stand-ard	More information		
Fuse bases	–	■	■	5SG	IEC	See page 7/5	■	–
	■	■	■	5SF	IEC	See page 7/11	–	■
	■	–	–	3NH	IEC / UL	See page 7/15	–	–
	■	–	–	3NH7	IEC	See page 7/15	–	–
	–	■	■	3NW7	IEC / UL	See page 7/17	–	–
	–	■	–	3NC..	IEC / UL	See page 7/18	–	–
	–	■	–	3NW7...-4	IEC	See page 7/19	–	–



For protection and switching tasks

System overview, see page 8/82, 8/126

	Floor fixation	Standard mounting rail	Busbar	Type	Stand-ard	More information		
Fuse switch disconnectors	■	■	■	3NP1	IEC / UL	See page 8/94	–	–
	■	–	■	3NP5	IEC / UL	See page 8/98	–	–
	–	■	■	5SG7	IEC	See page 8/112	■	–
	–	–	■	3NJ4	IEC	See page 8/102	–	–
Switch disconnector with fuse	■	■	–	3KF LV HRC	IEC	See page 8/126	–	–
	■	■	–	3KF SITOR	IEC / UL	See page 8/126	–	–
	–	–	■	3NJ62	IEC	See page 8/134	–	–





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Overview, see page 7/30

					
IEC	IEC	IEC / UL	IEC / UL	IEC	UL
2 ... 1250 A	0.5 ... 100 A	2 ... 2400 A	1 ... 125 A	2 ... 630 A	0.5 ...30 A
400 ... 690 V	400 ... 690 V	500 ... 2500 V	600 ... 1500 V	–	600 V
250 ... 400 V	–	440 ... 3000 V	250 ... 1000 V	1000 ... 1500 V	150 ... 300 V
LV HRC	Cylindrical	SITOR LV HRC	SITOR cylindrical	Photovoltaic	Class CC
■	■	–	–	–	■
■	■	–	–	–	■
–	–	■	■	–	–
–	–	–	–	■	–
–	–	■	■	–	–
3NA, 3ND	3NW6, 3NW8	3NE, 3NC	3NC10	3NE..., 3NW...	3NW1, 3NW2, 3NW3
See page 7/36	See page 7/41	See page 7/42	See page 7/59	See page 7/35 See page 7/64	See page 7/65
–	–	–	–	–	–
–	–	–	–	–	–
■	–	■	–	–	–
–	–	–	–	■	–
–	■	–	–	–	■
–	–	–	■	–	–
–	–	–	–	■	–
■	–	■	–	–	–
■	–	■	–	–	–
–	–	–	–	–	–
■	–	–	–	–	–
■	–	(■)	–	–	–
–	–	■	–	–	–
■	–	–	–	–	–

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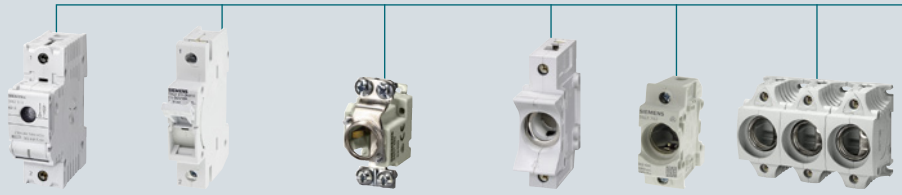
Overview of fuse holders, bases and D0 fuse switching devices

IEC



			MINIZED switch disconnectors with fuses	MINIZED fuse switch disconnectors	NEOZED fuse bases			NEOZED comfort bases	NEOZED fuse bases	DIAZED fuse bases
Basic data										
Size			D02	D01	D01	D02	D03	D01, D02	D01, D02	NDz, DII, DIII
Variant			5SG71	5SG76	5SG15 5SG55	5SG16 5SG56	5SG18	5SG1301 5SG1701 5SG5301 5SG5701	5SG1302 5SG1702 5SG5302 5SG5702	5SF
Standards										
Standards			DIN VDE 0638; DIN EN 60947-3 (VDE 0660-107) EC/EN 60947-3	DIN VDE 0638; DIN EN 60947-3 (VDE 0660-107) EC/EN 60947-3	IEC 60269-3; DIN VDE 0636-3			IEC 60269-3; DIN VDE 0636-3	IEC 60269-3; DIN VDE 0636-3	IEC 60269-3; DIN VDE 0635; DIN VDE 0636-3; CEE 16
Approvals			–	–		–		–	–	–
Approvals			–	–		–		–	–	–
Technical specifications AC										
Rated voltage	U_n	V AC	230/400, 240/415	230/400, 240/415	400	400	400	–	–	500, 690, 750
	U_n acc. to UL	V AC	–	–	–	–	–	–	–	–
Rated insulation voltage		V AC	500	690	–	–	–	–	–	–
Short-circuit strength		kA AC	50	50	50	50	50	50	50	50
Rated current	I_n	A	63	16	16	63	100	16/63	16/63	2 ... 100
	I_n acc. to UL/CSA	A	–	–	–	–	–	–	–	–
Rated impulse withstand voltage		kV AC	6	6	–	–	–	–	–	–
Utilization category	Acc. to VDE 0638	A	AC-22	AC-22	–	–	–	–	–	–
	Acc. to EN 60947-3	A	AC-22B, AC-23B (35A)	AC-22A	–	–	–	–	–	–
Technical specifications DC										
Rated voltage	U_n	V DC	65 (1P), 130 (2P)	48 (1P), 110 (2P)	250	250	250	–	–	500, 600, 750
	U_n acc. to UL	V DC	–	–	–	–	–	–	–	–
Short-circuit strength		kA DC	–	–	8	8	8	8	8	–
Utilization category	Acc. to EN 60947-3	A	DC-22B	–	–	–	–	–	–	–
Further technical specifications										
Overvoltage category			IV	IV		–		–	–	III; II (DIAZED fuse bases made of molded plastic for use at 690 V AC / 600 V DC)
Max. power dissipation of fuse links (conductor cross-section used)		W	–	–		–		–	–	–
Pollution degree			–	–		–		–	–	–
Further information										
Catalog LV 10 – 10/2020			See page 7/13	See page 7/12	See page 7/16					See page 7/18

[1] Extended rated voltage up to 1000 V (except LV HRC bus-mounting bases).

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IEC








Cylindrical fuse holders		LV HRC fuse bases, LV HRC bus-mounting bases						Photovoltaic cumulative fuse bases						NEOZED bus-mounting bases for 5SG 60 mm compact busbar systems	NEOZED SR60 bus-mounting bases	DIAZED SR60 bus-mounting bases	
8×32 mm	22×58 mm	000/00	0	1	2	3	4	1	1L	2L	3L	1XL	2XL	D02	D02	DII	DII
3NW73..	3NW72..	–	–	–	–	–	–	3NH7...-4						5SG6208	5SG6202 5SG6206 5SG6207	5SF6014 5SF6015 5SF6020	5SF6214 5SF6215 5SF6220
IEC 60269-1, -2, -3; NF C 60-200, NF C 63-210, -211; NBN C 63269-2-1; CEI 32-4, -12; UL 4248-1		IEC 60269-1, -2; EN 60269-1; DIN VDE 0636-2, UL 4248-1 (only downstream from the branch protection)						IEC 60269, IEC 60269-2, IEC 60947						IEC 60269-3, DIN VDE 0636-3	IEC 60269-3, DIN VDE 0636-3	IEC 60269-3, DIN VDE 0636-3	IEC 60269-3, DIN VDE 0636-3
UL File number E171267		KEMA; UL file number E171267-IZLT2						–	–	–	–	–	–	–	–	–	–
–	–	–						–	–	–	–	–	–	–	–	–	–
400	690	690 [1]	690 [1]	690 [1]	690 [1]	690 [1]	690	–	–	–	–	–	–	400	400	500	690
–	700	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
20	100	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
20	100	160	160	250	400	630	1250	160	250	400	630	250	400	63	63	25	63
–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
AC-20B (switching without load)		–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
–	–	250	440	440	440	440	440	1000	1000	1000	1000	1500	1500	250	250	–	600
–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
–	–	25	25	25	25	25	25	–	–	–	–	–	–	8	8	8	8
DC-20B (switching without load)		–	–	–	–	–	–	DC-20B (switching without load)						–	–	–	–
–		–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
–		12	25	32	45	60	90	40	90	110	130	90	110	–	–	–	–
–		–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
See page 7/22		See page 7/22						See page 7/21						See page 7/20			

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Overview of fuse holders, bases and D0 fuse switching devices

IEC / UL





			LV HRC fuse bases, LV HRC bus-mounting bases						Fuse holders for SITOR semiconductor fuses (cylindrical fuse design)			
Basic data												
Size			000/00	0	1	2	3	4	10 × 38 mm	14 × 51 mm	22 × 58 mm	22 × 127 mm
Variant			–	–	–	–	–	–	3NC10	3NC14	3NC22	3NC23
Standards												
Standards			IEC 60269-1, -2; EN 60269-1; DIN VDE 0636-2, UL 4248-1 (only downstream from the branch protection)						UL 4248-1; CSA C22.2; IEC 60269-2, IEC 60947-3	UL 4248-1; CSA C22.2; IEC 60269-2, IEC 60947-3	UL 4248-1; CSA C22.2; IEC 60269-2, IEC 60947-3	IEC 60269-2, IEC 60947-3
Approvals			KEMA, UL file number E171267-IZLT2						UL 4248-1; UL File number E171267; CSA C22.2 No. 39-M			–
Approvals			–						UL, CSA	UL, CSA	UL, CSA	–
Technical specifications AC												
Rated voltage	U_n	V AC	690 [1]	690 [1]	690 [1]	690 [1]	690 [1]	690	690	690	690	1500
	U_n acc. to UL	V AC	–	–	–	–	–	–	600	600	600	–
Rated insulation voltage		V AC	–	–	–	–	–	–	–	–	–	–
Short-circuit strength		kA AC	–	–	–	–	–	–	50	50 (100 at 400 V)	50 (100 at 500 V)	30
Rated current	I_n	A	160	160	250	400	630	1250	32	50	100	63
	I_n acc. to UL/CSA	A	–	–	–	–	–	–	30	50 (UL), 40 (CSA)	80	–
Rated impulse withstand voltage		kV AC	–	–	–	–	–	–	6	6	6	–
Utilization category	Acc. to VDE 0638	A	–	–	–	–	–	–	–	–	–	–
	Acc. to EN 60947-3	A	–	–	–	–	–	–	AC-22B (400 V)	AC-22B (400 V)	AC-20B (690 V)	AC-20B
Technical specifications DC												
Rated voltage	U_n	V DC	250	440	440	440	440	440		800		1000
	U_n acc. to UL	V DC	–	–	–	–	–	–	–	–	–	–
Short-circuit strength		kA DC	25	25	25	25	25	25	–	–	–	50
Utilization category	Acc. to EN 60947-3	A	–	–	–	–	–	–	–	–	–	DC-20B
Further technical specifications												
Overvoltage category			–	–	–	–	–	–	–	–	–	–
Max. power dissipation of fuse links (conductor cross-section used)		W	12	25	32	45	60	90	3 (6 mm²), 4.3 (10 mm²)	5 (10 mm²), 6.5 (25 mm²)	9.5 (35 mm²), 11 (50 mm²)	15 (1 ... 50 mm²)
Pollution degree			–	–	–	–	–	–	2	2	2	–
Further information												
Catalog LV 10 – 10/2020			See page 7/22						See page 7/60			

[1] Extended rated voltage up to 1000 V (except LV HRC bus-mounting bases).

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IEC / UL

UL









Cylindrical fuse holders		Photovoltaic cylindrical fuse holders		Class CC fuse holders	Class J fuse holders				
10 × 38 mm	14 × 51 mm	10 x 38 mm	10 x 85 mm	–	–				
3NW70.. 3NW703.-1	3NW71..	3NW70..-4	3NW76..-4	3NW75.3-0HG 3NW753.-1HG	3NW75.3-3HG, 3NW75.3-5HG, 3NW75.3-6HG, 3NW75.3-7HG, 3NW75.3-8HG, 3NW7431-6HG, 3NW7431-7HG, 3NW7431-8HG				
IEC 60269-1, -2, -3; NF C 60-200, NF C 63-210, -211; NBN C 63269-2-1; CEI 32-4, -12; UL 4248-1		IEC 60269, IEC 60269-2, IEC 60947, UL 4248-1, -18	IEC 60269, IEC 60269-2, IEC 60947, UL 4248-1, -18	UL 4248-1; CSA C22.2	UL 4248-1 Ed.1, UL 4248-8 Ed.1				
UL File number E171267		(File number E469670, CCC) (variants without signal detector)	(E355487)	UL 4248-1; UL File number E171267; CSA C22.2	UL File number E171267; CSA File number 233322; Class number 6225-01				
,		–	–	–	,	,	c us	c us	, Busbar device: c us
690	690	–	–	–	–	–	–	–	–
600	700	–	–	600	600	600	600	600	600
–	–	–	–	–	–	–	–	–	–
100	100	–	–	200	200	200	200	200	200
32	50	30	32	30	30	60	100	200	400
–	–	–	–	–	–	–	–	–	–
–	–	6	–	6	No information as the devices are only tested and certified to UL/CSA and not to IEC				
–	–	–	–	–	–				
AC-20B (switching without load)		–	–	AC-20B (switching without load)	AC-20B (switching without load)				
–	–	1000	1500	300	–	–	–	–	–
–	–	–	–	–	600	600	600	600	600
–	–	–	–	–	–	–	–	–	–
DC-20B (switching without load)		–	–	DC-20B (switching without load)	DC-20B (switching without load)				
–		II	–	II	No information as the devices are only tested and certified to UL/CSA and not to IEC				
–		4	6	3 (6 mm²), 4.3 (10 mm²)	–				
–		2	–	2	No information as the devices are only tested and certified to UL/CSA and not to IEC				
See page 7/24		See page 7/28		See page 7/30	See page 7/29				

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MINIZED fuse switch disconnectors

	Number of poles	1P	1P+N	2P	3P	3P+N
						
Size	**Rated current**					
D01	2 ... 6 A	5SG7611-0KK06	–	–	5SG7631-0KK06	–
	10 A	5SG7611-0KK10	–	–	5SG7631-0KK10	–
	16 A	5SG7611-0KK16	5SG7651-0KK16	5SG7621-0KK16	5SG7631-0KK16	5SG7661-0KK16

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Quick selection guide, page 7/8

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MINIZED switch disconnectors with fuses

Number of poles	1P	1P+N	2P	3P	3P+N
					
Size	**Rated current**				
D02	25 A	–	–	–	5SG7133-8BA25 [1]	–
	35 A	–	–	–	5SG7133-8BA35 [1]	–
	50 A	–		–	5SG7133-8BA50 [1]	–
	63 A	5SG7113	5SG7153	5SG7123	5SG7133	5SG7163

[1] Versions for Austria only, with permanently fitted adapter sleeves and incl. fuse link

Accessories

Reducers



Use	Article No.
For D01 fuse links in MINIZED switch disconnectors with fuses D02	5SH5527

Auxiliary switches (AS)



Version	Article No.
1 NO contact + 1 NC contact	5ST3010
2 NO contacts	5ST3011
2 NC contacts	5ST3012

Auxiliary switches (AS) with TEST button



Version	Article No.
1 NO contact + 1 NC contact	5ST3010-2
2 NO contacts	5ST3011-2
2 NC contacts	5ST3012-2

Quick selection guide, page 7/8

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NEOZED bus-mounting switch disconnectors

For 8US 60 mm busbar systems

							Size D02		
						Mounting width	1.5 MW	1.5 MW	1.5 MW
									
For flat copper profiles	**Rated current I_e**		**Rated voltage U_e**			**Standard**	**Without LED signal detector**		**With LED signal detector**
	IEC	**UL 508**	**IEC AC**	**IEC DC**	**UL 508**				
Box terminals									
5 mm and 10 mm	63 A	–	400 V AC	–	–	IEC	5SG7234-1 [2]	–	5SG7234-2 [2]
			400 V AC	110 V DC	–	IEC	–	5SG7230 [1]	–

[1] In the case of permanent load over 35 A, we recommend the use of lateral module 5SH5526. Please observe EN 60439-1, Table 1.
[2] In the case of permanent load over 35 A, we recommend the use of lateral module 5SH5533. Please observe EN 60439-1, Table 1.

Suitable accessories

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Auxiliary switches



- For signaling the switching state for bus-mounting switch disconnectors

Contacts	**Mounting width**	**Article No.**	**Article No.**	**Article No.**
1 CO contact	0.5 MW	–	5SH5525	–

Lateral modules



- For greater heat dissipation for loads from 35 A

Mounting width	**Article No.**	**Article No.**	**Article No.**
0.5 MW	5SH5533	5SH5526	5SH5533

Reducers



Use	**Article No.**	**Article No.**	**Article No.**
For NEOZED D01 fuse links in SR60 bus-mounting switch disconnectors	5SH5527	5SH5527	5SH5527

See SITOR semiconductor fuse links (cylindrical fuse design) **from page 13/1**

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System overview, page 7/4

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NEOZED fuse bases

		Comfort bases made of molded plastic		Fuse bases made of molded plastic		
				Without LED signal detector		With LED signal detector
	Number of poles	1P	3P	1P	3P	1P
						
Size	**Rated current**					
D01	16 A	5SG1301	5SG5301	5SG1302	5SG5302	5SG1302-1
D02	63 A	5SG1701	5SG5701	5SG1702	5SG5702	5SG1702-1
D03	100 A	–	–	–	–	–

Accessories

NEOZED screw caps

	Material	Version	Fuse size	Article No.
	Molded plastic	With inspection hole	D01	5SH4116
			D02	5SH4163
	Ceramic	Without inspection hole, sealable	D01	5SH4316
			D02	5SH4363
		Without inspection hole	D03	5SH4100
		With inspection hole	D01	5SH4317
			D02	5SH4362

NEOZED adapter sleeves

	Fuse size	Rated current	Color	Article No.
	D01	2 A	Pink	5SH5002
		4 A	Brown	5SH5004
		6 A	Green	5SH5006
		10/13 A	Red	5SH5010
	D01 fuse links in D02 base and MINIZED switch disconnectors with fuses D02	2 A	Pink	5SH5402
		4 A	Brown	5SH5404
		6 A	Green	5SH5406
		10/13 A	Red	5SH5410
		16 A	Gray	5SH5416
	D02	20 A	Blue	5SH5020
		25 A	Yellow	5SH5025
		32 A	Violet	5SH5032
		35/40 A	Black	5SH5035
		50 A	White	5SH5050
	D03	80 A	Silver	5SH5080

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	Fuse bases made of ceramic					
	With clamp-type terminal		With saddle terminal		With screw head contact	
3P	1P	3P	1P	3P	1P	3P
						
5SG5302-1	5SG1553	5SG5553	–	–	–	–
5SG5702-1	–	–	5SG1653	5SG5653	5SG1693	5SG5693
–	–	–	–	–	5SG1812	–

NEOZED covers



Fuse size	Article No.
D03	5SH5233

NEOZED adapter sleeve fitters



	Article No.
	5SH5100

NEOZED retaining springs



Use	Article No.
For D01 fuse links in D02 screw caps, 2 ... 16 A	5SH5400

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DIAZED fuse bases

		Fuse bases made of molded plastic With box terminal		Fuse bases made of ceramic With clamp-type terminal	With saddle terminal
	Number of poles	1P	3P	1P	1P
					
Size	**Rated current**	**U_n AC/DC 500/500 V**	**U_n AC/DC 500/500 V**	**U_n AC/DC 500/500 V**	**U_n AC/DC 500/500 V**
DII	25 A	5SF1060	5SF5068	5SF1005	–
DIII	63 A	5SF1260 [1]	5SF5268 [1]	–	5SF1205 [1]

[1] Can also be used for 690 V AC / 600 V DC.

Accessories

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DIAZED screw caps

	Material	Version	Fuse size	Rated voltage AC / DC	Article No.
	Molded plastic	With inspection hole	NDz	500/500 V	5SH1112
			DII	500/500 V	5SH1221
			DIII	500/500 V	5SH1231
	Ceramic	Without inspection hole	DII	500/500 V	5SH112
			DIII	500/500 V	5SH113
		With inspection hole, sealable	DII	500/500 V	5SH122
			DIII	500/500 V	5SH123
		Extended version	DIII	690/600 V	5SH1170
		With fine thread	DIII	750/750 V	5SH1161

DIAZED screw adapters

- Also for 5SF230 up to 750 V

	Fuse size	Rated current	Article No.
	DII	2 A	5SH310
		4 A	5SH311
		6 A	5SH312
		10 A	5SH313
		16 A	5SH314
		20 A	5SH315
		25 A	5SH316
	DIII	32 A	5SH327
		35 A	5SH317
		50 A	5SH318
		63 A	5SH320

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With screw head contact	
1P	
	
U_n AC/DC 750/750 V	
–	
5SF4230	

DIAZED adapter sleeves for screw caps



Use	Article No.
For DII fuse links in DIII base	5SH302

DIAZED adapter sleeve fitters



Use	Article No.
For DII / DIII screw adapters	5SH3703

DIAZED cover rings



Fuse size	Material	Article No.
DII	Molded plastic	5SH3401
DIII	Molded plastic	5SH3411

DIAZED caps



Fuse size	Material	Article No.
DII	Molded plastic	5SH202
DIII	Molded plastic	5SH222

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Bus-mounting bases

For 8US busbar systems

				Compact busbar systems	60 mm busbar systems			
				NEOZED design	NEOZED design		DIAZED design	
			Number of poles	3P	3P		3P	
								
Size	**I_n**	**Mounting width**	**U_n AC/DC**	**With touch protection**	**Standard**	**With touch protection**	**Standard**	**With touch protection**
D02	63 A	1.5 MW		–	5SG6202	5SG6206	–	–
		2 MW		5SG6208	–	5SG6207	–	–
DII	25 A		500/500 V	–	–	–	5SF6015	5SF6020
DIII	63 A		500/500 V [1]	–	–	–	5SF6215	5SF6220

[1] Can also be used for 690 V AC / 600 V DC.

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Accessories

Covers for standard version for 60 mm busbar systems					
	Design	**Fuse size**	**Version**	**Mounting width (1 MW = 18 mm)**	**Article No.**
	NEOZED	D02	Standard	1.5 MW	5SH5241
			Extra wide	2 MW	5SH5242
			Double width	3 MW	5SH5243
	DIAZED	DII			5SH2042
		DIII			5SH2242

See SITOR semiconductor fuse links (cylindrical fuse design) **from page 13/1**

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Photovoltaic cumulative fuse bases

			With flat terminals, ceramic	With swiveling mechanism	With swiveling mechanism and microswitch for tripped signaling
					
Size	**Rated current**	**Rated voltage DC**			
1	250 A	1000 V	3NH3230	–	3NH7262-4KK01
1L	250 A	1000 V	–	3NH7260-4	–
2L	400 A	1000 V	–	3NH7360-4	3NH7360-4KK01
3L	630 A	1000 / 1500 V	–	3NH7460-4	–
1XL	250 A	1500 V	–	3NH7261-4	–
2XL	400 A	1500 V	–	3NH7361-4	–

Accessories

Terminal covers for PV fuse bases with swiveling mechanism



Fuse link size	Article No.
1, 1L, 1XL	3NX3121
2L, 2XL	3NX3122
3L	3NX3123

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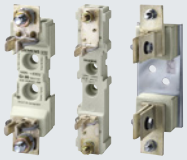
LV HRC fuse bases

Number of poles	Ceramic 1P				
					
Size	**Rated current**	**Flat terminals**	**Plug-in terminal**	**Saddle-type terminal**	**Double busbar terminal**
000/00	160 A	3NH3030	3NH3031	3NH3032	–
0 [1]	160 A	3NH3120	–	–	–
1	250 A	3NH3230	–	–	3NH3220
2	400 A	3NH3330	–	–	3NH3320
3	630 A	3NH3430	–	–	3NH3420
4	1250 A	3NH3530	–	–	–
4a	1250 A	–	–	–	–

[1] No longer to be used for new installations!

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Accessories

LV HRC protective covers for LV HRC fuse bases



- As touch protection for contact pieces

Size	Article No.
000/00	3NX3105
0	3NX3114
1	3NX3106
2	3NX3107
3	3NX3108

LV HRC partitions for LV HRC fuse bases



- As intermediate phase and end barrier

Size	Type	Article No.
000/00	3NH30/3NH40	3NX2023
0	3NH31	3NX2030
1	3NH32	3NX2024
2	3NH33	3NX2025
3	3NH34	3NX2026

LV HRC protective covers



Size	Number of poles	Article No.
000/00	1P and 3P	3NX3115

Grip lug cover for plugging into the LV HRC protective cover



Size	Use	Article No.
	When using fuse links with non-insulated grip lugs	3NX3116

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		Molded plastic	With swivel device
3P		1P	1P
			
Flat terminals	**Saddle-type terminal**	**Flat terminals**	**Flat terminals**
3NH4030	3NH4032	3NH3051	–
–	–	–	–
3NH4230	–	–	–
–	–	–	–
–	–	–	–
–	–	–	–
–	–	–	3NH7520

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Covers for LV HRC fuse bases



- Red color
- With inscription "Isolating point"
- Observe width 60 mm of the blank insert when using for size 1

Size	Article No.
000/00	3NX1003
1, 2, 3	3NX1004

Fuse pullers for LV HRC fuse links

Size	Version	Article No.
000 ... 3	Without sleeve	3NX1013
	With sleeve	3NX1014

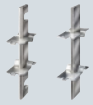




Isolating blades for LV HRC fuse bases and fuse switch disconnectors

Version	Contacts	Size	Article No.
With insulated grip lugs	Silver-plated	000/00	3NG1002
		0	3NG1102
		1	3NG1202
		2	3NG1302
		3	3NG1402
With non-insulated grip lugs	Tin-coated	4	3NG1503
	Nickel-plated	4a	3NG1505





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Cylindrical fuse holders

Number of poles	1P		1P+N	2P	3P		3P+N
							
Size	**Rated current**	**Standard**	**Bus-mounting fuse holders**	**Standard**	**Standard**	**Standard**	**Compact**	**Standard**
Without LED signal detector								
8 × 32 mm	20 A	3NW7313	–	3NW7353	3NW7323	3NW7333	–	3NW7363
10 × 38 mm	30 A	–	3NW7431	–	–	–	–	–
	32 A	3NW7013	–	3NW7053	3NW7023	3NW7033	3NW7033-1	3NW7063
14 × 51 mm	50 A	3NW7111	–	3NW7151	3NW7121	3NW7131	–	3NW7161
22 × 58 mm	100 A	3NW7211	–	3NW7251	3NW7221	3NW7231	–	3NW7261
With LED signal detector								
8 × 32 mm	20 A	3NW7314	–	3NW7354	3NW7324	3NW7334	–	3NW7364
10 × 38 mm	32 A	3NW7014	–	3NW7054	3NW7024	3NW7034	3NW7034-1	3NW7064
14 × 51 mm	50 A	3NW7112	–	3NW7152	3NW7122	3NW7132	–	3NW7162
22 × 58 mm	100 A	3NW7212	–	3NW7252	3NW7222	3NW7232	–	3NW7262

Note:
Semiconductor fuses heat up substantially more than standard fuses of operational classes gG and aM.
We therefore recommend only using SITOR cylindrical fuses in the intended SITOR fuse holders and complying with the maximum permissible current-carrying capacity.

Accessories

Auxiliary switches for cylindrical fuse holders, standard



- For retrofitting using the factory-fitted brackets

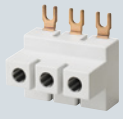
Display	Fuse link size	Article No.
Disconnection of fuse link, for striker fuse links	14 × 51 mm	3NW7901
	22 × 58 mm	3NW7902
Switching state of fuse holder	8 × 32 mm and 10 × 38 mm	3NW7903

Busbars for cylindrical fuse holders, compact



Number of poles	I_n	Pin spacing	Length	Article No.
2× 3P	63 A	15 mm	45 mm	5ST2601
3× 3P	63 A	15 mm	90 mm	5ST2602
4× 3P	63 A	15 mm	135 mm	5ST2603
5× 3P	63 A	15 mm	180 mm	5ST2604

Terminals for cylindrical fuse holders, compact



Version	Article No.
For conductor cross-sections 2.5 ... 35 mm²	5ST2600

See SITOR semiconductor fuse links (cylindrical fuse design) **from page 13/1**

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Fuse holders and bases for SITOR semiconductor fuses

For SITOR fuses with bolt-on links or blade contacts

				Ceramic	Metal
					
Rated current	**Rated voltage AC/DC**	**For fuse series**	**Mounting dimensions**		
50 A	690 V	3NC18	75 mm	3NH5723	–
315 A	690 V	3NE87, 3NC26	80 mm	3NH5023	–
400 A	690 V	3NE80..-3MK	80 mm	3NH5323	–
630 A	1800 V	3NE53, 3NE56	170 mm	–	3NH5473
1250 A	1250 V	3NC24, 3NC33..-1U, 3NC34..-1U, 3NC84, 3NE1..-3, NE32, 3NE33	110 mm	–	3NH5463
1600 A	690 V	3NE82..-3MK	80 mm	–	3NH5423

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For cylindrical fuses

		Cylindrical fuse holders, can be used as fuse switch disconnectors			
	Number of poles	**1P**		**2P**	**3P**
					
Size	**Rated voltage AC / DC**	**Signaling switch**			
		Without	**With**		
10 × 38 mm	600 / – V	–	–	–	–
	690 / 800 V	3NC1091	–	3NC1092	3NC1093
14 × 51 mm	690 / 800 V	3NC1491	3NC1491-5	3NC1492	3NC1493
22 × 58 mm	690 / 800 V	3NC2291	3NC2291-5	3NC2292	3NC2293
22 × 127 mm	1500 / 1000 V	3NC2391-0MK	–	3NC2392-0MK	3NC2393-0MK

Note:
Please comply with the maximum permissible current-carrying capacity.

Accessories

Fuse tongs



For sizes	**Article No.**
10 × 38 mm 14 × 51 mm 22 × 58 mm	3NC1000

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Photovoltaic cylindrical fuse holders

		Without signal detector			With signal detector	
	Number of poles	1P	1P	2P	1P	2P
						
Size	**Rated current**	**U_n DC 1000 V**	**U_n DC 1500 V**	**U_n DC 1000 V**	**U_n DC 1000 V**	**U_n DC 1000 V**
10 × 38 mm	30 A	3NW7013-4	–	3NW7023-4	3NW7014-4	3NW7024-4
10 × 85 mm	32 A	–	3NW7613-4	–	–	–

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Class J fuse holders

			For mounting on DIN mounting rail			For screwing onto mounting plate	Bus-mounting fuse holders for 8US 60 mm busbar systems		
	Number of poles		1P	2P	3P	3P	3P	3P	3P
									
Size	**Rated current**	**Rated voltage**							
21 × 57 mm	30 A	600 V	3NW7511-3HG	3NW7521-3HG	3NW7531-3HG	–	–	–	–
27 × 60 mm	60 A	600 V	3NW7511-5HG	3NW7521-5HG	3NW7531-5HG	–	–	–	–
28 × 118 mm	100 A	600 V	–	–	–	3NW7531-6HG	3NW7431-6HG	–	–
41 × 146 mm	200 A	600 V	–	–	–	3NW7531-7HG	–	3NW7431-7HG	–
54 × 181 mm	400 A	600 V	–	–	–	3NW7531-8HG	–	–	3NW7431-8HG

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Class CC fuse holders

		Standard			Compact		Bus-mounting fuse holders for 8US 60 mm busbar systems
Number of poles		1P	2P	3P	3P		1P
							
Rated current	Rated voltage				Signal detector without	Signal detector with	
30 A	600 V	3NW7513-0HG	3NW7523-0HG	3NW7533-0HG	3NW7533-1HG	3NW7534-1HG	3NW7431-0HG

See SITOR semiconductor fuse links (cylindrical fuse design) from page 13/1

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Overview of fuse links

IEC



		NEOZED fuse links	DIAZED fuse links	SILIZED fuse links	LV HRC fuse links
Basic data					
Design		NEOZED	DIAZED	NEOZED, DIAZED	LV HRC
Size		D01, D02, D03	NDz, DII, DIII	D01, D02, DII, DIII, DIV	000/00, 0, 1, 2, 3, 4, 4a
Operational class		gG	gG	gR	gG, aM
Rated current	A	2 ... 100	2 ... 100	10 ... 100	2 ... 1250
Standards					
Standard		IEC 60269-3 DIN VDE 0636-3	IEC 60269-3 DIN VDE 0635 DIN VDE 0636-3 CEE 16	IEC 60269-3 / -4 DIN VDE 0636-3 EN 60269-4 (VDE 0636-4)	IEC 60269-1 / -2 EN 60269-1 DIN VDE 0636
Approvals		–	–	–	CSA 22.2
Technical specifications AC					
Rated voltage AC	V	400	500 ... 750	400 ... 500	400 ... 690 600 (CSA)
Rated breaking capacity AC	kA	50	50	50	120
Technical specifications DC					
Rated voltage DC	V	250	500 ... 750	250 ... 500	250 ... 440
Rated breaking capacity DC	kA	8	8	8	25
Further information					
Catalog LV 10 – 10/2020		See page 7/4	See page 7/4	See page 7/5	Page 7/7

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IEC			IEC / UL		UL
					
Cylindrical fuse links	**Photovoltaic cylindrical fuse links**	**Photovoltaic cumulative fuse links**	**SITOR LV HRC semiconductor fuse links**	**SITOR cylindrical semiconductor fuse links**	**Class CC fuse links**
Cylindrical	Cylindrical	LV HRC	LV HRC	Cylindrical	Cylindrical
8 × 32 mm, 10 × 38 mm, 14 × 51 mm, 22 × 58 mm	10 × 38 mm, 10 × 85 mm	1, 1L, 2L, 3L, 1XL, 2XL	000, 00, 1, 2, 3	10 × 38 mm, 14 × 51 mm, 22 × 58 mm	–
gG, aM	gPV	gPV	gS, gR, aR	gS, gR, aR	–
0.5 ... 100	2 ... 20	63 ... 630	6 ... 2400	1 ... 125	0.6 ... 30
IEC 60269-1 / -2 NF C 60-200 NF C 63-210 / -211 NBN C 63269-2 CEI 32-4 / -12	IEC 60269-6	IEC 60269-6	IEC 60269-4	IEC 60269-2	–
UL 4248-1; CSA	–	–	UL 4248-1 UL 4248-13	UL 4248-1 UL 4248-13	UL 4248-1 CSA C22.2
400 ... 690 400 ... 600 (UL / CSA)	–	–	500 ... 2500	690 ... 1500 600 ... 1500 (UL / CSA)	600
20 ... 120	–	–	100 ... 150	100	200
–	1000 ... 1500	1000 ... 1500	400 ... 1500	250 ... 1000	150 ... 300
–	30	30	–	–	–
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NEOZED fuse links

Operational class gG

			Size D01	Size D02	Size D03
					
I_n	Identification color	Contacts	U_n AC/DC 400/250 V	U_n AC/DC 400/250 V	U_n AC/DC 400/250 V
2 A	Pink		5SE2302	–	–
4 A	Brown		5SE2304	–	–
6 A	Green		5SE2306	–	–
10 A	Red		5SE2310	–	–
13 A	Black		5SE2013-2A	–	–
16 A	Gray		5SE2316	–	–
20 A	Blue	Tin-coated	–	5SE2320	–
25 A	Yellow	Tin-coated	–	5SE2325	–
32 A	Violet	Tin-coated	–	5SE2332	–
35 A	Black	Tin-coated	–	5SE2335	–
40 A	Black	Silver-plated	–	5SE2340	–
50 A	White	Silver-plated	–	5SE2350	–
63 A	Copper	Silver-plated	–	5SE2363	–
80 A	Blue		–	–	5SE2280
100 A	Red		–	–	5SE2300

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DIAZED fuse links

	Size DII E27		Size DIII [1] E33			Size DIV R 1¼"	Size TNDz E16	
Operational class	gG		gG		quick	gG	slow	
								
I_n	Identification color	U_n AC/DC 500/440 V	500/500 V	U_n AC/DC 500/440 V	690/600 V	750/750 V	U_n AC/DC 500/400 V	U_n AC/DC 500/440 V	500/500 V
2 A	Pink	–	5SB211	–	5SD8002	5SD601	–	–	5SA211
4 A	Brown	–	5SB221	–	5SD8004	5SD602	–	–	5SA221
6 A	Green	–	5SB231	–	5SD8006	5SD603	–	–	5SA231
10 A	Red	–	5SB251	–	5SD8010	5SD604	–	–	5SA251
16 A	Gray	5SB2611 new	–	–	5SD8016	5SD605	–	5SA2611 new	–
20 A	Blue	5SB2711 new	–	–	5SD8020	5SD606	–	5SA2711 new	–
25 A	Yellow	5SB2811 new	–	–	5SD8025	5SD607	–	5SA2811 new	–
32 A	Violet	–	–	5SB4011 new	–	–	–	–	–
35 A	Black	–	–	5SB4111 new	5SD8035	5SD608	–	–	–
50 A	White	–	–	5SB4211 new	5SD8050	5SD610	–	–	–
63 A	Copper	–	–	5SB4311 new	5SD8063	5SD611	–	–	–
80 A	Silver	–	–	–	–	–	5SC211	–	–
100 A	Red	–	–	–	–	–	5SC221	–	–

[1] For 2 ... 25 A use screw adaptor DII

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SILIZED fuse links

Operational class gR

			NEOZED design		DIAZED design		
			Size D01	Size D02	Size DII	Size DIII	Size DIV
							
I_n	Operating value I^2t	Power loss P_v	U_n AC/DC 400/250 V	U_n AC/DC 400/250 V	U_n AC/DC 500/500 V	U_n AC/DC 500/500 V	U_n AC/DC 500/500 V
10 A	73 A^2s	6.9 W	5SE1310	–	–	–	–
16 A	60 A^2s	12.1 W	–	–	5SD420	–	–
	120 A^2s	6.2 W	5SE1316	–	–	–	–
20 A	139 A^2s	12.3 W	–	–	5SD430	–	–
	190 A^2s	8.1 W	–	5SE1320	–	–	–
25 A	205 A^2s	12.5 W	–	–	5SD440	–	–
	215 A^2s	8.2 W	–	5SE1325	–	–	–
30 A	310 A^2s	13.5 W	–	–	5SD480	–	–
35 A	470 A^2s	16.7 W	–	5SE1335	–	–	–
	539 A^2s	14.8 W	–	–	–	5SD450	–
50 A	1250 A^2s	18.5 W	–	–	–	5SD460	–
	1960 A^2s	12.0 W	–	5SE1350	–	–	–
63 A	1890 A^2s	28 W	–	–	–	5SD470	–
	4230 A^2s	15.5 W	–	5SE1363	–	–	–
80 A	4200 A^2s	34.3 W	–	–	–	–	5SD510
100 A	8450 A^2s	41.5 W	–	–	–	–	5SD520

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Photovoltaic cumulative fuse links

Operational class gPV

		Size 1	Size 1L	Size 2L	Size 3L	Size 1XL	Size 2XL
							
I_n DC	Power loss P_v	U_n DC 1000 V	U_n DC 1000 V	U_n DC 1000 V	U_n DC 1000 V	U_n DC 1500 V	U_n DC 1500 V
63 A	19 W	3NE1218-4	–	–	–	–	–
	20 W	–	–	–	–	3NE1218-5E	–
80 A	20 W	3NE1220-4	–	–	–	–	–
	25 W	–	–	–	–	3NE1220-5E	–
100 A	24 W	3NE1221-4	–	–	–	–	–
	30 W	–	–	–	–	3NE1221-5E	–
125 A	26 W	3NE1222-4	–	–	–	–	–
	29 W	–	–	–	–	3NE1222-5E	–
160 A	32 W	3NE1224-4	–	–	–	–	–
	34 W	–	–	–	–	3NE1224-5E	–
200 A	41 W	–	–	–	–	3NE1225-5E	–
	51 W	–	3NE1225-4D	–	–	–	–
250 A	53 W	–	–	–	–	–	3NE1327-5E
	54 W	–	3NE1227-4D	–	–	–	–
315 A	63 W	–	–	–	–	–	3NE1330-5E
	73 W	–	–	3NE1330-4D	–	–	–
400 A	82 W	–	–	3NE1332-4D	–	–	–
500 A	100 W	–	–	–	3NE1434-4E	–	–
630 A	110 W	–	–	–	3NE1436-4E	–	–

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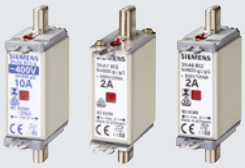
LV HRC fuse links

Operational class gG, with combination alarm

	Size 000			Size 00			Size 1		
Mounting width	21 mm			30 mm			30 mm		
									
I_n	U_n AC/DC			U_n AC/DC			U_n AC/DC		
	400/– V	500/250 V	690 [1]/250 V	400/– V	500/250 V	690 [1]/250 V	400/– V	500/440 V	690 [1]/440 V
Insulated grip lugs									
2 A	–	3NA6802	3NA6802-6	–	–	–	–	–	–
4 A	–	3NA6804	3NA6804-6	–	–	–	–	–	–
6 A	–	3NA6801	3NA6801-6	–	–	–	–	–	–
10 A	3NA6803-4	3NA6803	3NA6803-6	–	–	–	–	–	–
16 A	3NA6805-4	3NA6805	3NA6805-6	–	–	–	–	3NA6105	–
20 A	3NA6807-4	3NA6807	3NA6807-6	–	–	–	–	3NA6107	–
25 A	3NA6810-4	3NA6810	3NA6810-6	–	–	–	–	3NA6110	–
32 A	3NA6812-4	3NA6812	3NA6812-6	–	–	–	–	–	–
35 A	3NA6814-4	3NA6814	3NA6814-6	–	–	–	3NA6114-4	3NA6114	–
40 A	3NA6817-4	3NA6817	3NA6817-6KJ	–	–	3NA6817-6	3NA6117-4	3NA6117	–
50 A	3NA6820-4	3NA6820	3NA6820-6KJ	–	–	3NA6820-6	3NA6120-4	3NA6120	3NA6120-6
63 A	3NA6822-4	3NA6822	–	–	–	3NA6822-6	3NA6122-4	3NA6122	3NA6122-6
80 A	3NA6824-4	3NA6824	–	3NA6824-4KK	3NA6824-7	3NA6824-6	3NA6124-4	3NA6124	3NA6124-6
100 A	3NA6830-4	3NA6830	–	3NA6830-4KK	3NA6830-7	3NA6830-6	3NA6130-4	3NA6130	3NA6130-6
125 A	–	–	–	3NA6832-4	3NA6832	–	3NA6132-4	3NA6132	3NA6132-6
160 A	–	–	–	3NA6836-4	3NA6836	–	3NA6136-4	3NA6136	3NA6136-6
200 A	–	–	–	–	–	–	–	–	–
224 A	–	–	–	–	–	–	–	–	–
250 A	–	–	–	–	–	–	–	–	–
300 A	–	–	–	–	–	–	–	–	–
315 A	–	–	–	–	–	–	–	–	–
355 A	–	–	–	–	–	–	–	–	–
400 A	–	–	–	–	–	–	–	–	–
Non-insulated grip lugs									
2 A	–	3NA7802	3NA7802-6	–	–	–	–	–	–
4 A	–	3NA7804	3NA7804-6	–	–	–	–	–	–
6 A	–	3NA7801	3NA7801-6	–	–	–	–	–	–
10 A	–	3NA7803	3NA7803-6	–	–	–	–	–	–
16 A	–	3NA7805	3NA7805-6	–	–	–	–	3NA7105	–
20 A	–	3NA7807	3NA7807-6	–	–	–	–	3NA7107	–
25 A	–	3NA7810	3NA7810-6	–	–	–	–	3NA7110	–
32 A	–	3NA7812	3NA7812-6	–	–	–	–	–	–
35 A	–	3NA7814	3NA7814-6	–	–	–	–	3NA7114	–
40 A	–	3NA7817	3NA7817-6KJ	–	–	3NA7817-6	–	3NA7117	–
50 A	–	3NA7820	3NA7820-6KJ	–	–	3NA7820-6	–	3NA7120	3NA7120-6
63 A	–	3NA7822	–	–	–	3NA7822-6	–	3NA7122	3NA7122-6
80 A	–	3NA7824	–	–	3NA7824-7	3NA7824-6	–	3NA7124	3NA7124-6
100 A	–	3NA7830	–	–	3NA7830-7	3NA7830-6	–	3NA7130	3NA7130-6
125 A	–	–	–	–	3NA7832	–	–	3NA7132	3NA7132-6
160 A	–	–	–	–	3NA7836	–	–	3NA7136	3NA7136-6
200 A	–	–	–	–	–	–	–	–	–
224 A	–	–	–	–	–	–	–	–	–
250 A	–	–	–	–	–	–	–	–	–
300 A	–	–	–	–	–	–	–	–	–
315 A	–	–	–	–	–	–	–	–	–
355 A	–	–	–	–	–	–	–	–	–
400 A	–	–	–	–	–	–	–	–	–

[1] Manufacturer's confirmation for 690 V +10% rated voltage available on request.

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Size 1 47.2 mm			Size 2 47.2 mm			Size 2 57.8 mm		
								
U_n AC/DC 400/– V	500/440 V	690 [1]/440 V	U_n AC/DC 400/– V	500/440 V	690 [1]/440 V	U_n AC/DC 400/– V	500/440 V	690 [1]/440 V
–	–	–	–	–	–	–	–	–
–	–	–	–	–	–	–	–	–
–	–	–	–	–	–	–	–	–
–	–	–	–	–	–	–	–	–
–	–	–	–	–	–	–	–	–
–	–	–	–	–	–	–	–	–
–	–	–	–	–	–	–	–	–
–	–	–	–	–	–	–	–	–
–	–	–	–	3NA6214	–	–	–	–
–	–	–	–	–	–	–	–	–
–	–	–	3NA6220-4	3NA6220	–	–	–	–
–	–	–	3NA6222-4	3NA6222	–	–	–	–
–	–	–	3NA6224-4	3NA6224	3NA6224-6	–	–	–
–	–	–	3NA6230-4	3NA6230	3NA6230-6	–	–	–
–	–	–	3NA6232-4	3NA6232	3NA6232-6	–	–	–
–	–	–	3NA6236-4	3NA6236	3NA6236-6	–	–	–
3NA6140-4	3NA6140	3NA6140-6	3NA6240-4	3NA6240	3NA6240-6	–	–	–
3NA6142-4	3NA6142	–	3NA6242-4	3NA6242	–	–	–	3NA6242-6
3NA6144-4	3NA6144	–	3NA6244-4	3NA6244	–	–	–	3NA6244-6
–	–	–	–	–	–	3NA6250-4	3NA6250	3NA6250-6
–	–	–	–	–	–	3NA6252-4	3NA6252	3NA6252-6
–	–	–	–	–	–	3NA6254-4	3NA6254	–
–	–	–	–	–	–	3NA6260-4	3NA6260	–
–	–	–	–	–	–	–	–	–
–	–	–	–	–	–	–	–	–
–	–	–	–	–	–	–	–	–
–	–	–	–	–	–	–	–	–
–	–	–	–	–	–	–	–	–
–	–	–	–	–	–	–	–	–
–	–	–	–	–	–	–	–	–
–	–	–	–	–	–	–	–	–
–	–	–	–	3NA7214	–	–	–	–
–	–	–	–	–	–	–	–	–
–	–	–	–	3NA7220	–	–	–	–
–	–	–	–	3NA7222	–	–	–	–
–	–	–	–	3NA7224	3NA7224-6	–	–	–
–	–	–	–	3NA7230	3NA7230-6	–	–	–
–	–	–	–	3NA7232	3NA7232-6	–	–	–
–	–	–	–	3NA7236	3NA7236-6	–	–	–
–	3NA7140	3NA7140-6	–	3NA7240	3NA7240-6	–	–	–
–	3NA7142	–	–	3NA7242	–	–	–	3NA7242-6
–	3NA7144	–	–	3NA7244	–	–	–	3NA7244-6
–	–	–	–	–	–	–	–	3NA7250-6
–	–	–	–	–	–	–	3NA7252	3NA7252-6
–	–	–	–	–	–	–	–	–
–	–	–	–	–	–	–	3NA7260	–

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LV HRC fuse links

Operational class gG, with front indicator

	Size 000			Size 00		Size 0	Size 1			
Mounting width	21 mm			30 mm		30 mm	30 mm		47.2 mm	
										
I_n	U_n AC/DC 400/250 V	500/250 V	690 [1]/250 V	U_n AC/DC 500/250 V	690 [1]/250 V	U_n AC/DC 500/440 V	U_n AC/DC 500/440 V	690 [1]/440 V	U_n AC/DC 500/440 V	690 [1]/440 V
Non-insulated grip lugs										
2 A	–	3NA3802	3NA3802-6	–	–	–	–	–	–	–
4 A	–	3NA3804	3NA3804-6	–	–	–	–	–	–	–
6 A	–	3NA3801	3NA3801-6	–	–	3NA3001	–	–	–	–
10 A	–	3NA3803	3NA3803-6	–	–	3NA3003	–	–	–	–
16 A	–	3NA3805	3NA3805-6	–	–	3NA3005	3NA3105	–	–	–
20 A	–	3NA3807	3NA3807-6	–	–	3NA3007	3NA3107	–	–	–
25 A	–	3NA3810	3NA3810-6	–	–	3NA3010	3NA3110	–	–	–
32 A	–	3NA3812	3NA3812-6	–	–	3NA3012	–	–	–	–
35 A	–	3NA3814	3NA3814-6	3NA3814-7	–	3NA3014	3NA3114	–	–	–
40 A	–	3NA3817	3NA3817-6KJ	–	3NA3817-6	3NA3017	3NA3117	–	–	–
50 A	–	3NA3820	3NA3820-6KJ	3NA3820-7	3NA3820-6	3NA3020	3NA3120	3NA3120-6	–	–
63 A	–	3NA3822	–	3NA3822-7	3NA3822-6	3NA3022	3NA3122	3NA3122-6	–	–
80 A	–	3NA3824	–	3NA3824-7	3NA3824-6	3NA3024	3NA3124	3NA3124-6	–	–
100 A	–	3NA3830	–	3NA3830-7	3NA3830-6	3NA3030	3NA3130	3NA3130-6	–	–
125 A	3NA3832-8	–	–	3NA3832	–	3NA3032	3NA3132	3NA3132-6	–	–
160 A	3NA3836-8	–	–	3NA3836	–	3NA3036	3NA3136	3NA3136-6	–	–
200 A	–	–	–	–	–	–	–	–	3NA3140	3NA3140-6
224 A	–	–	–	–	–	–	–	–	3NA3142	–
250 A	–	–	–	–	–	–	–	–	3NA3144	3NA3144-6
300 A	–	–	–	–	–	–	–	–	–	–
315 A	–	–	–	–	–	–	–	–	–	–
355 A	–	–	–	–	–	–	–	–	–	–
400 A	–	–	–	–	–	–	–	–	–	–
425 A	–	–	–	–	–	–	–	–	–	–
500 A	–	–	–	–	–	–	–	–	–	–
630 A	–	–	–	–	–	–	–	–	–	–
800 A	–	–	–	–	–	–	–	–	–	–
1000 A	–	–	–	–	–	–	–	–	–	–
1250 A	–	–	–	–	–	–	–	–	–	–

[1] Manufacturer's confirmation for 690 V +10% rated voltage available on request.

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Size 2				Size 3				Size 4 (IEC design)	Size 4a
47.2 mm		57.8 mm		57.8 mm		71.2 mm		101.8 mm	101.8 mm
									
U_n AC/DC 500/440 V	690 [1]/440 V	U_n AC/DC 500/440 V	690 [1]/440 V	U_n AC/DC 500/440 V	690 [1]/440 V	U_n AC/DC 500/440 V	690 [1]/440 V	U_n AC/DC 500/440 V	U_n AC/DC 500/440 V
–	–	–	–	–	–	–	–	–	–
–	–	–	–	–	–	–	–	–	–
–	–	–	–	–	–	–	–	–	–
–	–	–	–	–	–	–	–	–	–
–	–	–	–	–	–	–	–	–	–
–	–	–	–	–	–	–	–	–	–
–	–	–	–	–	–	–	–	–	–
–	–	–	–	–	–	–	–	–	–
3NA3214	–	–	–	–	–	–	–	–	–
–	–	–	–	–	–	–	–	–	–
3NA3220	–	–	–	–	–	–	–	–	–
3NA3222	–	–	–	–	–	–	–	–	–
3NA3224	3NA3224-6	–	–	–	–	–	–	–	–
3NA3230	3NA3230-6	–	–	–	–	–	–	–	–
3NA3232	3NA3232-6	–	–	–	–	–	–	–	–
3NA3236	3NA3236-6	–	–	–	–	–	–	–	–
3NA3240	3NA3240-6	–	–	3NA3340	–	–	–	–	–
3NA3242	–	–	3NA3242-6	3NA3342	–	–	–	–	–
3NA3244	–	–	3NA3244-6	3NA3344	3NA3344-6	–	–	–	–
–	–	3NA3250	3NA3250-6	3NA3350	–	–	–	–	–
–	–	3NA3252	3NA3252-6	3NA3352	3NA3352-6	–	–	–	–
–	–	3NA3254	–	3NA3354	–	–	3NA3354-6	–	–
–	–	3NA3260	–	3NA3360	–	–	3NA3360-6	–	–
–	–	–	–	–	–	3NA3362	3NA3362-6	–	–
–	–	–	–	–	–	3NA3365	3NA3365-6	–	3NA3665
–	–	–	–	–	–	3NA3372	–	3NA3472	3NA3672
–	–	–	–	–	–	–	–	3NA3475	3NA3675
–	–	–	–	–	–	–	–	3NA3480	3NA3680
–	–	–	–	–	–	–	–	3NA3482	3NA3682

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LV HRC fuse links

Operational class aM, with front indicator

	Size 000	Size 00	Size 1		Size 2		Size 3	
Mounting width	21 mm	30 mm	30 mm	47.2 mm	47.2 mm	57.8 mm	57.8 mm	71.2 mm
								
I_n	U_n AC/DC 500/– V	U_n AC/DC 500/– V	U_n AC/DC 690/– V	U_n AC/DC 690/– V	U_n AC/DC 690/– V	U_n AC/DC 690/– V	U_n AC/DC 690/– V	U_n AC/DC 690/– V
Non-insulated grip lugs								
6 A	3ND1801	–	–	–	–	–	–	–
10 A	3ND1803	–	–	–	–	–	–	–
16 A	3ND1805	–	–	–	–	–	–	–
20 A	3ND1807	–	–	–	–	–	–	–
25 A	3ND1810	–	–	–	–	–	–	–
32 A	3ND1812	–	–	–	–	–	–	–
35 A	3ND1814	–	–	–	–	–	–	–
40 A	3ND1817	–	–	–	–	–	–	–
50 A	3ND1820	–	–	–	–	–	–	–
63 A	3ND1822	–	3ND2122	–	–	–	–	–
80 A	3ND1824	–	3ND2124	–	–	–	–	–
100 A	3ND1830-8	3ND1830	3ND2130	–	–	–	–	–
125 A	–	3ND1832	–	3ND2132	3ND2232	–	–	–
160 A	–	3ND1836	–	3ND2136	3ND2236	–	–	–
200 A	–	–	–	3ND2140	3ND2240	–	–	–
250 A	–	–	–	3ND2144	3ND2244	–	–	–
315 A	–	–	–	–	–	3ND2252	3ND2352	–
355 A	–	–	–	–	–	3ND2254	3ND2354	–
400 A	–	–	–	–	–	3ND2260	3ND2360	–
500 A	–	–	–	–	–	–	–	3ND1365
630 A	–	–	–	–	–	–	–	3ND1372

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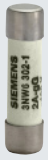
Cylindrical fuse links

Operational class gG

	Size 8 × 32 mm		Size 10 × 38 mm		Size 14 × 51 mm		Size 22 × 58 mm	
								
I_n	U_n AC		U_n AC		U_n AC		U_n AC	
	400 V		400 V	500 V	500 V	690 V	500 V	690 V
0.5 A	–		–	3NW6000-1	–	–	–	–
1 A	–		–	3NW6011-1	–	–	–	–
2 A	3NW6302-1		–	3NW6002-1	–	–	–	–
4 A	3NW6304-1		–	3NW6004-1	–	3NW6104-1	–	–
6 A	3NW6301-1		–	3NW6001-1	–	3NW6101-1	–	–
8 A	–		–	3NW6008-1	–	3NW6108-1	–	–
10 A	3NW6303-1		–	3NW6003-1	–	3NW6103-1	–	–
12 A	–		–	3NW6006-1	–	3NW6106-1	–	–
16 A	3NW6305-1		–	3NW6005-1	–	3NW6105-1	–	3NW6205-1
20 A	3NW6307-1		–	3NW6007-1	–	3NW6107-1	–	3NW6207-1
25 A	–		–	3NW6010-1	–	3NW6110-1	–	3NW6210-1
32 A	–		3NW6012-1	–	–	3NW6112-1	–	3NW6212-1
40 A	–		–	–	3NW6117-1	–	–	3NW6217-1
50 A	–		–	–	3NW6120-1	–	–	3NW6220-1
63 A	–		–	–	–	–	3NW6222-1	–
80 A	–		–	–	–	–	3NW6224-1	–
100 A	–		–	–	–	–	3NW6230-1	–

Operational class aM

	Size 10 × 38 mm		Size 14 × 51 mm			Size 22 × 58 mm	
							
I_n	U_n AC		U_n AC			U_n AC	
	400 V	500 V	400 V	500 V	690 V	500 V	690 V
0.5 A	–	3NW8000-1	–	–	–	–	–
1 A	–	3NW8011-1	–	–	–	–	–
2 A	–	3NW8002-1	–	–	3NW8102-1	–	–
4 A	–	3NW8004-1	–	–	3NW8104-1	–	–
6 A	–	3NW8001-1	–	–	3NW8101-1	–	–
8 A	–	3NW8008-1	–	–	3NW8108-1	–	–
10 A	–	3NW8003-1	–	–	3NW8103-1	–	–
12 A	–	3NW8006-1	–	–	3NW8106-1	–	–
16 A	–	3NW8005-1	–	3NW8105-1	–	–	3NW8205-1
20 A	3NW8007-1	–	–	3NW8107-1	–	–	3NW8207-1
25 A	3NW8010-1	–	–	3NW8110-1	–	–	3NW8210-1
32 A	3NW8012-1	–	–	3NW8112-1	–	–	3NW8212-1
40 A	–	–	–	3NW8117-1	–	–	3NW8217-1
50 A	–	–	3NW8120-1	–	–	–	3NW8220-1
63 A	–	–	–	–	–	3NW8222-1	–
80 A	–	–	–	–	–	3NW8224-1	–
100 A	–	–	–	–	–	3NW8230-1	–

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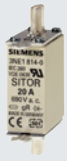
SITOR semiconductor fuse links (LV HRC design)

Operational class gS, with blade contacts without slots

				Size 000	Size 00	Size 1	Size 2	Size 3
								
I_n	Operating value I^2t	Power loss P_v	Varying load factor WL	U_n AC/DC 690/– V [1]	U_n AC/DC 690/– V [1]	U_n AC/DC 690/– V [1]	U_n AC/DC 690/– V [1]	U_n AC/DC 690/– V [1]
16 A	200 A^2s	4 W	1.0	3NE1813-0	–	–	–	–
20 A	430 A^2s	5 W	1.0	3NE1814-0	–	–	–	–
25 A	780 A^2s	5 W	1.0	3NE1815-0	–	–	–	–
35 A	1700 A^2s	3.5 W	1.0	3NE1803-0	–	–	–	–
40 A	3000 A^2s	3 W	1.0	3NE1802-0	–	–	–	–
50 A	4400 A^2s	6 W	1.0	3NE1817-0	–	–	–	–
63 A	9000 A^2s	7 W	1.0	3NE1818-0	–	–	–	–
80 A	18000 A^2s	8 W	1.0	3NE1820-0	–	–	–	–
100 A	33000 A^2s	10 W	1.0	–	3NE1021-0	–	–	–
125 A	63000 A^2s	11 W	1.0	–	3NE1022-0	–	–	–
160 A	60000 A^2s	24 W	1.0	–	–	3NE1224-0	–	–
200 A	100000 A^2s	27 W	1.0	–	–	3NE1225-0	–	–
250 A	200000 A^2s	30 W	1.0	–	–	3NE1227-0	–	–
315 A	310000 A^2s	38 W	1.0	–	–	3NE1230-0	–	–
350 A	430000 A^2s	42 W	1.0	–	–	–	3NE1331-0	–
400 A	590000 A^2s	45 W	1.0	–	–	–	3NE1332-0	–
450 A	750000 A^2s	53 W	1.0	–	–	–	3NE1333-0	–
500 A	950000 A^2s	56 W	1.0	–	–	–	3NE1334-0	–
560 A	1700000 A^2s	50 W	1.0	–	–	–	–	3NE1435-0
630 A	2350000 A^2s	55 W	1.0	–	–	–	–	3NE1436-0
710 A	3400000 A^2s	58 W	1.0	–	–	–	–	3NE1437-0
800 A	5000000 A^2s	58 W	1.0	–	–	–	–	3NE1438-0

[1] For the max. DC voltage, see the Configuration Manual "Fuse Systems", chapter "Configuration", "Use with direct current"

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Operational class gR, with bolt-on links

				Size 000	Size 00
			Screw fixing, mounting dimension	M8, 80 mm	M10, 80 mm
					
I_n	Operating value I^2t	Power loss P_v	Varying load factor WL	U_n AC/DC 690/700 V	U_n AC/DC 690/440 V
20 A	83 A^2s	7 W	0.9	3NE8714-1	–
25 A	140 A^2s	9 W	0.9	3NE8715-1	–
32 A	285 A^2s	10 W	0.9	3NE8701-1	–
40 A	490 A^2s	12 W	0.9	3NE8702-1	–
50 A	815 A^2s	15 W	0.9	3NE8717-1	–
80 A	3200 A^2s	23 W	On req.	–	3NE8020-3MK
100 A	5200 A^2s	29 W	On req.	–	3NE8021-3MK
Further information					
Catalog LV 10 – 10/2020				For further currents for operational class aR, see page 7/19	For further currents for operational class aR, see page 7/19

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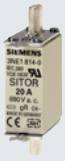
SITOR semiconductor fuse links (LV HRC design)

Operational class gR, with blade contacts without slots

				Size 000	Size 00	Size 0
						
I_n	Operating value I^2t	Power loss P_v	Varying load factor WL	U_n AC/DC 690/400 V	U_n AC/DC 690 V [1]	U_n AC/DC 1000 V [1]
6 A	37 A^2s	2.7 W	On req.	3NE8810-0MK	–	–
10 A	50 A^2s	4.5 W	On req.	3NE8812-0MK	–	–
16 A	73 A^2s	6.7 W	On req.	3NE8813-0MK	–	–
20 A	90 A^2s	8 W	On req.	3NE8814-0MK	–	–
25 A	150 A^2s	8.1 W	On req.	3NE8815-0MK	–	–
	180 A^2s	7 W	0.95	–	3NE8015-1	–
32 A	280 A^2s	12 W	0.9	–	–	3NE4101
	350 A^2s	10.5 W	On req.	3NE8801-0MK	–	–
35 A	400 A^2s	9 W	0.95	–	3NE8003-1	–
40 A	480 A^2s	12 W	On req.	3NE8802-0MK	–	–
	500 A^2s	13 W	0.9	–	–	3NE4102
50 A	700 A^2s	14 W	0.90	–	3NE8017-1	–
	800 A^2s	16 W	0.9	–	–	3NE4117
	1050 A^2s	14.5 W	On req.	3NE8817-0MK	–	–
63 A	1400 A^2s	16 W	0.95	–	3NE8018-1	–
	1960 A^2s	23 W	On req.	3NE8818-0MK	–	–
80 A	5800 A^2s	10.5 W	1.0	–	3NE1020-2	–
100 A	11000 A^2s	12 W	1.0	–	3NE1021-2	–
125 A	23000 A^2s	13.5 W	1.0	–	3NE1022-2	–
160 A	18600 A^2s	32 W	1.0	–	–	–
200 A	51800 A^2s	35 W	1.0	–	–	–
250 A	80900 A^2s	37 W	1.0	–	–	–
315 A	168000 A^2s	40 W	1.0	–	–	–
350 A	177000 A^2s	43 W	1.0	–	–	–
400 A	224000 A^2s	50 W	1.0	–	–	–
450 A	276500 A^2s	58 W	1.0	–	–	–
500 A	398000 A^2s	64 W	1.0	–	–	–
560 A	890000 A^2s	60 W	1.0	–	–	–
630 A	1390000 A^2s	60 W	1.0	–	–	–
670 A	1640000 A^2s	64 W	1.0	–	–	–
710 A	1818000 A^2s	72 W	1.0	–	–	–
	2460000 A^2s	65 W	1.0	–	–	–
800 A	2475000 A^2s	84 W	1.0	–	–	–
	3350000 A^2s	72 W	1.0	–	–	–
850 A	3640000 A^2s	76 W	1.0	–	–	–
Further information						
Catalog LV 10 – 10/2020				For further currents for operational class aR, see page 7/20	–	For further currents for operational class aR, see page 7/20

[1] For the max. DC voltage, see the Configuration Manual „Fuse Systems", chapter "Configuration", "Use with direct current"

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Size 1	Size 2	Size 3	
			
U_n AC/DC 690 V [1]	U_n AC/DC 690 V [1]	U_n AC/DC 600/– V [1]	690 V [1]
–	–	–	–
–	–	–	–
–	–	–	–
–	–	–	–
–	–	–	–
–	–	–	–
–	–	–	–
–	–	–	–
–	–	–	–
–	–	–	–
–	–	–	–
–	–	–	–
–	–	–	–
–	–	–	–
–	–	–	–
–	–	–	–
–	–	–	–
–	–	–	–
3NE1224-2	–	–	–
3NE1225-2	–	–	–
3NE1227-2	–	–	–
3NE1230-2	–	–	–
–	3NE1331-2	–	–
–	3NE1332-2	–	–
–	3NE1333-2	–	–
–	3NE1334-2	–	–
–	–	–	3NE1435-2
–	–	–	3NE1436-2
–	–	–	3NE1447-2
–	–	–	3NE1437-2
–	–	3NE1437-1	–
–	–	–	3NE1438-2
–	–	3NE1438-1	–
–	–	–	3NE1448-2
–	–	–	–

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SITOR semiconductor fuse links (LV HRC design)

Operational class gR, with slotted blade contacts

				With 2 oblong slots Size 3		With oblong and transverse slots Size 1	
			Screw fixing, mounting dimension (lateral)	M10, 110 mm		M10, 110 mm	
							
I_n	Operating value I^2t	Power loss P_v	Varying load factor WL	U_n AC/DC 500 V [1]	690 V [1]	U_n AC/DC 690 V [1]	1000/600 V
32 A	4500 A^2s	9 W	On req.	–	–	–	3NE3201-0MK
40 A	900 A^2s	26 W	On req.	–	–	–	–
	6000 A^2s	13 W	On req.	–	–	–	3NE3202-0MK
50 A	1800 A^2s	27 W	On req.	–	–	–	–
	8000 A^2s	18 W	On req.	–	–	–	3NE3217-0MK
63 A	3100 A^2s	34 W	On req.	–	–	–	–
	9000 A^2s	25 W	On req.	–	–	–	3NE3218-0MK
150 A	17600 A^2s	40 W	0.85	–	3NC8423-0C	–	–
	33000 A^2s	35 W	0.85	3NC2423-0C	–	–	–
160 A	18600 A^2s	32 W	1.0	–	–	3NE1224-3	–
200 A	38400 A^2s	55 W	0.85	–	3NC8425-0C	–	–
	51800 A^2s	35 W	1.0	–	–	3NE1225-3	–
	64000 A^2s	40 W	0.85	3NC2425-0C	–	–	–
250 A	70400 A^2s	72 W	0.85	–	3NC8427-0C	–	–
	80900 A^2s	37 W	1.0	–	–	3NE1227-3	–
	99000 A^2s	50 W	0.85	3NC2427-0C	–	–	–
300 A	132000 A^2s	65 W	0.85	3NC2428-0C	–	–	–
315 A	168000 A^2s	40 W	1.0	–	–	3NE1230-3	–
350 A	176000 A^2s	95 W	0.85	–	3NC8431-0C	–	–
	177000 A^2s	43 W	1.0	–	–	–	–
	249000 A^2s	60 W	0.85	3NC2431-0C	–	–	–
400 A	224000 A^2s	50 W	1.0	–	–	–	–
450 A	276500 A^2s	58 W	1.0	–	–	–	–
500 A	398000 A^2s	64 W	1.0	–	–	–	–
	448000 A^2s	130 W	0.85	–	3NC8434-0C	–	–
560 A	890000 A^2s	60 W	1.0	–	–	–	–
630 A	1390000 A^2s	60 W	1.0	–	–	–	–
670 A	1640000 A^2s	64 W	1.0	–	–	–	–
710 A	1818000 A^2s	72 W	1.0	–	–	–	–
800 A	2475000 A^2s	84 W	1.0	–	–	–	–
850 A	3640000 A^2s	76 W	1.0	–	–	–	–
1000 A	1400000 A^2s	138 W	1.0	–	–	–	–
1100 A	3000000 A^2s	110 W	1.0	–	–	–	–
1250 A	4100000 A^2s	104 W	1.0	–	–	–	–
1350 A	4800000 A^2s	126 W	1.0	–	–	–	–
1400 A	5200000 A^2s	127 W	1.0	–	–	–	–
1600 A	6900000 A^2s	152 W	1.0	–	–	–	–
1700 A	6400000 A^2s	179 W	1.0	–	–	–	–
1700 A	10000000 A^2s	143 W	1.0	–	–	–	–
1900 A	8200000 A^2s	196 W	1.0	–	–	–	–
Further information							
Catalog LV 10 – 10/2020				For further currents for operational class aR, see page 7/23	–	–	–

[1] For the max. DC voltage, see the Configuration Manual „Fuse Systems“, chapter “Configuration”, “Use with direct current”
[2] Minimum clearance 90 mm

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Size 2		Size 3		Size 3	Size 2 × 3	Size 3 × 3
M10, 110 (90) mm	M10, 170 mm	M10, 110 mm		M12, 110 mm	M12, 110 mm [2]	M12, 110 mm [2]
						
U_n AC/DC 690 V [1]	U_n AC/DC 1500/1000 V	U_n AC/DC 500 V [1]	690 V [1]	U_n AC/DC 690 V [1]	U_n AC/DC 690 V [1]	U_n AC/DC 690 V [1]
–	–	–	–	–	–	–
–	3NE5302-0MK06	–	–	–	–	–
–	–	–	–	–	–	–
–	3NE5317-0MK06	–	–	–	–	–
–	–	–	–	–	–	–
–	3NE5318-0MK06	–	–	–	–	–
–	–	–	–	–	–	–
–	–	–	3NC8423-3C	–	–	–
–	–	3NC2423-3C	–	–	–	–
–	–	–	–	–	–	–
–	–	–	3NC8425-3C	–	–	–
–	–	–	–	–	–	–
–	–	3NC2425-3C	–	–	–	–
–	–	–	3NC8427-3C	–	–	–
–	–	–	–	–	–	–
–	–	3NC2427-3C	–	–	–	–
–	–	3NC2428-3C	–	–	–	–
–	–	–	–	–	–	–
–	–	–	3NC8431-3C	–	–	–
3NE1331-3	–	–	–	–	–	–
–	–	3NC2431-3C	–	–	–	–
3NE1332-3	–	–	–	–	–	–
3NE1333-3	–	–	–	–	–	–
3NE1334-3	–	–	–	–	–	–
–	–	–	3NC8434-3C	–	–	–
–	–	–	–	3NE1435-3	–	–
–	–	–	–	3NE1436-3	–	–
–	–	–	–	3NE1447-3	–	–
–	–	–	–	3NE1437-3	–	–
–	–	–	–	3NE1438-3	–	–
–	–	–	–	3NE1448-3	–	–
–	–	–	–	–	3NB3350-1KK26	–
–	–	–	–	–	3NB3351-1KK26	–
–	–	–	–	–	3NB3352-1KK26	–
–	–	–	–	–	3NB3354-1KK26	–
–	–	–	–	–	3NB3355-1KK26	–
–	–	–	–	–	3NB3357-1KK26	–
–	–	–	–	–	–	3NB3358-1KK27
–	–	–	–	–	3NB3358-1KK26	–
–	–	–	–	–	–	3NB3362-1KK27
–	–	For further currents for operational class aR, see page 7/23	For further currents for operational class aR, see page 7/23	For further currents for operational class aR, see page 7/23	–	–

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SITOR semiconductor fuse links (LV HRC design)

Operational class aR, with bolt-on links

				Size 000	
			Screw fixing, mounting dimension	M8, 80 mm	M10, 80 mm
					
I_n	Operating value I^2t	Power loss P_v	Varying load factor WL	U_n AC/DC 690/700 V	U_n AC/DC 690/440 V
63 A	1550 A^2s	16 W	0.95	3NE8718-1	–
80 A	2700 A^2s	18 W	0.9	3NE8720-1	–
100 A	4950 A^2s	19 W	0.95	3NE8721-1	–
125 A	9100 A^2s	23 W	0.95	3NE8722-1	–
160 A	17000 A^2s	31 W	0.9	3NE8724-1	–
200 A	30000 A^2s	36 W	0.9	3NE8725-1	–
250 A	55000 A^2s	42 W	0.9	3NE8727-1	–
315 A	85500 A^2s	54 W	0.85	3NE8731-1	–
350 A	135000 A^2s	58.8 W	On req.	–	3NE8031-3MK
400 A	170000 A^2s	74.5 W	On req.	–	3NE8032-3MK
Further information					
Catalog LV 10 – 10/2020				For further currents for operational class gR, see page 7/14	For further currents for operational class gR, see page 7/14

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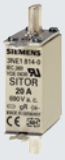
Operational class aR, with blade contacts without slots

				Size 000		Size 00	Size 0	Size 1	Size 2
									
I_n	Operating value I^2t	Power loss P_v	Varying load factor WL	U_n AC/DC 500/440 V	690/440 V	U_n AC/DC 690 V [1]	U_n AC/DC 1000 V [1]	U_n AC/DC 690/440 V	U_n AC/DC 690/440 V
63 A	1500 A^2s	20 W	0.9	–	–	–	3NE4118	–	–
80 A	2200 A^2s	23.3 W	On req.	–	3NE8820-0MK	–	–	–	–
	2400 A^2s	19 W	0.95	–	–	3NE8020-1	–	–	–
	3000 A^2s	22 W	0.9	–	–	–	3NE4120	–	–
100 A	3650 A^2s	27 W	On req.	–	3NE8821-0MK	–	–	–	–
	4200 A^2s	22 W	0.95	–	–	3NE8021-1	–	–	–
	6000 A^2s	24 W	0.9	–	–	–	3NE4121	–	–
	6050 A^2s	25.5 W	On req.	–	–	–	–	3NE8221-0MK	–
125 A	6500 A^2s	28 W	0.95	–	–	3NE8022-1	–	–	–
	7800 A^2s	30 W	On req.	–	3NE8822-0MK	–	–	–	–
	8900 A^2s	28.5 W	On req.	–	–	–	–	3NE8222-0MK	–
	14000 A^2s	30 W	0.9	–	–	–	3NE4122	–	–
160 A	13000 A^2s	38 W	0.95	–	–	3NE8024-1	–	–	–
	14000 A^2s	34 W	On req.	3NE8824-0MK	–	–	–	–	–
	16200 A^2s	37 W	On req.	–	–	–	–	3NE8224-0MK	–
	29000 A^2s	35 W	0.9	–	–	–	3NE4124	–	–
200 A	26000 A^2s	49 W	On req.	–	–	–	–	3NE8225-0MK	–
250 A	59000 A^2s	52 W	On req.	–	–	–	–	3NE8227-0MK	–
315 A	120000 A^2s	68 W	On req.	–	–	–	–	3NE8230-0MK	–
350 A	83500 A^2s	68.6 W	On req.	–	–	–	–	–	3NE8331-0MK
400 A	136000 A^2s	72.8 W	On req.	–	–	–	–	–	3NE8332-0MK
450 A	207000 A^2s	80.1 W	On req.	–	–	–	–	–	3NE8333-0MK
500 A	318000 A^2s	77.5 W	On req.	–	–	–	–	–	3NE8334-0MK
550 A	399000 A^2s	86.4 W	On req.	–	–	–	–	–	3NE8335-0MK
630 A	740000 A^2s	90.7 W	On req.	–	–	–	–	–	3NE8336-0MK
Further information									
Catalog LV 10 – 10/2020				For further currents for operational class gR, see page 7/15		–	For further currents for operational class gR, see page 7/15	–	–

[1] For the max. DC voltage, see the Configuration Manual „Fuse Systems“, chapter “Configuration”, “Use with direct current”

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SITOR semiconductor fuse links (LV HRC design)

Operational class aR, with slotted blade contacts

				With 2 oblong slots Size 3	With oblong and transverse slots Size 1		
			Screw fixing, mounting dimension	M10, 110 mm	M8, 80 mm	M10, 110 mm	
							
I_n	Operating value I^2t	Power loss P_v	Varying load factor WL	U_n AC/DC 500 V [1]	U_n AC/DC 690/440 V	U_n AC/DC 1000/– V [1]	1000/600 V
80 A	3900 A^2s	42 W	On req.	–	–	–	–
100 A	3200 A^2s	25 W	On req.	–	3NE8221-3MK	–	–
	4800 A^2s	28 W	0.95	–	–	3NE3221	–
	8700 A^2s	45 W	On req.	–	–	–	–
125 A	6000 A^2s	28 W	On req.	–	3NE8222-3MK	–	–
	7200 A^2s	36 W	0.95	–	–	3NE3222	–
	11800 A^2s	59 W	On req.	–	–	–	–
160 A	10500 A^2s	35 W	On req.	–	3NE8224-3MK	–	–
	13000 A^2s	42 W	1.0	–	–	3NE3224	–
	37000 A^2s	54 W	On req.	–	–	–	–
200 A	17500 A^2s	42 W	On req.	–	3NE8225-3MK	–	–
	30000 A^2s	42 W	1.0	–	–	3NE3225	–
	70000 A^2s	56 W	On req.	–	–	–	–
250 A	28500 A^2s	53.5 W	On req.	–	3NE8227-3MK	–	–
	29700 A^2s	105 W	0.85	–	–	–	–
	48000 A^2s	50 W	1.0	–	–	3NE3227	–
	165000 A^2s	59 W	On req.	–	–	–	–
315 A	53500 A^2s	61 W	On req.	–	3NE8230-3MK	–	–
	60700 A^2s	120 W	0.85	–	–	–	–
	80000 A^2s	60 W	0.95	–	–	3NE3230-0B	–
	250000 A^2s	76 W	On req.	–	–	–	–
	300000 A^2s	245 W	On req.	–	–	–	–
350 A	66000 A^2s	69 W	On req.	–	3NE8231-3MK	–	–
	100000 A^2s	75 W	0.95	–	–	3NE3231	–
400 A	110000 A^2s	70.5 W	On req.	–	3NE8232-3MK	–	–
	135000 A^2s	80 W	1.0	–	–	–	–
		85 W	0.9	–	–	3NE3232-0B	–
	390000 A^2s	50 W	0.85	3NC2432-0C	–	–	–
	470000 A^2s	89 W	On req.	–	–	–	–
450 A	175000 A^2s	90 W	1.0	–	–	–	–
		95 W	0.9	–	–	3NE3233	–
	180000 A^2s	71 W	On req.	–	3NE8233-3MK	–	–
	191000 A^2s	140 W	0.85	–	–	–	–
500 A	215000 A^2s	84 W	On req.	–	3NE8234-3MK	–	–
	260000 A^2s	90 W	1.0	–	–	–	–
	276000 A^2s	155 W	0.85	–	–	–	–
	500000 A^2s	105 W	On req.	–	–	–	3NE3234-0MK08
	800000 A^2s	109 W	On req.	–	–	–	–
550 A	290000 A^2s	87 W	On req.	–	3NE8235-3MK	–	–
	700000 A^2s	110 W	On req.	–	–	–	3NE3235-0MK08
560 A	360000 A^2s	95 W	1.0	–	–	–	–
630 A	440000 A^2s	96 W	On req.	–	3NE8236-3MK	–	–
	600000 A^2s	100 W	1.0	–	–	–	–
	850000 A^2s	127 W	On req.	–	–	–	3NE3236-0MK08
	1100000 A^2s	163 W	On req.	–	–	–	–
710 A	800000 A^2s	105 W	1.0	–	–	–	–
	923000 A^2s	155 W	0.95	–	–	–	–
800 A	850000 A^2s	130 W	0.95	–	–	–	–
900 A	920000 A^2s	165 W	0.95	–	–	–	–
Further information							
Catalog LV 10 – 10/2020				For further currents for operational class gR, see page 7/17	–	–	–

[1] For the max. DC voltage, see the Configuration Manual „Fuse Systems“, chapter “Configuration”, “Use with direct current”

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Size 2

M10, 110 mm					M10, 170 mm	M10, 190 mm	M12, 260 mm
							
U_n AC/DC 690/– V [1]	800/– V [1]	800 V [1]	900/– V [1]	1000/– V [1]	U_n AC/DC 1500/1000 V	U_n AC/DC 1500/1000 V	U_n AC/DC –/3000 V
–	–	–	–	–	3NE5320-0MK06	–	–
–	–	–	–	–	–	–	–
–	–	–	–	–	–	–	–
–	–	–	–	–	3NE5321-0MK06	–	–
–	–	–	–	–	–	–	–
–	–	–	–	–	–	–	–
–	–	–	–	–	3NE5322-0MK06	–	–
–	–	–	–	–	–	–	–
–	–	–	–	–	–	–	–
–	–	–	–	–	3NE5324-0MK06	–	–
–	–	–	–	–	–	–	–
–	–	–	–	–	–	–	–
–	–	–	–	–	3NE5325-0MK06	–	–
–	–	–	–	–	–	–	–
–	–	3NE4327-0B	–	–	–	–	–
–	–	–	–	–	–	–	–
–	–	–	–	–	3NE5327-0MK06	–	–
–	–	–	–	–	–	–	–
–	–	3NE4330-0B	–	–	–	–	–
–	–	–	–	–	–	–	–
–	–	–	–	–	3NE5330-0MK06	–	–
–	–	–	–	–	–	–	3NE9330-0MK07
–	–	–	–	–	–	–	–
–	–	–	–	–	–	–	–
–	–	–	–	–	–	–	–
–	–	–	–	3NE3332-0B	–	–	–
–	–	–	–	–	–	–	–
–	–	–	–	–	–	–	–
–	–	–	–	–	3NE5332-0MK06	–	–
–	–	–	–	3NE3333	–	–	–
–	–	–	–	–	–	–	–
–	–	–	–	–	–	–	–
–	–	3NE4333-0B	–	–	–	–	–
–	–	–	–	–	–	–	–
–	–	–	–	3NE3334-0B	–	–	–
–	–	3NE4334-0B	–	–	–	–	–
–	–	–	–	–	–	–	–
–	–	–	–	–	3NE5334-0MK06	–	–
–	–	–	–	–	–	–	–
–	–	–	–	–	–	–	–
–	–	–	–	3NE3335	–	–	–
–	–	–	–	–	–	–	–
–	–	–	–	3NE3336	–	–	–
–	–	–	–	–	–	–	–
–	–	–	–	–	3NE5336-0MK06	3NE5336-0MK66	–
–	–	–	3NE3337-8	–	–	–	–
–	–	3NE4337	–	–	–	–	–
–	3NE3338-8	–	–	–	–	–	–
3NE3340-8	–	–	–	–	–	–	–
–	–	–	–	–	For further currents for operational class gR, see page 7/17	–	–

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SITOR semiconductor fuse links (LV HRC design)

Operational class aR, with slotted blade contacts

				With oblong and transverse slots Size 3					
				Screw fixing, mounting dimension	M10, 110 mm		M10, 130 mm	M10, 170 mm	M10, 210 mm
									 
I_n	Operating value I^2t	Power loss P_v	Varying load factor WL	U_n AC/DC 500 V [1]	600 V [1]		U_n AC/DC 1000 V [1]	U_n AC/DC 1500 V [1]	U_n AC/DC 1500 V [1]	2000 V [1]
100 A	13500 A^2s	25 W	1.0	–	–		3NE3421-0C	–	–	–
125 A	34500 A^2s	78 W	1.0	–	–		–	–	–	–
160 A	54000 A^2s	56 W	1.0	–	–		–	–	3NE5424-0C	–
200 A	138000 A^2s	75 W	1.0	–	–		–	–	–	3NE7425-0U
224 A	54000 A^2s	85 W	1.0	–	–		3NE3626-0C	–	–	–
	138000 A^2s	80 W	1.0	–	–		–	–	3NE5426-0C	–
250 A	84000 A^2s	130 W	1.0	–	–		–	3NE5627-0C	–	–
	218000 A^2s	110 W	1.0	–	–		–	–	–	3NE7427-0U
315 A	72500 A^2s	80 W	0.95	–	–		–	–	–	–
	218000 A^2s	80 W	1.0	–	–		3NE3430-0C	–	–	–
	311000 A^2s	115 W	1.0	–	–		–	–	3NE5430-0C	–
350 A	428000 A^2s	135 W	1.0	–	–		–	–	3NE5431-0C	–
	555000 A^2s	120 W	1.0	–	–		–	–	–	3NE7431-0U
400 A	163000 A^2s	95 W	0.95	–	–		–	–	–	–
	364000 A^2s	110 W	1.0	–	–		3NE3432-0C	–	–	–
	390000 A^2s	50 W	0.85	3NC2432-3C	–		–	–	–	–
	620000 A^2s	205 W	1.0	–	–		–	–	–	–
	870000 A^2s	150 W	1.0	–	–		–	–	–	3NE7432-0U
450 A	488000 A^2s	110 W	1.0	–	–		3NE3635-0C	–	–	–
	590000 A^2s	160 W	1.0	–	–		–	3NE5633-0C	–	–
	870000 A^2s	145 W	0.95	–	–		–	–	3NE5433-0C	–
	960000 A^2s	160 W	1.0	–	–		–	–	–	3NE7633-0U
500 A	290000 A^2s	115 W	0.90	–	–		–	–	–	–
	870000 A^2s	95 W	1.0	–	–		3NE3434-0C	–	–	–
	1270000 A^2s	235 W	1.0	–	–		–	–	–	–
525 A	1120000 A^2s	210 W	1.0	–	–		–	–	–	–
600 A	1950000 A^2s	145 W	1.0	–	–		–	3NE5643-0C	–	–
630 A	244000 A^2s	120 W	0.85	–	–		–	–	–	–
	418000 A^2s	145 W	0.85	–	–		–	–	–	–
	650000 A^2s	120 W	0.95	–	–		–	–	–	–
	1280000 A^2s	132 W	1.0	–	–		3NE3636-0C	–	–	–
	1950000 A^2s	220 W	1.0	–	–		–	–	–	3NE7636-0U
	2800000 A^2s	275 W	1.0	–	–		–	–	–	–
710 A	346000 A^2s	130 W	0.85	–	–		–	–	–	–
	569000 A^2s	150 W	0.85	–	–		–	–	–	–
	1950000 A^2s	145 W	1.0	–	–		3NE3637-0C	–	–	–
	3110000 A^2s	275 W	1.0	–	–		–	–	–	–
800 A	498000 A^2s	135 W	0.9	–	–		–	–	–	–
	819000 A^2s	155 W	0.85	–	–		–	–	–	–
	985000 A^2s	145 W	0.90	–	–		–	–	–	–
900 A	677000 A^2s	145 W	0.9	–	–		–	–	–	–
	1160000 A^2s	165 W	0.9	–	–		–	–	–	–
1000 A	975000 A^2s	155 W	0.95	–	–		–	–	–	–
	1670000 A^2s	170 W	0.9	–	–		–	–	–	–
	2480000 A^2s	140 W	0.85	–	3NC8444-3C		–	–	–	–
1100 A	1382000 A^2s	165 W	0.95	–	–		–	–	–	–
	1910000 A^2s	185 W	0.9	–	–		–	–	–	–
1250 A	1990000 A^2s	175 W	0.95	–	–		–	–	–	–
	2600000 A^2s	210 W	0.9	–	–		–	–	–	–
1400 A	2100000 A^2s	200 W	0.95	–	–		–	–	–	–
1600 A	2860000 A^2s	240 W	0.9	–	–		–	–	–	–
Further information										
Catalog LV 10 – 10/2020				For further currents for operational class gR, see page 7/17			–	–	–	–

[1] For the max. DC voltage, see the Configuration Manual „Fuse Systems", chapter "Configuration", "Use with direct current"

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M12, 80 mm		M12, 110 mm				M12, 140 mm	M12, 210 mm		M12, 260 mm
									
U_n AC/DC 500 V [1]	690 V [1]	U_n AC/DC 800 V [1]	1000 V [1]	1100 V [1]	1250 V [1]	U_n AC/DC 1000 V [1]	U_n AC/DC 1500 V [1]	2000 V [1]	U_n AC/DC 2500 V [1]
–	–	–	–	–	–	–	–	–	–
–	–	–	–	–	–	–	–	–	3NE9622-1C
–	–	–	–	–	–	–	–	–	–
–	–	–	–	–	–	–	–	–	–
–	–	–	–	–	–	–	–	–	–
–	–	–	–	–	–	–	–	–	–
–	–	–	–	–	–	–	–	–	–
–	–	–	–	–	–	–	–	–	–
–		–	–	–	3NC3430-1U	–	–	–	–
–	–	–	–	–	–	–	–	–	–
–	–	–	–	–	–	–	–	–	–
–	–	–	–	–	–	–	–	–	–
–	–	–	–	–	–	–	–	–	–
–	–	–	–	–	3NC3432-1U	–	–	–	–
–	–	–	–	–	–	–	–	–	–
–	–	–	–	–	–	–	–	–	–
–	–	–	–	–	–	–	–	–	3NE9632-1C
–	–	–	–	–	–	–	–	–	–
–	–	–	–	–	–	–	–	–	–
–	–	–	–	–	–	–	–	–	–
–	–	–	–	–	–	–	3NE5433-1C	–	–
–	–	–	–	–	–	–	–	3NE7633-1U	–
–	–	–	–	–	3NC3434-1U	–	–	–	–
–	–	–	–	–	–	–	–	–	–
–	–	–	–	–	–	–	–	–	3NE9634-1C
–	–	–	–	–	–	–	–	3NE7648-1U	–
–	–	–	–	–	–	–	–	–	–
–	3NC3236-1U	–	–	–	–	–	–	–	–
–	–	–	3NC3336-1U	–	–	–	–	–	–
–	–	–	–	–	3NC3436-1U	–	–	–	–
–	–	–	–	–	–	–	–	–	–
–	–	–	–	–	–	–	–	3NE7636-1U	–
–	–	–	–	–	–	–	–	–	3NE9636-1C
–	3NC3237-1U	–	–	–	–	–	–	–	–
–	–	–	3NC3337-1U	–	–	–	–	–	–
–	–	–	–	–	–	3NE3637-1C	–	–	–
–	–	–	–	–	–	–	–	3NE7637-1U	–
–	3NC3238-1U	–	–	–	–	–	–	–	–
–	–	–	3NC3338-1U	–	–	–	–	–	–
–	–	–	–	3NC3438-1U	–	–	–	–	–
–	3NC3240-1U	–	–	–	–	–	–	–	–
–	–	–	3NC3340-1U	–	–	–	–	–	–
–	3NC3241-1U	–	–	–	–	–	–	–	–
–	–	–	3NC3341-1U	–	–	–	–	–	–
–	–	–	–	–	–	–	–	–	–
–	3NC3242-1U	–	–	–	–	–	–	–	–
–	–	3NC3342-1U	–	–	–	–	–	–	–
–	3NC3243-1U	–	–	–	–	–	–	–	–
–	–	3NC3343-1U	–	–	–	–	–	–	–
3NC3244-1U	–	–	–	–	–	–	–	–	–
3NC3245-1U	–	–	–	–	–	–	–	–	–
–	–	–	–	–	–	–	–	–	–

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SITOR semiconductor fuse links (LV HRC design)

Operational class aR, with female thread at both ends

				Size 3		
			Screw fixing, flange dimension	M10, 109 mm	M12, 52 mm	
						
I_n	Operating value I^2t	Power loss P_v	Varying load factor WL	U_n AC/DC 1000/– V	U_n AC/DC 500/– V	690/– V
315 A	72500 A^2s	80 W	0.95	–	–	–
400 A	163000 A^2s	95 W	0.95	–	–	–
450 A	488000 A^2s	110 W	1.0	3NE3635-6	–	–
500 A	290000 A^2s	115 W	0.90	–	–	–
630 A	244000 A^2s	125 W	0.9	–	–	3NC3236-6U
	418000 A^2s	130 W	0.90	–	–	–
	650000 A^2s	120 W	0.95	–	–	–
710 A	346000 A^2s	130 W	0.9	–	–	3NC3237-6U
	569000 A^2s	140 W	0.90	–	–	–
800 A	498000 A^2s	135 W	0.95	–	–	3NC3238-6U
	819000 A^2s	150 W	0.90	–	–	–
	985000 A^2s	145 W	0.95	–	–	–
900 A	677000 A^2s	140 W	0.95	–	–	3NC3240-6U
	1160000 A^2s	160 W	0.95	–	–	–
1000 A	975000 A^2s	145 W	1.0	–	–	3NC3241-6U
	1670000 A^2s	165 W	0.95	–	–	–
1100 A	1382000 A^2s	150 W	1.0	–	–	3NC3242-6U
	1910000 A^2s	175 W	0.95	–	–	–
1250 A	1990000 A^2s	155 W	1.0	–	–	3NC3243-6U
	2600000 A^2s	185 W	0.95	–	–	–
1400 A	2100000 A^2s	175 W	1.0	–	3NC3244-6U	–
1600 A	2860000 A^2s	195 W	0.95	–	3NC3245-6U	–

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M12, 73 mm		M12, 73 mm	
			
U_n AC/DC		U_n AC/DC	
800/– V	1000/– V	1100/– V	1250/– V
–	–	–	3NC3430-6U
–	–	–	3NC3432-6U
–	–	–	–
–	–	–	3NC3434-6U
–	–	–	–
–	3NC3336-6U	–	–
–	–	–	3NC3436-6U
–	–	–	–
–	3NC3337-6U	–	–
–	–	–	–
–	3NC3338-6U	–	–
–	–	3NC3438-6U	–
–	–	–	–
–	3NC3340-6U	–	–
–	–	–	–
–	3NC3341-6U	–	–
–	–	–	–
3NC3342-6U	–	–	–
–	–	–	–
3NC3343-6U	–	–	–
–	–	–	–
–	–	–	–

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SITOR semiconductor fuse links (LV HRC design)

Operational class gR, special designs

				Without installation bracket	With installation bracket For SITOR 6QG11 thyristor sets
			Screw fixing, flange dimension	M10, 89 mm	
					
I_n	Operating value I^2t	Power loss P_v	Varying load factor WL	U_n AC 600 V	U_n AC 1000 V
50 A	1100 A^2s	20 W	0.85	–	3NE4117-5
850 A	2480000 A^2s	85 W	1.0	3NE9440-6	–

Operational class aR, special designs

				Without installation bracket For screwing onto water-cooled busbars			
			Flange dimension	83 mm			
							
I_n	Operating value I^2t	Power loss P_v	Varying load factor WL	U_n AC 600 V	900 V	U_n AC 800 V	1000 V
100 A	7400 A^2s	35 W	0.85	–	–	–	–
170 A	60500 A^2s	43 W	0.85	–	–	–	–
200 A	44000 A^2s	50 W	0.85	–	–	–	–
250 A	29700 A^2s	105 W	0.85	–	–	–	–
	635000 A^2s	25 W	0.9	–	–	–	–
315 A	60700 A^2s	120 W	0.85	–	–	–	–
350 A	260000 A^2s	80 W	0.9	–	–	3NC5531	–
	1430000 A^2s	32 W	0.9	–	–	–	–
450 A	191000 A^2s	140 W	0.85	–	–	–	–
	395000 A^2s	90 W	0.85	–	–	–	–
500 A	276000 A^2s	155 W	0.85	–	–	–	–
600 A	888000 A^2s	150 W	0.9	–	–	–	3NC5840
630 A	888000 A^2s	145 W	0.9	–	–	3NC5841	–
710 A	620000 A^2s	150 W	0.9	–	3NE6437-7	–	–
	923000 A^2s	155 W	0.95	–	–	–	–
800 A	1728000 A^2s	170 W	0.9	–	–	–	3NC5838
900 A	1920000 A^2s	170 W	0.9	–	–	–	–
1250 A	2480000 A^2s	210 W	0.9	3NE9450-7	–	–	–

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For air-cooled rectifiers in electrolysis systems		For mounting directly in the railway supply rectifier	For SITOR 6QG12 thyristor sets	With installation bracket For SITOR 6QG10 thyristor sets	For SITOR 6QG11 thyristor sets
89 mm			77 mm		
					
U_n AC 600 V	U_n AC 900 V	U_n AC 680 V	U_n AC 800 V	U_n AC 1000 V	U_n AC 1000 V
–	–	–	–	–	3NE4121-5
–	–	–	–	–	3NE4146-5
–	–	–	–	3NE3525-5	–
–	–	–	3NE4327-6B	–	–
–	–	3NC7327-2	–	–	–
–	–	–	3NE4330-6B	–	–
–	–	–	–	–	–
–	–	3NC7331-2	–	–	–
–	–	–	3NE4333-6B	–	–
–	–	–	–	3NE3535-5	–
–	–	–	3NE4334-6B	–	–
–	–	–	–	–	–
–	–	–	–	–	–
–	3NE6437	–	–	–	–
–	–	–	3NE4337-6	–	–
–	–	–	–	–	–
–	3NE6444	–	–	–	–
3NE9450	–	–	–	–	–

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SITOR semiconductor fuse links (LV HRC design)

DC fuses, operational class gR, with slotted blade contacts

				Size 2L
			Screw fixing	M12
				
I_n	Operating value I^2t	Power loss P_v	Varying load factor WL	U_n DC 900 V
400 A	180000 A^2s [1]	75 W	–	3NB1234-3KK20

[1] I^2t at U_{VSI} 1400 V is 240000 A^2s

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DC fuses, operational class aR, with slotted blade contacts

				Size 1L	Size 2L	Size 3L	Size 2 × 3L	Size 3 × 3L
			Screw fixing	M12	M12	M12	M12	M12
								
I_n	Operating value I^2t at U_{VSI} 1500 V [2]	Power loss P_v	Varying load factor WL	U_n DC/U_{VSI} 1250 V/1500 V	U_n DC/U_{VSI} 1250 V/1500 V	U_n DC/U_{VSI} 1250 V/1500 V	U_n DC/U_{VSI} 1250 V/1500 V	U_n DC/U_{VSI} 1250 V/1500 V
200 A	39000 A^2s	50 W	–	3NB1126-4KK11	–	–	–	–
250 A	80500 A^2s	51 W	–	3NB1128-4KK11	–	–	–	–
315 A	129000 A^2s	63 W	–	–	3NB1231-4KK11	–	–	–
400 A	290000 A^2s	68 W	–	–	3NB1234-4KK11	–	–	–
500 A	600000 A^2s	89 W	–	–	–	3NB1337-4KK11	–	–
800 A	1910000 A^2s	135 W	–	–	–	3NB1345-4KK11	–	–
800 A	1150000 A^2s	160 W	–	–	–	–	3NB2345-4KK16	–
1000 A	2250000 A^2s	195 W	–	–	–	–	3NB2350-4KK16	–
1400 A	5100000 A^2s	250 W	–	–	–	–	3NB2355-4KK16	–
1600 A	7450000 A^2s	275 W	–	–	–	–	3NB2357-4KK16	–
2100 A	1195000 A^2s	365 W	–	–	–	–	–	3NB2364-4KK17
2400 A	18100000 A^2s	445 W	–	–	–	–	–	3NB2366-4KK17

[2] I^2t at U_n 1250 V is reduced by the factor k = 0.79.

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SITOR semiconductor fuse links (cylindrical fuse design)

Cylindrical fuses, operational class gS

			Size 22 × 127 mm
			
I_n	Operating value I^2t	Power loss P_v	U_n AC/DC 1500/1000 V
1 A	2 A^2s	2 W	3NC2301-0MK
2 A	4.4 A^2s	2.5 W	3NC2302-0MK
4 A	55 A^2s	5.3 W	3NC2304-0MK
6 A	150 A^2s	6.4 W	3NC2306-0MK
10 A	540 A^2s	3.1 W	3NC2310-0MK
16 A	1120 A^2s	4.7 W	3NC2316-0MK
20 A	2850 A^2s	5.4 W	3NC2320-0MK
25 A	3300 A^2s	6.9 W	3NC2325-0MK
32 A	9050 A^2s	6.7 W	3NC2332-0MK
Further information			
Catalog LV 10 – 10/2020			For further currents for operational class gR, see page 7/31 Operational class aR, see page 7/33

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SITOR semiconductor fuse links (cylindrical fuse design)

Operational class gR

			Size 10 × 38 mm		Size 14 × 51 mm			
								
I_n	Operating value I^2t	Power loss P_v	U_n AC/DC 690/440 V	690/250 V	U_n AC/DC 690/700 V [1]	690/600 V	690/440 V	690/250 V
6 A	3.5 A^2s	3.1 W	–	–	3NC1406-0MK	–	–	–
	6.5 A^2s	2.5 W	3NC1006-0MK	–	–	–	–	–
10 A	15 A^2s	4.6 W	–	–	3NC1410-0MK	–	–	–
	17 A^2s	4.3 W	–	–	–	–	–	–
	18 A^2s	3.3 W	3NC1010-0MK	–	–	–	–	–
12 A	35 A^2s	4 W	3NC1012-0MK	–	–	–	–	–
16 A	32 A^2s	6.7 W	–	–	–	3NC1416-0MK	–	–
	45 A^2s	6 W	3NC1016-0MK	–	–	–	–	–
	52 A^2s	4.4 W	–	–	–	–	–	–
20 A	68 A^2s	7.4 W	–	–	–	3NC1420-0MK	–	–
	90 A^2s	6.5 W	–	–	–	–	–	–
	110 A^2s	7.8 W	–	3NC1020-0MK	–	–	–	–
25 A	108 A^2s	8.4 W	–	–	–	3NC1425-0MK	–	–
	120 A^2s	9.5 W	–	–	–	–	–	–
	140 A^2s	8.7 W	–	3NC1025-0MK	–	–	–	–
	160 A^2s	8.5 W	–	–	–	–	–	–
	180 A^2s	8.1 W	–	–	–	–	–	–
32 A	175 A^2s	12.3 W	–	–	–	3NC1432-0MK	–	–
	220 A^2s	12.3 W	–	–	–	–	–	–
	400 A^2s	8.9 W	–	–	–	–	–	–
	420 A^2s	9 W	–	–	–	–	–	–
	450 A^2s	12 W	–	3NC1032-0MK	–	–	–	–
40 A	400 A^2s	14.8 W	–	–	–	–	–	–
	470 A^2s	11.7 W	–	–	–	–	3NC1440-0MK	–
	600 A^2s	11 W	–	–	–	–	–	–
	700 A^2s	12.5 W	–	–	–	–	–	–
	18500 A^2s	9.4 W	–	–	–	–	–	–
50 A	830 A^2s	16.3 W	–	–	–	–	–	3NC1450-0MK
	980 A^2s	17.5 W	–	–	–	–	–	–
	1250 A^2s	13.8 W	–	–	–	–	–	–
	1250 A^2s	15.2 W	–	–	–	–	–	–
63 A	2050 A^2s	18.8 W	–	–	–	–	–	–
	2400 A^2s	17.5 W	–	–	–	–	–	–
80 A	4400 A^2s	23 W	–	–	–	–	–	–
100 A	11500 A^2s	28.7 W	–	–	–	–	–	–
Further information								
Catalog LV 10 – 10/2020			–	–	–	–	–	–

[1] DC voltage according to UL

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Size 22 × 58 mm				Size 22 × 127 mm	With M8 bolt-on links Size 18 × 88 mm	Size 26 × 103 mm
						
U_n AC/DC 690/700 V [1]	690/600 V	690/440 V	690/250 V	U_n AC/DC 1500/1000 V	U_n AC/DC 690/440 V	U_n AC/DC 690/440 V
–	–	–	–	–	–	–
–	–	–	–	–	–	–
–	–	–	–	–	–	–
–	–	–	–	–	3NC1810-0MK	–
–	–	–	–	–	–	–
–	–	–	–	–	–	–
–	–	–	–	–	–	–
–	–	–	–	–	–	–
–	–	–	–	–	3NC1816-0MK	–
–	–	–	–	–	–	–
–	–	–	–	–	3NC1820-0MK	–
–	–	–	–	–	–	–
–	–	–	–	–	–	–
–	–	–	–	–	–	3NC2625-0MK
–	–	–	–	–	–	–
–	–	–	–	–	3NC1825-0MK	–
3NC2225-0MK	–	–	–	–	–	–
–	–	–	–	–	–	–
–	–	–	–	–	–	3NC2632-0MK
–	–	–	–	–	3NC1832-0MK	–
–	3NC2232-0MK	–	–	–	–	–
–	–	–	–	–	–	–
–	–	–	–	–	–	3NC2640-0MK
–	–	–	–	–	–	–
–	–	–	–	–	3NC1840-0MK	–
–	–	3NC2240-0MK	–	–	–	–
–	–	–	–	3NC2340-0MK	–	–
–	–	–	–	–	–	–
–	–	–	–	–	–	3NC2650-0MK
–	–	–	–	–	3NC1850-0MK	–
–	–	–	3NC2250-0MK	–	–	–
–	–	–	–	–	–	3NC2663-0MK
–	–	–	3NC2263-0MK	–	–	–
–	–	–	3NC2280-0MK	–	–	–
–	–	–	3NC2200-0MK	–	–	–
–	–	–	–	For further currents for operational class gG, see page 7/30 Operational class aR, see page 7/33	–	–

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SITOR semiconductor fuse links (cylindrical fuse design)

Operational class aR

			Size 10 × 38 mm [1]		Size 14 × 51 mm			
					Standard			With striking pin
								
I_n	Operating value I^2t	Power loss P_v	U_n AC/DC 600/700 V [2]	600/– V	U_n AC/DC 660/– V	690/700 V [2]	690/250 V	U_n AC/DC 690/600 V [1]
1 A	1.2 A^2s	5 W	–	–	3NC1401	–	–	–
2 A	10 A^2s	3 W	–	–	3NC1402	–	–	–
3 A	8 A^2s	1.2 W	3NC1003	–	–	–	–	–
	15 A^2s	2.5 W	–	–	3NC1403	–	–	–
4 A	25 A^2s	3 W	–	–	3NC1404	–	–	–
5 A	11 A^2s	1.5 W	–	–	–	3NC1405	–	–
6 A	11 A^2s	1.5 W	–	–	–	3NC1406	–	–
	20 A^2s	1.5 W	3NC1006	–	–	–	–	–
8 A	30 A^2s	2 W	3NC1008	–	–	–	–	–
10 A	22 A^2s	4 W	–	–	–	3NC1410	–	–
	32 A^2s	4 W	–	–	–	–	–	3NC1410-5
	60 A^2s	2.5 W	3NC1010	–	–	–	–	–
12 A	110 A^2s	3 W	3NC1012	–	–	–	–	–
15 A	63 A^2s	5.5 W	–	–	–	–	–	3NC1415-5
	70 A^2s	5.5 W	–	–	–	3NC1415	–	–
16 A	150 A^2s	3.5 W	3NC1016	–	–	–	–	–
20 A	100 A^2s	6 W	–	–	–	3NC1420	–	–
	200 A^2s	4.8 W	3NC1020	–	–	–	–	–
	220 A^2s	4.6 W	–	–	–	–	–	–
	234 A^2s	6 W	–	–	–	–	–	3NC1420-5
	240 A^2s	5 W	–	–	–	–	–	–
25 A	250 A^2s	6 W	3NC1025	–	–	–	–	–
	300 A^2s	5.6 W	–	–	–	–	–	–
	320 A^2s	7 W	–	–	–	3NC1425	–	–
	350 A^2s	6 W	–	–	–	–	–	–
	378 A^2s	7 W	–	–	–	–	–	3NC1425-5
30 A	400 A^2s	9 W	–	–	–	3NC1430	–	–
	466 A^2s	9 W	–	–	–	–	–	3NC1430-5
32 A	450 A^2s	7 W	–	–	–	–	–	–
	500 A^2s	7.5 W	–	3NC1032	–	–	–	–
	500 A^2s	8 W	–	–	–	–	–	–
	600 A^2s	7.6 W	–	–	–	3NC1432	–	3NC1432-5
40 A	700 A^2s	8.5 W	–	–	–	–	–	–
	750 A^2s	8 W	–	–	–	3NC1440	–	3NC1440-5
	800 A^2s	9 W	–	–	–	–	–	–
50 A	1350 A^2s	9.5 W	–	–	–	–	–	–
	1500 A^2s	9.5 W	–	–	–	–	–	–
	1800 A^2s	9 W	–	–	–	3NC1450	–	3NC1450-5
	26000 A^2s	11.6 W	–	–	–	–	–	–
63 A	2100 A^2s	16.7 W	–	–	–	–	3NC1463-0MK	–
	2600 A^2s	11 W	–	–	–	–	–	–
	3000 A^2s	11 W	–	–	–	–	–	–
80 A	3500 A^2s	22.5 W	–	–	–	–	–	–
	5500 A^2s	13.5 W	–	–	–	–	–	–
	6000 A^2s	13.5 W	–	–	–	–	–	–
100 A	5400 A^2s	31.5 W	–	–	–	–	–	–
	8000 A^2s	16 W	–	–	–	–	–	–
	8500 A^2s	16 W	–	–	–	–	–	–
125 A	11800 A^2s	39 W	–	–	–	–	–	–
	29000 A^2s	35.3 W	–	–	–	–	–	–
Further information								
Catalog LV 10 – 10/2020			–	–	–	–	–	–

[1] Observe DC voltage acc. to UL, time constant and minimum breaking current MBC
[2] CCC approval

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Size 22 × 58 mm				Size 22 × 127 mm	Size 26 × 103 mm
Standard		With striking pin			With M8 bolt-on links
					
U_n AC/DC		U_n AC/DC		U_n AC/DC	U_n AC/DC
690/700 V [2]	690/250 V	600/500 V [1]	690/500 V [1]	1500/1000 V	690/440 V
–	–	–	–	–	–
–	–	–	–	–	–
–	–	–	–	–	–
–	–	–	–	–	–
–	–	–	–	–	–
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–	–	–	–	–	–
–	–	–	–	–	–
–	–	–	–	–	–
–	–	–	–	–	–
3NC2220	–	–	–	–	–
–	–	–	–	–	–
–	–	–	3NC2220-5	–	–
–	–	–	–	–	–
3NC2225	–	–	–	–	–
–	–	–	–	–	–
–	–	–	3NC2225-5	–	–
–	–	–	–	–	–
–	–	–	–	–	–
–	–	–	–	–	–
3NC2232	–	–	–	–	–
–	–	–	–	–	–
–	–	–	3NC2232-5	–	–
–	–	–	–	–	–
3NC2240	–	–	–	–	–
–	–	–	–	–	–
–	–	–	3NC2240-5	–	–
3NC2250	–	–	–	–	–
–	–	–	3NC2250-5	–	–
–	–	–	–	–	–
–	–	–	–	3NC2350-0MK	–
–	–	–	–	–	–
3NC2263	–	–	–	–	–
–	–	–	3NC2263-5	–	–
–	–	–	–	–	3NC2680-0MK
3NC2280	–	–	–	–	–
–	–	–	3NC2280-5	–	–
–	–	–	–	–	3NC2600-0MK
3NC2200	–	–	–	–	–
–	–	3NC2200-5	–	–	–
–	–	–	–	–	3NC2611-0MK
–	3NC2211-0MK	–	–	–	–
–	–	–	–	For further currents for operational class gR, see page 7/31 Operational class gS see page 7/30	–

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Photovoltaic cylindrical fuse links

Operational class gPV

			Size 10 × 38 mm	Size 10 × 85 mm	
					
I_n DC	Power loss P_v	Power loss P_v at 70% [1]	U_n DC 1000 V	U_n DC 1200 V	1500 V
2 A	1.4 W	0.6 W	3NW6002-4	–	–
	2.7 W	1.1 W	–	–	3NW6604-4
4 A	1.6 W	0.7 W	3NW6004-4	–	–
	3.0 W	1.2 W	–	–	3NW6601-4
6 A	1.7 W	0.7 W	3NW6001-4	–	–
	3.6 W	1.5 W	–	–	3NW6608-4
8 A	1.9 W	0.8 W	3NW6008-4	–	–
	3.7 W	1.6 W	–	–	3NW6603-4
10 A	2.3 W	1.0 W	3NW6003-4	–	–
	3.3 W	1.4 W	–	–	3NW6606-4
12 A	2.7 W	1.1 W	3NW6006-4	–	–
	3.7 W	1.6 W	–	–	3NW6605-4
16 A	3.2 W	1.3 W	3NW6005-4	–	–
	4.0 W	1.7 W	–	3NW6607-4	–
20 A	3.4 W	1.4 W	3NW6007-4	–	–

[1] Tested in fuse holders 3NW7013-4 and 3NW7613-4.

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Class CC fuse links

Acc. to UL

		Characteristic: Slow	Characteristic: Slow, current-limiting	Characteristic: Quick
				
I_n	I_n [1]			
0.6 A	6 / 10 A	3NW1006-0HG	–	–
0.8 A	8 / 10 A	3NW1008-0HG	–	–
1 A	–	3NW1010-0HG	3NW3010-0HG	3NW2010-0HG
1.5 A	1 ½ A	3NW1015-0HG	–	–
2 A	–	3NW1020-0HG	3NW3020-0HG	3NW2020-0HG
2.5 A	–	3NW1025-0HG	–	–
3 A	–	3NW1030-0HG	3NW3030-0HG	3NW2030-0HG
4 A	–	3NW1040-0HG	3NW3040-0HG	3NW2040-0HG
5 A	–	3NW1050-0HG	3NW3050-0HG	3NW2050-0HG
6 A	–	3NW1060-0HG	3NW3060-0HG	3NW2060-0HG
7.5 A	–	3NW1075-0HG	–	–
8 A	–	3NW1080-0HG	3NW3080-0HG	3NW2080-0HG
10 A	–	3NW1100-0HG	3NW3100-0HG	3NW2100-0HG
12 A	–	–	3NW3120-0HG	3NW2120-0HG
15 A	–	3NW1150-0HG	3NW3150-0HG	3NW2150-0HG
20 A	–	3NW1200-0HG	3NW3200-0HG	3NW2200-0HG
25 A	–	3NW1250-0HG	3NW3250-0HG	3NW2250-0HG
30 A	–	3NW1300-0HG	3NW3300-0HG	3NW2300-0HG

[1] American English wording

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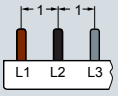
Busbars

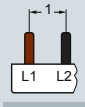
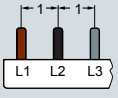
According to IEC and UL, can be cut

Pin spacing 1 MW

Pin spacing in MW (1 MW = 18 mm)	Application	Length	Version	Conductor cross-section	Article No.
Single-phase					
	For MINIZED D01 fuse switch disconnectors	220 mm	With end caps	16 mm²	5ST2186
		1000 mm	Without end caps	16 mm²	5ST2190
Single-phase, angled					Article No.
	For cylindrical fuse holders 8 × 32 mm and 10 × 38 mm For SITOR cylindrical fuse holders 10 × 38 mm For Class CC fuse holders	214 mm	With end caps	16 mm²	5ST3700
		1016 mm	Without end caps	16 mm²	5ST3701
Two-phase					Article No.
	For cylindrical fuse holders 8 × 32 mm and 10 × 38 mm For SITOR cylindrical fuse holders 10 × 38 mm For Class CC fuse holders	214 mm	With end caps	16 mm²	5ST3704
		1016 mm	Without end caps	16 mm²	5ST3705
	For MINIZED D01 fuse switch disconnectors	220 mm	With end caps	16 mm²	5ST2187
		1000 mm	Without end caps	16 mm²	5ST2191
Three-phase					Article No.
	For cylindrical fuse holders 8 × 32 mm and 10 × 38 mm For SITOR cylindrical fuse holders 10 × 38 mm For Class CC fuse holders	214 mm	With end caps	16 mm²	5ST3708
		1016 mm	Without end caps	16 mm²	5ST3710
	For MINIZED D01 fuse switch disconnectors	220 mm	With end caps	16 mm²	5ST2188
		1000 mm	Without end caps	16 mm²	5ST2192

According to UL 508, can be cut

Pin spacing 1 MW

Pin spacing in MW (1 MW = 18 mm)	Application	Length	Version	Conductor cross-section	Article No.
Single-phase					
	For Class CC fuse holders 10 × 38 mm (3NC1091, 3NW7513-0HG)	1000 mm	Without end caps	18 mm²	5ST3701-0HG
Two-phase					Article No.
	For Class CC fuse holders 10 × 38 mm (3NC1092, 3NW7523-0HG)	1000 mm	Without end caps	18 mm²	5ST3705-0HG
Three-phase					Article No.
	For Class CC fuse holders 10 × 38 mm (3NC1093, 3NW7533-0HG)	1000 mm	Without end caps	18 mm²	5ST3710-0HG

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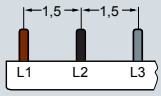
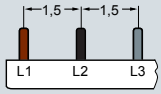
According to IEC and UL, can be cut

Pin spacing 1.5 MW

Pin spacing in MW (1 MW = 18 mm)	Application	Length	Version	Conductor cross-section	
Single-phase					**Article No.**
	For NEOZED D01 / D02 fuse bases made of molded plastic 5SG1.30, 5SG1.31, 5SG5.30	1000 mm	Without end caps, non-insulated	36 mm²	5SH5322
Single-phase, angled					**Article No.**
	For 5SG71.3 MINIZED switch disconnectors with fuses D02 For NEOZED D01 / D02 fuse bases made of molded plastic 5SG1301, 5SG1701, 5SG5301, 5SG5701, 5SG1302, 5SG1702, 5SG5302, 5SG5702 For NEOZED D01 / D02 fuse bases made of ceramic with saddle terminals For cylindrical fuse holders 14 × 51 mm For SITOR cylindrical fuse holders 14 × 51 mm	1016 mm	Without end caps	16 mm²	5ST3703
Three-phase					**Article No.**
	For 5SG71.3 MINIZED switch disconnectors with fuses D02 For NEOZED D01 / D02 fuse bases made of molded plastic 5SG1301, 5SG1701, 5SG5301, 5SG5701, 5SG1302, 5SG1702, 5SG5302, 5SG5702 For NEOZED D01 / D02 fuse bases made of ceramic with saddle terminals For cylindrical fuse holders 14 × 51 mm For SITOR cylindrical fuse holders 14 × 51 mm	1016 mm	Without end caps	16 mm²	5ST3714
	For NEOZED D01 / D02 fuse bases made of molded plastic 5SG1.30, 5SG1.31, 5SG5.30 For NEOZED D01 / D02 fuse bases made of ceramic with clamp-type terminals and screw head contacts	1000 mm	Without end caps	16 mm²	5SH5320

According to UL 508, can be cut

Pin spacing 1.5 MW

Pin spacing in MW (1 MW = 18 mm)	Application	Length	Version	Conductor cross-section	
1-phase					**Article No.**
	For fuse holders 14 × 51 mm (3NC1491, 3NW7111)	1000 mm	Without end caps	18 mm²	5ST3703-0HG
				25 mm²	5ST3701-2HG
Two-phase					
	For fuse holders 14 × 51 mm (3NC1492, 3NW7121)	1000 mm	Without end caps	25 mm²	5ST3705-2HG
3-phase					**Article No.**
	For fuse holders 14 × 51 mm (3NC1493, 3NW7131)	1000 mm	Without end caps	18 mm²	5ST3714-0HG
				25 mm²	5ST3710-2HG

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Busbars

Accessories

For busbars according to IEC

Terminals

- For NEOZED D01 / D02 fuse bases made of ceramic
- For DIAZED DII / DIII fuse bases made of ceramic

	Terminal version	Conductor cross-section	Article No.
	Terminal version S	2 ... 25 mm²	5SH5327
	Terminal versions B and K	6 ... 25 mm²	5SH5328

Bus-mounting terminal



- For DIAZED EZR bus-mounting bases
- Non-insulated

Conductor cross-section	Article No.
1.5 ... 16 mm²	8JH4122
10 ... 35 mm²	8JH4124

Touch protection



- For free connections, yellow (RAL 1004) 5 × 1 pin

Article No.
5ST3655

End caps

	Version	For bar type	Article No.
	For single-phase busbars	5ST2190	5ST2196
		5ST37 and 5SH55	5ST3748
	For two-phase and three-phase busbars	5ST2191 and 5ST2192	5ST2197
		5ST37 and 5SH5320	5ST3750

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For busbars according to UL 508

Terminals according to UL 508

	Version	Infeed	Article No.
	For busbars 35 mm²	Device	5ST3770-0HG
	For busbars 30 mm²	Busbar	5ST3770-1HG

Busbar touch protection according to UL 508



- For free connections, yellow (RAL 1004) 5 × 1 pin

Article No.
5ST3655-0HG

End caps for 5ST37. .-.HG

	Version	Article No.
	For single-phase busbars	5ST3748-0HG
	For two- and three-phase busbars	5ST3750-0HG

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LV HRC signal detectors, electronic fuse monitoring

LV HRC signal detectors



- Only for SIEMENS LV HRC fuse links 3NA3, 3NA7, 3ND with non-insulated grip lugs
- Rated voltage of up to 690 V AC / 600 V DC
- Contact: Microswitches 250 V AC, 6 A
- Connection: Flat termination 2.3 mm

Fuse size	Article No.
000 ... 4	3NX1021

Signal detector links



- Rated voltage of up to 690 V AC / 600 V DC

Fuse size	Response value	Application	Article No.
000 ... 4	>9 V / 2.5 A	For standard applications	3NX1022
	>2 V / 7 A	Only for meshed networks	3NX1023

Signal detector tops



- Only for SIEMENS LV HRC fuse links 3NA3, 3NA7, 3ND with non-insulated grip lugs
- Rated voltage of up to 690 V AC / 600 V DC
- Contact: Microswitch 230 V AC, 5 A, 1 CO
- Connection: Flat termination 2.3 mm

Fuse size	Article No.
000, 00, 1, 2	3NX1024

Electronic fuse monitor



- For all low-voltage fuse systems
- For monitoring all types and versions of melting fuses that cannot be equipped with a fault signal contact
- Can be used in asymmetric systems afflicted with harmonics and regenerative feedback motors
- Signal also for disconnected loads

U_e AC	I_n	U_c	Article No.
230 V	4 A	3 AC 380 ... 415 V	5TT3170

Electronic fuse monitoring for remote display of tripped fuses



- Remote display by auxiliary contact (1 CO)
- Local detection by integrated LED
- For all sizes
- For 3KF LV HRC and 3KF SITOR

U_e AC	I_n	U_c	Article No.
230 V	1.5 A	3 AC 690 V	3KF9010-1AA00

System overview, page 7/4

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System overview, page 7/4

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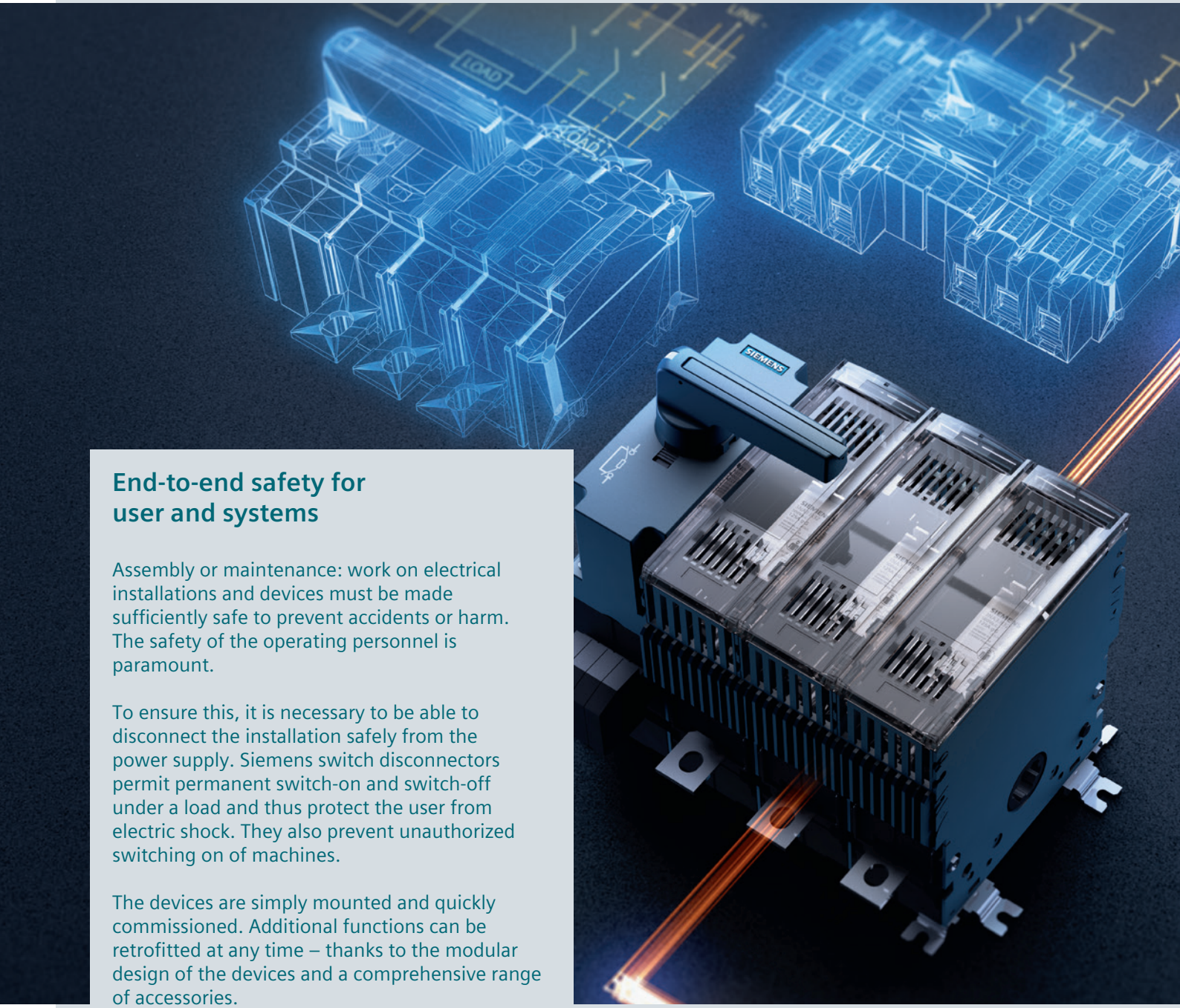

End-to-end safety for user and systems

Assembly or maintenance: work on electrical installations and devices must be made sufficiently safe to prevent accidents or harm. The safety of the operating personnel is paramount.

To ensure this, it is necessary to be able to disconnect the installation safely from the power supply. Siemens switch disconnectors permit permanent switch-on and switch-off under a load and thus protect the user from electric shock. They also prevent unauthorized switching on of machines.

The devices are simply mounted and quickly commissioned. Additional functions can be retrofitted at any time – thanks to the modular design of the devices and a comprehensive range of accessories.

Convenient ordering processes and fast delivery optimize stock management and reduce the time and money expended. You can also make use of our CAx data for automated, simplified planning and configuring.

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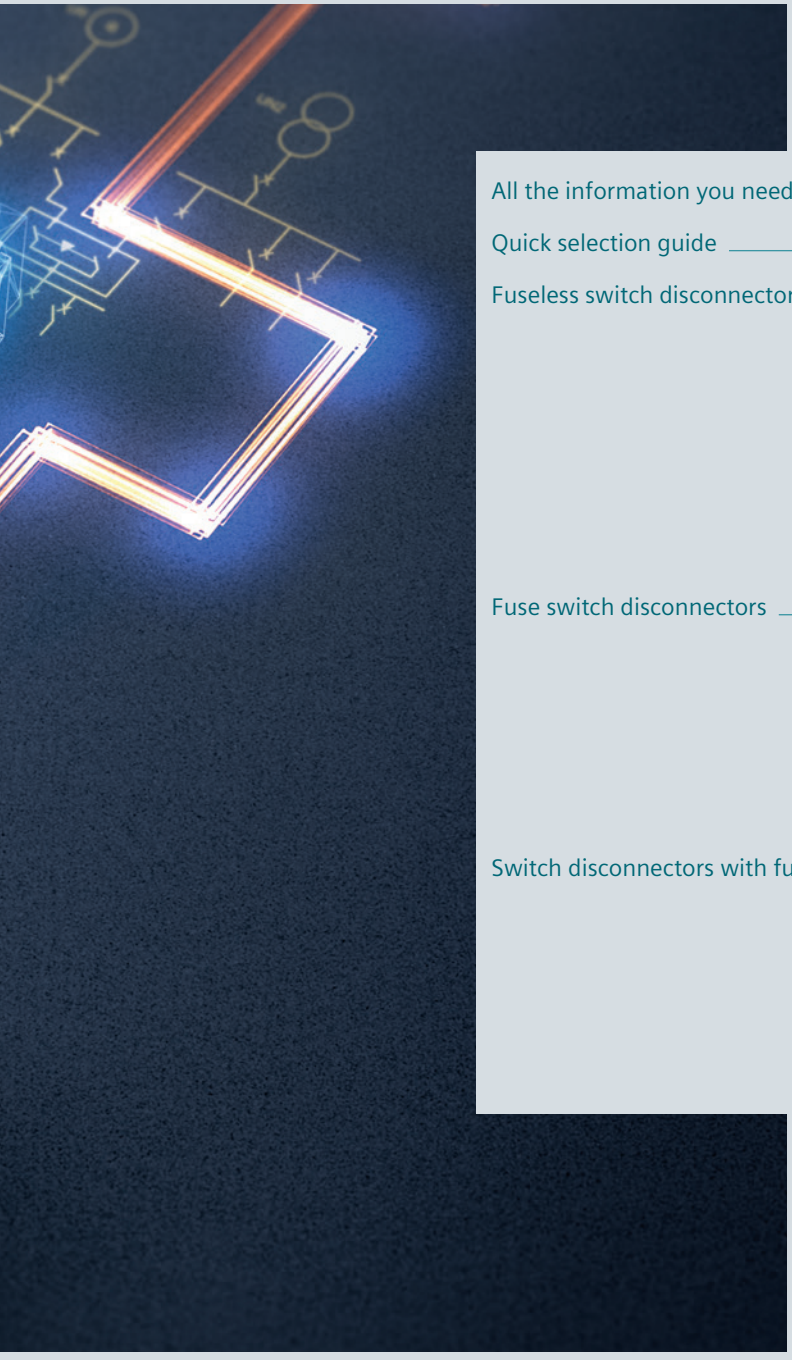
Switch Disconnectors



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- 3LD switch disconnectors 8/10
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Fuse switch disconnectors 8/80

- 3NP1 fuse switch disconnectors 8/82
- 3NP5 fuse switch disconnectors 8/96
- 3NJ4 fuse switch disconnectors 8/100
- 5SG76 fuse switch disconnectors 8/112

Switch disconnectors with fuses 8/114

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- 3KF switch disconnectors with fuses 8/118
- 3NJ62 switch disconnectors with fuses 8/134
- 5SG switch disconnectors with fuses 8/146

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Information + ordering

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Information to get you started

For information about switch disconnectors, please visit our website
www.siemens.com/switching-devices

Your product in detail

The Siemens Industry Online Support portal provides comprehensive information
www.siemens.com/lowvoltage/product-support

- Technical basic information – Switch disconnectors and transfer switching equipment (109763354)

The relevant tender specifications can be found at
www.siemens.com/lowvoltage/tenderspecifications

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Configurators

Exactly the right switch disconnector for your application

The configurator reduces the time and effort required in the planning and ordering process, and allows for individual adaptations.
Configure your 3NJ62 switch disconnector at
www.siemens.com/lowvoltage/3nj62-configurator
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Choose the right SITOR semiconductor fuse for your application
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Direct forwarding to the individual products in the Industry Mall by clicking on the Article No. in the catalog or by entering this web address incl. Article No.
www.siemens.com/product?Article No.

You will find order support for the electrical wholesale trade carrying fast-selling items in the Siemens Industry Online Support at
www.siemens.com/lowvoltage/catalogs

- Order support – 3KD switch disconnectors – End-to-end safety for user and systems (109750228)
- Order support – 3LD2 main control and EMERGENCY-STOP-switching equipment – End-to-end safety for user and systems (109755626)
- Order support – 3NP1 fuse switch disconnectors – End-to-end safety for user and systems (109755624)
- Order support – 3KF switch disconnectors with fuses – End-to-end safety for user and systems (109750229)
- Order support – 3NJ6 switch disconnectors with fuses – End-to-end safety for user and systems (109755619)

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… can be found in our online services

Commissioning + operation

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- Operating instructions
- Certificates

Engineering data for CAD or CAE systems are available in the CAx Download Manager at
www.siemens.com/lowvoltage/cax

Manuals

Manuals are available for downloading in Siemens Industry Online Support at
www.siemens.com/lowvoltage/manuals

- Configuration manual – Switch disconnectors (109769744)
- Configuration manual – Fuse systems (45314810)
- Configuration manual – Transfer switching equipment and load transfer switches (109769745)
- Configuration manual – Busbar systems (109769746)
- System manual – SENTRON 3NJ62 In-Line Plug-In switch disconnectors with fuses (31753460)
- Equipment manual – 3KD switch disconnector (109758120)
- System manual – SENTRON 3NP1 fuse switch disconnector (33515690)

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Technical overview – Switch disconnectors

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This page provides you with comprehensive information and links on switch disconnectors
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Quick selection guide

Load switching devices for all applications



Fuseless switch disconnectors [3]

Functional switching [1]








	Type	3LD3	3LD2	3LD5 UL new	3KD	3VA	5TE
	Rated current I_n	16 ... 63 A	16 ... 250 A	30 ... 160 A	16 ... 2000 A	63 ... 630 A	100 ... 200 A
	Short-circuit current max.	6 kA	50 kA	50 kA	100 kA	110 kA [5]	33 kA
Selection acc. to utilization category	**AC max.**	AC-3	AC-3	AC-3	AC-23A	AC-23A	AC-23A
	DC max.	–	DC-22A	–	DC-23A	DC-23A (up to 250 A)	DC-23A
	Suitable fuses	–	–	–	–	–	–
Types of mounting	**Floor mounting**	■	■	■	■	■	–
	Mounting on a standard mounting rail	■	■ (up to 125 A)	■ (up to 63 A)	■ (up to 250 A)	■ (up to 160 A)	■
	Front mounting (e.g. in panel door)	■	■	■	–	–	–
	Mounting on busbar systems (spacing of the busbars)	–	–	–	–	■	–
	Draw-out technology	–	–	–	–	■	–
Methods of operation	**Manual from the front**	■	■	■	■	■	■
	Manual from the side	–	–	–	■	■	–
	Remote-controllable	–	–	–	–	■	–
Number of poles	**1-pole**	–	–	–	–	–	–
	2-pole	–	–	–	–	–	■
	3-pole	■	■	■	■	■	■
	4-pole	■	■	■	■	■	■
	6-pole	–	■	–	■	–	–
Switching function	**All poles**	■	■	■	■	■	■
	Individual poles switchable	–	–	–	–	–	–
	More information		from page 8/6			from page 2/1	from page 8/6

[1] According to DIN VDE 0100-200, functional switching is an operation intended to switch on or off or vary the supply of electric energy to an electrical installation or parts of it for normal operating purposes.

[2] Devices for occasional switching usually have a substantially lower electrical endurance and are switched no more than 1× per minute in the tests.

[3] Pure switching without protection function

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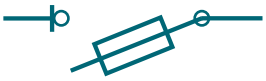

Fuse switch disconnectors [4]

Occasional switching [2]



3NP1	3NP5	3NJ4	5SG76
160 ... 630 A	160 ... 630 A	160 ... 1600 A	16 A
120 kA	100 kA	120 kA	50 kA
AC-23B	AC-23B	AC-23B	AC-22A
DC-23B	DC-23B	–	–
IEC NH	IEC NH	IEC NH	Neozed
■	■	–	–
■	–	–	■
–	–	–	–
40/60 mm	40/60 mm	60/100/185 mm	–
–	–	–	–
■	■	■	■
–	–	–	–
–	–	–	–
■	–	–	■
■	–	–	■
■	■	■	■
■	–	–	■
–	–	–	–
■	■	■	■
–	–	■	–

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Switch disconnectors with fuse [4]

Functional switching [1]



3KF NH	3KF SITOR	3NJ62	5SG71/72
32 ... 800 A	32 ... 800 A	63 ... 630 A	63 A
100 kA	100 kA	100 kA	50 kA
AC-23A	AC-23A	AC-23B	AC-23A
DC-23A	DC-23A	DC-23B	DC-22B
IEC NH	IEC LV HRC, optimized for semiconductor protection	IEC NH / BS	–
■	■	–	–
■	■	–	–
–	–	–	–
–	–	185 mm	60 mm
–	–	■	–
■	■	■	■
■	■	–	–
–	–	■	–
–	–	–	■
–	–	■	■
■	■	■	■
■	■	■	■
–	–	–	–
■	■	■	■
–	–	–	–

from page 8/114

[4] The suitable fuses protect persons, motors, installations and generators against short circuit and overload

[5] With a line-side fuse for 415 V

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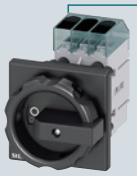
Fuseless switch disconnectors

Quick selection guide







			3LD3					3LD2		
Type			**3LD30**	**3LD31**	**3LD32**	**3LD33**	**3LD34**	**3LD20**	**3LD21**	**3LD22**
General technical specifications acc. to IEC 60947-3										
General technical specifications										
Rated uninterrupted current I_u		A	16	25	32	40	63	16	25	32
Rated operational voltage U_e	At 50/60 Hz AC	V			690				690	
	At DC – 2 conducting paths in series	V			–				–	
	At DC – 3 conducting paths in series	V			–				–	
	At DC – 4 conducting paths in series	V			–				–	
Operating and short-circuit behavior										
Rated operational current I_e [1]	At AC-20A | AC-20B at 1000 V	A	–	–	–	–	–	–	–	–
	At AC-21A | AC-21B at 400 V	A	16	25	32	40	63	16	25	32
	At AC-21A | AC-21B at 690 V	A	16	25	32	40	63	16	25	32
	At AC-22A | AC-22B at 400 V	A	16	20	22	36	43	16	25	32
	At AC-22A | AC-22B at 690 V	A	9	11	13	17	22	16	25	32
	At AC-22A | AC-22B at 1000 V	A	–	–	–	–	–	–	–	–
	At AC-23A | AC-23B at 400 V	A	16	20	22	36	43	16	20	22
	At AC-23A | AC-23B at 690 V	A	9	11	13	17	22	9	11	13
	At DC-20A | DC-20B at 1000 V	A	–	–	–	–	–	–	–	–
	At DC-21A | DC-21B at 110 V	A	–	–	–	–	–	–	–	–
	At DC-21A | DC-21B at 220 V	A	–	–	–	–	–	–	–	–
	At DC-21A | DC-21B at 440 V	A	–	–	–	–	–	–	–	–
	At DC-22A | DC-22B at 220 V	A	–	–	–	–	–	–	–	–
	At DC-22A | DC-22B at 440 V	A	–	–	–	–	–	–	–	–
	At DC-23A | DC-23B at 220 V	A	–	–	–	–	–	–	–	–
	At DC-23A | DC-23B at 440 V	A	–	–	–	–	–	–	–	–
Motor switching capacity	At AC-23A | AC-23B at 400 V	kW	7.5	9.5	11.5	18.5	22	7.5	9.5	11.5
	At AC-23A | AC-23B at 690 V	kW	7.5	9	11.5	15	18.5	7.5	9.5	11.5
	At AC-3 | bei 400 V	kW	5.5	7.5	9.5	11.5	18.5	5.5	7.5	9.5
	At AC-3 | bei 690 V	kW	5.5	7.5	9.5	11.5	15	5.5	7.5	9.5
Rated short-time withstand current I_{cw}	At 690 V AC (t=1 s)	kA	0.5	0.5	0.5	1	1	0.34	0.64	0.64
	At 1000 V AC (t=1 s)	kA	–	–	–	–	–	–	–	–
Rated conditional short-circuit current with upstream fuse	At 400/415 V AC	kA	6	6	6	6	6	50	50	50
	At 690 V AC	kA	6	6	6	6	6	50	50	50
Degree of protection										
Maximum achievable IP degree of protection (with a rotary operating mechanism)					IP65				IP65	
General technical specifications acc. to UL										
General technical specifications										
Certification according to UL standard					UL 508				UL 508	
I_n acc. to UL 508/UL60947-4-1 | UL489		A	16|–	25|–	32|–	40|–	63|–	16|–	25|–	32|–
U_e acc. to UL 508/UL60947-4-1 | UL489		V AC			600|–				600|–	
Operating and short-circuit behavior										
Operational power, three-phase	At 480 V	hp	7.5	10	20	20	25	7.5	10	20
	At 600 V	hp	10	15	20	20	30	10	15	20
Short circuit current rating (SCCR)	At 480 V | at 600 V	kA			5|5			5|5	5|5	5|5
Upstream fuse according to UL					RK5				RK5	
More information										
Catalog LV 10 – 10/2020					see page 8/10				see page 8/20	

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3LD2					3LD5 UL new					5TE			
													
3LD25	**3LD27**	**3LD28**	**3LD23**	**3LD24**	**3LD50**	**3LD52**	**3LD54**	**3LD56**	**3LD58**	**5TE1.1**	**5TE1.2**	**5TE1.3**	**5TE1.4**
63	100	125	160	250	32	63	100	125	160	100	125	160	200
		690					690			690	690	690	690
		–					–			110	110	110	110
		–					–			–	–	–	–
		–					–			220	220	220	220
–	–	–	–	–	–	–	–	–	–	–	–	–	–
63	100	125	160	250	32	63	100	125	160	100	100	160	200
63	100	125	160	250	32	63	100	125	160	100	100	160	200
63	100	125	140	230	32	63	100	125	160	–	–	–	–
63	100	125	140	230	32	63	100	125	160	–	–	–	–
–	–	–	–	–	–	–	–	–	–	–	–	–	–
43	70	80	132	224	32	63	100	125	160	80	80	125	125
22	34	39	47	58	22	39	39	47	58	40	40	63	80
–	–	–	–	–	–	–	–	–	–	–	–	–	–
–	–	–	–	–	–	–	–	–	–	100	100	160	160
–	–	–	–	–	–	–	–	–	–	100	100	160	160
–	–	–	–	–	–	–	–	–	–	100	100	160	160
–	–	–	–	–	–	–	–	–	–	–	–	–	–
–	–	–	–	–	–	–	–	–	–	–	–	–	–
–	–	–	–	–	–	–	–	–	–	–	–	–	–
–	–	–	–	–	–	–	–	–	–	100	100	160	160
22	37	45	75	132	15	30	45	55	75	44	44	69	88
18.5	30	37	45	55	18.5	37	37	45	55	36	36	60	76
18.5	30	37	50	110	15	30	45	55	75	–	–	–	–
15	22	30	37	45	15	30	30	37	45	–	–	–	–
1.26	2	2	4	4	1.26	2	4	4	4	2.5	2.5	3	3
–	–	–	–	–	–	–	–	–	–				
50	50	25	50	50	50	50	50	50	50	50	50	50	50
50	50	25	50	50	50	50	50	50	30	33	33	33	33
		IP65					IP65				No info.		
		UL 508					UL60947-4-1 / UL489				UL 508		
63|–	100|–	125|–	160|–	250|–	30|30	60|60	100|100	125|125	150|150	–	80|–	100|–	125|–
		600|–					480|480			–		480|–	
40	60	75	75	100	20	30	60	75	100	–	20	15	15
50	75	100	50	75	–	–	–	–	–	–	–	–	–
5|5	10|10	10|10	10|10	10|10	50|–	65|–	65|–	65|–	50|–	–	50|–	50|–	50|–
		RK5			J|CC	J	J	J	J	–	J	J	J
		see page 8/20					see page 8/52				see page 8/78		

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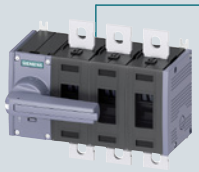
Fuseless switch disconnectors

Quick selection guide



3KD



Type			3KD 01..–.K	3KD 02..–.K	3KD 03..–.K	3KD 03..–.L	3KD 04..–.L	3KD 05..–.L	3KD 06..–.L	3KD 16	3KD 22	3KD 26	3KD 28..–M.
General technical specifications acc. to IEC 60947-3													
General technical specifications													
Rated uninterrupted current I_u		A	16	32	63	63	80	100	125	16	32	63	80
Rated operational voltage U_e	At 50/60 Hz AC	V	690	690	415	690	690	690	690	1000	1000	1000	1000
	At DC – 2 conducting paths in series	V	–	–	–	–	–	–	–	220	220	220	220
	At DC – 3 conducting paths in series	V	–	–	–	–	–	–	–	440	440	440	440
	At DC – 4 conducting paths in series	V	–	–	–	–	–	–	–	–	–	–	–
Operating and short-circuit behavior													
Rated operational current I_e [1]	At AC-20A | AC-20B at 1000 V	A	–	–	–	–	–	–	–	16	32	63	80
	At AC-21A | AC-21B at 400 V	A	16	32	63	63	80	100	125	16	32	63	80
	At AC-21A | AC-21B at 690 V	A	16	32	–	63	80	100	125	16	32	63	80
	At AC-22A | AC-22B at 400 V	A	16	32	63	63	80	100	125	16	32	63	80
	At AC-22A | AC-22B at 690 V	A	16	32	–	63	80	100	125	16	32	63	80
	At AC-22A | AC-22B at 1000 V	A	–	–	–	–	–	–	–	16	32	63	80
	At AC-23A | AC-23B at 400 V	A	16	32	63	63	75	80	90	16	32	63	80
	At AC-23A | AC-23B at 690 V	A	14	17	–	22	30	35	39	16	32	63	80
	At DC-20A | DC-20B at 1000 V	A	–	–	–	–	–	–	–	16	32	63	80
	At DC-21A | DC-21B at 110 V	A	–	–	–	–	–	–	–	16	32	63	80
	At DC-21A | DC-21B at 220 V	A	–	–	–	–	–	–	–	16	32	63	80
	At DC-21A | DC-21B at 440 V	A	–	–	–	–	–	–	–	16	32	63	80
	At DC-22A | DC-22B at 220 V	A	–	–	–	–	–	–	–	16	32	63	80
	At DC-22A | DC-22B at 440 V	A	–	–	–	–	–	–	–	16	32	63	80
	At DC-23A | DC-23B at 220 V	A	–	–	–	–	–	–	–	16	32	63	80
	At DC-23A | DC-23B at 440 V	A	–	–	–	–	–	–	–	16	32	63	80
Motor switching capacity	At AC-23A | AC-23B at 400 V	kW	7,5	15	30	30	37	45	45	7,5	15	30	45
	At AC-23A | AC-23B at 690 V	kW	11	15	–	18,5	22	30	30	11	30	55	75
	At AC-3 | bei 400 V	kW	–	–	–	–	–	–	–	–	–	–	–
	At AC-3 | bei 690 V	kW	–	–	–	–	–	–	–	–	–	–	–
Rated short-time withstand current I_{cw}	At 690 V AC (t=1 s)	kA	1,26	1,26	1,26 [1]	2,5	2,5	2,5	2,5	3	3	3	3
	At 1000 V AC (t=1 s)	kA	–	–	–	–	–	–	–	3	3	3	3
Rated conditional short-circuit current with upstream fuse	At 400/415 V AC	kA	50	50	50	50	50	50	50	100	100	100	100
	At 690 V AC	kA	50	50	–	50	50	50	20	100	100	100	100
Degree of protection													
Maximum achievable IP degree of protection (with a rotary operating mechanism)			IP65										
General technical specifications acc. to UL													
General technical specifications													
Certification according to UL standard			–										
I_n acc. to UL 508/UL60947-4-1 | UL489		A	–										
U_e acc. to UL 508/UL60947-4-1 | UL489		AC V	–										
Operating and short-circuit behavior													
Operational power, three-phase	At 480 V	hp	–										
	At 600 V	hp	–										
Short circuit current rating (SCCR)	At 480 V | at 600 V	kA	–										
Fuse type			–										
More information													
Catalog LV 10 – 10/2020			see page 8/62										

[1] Applies to AC 415 V

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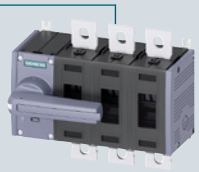
3KD



	3KD 28..–N	3KD 30..–M.	3KD 30..–N.	3KD 32	3KD 34	3KD 36..–.N	3KD 36..–.P	3KD 38..–N.	3KD 38..–P.	3KD 40	3KD 42	3KD 44..–P.	3KD 44..–Q.	3KD 46	3KD 48	3KD 50..–Q.	3KD 50..–R.	3KD 52	3KD 54	3KD 56
	80	100	100	125	160	200	200	250	250	315	400	500	500	630	800	1000	1000	1250	1600	2000
	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000
	220	220	220	220	220	220	220	220	220	220	220	220	220	220	220	220	220	220	220	220
	440	440	440	440	440	440	440	440	440	440	440	440	440	440	440	440	440	440	440	440
	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
	80	100	100	125	160	200	200	250	250	315	400	500	500	630	800	1000	1000	1250	1600	2000
	80	100	100	125	160	200	200	250	250	315	400	500	500	630	800	1000	1000	1250	1600	2000
	80	100	100	125	160	200	200	200	250	315	400	400	500	630	800	1000	1000	1250	1600	2000
	80	100	100	125	160	200	200	250	250	315	400	500	500	630	800	1000	1000	1250	1600	2000
	80	100	100	125	160	160	200	200	250	315	400	400	500	630	800	1000	1000	1250	1600	2000
	80	80	100	125	160	160	200	200	250	315	400	400	500	630	800	800	1000	1250	1600	1600
	80	80	100	125	160	160	200	160	250	315	400	400	500	630	800	1000	1000	1250	1600	2000
	80	80	100	125	160	160	200	160	250	315	400	400	500	630	800	1000	1000	1250	1600	2000
	80	100	100	125	160	200	200	250	250	315	400	500	500	630	800	1000	1000	1250	1600	2000
	80	80	100	125	160	160	200	160	250	315	400	400	500	630	800	800	1000	1250	1600	1600
	80	80	100	125	160	160	200	160	250	315	400	400	500	630	800	800	1000	1250	1600	1600
	80	80	100	125	160	160	200	160	250	315	400	400	500	630	800	800	1000	1250	1600	1600
	80	80	100	125	160	160	200	160	250	315	400	400	500	630	800	800	–	–	–	–
	80	80	100	125	160	160	200	160	250	315	400	400	500	630	800	800	–	–	–	–
	80	80	100	125	160	160	200	160	250	315	400	400	500	630	800	800	–	–	–	–
	80	80	100	125	160	160	200	160	250	315	400	400	500	630	800	800	–	–	–	–
	45	45	55	55	90	90	110	90	132	160	200	200	250	355	400	560	560	710	900	1000
	75	75	90	110	110	110	185	110	250	315	315	315	500	630	800	1000	1000	1000	1000	1000
	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
	4	3	4	4	4	4	13	4	13	13	13	13	30	30	30	30	55	55	55	55
	4	3	4	4	4	4	13	4	13	13	13	13	30	30	30	30	55	55	55	55
	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	80	80	80
	80	100	80	80	80	80	80	80	80	80	80	80	80	80	80	80	80	100	100	65
	IP65																			
	–																			
	–																			
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	–																			
	see page 8/62																			

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3LD switch disconnectors

System overview of 3LD3 main control and EMERGENCY-STOP switches

Basic units for front mounting

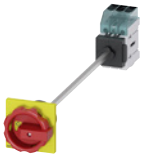

3P rotary operating mechanisms


3P knob-operated mechanisms


3P+N rotary operating mechanisms


3P+N knob-operated mechanisms

Basic units for floor mounting


3P rotary operating mechanisms


3P knob-operated mechanisms


3P+N rotary operating mechanisms


3P+N knob-operated mechanisms

Basic units for installation in distribution boards


3P knob-operated mechanisms


3P basic switches without knob-operated mechanism


3P+N knob-operated mechanisms


3P+N basic switches without knob-operated mechanism

Additional poles and auxiliary switches


N switching contacts


N/PE terminals


Auxiliary switches

Operating mechanisms



Rotary operating mechanisms for front or floor mounting (center hole)



Knob-operated mechanisms for front or floor mounting (center hole)


Door-coupling rotary operating mechanisms


Door-coupling knob-operated mechanisms

Other accessories



Terminal covers, 1 and 3-pole




Inscription labels

Note:
You will find a detailed range of accessories with the basic units.

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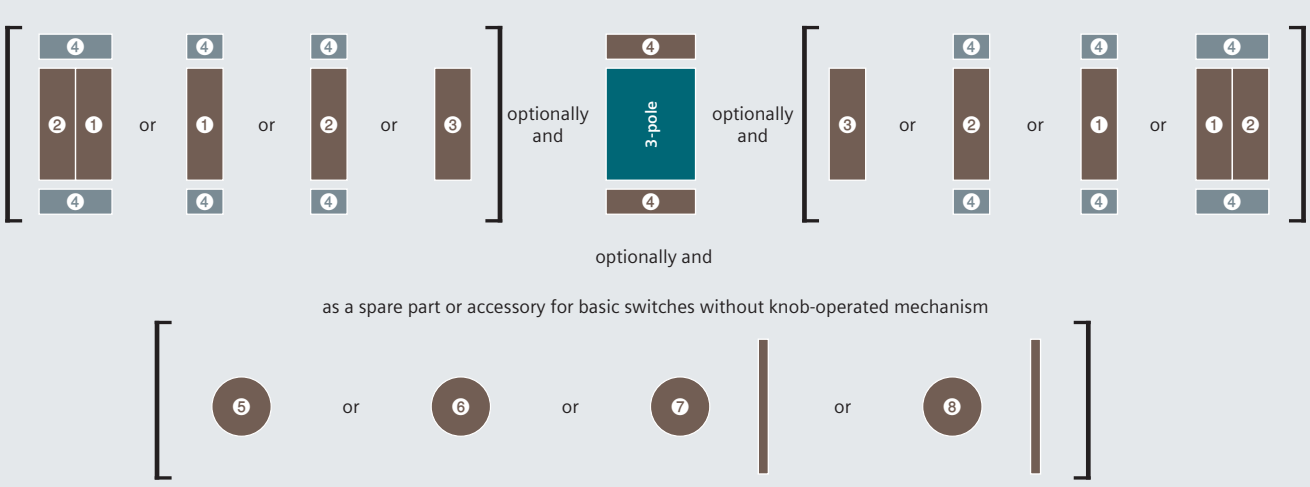
Mounting concept and accessories



Legend

❶ N switching contact [1)]
❷ N/PE terminal
❸ Auxiliary switch
❹ Terminal cover
❺ Rotary operating mechanism, center-hole mounting
❻ Knob-operated mechanism, center-hole mounting
❼ Door-coupling rotary operating mechanism, center-hole mounting
❽ Door-coupling knob-operated mechanism, center-hole mounting

[1)] The N switching contact ❶ first has to be mounted on the basic unit

8

Mounting types

You will find further information under:
sie.ag/2UlrAvy

Front mounting



The switches for front mounting are mounted on the inside of the panel door via the operating mechanism. The switches are mounted via the 22.5 mm diameter center hole.

Floor mounting



The switches for floor mounting are snapped onto 35 mm standard mounting rails according to EN 60715 or screw-mounted on mounting panels. The actuators are connected to the lower section of the switch through a door coupling, which can be released in its zero position, and a 300 mm long switch shaft. When the control cabinet door is open, the switch can be protected against inadvertent operation by removing the switch shaft from the lower section of the switch. The overall depth can be adapted to individual requirements by adjusting the switch shaft length.

Distribution board mounting



The switches for distribution board mounting are suited for operation in distribution boards and for switching inside control cabinets or distributors. They have cap and mounting dimensions acc. to DIN 43880 and can be fitted under the same cover together with miniature circuit breakers. The selector switches can be locked in their OFF position with no more than one padlock with a hasp thickness of 4 to 6 mm.

Basic switches without knob-operated mechanism



For the basic switch variant without knob-operated mechanism, the appropriate door-coupling rotary operating mechanism can be ordered separately.

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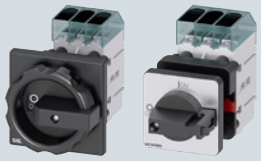
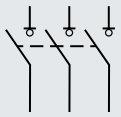
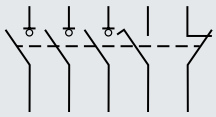
3LD switch disconnectors

3LD3 main control and EMERGENCY-STOP switches, front mounting, 6 kA_{rms}



	Operating mechanisms, black	
Number of poles	3P	
		
Uninterrupted current I_u At AC-21A, 380 ... 440 V	Operational power P At AC-23A, 380 ... 440 V	Operational power P At AC-3, 380 ... 440 V	Without auxiliary switch	1 NO + 1 NC
Rotary operating mechanisms				
16 A	7.5 kW	5.5 kW	3LD3054-0TK51	3LD3054-1TK51
25 A	9 kW	7.5 kW	3LD3154-0TK51	3LD3154-1TK51
32 A	11.5 kW	9.5 kW	3LD3254-0TK51	3LD3254-1TK51
40 A	18.5 kW	11.5 kW	3LD3354-0TK51	3LD3354-1TK51
63 A	22 kW	18.5 kW	3LD3454-0TK51	3LD3454-1TK51
Knob-operated mechanisms				
16 A	7.5 kW	5.5 kW	3LD3050-0TK11	3LD3050-1TK11
25 A	9 kW	7.5 kW	3LD3150-0TK11	3LD3150-1TK11
32 A	11.5 kW	9.5 kW	3LD3250-0TK11	3LD3250-1TK11
40 A	18.5 kW	11.5 kW	3LD3350-0TK11	3LD3350-1TK11
63 A	22 kW	18.5 kW	3LD3450-0TK11	3LD3450-1TK11

Scope of supply:
- Including terminal covers for the infeed side

Accessories

				3LD30 (16 A)	3LD31 (25 A)	3LD32 (32 A)	3LD33 (40 A)	3LD34 (63 A)
Additional poles								
	Variant	Contacts	Article No.					
	Switching contact for N conductor (4th contact)	Leading switch-on, lagging switch-off	3LD9340-0B	■	■	■	■	■
	N terminal	Through-type	3LD9340-2B	■	■	■	■	■
	PE terminal	Through-type	3LD9340-3B	■	■	■	■	■
Auxiliary switches								
		Contacts	Article No.					
		1 NO + 1 NC	3LD9340-6B	■	■	■	■	■
Rotary operating mechanisms								
		Color	Article No.					
		Black	3LD9344-4C	■	■	■	■	■
		Red/yellow	3LD9344-5C	■	■	■	■	■
Knob-operated mechanisms								
		Color	Article No.					
		Black	3LD9343-6C	■	■	■	■	■
		Red/yellow	3LD9343-7C	■	■	■	■	■

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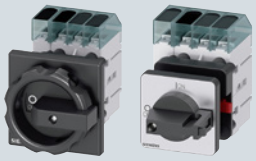
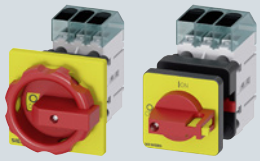
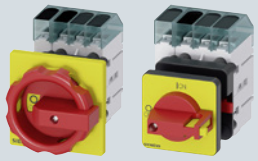
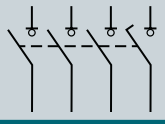
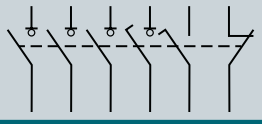
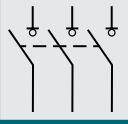
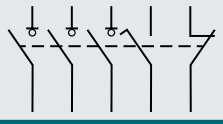
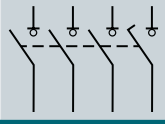
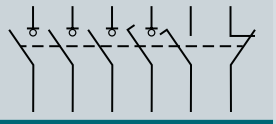
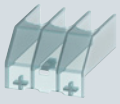




Operating mechanisms, red/yellow

3P+N		3P		3P+N	
					
Without auxiliary switch	**1 NO + 1 NC**	**Without auxiliary switch**	**1 NO + 1 NC**	**Without auxiliary switch**	**1 NO + 1 NC**
3LD3054-0TL51	3LD3054-1TL51	3LD3054-0TK53	3LD3054-1TK53	3LD3054-0TL53	3LD3054-1TL53
3LD3154-0TL51	3LD3154-1TL51	3LD3154-0TK53	3LD3154-1TK53	3LD3154-0TL53	3LD3154-1TL53
3LD3254-0TL51	3LD3254-1TL51	3LD3254-0TK53	3LD3254-1TK53	3LD3254-0TL53	3LD3254-1TL53
3LD3354-0TL51	3LD3354-1TL51	3LD3354-0TK53	3LD3354-1TK53	3LD3354-0TL53	3LD3354-1TL53
3LD3454-0TL51	3LD3454-1TL51	3LD3454-0TK53	3LD3454-1TK53	3LD3454-0TL53	3LD3454-1TL53
3LD3050-0TL11	3LD3050-1TL11	3LD3050-0TK13	3LD3050-1TK13	3LD3050-0TL13	3LD3050-1TL13
3LD3150-0TL11	3LD3150-1TL11	3LD3150-0TK13	3LD3150-1TK13	3LD3150-0TL13	3LD3150-1TL13
3LD3250-0TL11	3LD3250-1TL11	3LD3250-0TK13	3LD3250-1TK13	3LD3250-0TL13	3LD3250-1TL13
3LD3350-0TL11	3LD3350-1TL11	3LD3350-0TK13	3LD3350-1TK13	3LD3350-0TL13	3LD3350-1TL13
3LD3450-0TL11	3LD3450-1TL11	3LD3450-0TK13	3LD3450-1TK13	3LD3450-0TL13	3LD3450-1TL13

8

			3LD30 (16 A)	3LD31 (25 A)	3LD32 (32 A)	3LD33 (40 A)	3LD34 (63 A)
Terminal covers							
	• Pack of 4 units						
	Version	**Article No.**					
	For N switching contacts, N terminals or PE terminals	3LD9341-2A	■	■	■	■	■
	For 3-pole 3LD3 switch disconnectors	3LD9341-0A	■	■	■	■	■
Inscription labels							
	• Pack of 10 units						
	Inscription	**Article No.**					
	German / English (Hauptschalter / Main Switch)	3LD9346-1A	■	■	■	■	■
	French / Spanish (Interrupteur Principal / Interruptor Principal)	3LD9346-2A	■	■	■	■	■
	Without inscription	3LD9346-3A	■	■	■	■	■

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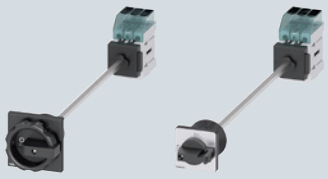
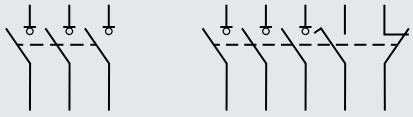
3LD switch disconnectors

3LD3 main control and EMERGENCY-STOP switches, floor mounting, 6 kA_{rms}





	Operating mechanisms, black	
Number of poles	3P	
Uninterrupted current I_u At AC-21A, 380 ... 440 V	Operational power P At AC-23A, 380 ... 440 V	Operational power P At AC-3, 380 ... 440 V	Without auxiliary switch	1 NO + 1 NC
Rotary operating mechanisms				
16 A	7.5 kW	5.5 kW	3LD3048-0TK51	3LD3048-1TK51
25 A	9 kW	7.5 kW	3LD3148-0TK51	3LD3148-1TK51
32 A	11.5 kW	9.5 kW	3LD3248-0TK51	3LD3248-1TK51
40 A	18.5 kW	11.5 kW	3LD3348-0TK51	3LD3348-1TK51
63 A	22 kW	18.5 kW	3LD3448-0TK51	3LD3448-1TK51
Knob-operated mechanisms				
16 A	7.5 kW	5.5 kW	3LD3040-0TK11	3LD3040-1TK11
25 A	9 kW	7.5 kW	3LD3140-0TK11	3LD3140-1TK11
32 A	11.5 kW	9.5 kW	3LD3240-0TK11	3LD3240-1TK11
40 A	18.5 kW	11.5 kW	3LD3340-0TK11	3LD3340-1TK11
63 A	22 kW	18.5 kW	3LD3440-0TK11	3LD3440-1TK11

Scope of supply:
- Including terminal covers for the infeed side

Mounting:
- Using screws or snap-on mounting on 35 mm mounting rails

Accessories

				3LD30 (16 A)	3LD31 (25 A)	3LD32 (32 A)	3LD33 (40 A)	3LD34 (63 A)
Additional poles								
	**Variant**	**Contacts**	**Article No.**					
	Switching contact for N conductor (4th contact)	Leading switch-on, lagging switch-off	3LD9340-0C	■	■	■	■	■
	N terminal	Through-type	3LD9340-2C	■	■	■	■	■
	PE terminal	Through-type	3LD9340-3C	■	■	■	■	■
Auxiliary switches								
		**Contacts**	**Article No.**					
		1 NO + 1 NC	3LD9340-6C	■	■	■	■	■
Rotary operating mechanisms								
	**Version**	**Color**	**Article No.**					
	Incl. funnel	Black	3LD9344-2C	■	■	■	■	■
		Red/yellow	3LD9344-3C	■	■	■	■	■
Knob-operated mechanisms								
	**Version**	**Color**	**Article No.**					
	Incl. funnel	Black	3LD9343-4C	■	■	■	■	■
		Red/yellow	3LD9343-5C	■	■	■	■	■

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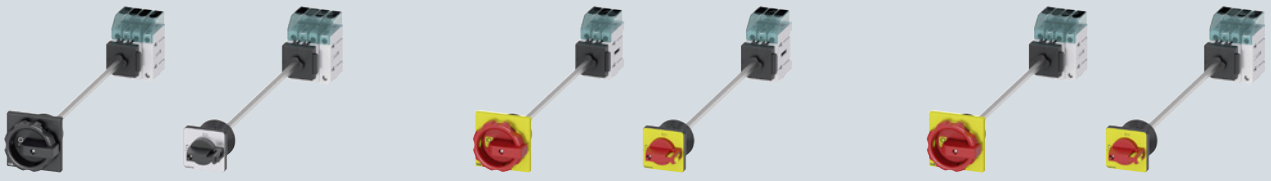
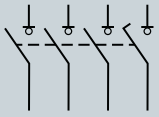
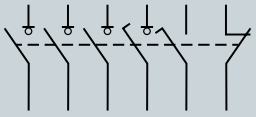
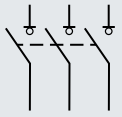
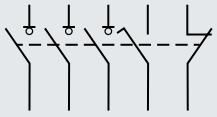
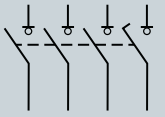
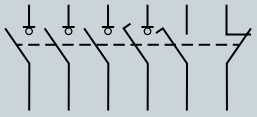
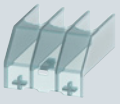


Operating mechanisms, red/yellow

3P+N		3P		3P+N	
					
Without auxiliary switch	1 NO + 1 NC	Without auxiliary switch	1 NO + 1 NC	Without auxiliary switch	1 NO + 1 NC
3LD3048-0TL51	3LD3048-1TL51	3LD3048-0TK53	3LD3048-1TK53	3LD3048-0TL53	3LD3048-1TL53
3LD3148-0TL51	3LD3148-1TL51	3LD3148-0TK53	3LD3148-1TK53	3LD3148-0TL53	3LD3148-1TL53
3LD3248-0TL51	3LD3248-1TL51	3LD3248-0TK53	3LD3248-1TK53	3LD3248-0TL53	3LD3248-1TL53
3LD3348-0TL51	3LD3348-1TL51	3LD3348-0TK53	3LD3348-1TK53	3LD3348-0TL53	3LD3348-1TL53
3LD3448-0TL51	3LD3448-1TL51	3LD3448-0TK53	3LD3448-1TK53	3LD3448-0TL53	3LD3448-1TL53
3LD3040-0TL11	3LD3040-1TL11	3LD3040-0TK13	3LD3040-1TK13	3LD3040-0TL13	3LD3040-1TL13
3LD3140-0TL11	3LD3140-1TL11	3LD3140-0TK13	3LD3140-1TK13	3LD3140-0TL13	3LD3140-1TL13
3LD3240-0TL11	3LD3240-1TL11	3LD3240-0TK13	3LD3240-1TK13	3LD3240-0TL13	3LD3240-1TL13
3LD3340-0TL11	3LD3340-1TL11	3LD3340-0TK13	3LD3340-1TK13	3LD3340-0TL13	3LD3340-1TL13
3LD3440-0TL11	3LD3440-1TL11	3LD3440-0TK13	3LD3440-1TK13	3LD3440-0TL13	3LD3440-1TL13

8

				3LD30 (16 A)	3LD31 (25 A)	3LD32 (32 A)	3LD33 (40 A)	3LD34 (63 A)
Door-coupling rotary operating mechanisms								
	**Variant**	**Color**	**Article No.**					
	Rotary operating mechanisms 66 × 66 mm	Black	3LD9344-2CA	■	■	■	■	■
		Red/yellow	3LD9344-3CA	■	■	■	■	■
	Knob-operated mechanisms 48 × 48 mm	Black	3LD9343-4CA	■	■	■	■	■
		Red/yellow	3LD9343-5CA	■	■	■	■	■
Terminal covers								
	• Pack of 4 units							
	**Version**		**Article No.**					
	For N switching contacts, N terminals or PE terminals		3LD9341-2A	■	■	■	■	■
	For 3LD3 3-pole switch disconnectors		3LD9341-0A	■	■	■	■	■
Inscription labels								
	• Pack of 10 units							
	Inscription		**Article No.**					
	German / English (Hauptschalter / Main Switch)		3LD9346-1A	■	■	■	■	■
	French / Spanish (Interrupteur Principal / Interruptor Principal)		3LD9346-2A	■	■	■	■	■
	Without inscription		3LD9346-3A	■	■	■	■	■

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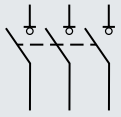
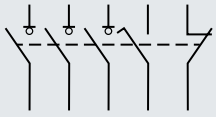
3LD switch disconnectors

3LD3 main control and EMERGENCY-STOP switches, installation in distribution boards and basic switches without direct operating mechanism, 6kA$_{rms}$

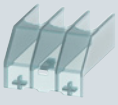


	Operating mechanisms, black	
Number of poles	3P	
		
Uninterrupted current I_u At AC-21A, 380 ... 440 V	**Operational power P At AC-23A, 380 ... 440 V**	**Operational power P At AC-3, 380 ... 440 V**	**Without auxiliary switch**	**1 NO + 1 NC**
Basic switch with masking plate and selector knob, standard rail mounting				
16 A	7.5 kW	5.5 kW	3LD3030-0TK11	3LD3030-1TK11
25 A	9 kW	7.5 kW	3LD3130-0TK11	3LD3130-1TK11
32 A	11.5 kW	9.5 kW	3LD3230-0TK11	3LD3230-1TK11
40 A	18.5 kW	11.5 kW	3LD3330-0TK11	3LD3330-1TK11
63 A	22 kW	18.5 kW	3LD3430-0TK11	3LD3430-1TK11
Basic switches without knob-operated mechanism				
16 A	7.5 kW	5.5 kW	3LD3010-0TK05	3LD3010-1TK05
25 A	9 kW	7.5 kW	3LD3110-0TK05	3LD3110-1TK05
32 A	11.5 kW	9.5 kW	3LD3210-0TK05	3LD3210-1TK05
40 A	18.5 kW	11.5 kW	3LD3310-0TK05	3LD3310-1TK05
63 A	22 kW	18.5 kW	3LD3410-0TK05	3LD3410-1TK05

Scope of supply:
- Basic switches without direct operating mechanism, incl. terminal covers for the infeed side

Mounting:
- Using screws or snap-on mounting on 35 mm mounting rails

Accessories for switches for installation in distribution boards and basic switches without knob-operated mechanism

				3LD30 (16 A)	3LD31 (25 A)	3LD32 (32 A)	3LD33 (40 A)	3LD34 (63 A)
Additional poles								
	**Variant**	**Contacts**	**Article No.**					
	Switching contact for N conductor (4th contact)	Leading switch-on, lagging switch-off	3LD9340-0C	■	■	■	■	■
	N terminal	Through-type	3LD9340-2C	■	■	■	■	■
	PE terminal	Through-type	3LD9340-3C	■	■	■	■	■
Auxiliary switches								
		**Contacts**	**Article No.**					
		1 NO + 1 NC	3LD9340-6C	■	■	■	■	■
Terminal covers								
	• Pack of 4 units							
	**Version**		**Article No.**					
	For N switching contacts, N terminals or PE terminals		3LD9341-2A	■	■	■	■	■
	For 3LD3 3-pole switch disconnectors		3LD9341-0A	■	■	■	■	■

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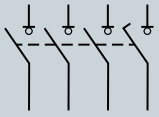
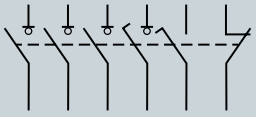
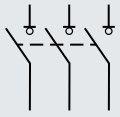
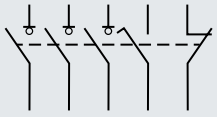
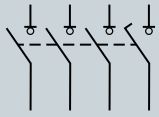
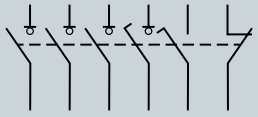
Operating mechanisms, red/yellow

3P+N		3P		3P+N	
					
Without auxiliary switch	**1 NO + 1 NC**	**Without auxiliary switch**	**1 NO + 1 NC**	**Without auxiliary switch**	**1 NO + 1 NC**
3LD3030-0TL11	3LD3030-1TL11	3LD3030-0TK13	3LD3030-1TK13	3LD3030-0TL13	3LD3030-1TL13
3LD3130-0TL11	3LD3130-1TL11	3LD3130-0TK13	3LD3130-1TK13	3LD3130-0TL13	3LD3130-1TL13
3LD3230-0TL11	3LD3230-1TL11	3LD3230-0TK13	3LD3230-1TK13	3LD3230-0TL13	3LD3230-1TL13
3LD3330-0TL11	3LD3330-1TL11	3LD3330-0TK13	3LD3330-1TK13	3LD3330-0TL13	3LD3330-1TL13
3LD3430-0TL11	3LD3430-1TL11	3LD3430-0TK13	3LD3430-1TK13	3LD3430-0TL13	3LD3430-1TL13
3LD3010-0TL05	3LD3010-1TL05	–	–	–	–
3LD3110-0TL05	3LD3110-1TL05	–	–	–	–
3LD3210-0TL05	3LD3210-1TL05	–	–	–	–
3LD3310-0TL05	3LD3310-1TL05	–	–	–	–
3LD3410-0TL05	3LD3410-1TL05	–	–	–	–

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Accessories for basic switches without operating mechanism

			3LD30 (16 A)	3LD31 (25 A)	3LD32 (32 A)	3LD33 (40 A)	3LD34 (63 A)
Rotary operating mechanisms							
	**Version**	**Color**	**Article No.**				
	Incl. funnel	Black	3LD9344-2C	■	■	■	■	■
		Red/yellow	3LD9344-3C	■	■	■	■	■
Knob-operated mechanisms							
	**Version**	**Color**	**Article No.**				
	Incl. funnel	Black	3LD9343-4C	■	■	■	■	■
		Red/yellow	3LD9343-5C	■	■	■	■	■
Door-coupling rotary operating mechanisms							
	**Variant**	**Color**	**Article No.**				
	Rotary operating mechanisms 66 × 66 mm	Black	3LD9344-2CA	■	■	■	■	■
		Red/yellow	3LD9344-3CA	■	■	■	■	■
	Knob-operated mechanisms 48 × 48 mm	Black	3LD9343-4CA	■	■	■	■	■
		Red/yellow	3LD9343-5CA	■	■	■	■	■
Inscription labels							
	• Pack of 10 units						
	Inscription		**Article No.**				
	German / English (Hauptschalter / Main Switch)		3LD9346-1A	■	■	■	■	■
	French / Spanish (Interrupteur Principal / Interruptor Principal)		3LD9346-2A	■	■	■	■	■
	Without inscription		3LD9346-3A	■	■	■	■	■

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3LD switch disconnectors

3LD3 main control and EMERGENCY-STOP switches, accessories

				3LD30 (16 A)	3LD31 (25 A)	3LD32 (32 A)	3LD33 (40 A)	3LD34 (63 A)
Switching contacts for N conductor (4th contact)								
	Version	**Contacts**	**Article No.**					
	For front mounting	Leading switch-on, lagging switch-off	3LD9340-0B	■	■	■	■	■
	For floor mounting, installation in distribution boards and basic switches without knob-operated mechanism	Leading switch-on, lagging switch-off	3LD9340-0C	■	■	■	■	■
N terminals								
	Version	**Contacts**	**Article No.**					
	For front mounting	Through-type	3LD9340-2B	■	■	■	■	■
	For floor mounting, installation in distribution boards and basic switches without knob-operated mechanism	Through-type	3LD9340-2C	■	■	■	■	■
PE terminals								
	Version	**Contacts**	**Article No.**					
	For front mounting	Through-type	3LD9340-3B	■	■	■	■	■
	For floor mounting, installation in distribution boards and basic switches without knob-operated mechanism	Through-type	3LD9340-3C	■	■	■	■	■
Auxiliary switches								
	Version	**Contacts**	**Article No.**					
	For front mounting	1 NO + 1 NC	3LD9340-6B	■	■	■	■	■
	For floor mounting, installation in distribution boards and basic switches without knob-operated mechanism	1 NO + 1 NC	3LD9340-6C	■	■	■	■	■

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				3LD30 (16 A)	3LD31 (25 A)	3LD32 (32 A)	3LD33 (40 A)	3LD34 (63 A)
Rotary operating mechanisms								
	Version	**Color**	**Article No.**					
	For front mounting, without funnel	Black	3LD9344-4C	■	■	■	■	■
		Red/yellow	3LD9344-5C	■	■	■	■	■
	For floor mounting and basic switches without knob-operated mechanism, with funnel	Black	3LD9344-2C	■	■	■	■	■
		Red/yellow	3LD9344-3C	■	■	■	■	■
Knob-operated mechanisms								
	Version	**Color**	**Article No.**					
	For front mounting, without funnel	Black	3LD9343-6C	■	■	■	■	■
		Red/yellow	3LD9343-7C	■	■	■	■	■
	For floor mounting and basic switches without knob-operated mechanism, with funnel	Black	3LD9343-4C	■	■	■	■	■
		Red/yellow	3LD9343-5C	■	■	■	■	■
Door-coupling rotary operating mechanisms								
	Version	**Variant**	**Color**	**Article No.**					
	For floor mounting and basic switches without knob-operated mechanism	Rotary operating mechanisms 66 × 66 mm	Black	3LD9344-2CA	■	■	■	■	■
			Red/yellow	3LD9344-3CA	■	■	■	■	■
		Knob-operated mechanisms 48 × 48 mm	Black	3LD9343-4CA	■	■	■	■	■
			Red/yellow	3LD9343-5CA	■	■	■	■	■
Terminal covers								
	• For front mounting, floor mounting, installation in distribution boards and basic switches without knob-operated mechanism • Pack of 4 units							
	Number of poles		**Article No.**					
	1-pole		3LD9341-2A	■	■	■	■	■
	3-pole		3LD9341-0A	■	■	■	■	■
Inscription labels								
	• Pack of 10 units • Not for installation in distribution boards							
	Inscription		**Article No.**					
	German / English (Hauptschalter / Main Switch)		3LD9346-1A	■	■	■	■	■
	French / Spanish (Interrupteur Principal / Interruptor Principal)		3LD9346-2A	■	■	■	■	■
	Without inscription		3LD9346-3A	■	■	■	■	■

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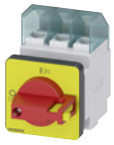
3LD switch disconnectors

System overview of 3LD2 switch disconnectors

Basic units for front mounting


3P rotary operating mechanisms

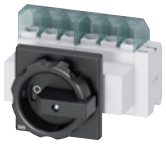

3P knob-operated mechanisms (3LD23 / 3LD24)


3P knob-operated mechanisms


3P+N rotary operating mechanisms


3P+N knob-operated mechanisms (3LD23 / 3LD24)


3P+N knob-operated mechanisms


6P rotary operating mechanisms

Basic units for floor mounting


3P rotary operating mechanisms


3P knob-operated mechanisms (3LD23 / 3LD24)


3P knob-operated mechanisms, defeatable


3P+N rotary operating mechanisms


3P+N knob-operated mechanisms (3LD23 / 3LD24)


3P+N knob-operated mechanisms, defeatable


6P rotary operating mechanisms

Basic units for installation in distribution boards/enclosures, DC


3P knob-operated mechanisms


3P+N knob-operated mechanisms


8P DC isolators

Additional poles and auxiliary switches


N switching contacts


N/PE terminals (through-type)


Auxiliary switches (standard version)


Auxiliary switch for mounting on the front new

Operating mechanisms


Rotary operating mechanisms for 4-hole and center-hole mounting




Knob-operated mechanisms (3LD23 / 3LD24)


Switching shafts


Coupling pieces without ON-lock


Assembly tools for center-hole mounting

Other accessories


Terminal covers, 1-pole


Terminal covers, 3 and 4-pole



Inscription labels (with and without inscription)

Note:
You will find a detailed range of accessories with the basic units.

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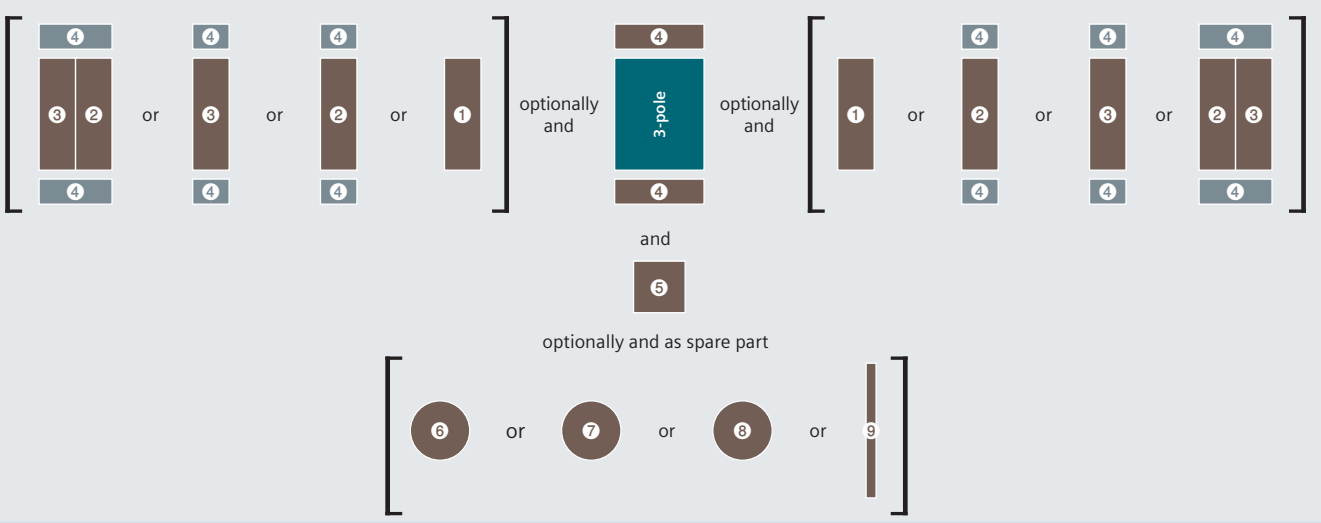
Mounting concept and accessories



Legend

❶ Auxiliary switch
❷ N switching contact [1)]
❸ N/PE terminal
❹ Terminal cover
❺ Auxiliary switch for mounting on the front [2)]
❻ Rotary operating mechanism, center-hole mounting
❼ Rotary operating mechanism, four-hole mounting
❽ Knob-operated mechanism, four-hole mounting
❾ Switching shaft (300 or 600)

[1)] The N switching contact ❷ first has to be mounted on the basic unit
[2)] Can only be used with four-hole front mounting and floor mounting

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Mounting types

You will find further information under:
sie.ag/2UlrAvy

Front mounting



The switches for front mounting are mounted on the inside of the panel door via the operating mechanism. In addition to the 4-hole fastening of the handle, up to 63 A (3LD25) fastening with the 22.5 mm diameter center hole can also be chosen.

Floor mounting



The switches for floor mounting up to 125 A (3LD28) are snapped onto 35 mm standard mounting rails according to EN 60715 or screw-mounted on mounting panels. The switches for 160 and 250 A (3LD23/3LD24) are exclusively screwed onto mounting panels.
The actuators are connected to the lower section of the switch through a door coupling, which can be released in its zero position, and a 300 mm long switch shaft. When the control cabinet door is open, the switch can be protected against inadvertent operation by removing the switch shaft from the lower section of the switch. The overall depth can be adapted to individual requirements by adjusting the switch shaft length.

Distribution board mounting



The switches for distribution board mounting are suited for operation in distribution boards and for switching inside control cabinets or distributors. Up to 125 A (3LD28), they have cap and mounting dimensions acc. to DIN 43880 and can be fitted under the same cover together with miniature circuit breakers.

DC isolators



The DC isolators in the enclosure are suitable for disconnecting loads of up to 800 V DC due to their 8-pole design. To provide additional safety, the isolators can be locked in the 0 position.

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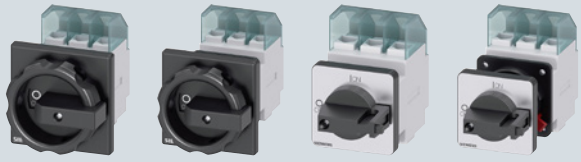
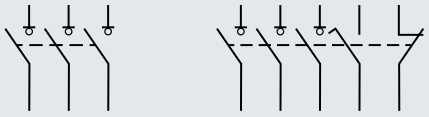
3LD switch disconnectors

3LD2 main control switches, front mounting, 25 ... 50 kA_{eff}



Operating mechanisms, black

Number of poles **3P**



Uninterrupted current I_u At AC-21A, 380 ... 440 V	Operational power P At AC-23A, 380 ... 440 V	Operational power P At AC-3A, 380 ... 440 V	Without auxiliary switch	1 NO + 1 NC (standard version)
Rotary operating mechanism, four-hole mounting				
16 A	7.5 kW	5.5 kW	3LD2003-0TK51	3LD2003-1TP51
25 A	9.5 kW	7.5 kW	3LD2103-0TK51	3LD2103-1TP51
32 A	11.5 kW	9.5 kW	3LD2203-0TK51	3LD2203-1TP51
63 A	22 kW	18.5 kW	3LD2504-0TK51	3LD2504-1TP51
100 A	37 kW	30 kW	3LD2704-0TK51	3LD2704-1TP51
125 A	45 kW	37 kW	3LD2804-0TK51	3LD2804-1TP51
160 A	75 kW	50 kW	3LD2305-0TK11	3LD2305-0TK11 + 3LD9200-5B
250 A	132 kW	110 kW	3LD2405-0TK11	3LD2405-0TK11 + 3LD9200-5B
Rotary operating mechanism, center-hole mounting Ø 22.5 mm				
16 A	7.5 kW	5.5 kW	3LD2054-0TK51	3LD2054-1TP51
25 A	9.5 kW	7.5 kW	3LD2154-0TK51	3LD2154-1TP51
32 A	11.5 kW	9.5 kW	3LD2254-0TK51	3LD2254-0TK51 + 3LD9200-5B
63 A	22 kW	18.5 kW	3LD2555-0TK51	3LD2555-0TK51 + 3LD9200-5B
Knob-operated mechanism, four-hole mounting				
16 A	7.5 kW	5.5 kW	3LD2022-0TK11	3LD2022-0TK11 + 3LD9200-5B
25 A	9.5 kW	7.5 kW	3LD2122-0TK11	3LD2122-0TK11 + 3LD9200-5B
32 A	11.5 kW	9.5 kW	3LD2222-0TK11	3LD2222-0TK11 + 3LD9200-5B
Knob-operated mechanism, center-hole mounting Ø 22.5 mm				
16 A	7.5 kW	5.5 kW	3LD2050-0TK11	3LD2050-0TK11 + 3LD9200-5B
25 A	9.5 kW	7.5 kW	3LD2150-0TK11	3LD2150-0TK11 + 3LD9200-5B
32 A	11.5 kW	9.5 kW	3LD2250-0TK11	3LD2250-0TK11 + 3LD9200-5B

Scope of supply:
- Including terminal covers for the infeed side

Accessories, see page 8/26

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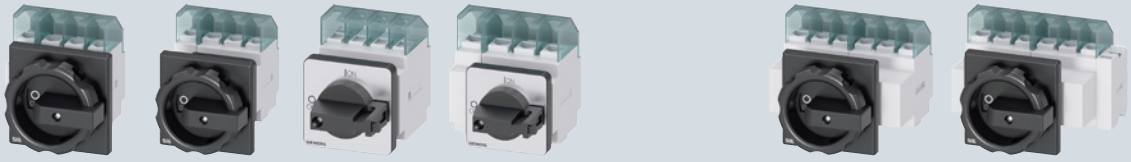
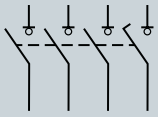
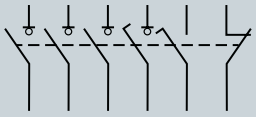
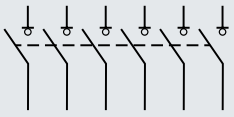
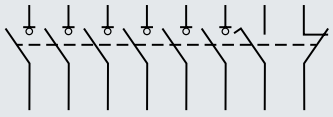


3P+N		6P	
			
Without auxiliary switch	**1 NO + 1 NC (standard version)**	**Without auxiliary switch**	**1 NO + 1 NC (standard version)**
3LD2003-1TL51	3LD2003-2EP51	–	–
3LD2103-1TL51	3LD2103-2EP51	3LD2103-3VK51	3LD2103-4VP51
3LD2203-1TL51	3LD2203-1TL51 + 3LD9200-5B	3LD2203-3VK51	3LD2203-3VK51 + 3LD9200-5B
3LD2504-1TL51	3LD2504-1TP51 + 3LD9250-0BA	3LD2504-3VK51	3LD2504-3VK51 + 3LD9200-5B
3LD2704-0TK51 + 3LD9280-0B	3LD2704-0TK51 + 3LD9280-0B + 3LD9200-5B	–	–
3LD2804-0TK51 + 3LD9280-0B	3LD2804-0TK51 + 3LD9280-0B + 3LD9200-5B	–	–
3LD2305-1TL11	3LD2305-1TL11 + 3LD9200-5B	3LD2305-3VK11	3LD2305-3VK11 + 3LD9200-5B
3LD2405-1TL11	3LD2405-1TL11 + 3LD9200-5B	3LD2405-3VK11	3LD2405-3VK11 + 3LD9200-5B
3LD2054-1TL51	3LD2054-2EP51	–	–
3LD2154-1TL51	3LD2154-2EP51	–	–
3LD2254-1TL51	3LD2254-1TL51 + 3LD9200-5B	–	–
3LD2555-0TK51 + 3LD9250-0BA	3LD2555-0TK51 + 3LD9250-0BA + 3LD9200-5B	–	–
3LD2022-1TL11	3LD2022-1TL11 + 3LD9200-5B	–	–
3LD2122-1TL11	3LD2122-1TL11 + 3LD9200-5B	–	–
3LD2222-0TK11 + 3LD9220-0B	3LD2222-0TK11 + 3LD9220-0B + 3LD9200-5B	–	–
3LD2050-1TL11	3LD2050-1TL11 + 3LD9200-5B	–	–
3LD2150-0TK11 + 3LD9220-0B	3LD2150-0TK11 + 3LD9220-0B + 3LD9200-5B	–	–
3LD2250-0TK11 + 3LD9220-0B	3LD2250-0TK11 + 3LD9220-0B + 3LD9200-5B	–	–

Quick selection guide, page 8/6

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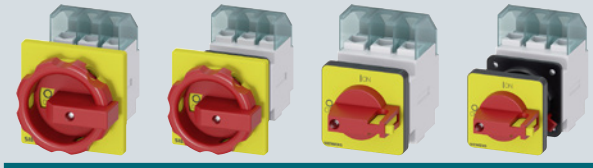
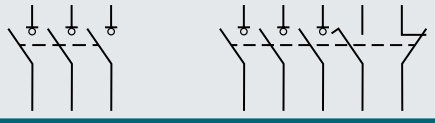
3LD switch disconnectors

3LD2 EMERGENCY-STOP switches, front mounting, 25 ... 50 kA_{eff}



Operating mechanisms, red/yellow

Number of poles **3P**



Uninterrupted current I_u At AC-21A, 380 ... 440 V	Operational power P At AC-23A, 380 ... 440 V	Operational power P At AC-3A, 380 ... 440 V	Without auxiliary switch	1 NO + 1 NC (standard version)
Rotary operating mechanism, four-hole mounting				
16 A	7.5 kW	5.5 kW	3LD2003-0TK53	3LD2003-1TP53
25 A	9.5 kW	7.5 kW	3LD2103-0TK53	3LD2103-1TP53
32 A	11.5 kW	9.5 kW	3LD2203-0TK53	3LD2203-1TP53
63 A	22 kW	18.5 kW	3LD2504-0TK53	3LD2504-1TP53
100 A	37 kW	30 kW	3LD2704-0TK53	3LD2704-1TP53
125 A	45 kW	37 kW	3LD2804-0TK53	3LD2804-1TP53
160 A	75 kW	50 kW	3LD2305-0TK13	3LD2305-0TK13 + 3LD9200-5B
250 A	132 kW	110 kW	3LD2405-0TK13	3LD2405-0TK13 + 3LD9200-5B
Rotary operating mechanism, center-hole mounting Ø 22.5 mm				
16 A	7.5 kW	5.5 kW	3LD2054-0TK53	3LD2054-1TP53
25 A	9.5 kW	7.5 kW	3LD2154-0TK53	3LD2154-1TP53
32 A	11.5 kW	9.5 kW	3LD2254-0TK53	3LD2254-0TK53 + 3LD9200-5B
63 A	22 kW	18.5 kW	3LD2555-0TK53	3LD2555-0TK53 + 3LD9200-5B
Knob-operated mechanism, four-hole mounting				
16 A	7.5 kW	5.5 kW	3LD2022-0TK13	3LD2022-0TK13 + 3LD9200-5B
25 A	9.5 kW	7.5 kW	3LD2122-0TK13	3LD2122-0TK13 + 3LD9200-5B
32 A	11.5 kW	9.5 kW	3LD2222-0TK13	3LD2222-0TK13 + 3LD9200-5B
Knob-operated mechanism, center-hole mounting Ø 22.5 mm				
16 A	7.5 kW	5.5 kW	3LD2050-0TK13	3LD2050-0TK13 + 3LD9200-5B
25 A	9.5 kW	7.5 kW	3LD2150-0TK13	3LD2150-0TK13 + 3LD9200-5B
32 A	11.5 kW	9.5 kW	3LD2250-0TK13	3LD2250-0TK13 + 3LD9200-5B

Scope of supply:
- Including terminal covers for the infeed side

Accessories, see page 8/26

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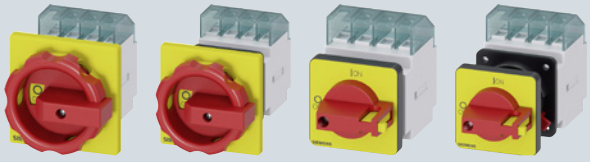
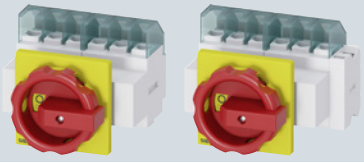
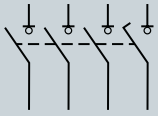
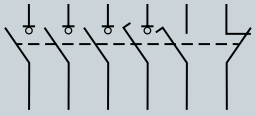
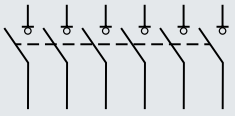
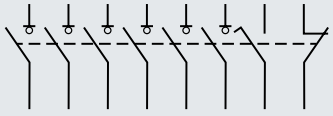




3+N		6P	
			
Without auxiliary switch	**1 NO + 1 NC (standard version)**	**Without auxiliary switch**	**1 NO + 1 NC (standard version)**
3LD2003-1TL53	3LD2003-2EP53	–	–
3LD2103-1TL53	3LD2103-2EP53	3LD2103-3VK53	3LD2103-4VP53
3LD2203-1TL53	3LD2203-1TL53 + 3LD9200-5B	3LD2203-3VK53	3LD2203-3VK53 + 3LD9200-5B
3LD2504-1TL53	3LD2504-1TP53 + 3LD9250-0BA	3LD2504-3VK53	3LD2504-3VK53 + 3LD9200-5B
3LD2704-0TK53 + 3LD9280-0B	3LD2704-0TK53 + 3LD9280-0B + 3LD9200-5B	–	–
3LD2804-0TK53 + 3LD9280-0B	3LD2804-0TK53 + 3LD9280-0B + 3LD9200-5B	–	–
3LD2305-1TL13	3LD2305-1TL13 + 3LD9200-5B	3LD2305-3VK13	3LD2305-3VK13 + 3LD9200-5B
3LD2405-1TL13	3LD2405-1TL13 + 3LD9200-5B	3LD2405-3VK13	3LD2405-3VK13 + 3LD9200-5B
3LD2054-1TL53	3LD2054-2EP53	–	–
3LD2154-1TL53	3LD2154-2EP53	–	–
3LD2254-1TL53	3LD2254-1TL53 + 3LD9200-5B	–	–
3LD2555-0TK53 + 3LD9250-0BA	3LD2555-0TK53 + 3LD9250-0BA + 3LD9200-5B	–	–
3LD2022-1TL13	3LD2022-1TL13 + 3LD9200-5B	–	–
3LD2122-1TL13	3LD2122-1TL13 + 3LD9200-5B	–	–
3LD2222-0TK13 + 3LD9220-0B	3LD2222-0TK13 + 3LD9220-0B + 3LD9200-5B	–	–
3LD2050-1TL13	3LD2050-1TL13 + 3LD9200-5B	–	–
3LD2150-0TK13 + 3LD9220-0B	3LD2150-0TK13 + 3LD9220-0B + 3LD9200-5B	–	–
3LD2250-0TK13 + 3LD9220-0B	3LD2250-0TK13 + 3LD9220-0B + 3LD9200-5B	–	–

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Quick selection guide, page 8/6

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3LD switch disconnectors

Accessories for front mounting

				3LD20 (16 A)	3LD21 (25 A)	3LD22 (32 A)	3LD25 (63 A)	3LD27 (100 A)	3LD28 (125 A)	3LD23 (160 A)	3LD24 (250 A)
Switching contacts for N conductor (4th contact)											
	**Contacts**		**Article No.**								
	Leading switch-on, lagging switch-off		3LD9220-0B		■	■					
			3LD9250-0BA				■				
			3LD9280-0B					■	■		
			3LD9240-0B							■	■
N/PE terminals											
	**Contacts**		**Article No.**								
	Through-type		3LD9200-2B	■							
			3LD9220-2B		■	■					
			3LD9250-2BA				■				
			3LD9280-2B					■	■		
			3LD9240-2B							■	■
Auxiliary switches (standard version)											
	• For mounting on the left and/or right • Lagging switch-on, leading switch-off										
	Contacts	**Contact surface**	**Article No.**								
	1 NO + 1 NC	Standard	3LD9200-5B	■	■	■	■	■	■	■	■
		Gold-plated	3LD9200-5BF	■	■	■	■	■	■	■	■
Auxiliary switch for mounting on the front											
	• Mounted on the switch shaft • For four-hole front mounting and floor mounting only • For long leading times (20 ... 150 ms)										
	Contacts	**Contact surface**	**Article No.**								
	1 NO + 1 NC	Standard	3LD9280-5D new	■	■	■	■	■	■		
			3LD9240-5D new							■	■
		Gold-plated	3LD9280-5DF new	■	■	■	■	■	■		
			3LD9240-5DF new							■	■
Rotary operating mechanisms											
	• Lockable in 0 position with up to 3 padlocks										
	Version	**Mounting**	**Article No.**								
	For main control switches	Center-hole mounting	3LD9224-1D	■	■	■					
			3LD9284-1D				■				
		Four-hole mounting	3LD9224-1B	■	■	■					
			3LD9284-1B				■	■	■		
	For EMERGENCY-STOP switches	Center-hole mounting	3LD9224-3D	■	■	■					
			3LD9284-3D				■				
		Four-hole mounting	3LD9224-3B	■	■	■					
			3LD9284-3B				■	■	■		
Knob-operated mechanisms											
	• Lockable in 0 position with up to 3 padlocks										
	Version	**Mounting**	**Article No.**								
	For main control switches	Four-hole mounting	3LD9243-1B							■	■
	For EMERGENCY-STOP switches	Four-hole mounting	3LD9243-3B							■	■

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System overview, page 8/20

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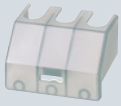
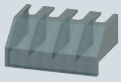
			3LD20 (16 A)	3LD21 (25 A)	3LD22 (32 A)	3LD25 (63 A)	3LD27 (100 A)	3LD28 (125 A)	3LD23 (160 A)	3LD24 (250 A)
Terminal covers										
	• Pack of 4 units									
	Number of poles	**Article No.**								
	1-pole	3LD9201-2A	■							
		3LD9221-2A		■	■					
		3LD9251-2A				■				
		3LD9281-2A					■	■		
		3LD9241-2A							■	■
	3-pole	3LD9221-0A		■	■					
		3LD9251-0A				■				
	4-pole	3LD9201-1A	■							
Inscription labels										
	• Pack of 10 units									
	Inscription	**Article No.**								
	German / English (Hauptschalter / Main Switch)	3LD9286-1A	■	■	■	■	■	■		
	Without inscription	3LD9286-4A	■	■	■	■	■	■		
Assembly tools										
	• For center-hole mounting with nut • Pack of 5 units									
	Version	**Article No.**								
	For main control switches and EMERGENCY-STOP switches	3LD9256-0A	■	■	■	■				

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System overview, page 8/20

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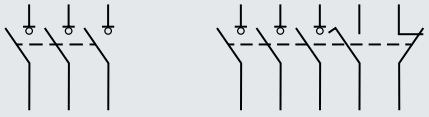
3LD switch disconnectors

3LD2 main control switches, floor mounting, 25 ... 50 kA_{eff}



Operating mechanisms, black

Number of poles **3P**



Uninterrupted current I_u At AC-21A, 380 ... 440 V	Operational power P At AC-23A, 380 ... 440 V	Operational power P At AC-3A, 380 ... 440 V	Without auxiliary switch	1 NO + 1 NC (standard version)
Door-coupling rotary operating mechanism, four-hole mounting				
16 A	7.5 kW	5.5 kW	3LD2013-0TK51	3LD2013-0TK51 + 3LD9200-5C
25 A	9.5 kW	7.5 kW	3LD2113-0TK51	3LD2113-0TK51 + 3LD9200-5C
32 A	11.5 kW	9.5 kW	3LD2213-0TK51	3LD2213-0TK51 + 3LD9200-5C
63 A	22 kW	18.5 kW	3LD2514-0TK51	3LD2514-0TK51 + 3LD9200-5C
100 A	37 kW	30 kW	3LD2714-0TK51	3LD2714-0TK51 + 3LD9200-5C
125 A	45 kW	37 kW	3LD2814-0TK51	3LD2814-0TK51 + 3LD9200-5C
160 A	75 kW	50 kW	3LD2318-0TK11	3LD2318-0TK11 + 3LD9200-5C
250 A	132 kW	110 kW	3LD2418-0TK11	3LD2418-0TK11 + 3LD9200-5C
Door-coupling rotary operating mechanism, center-hole mounting Ø 22.5 mm				
16 A	7.5 kW	5.5 kW	3LD2044-0TK51	3LD2044-0TK51 + 3LD9200-5C
25 A	9.5 kW	7.5 kW	3LD2144-0TK51	3LD2144-0TK51 + 3LD9200-5C
32 A	11.5 kW	9.5 kW	3LD2244-0TK51	3LD2244-0TK51 + 3LD9200-5C
63 A	22 kW	18.5 kW	3LD2545-0TK51	3LD2545-0TK51 + 3LD9200-5C
Defeatable door-coupling knob-operated mechanism, four-hole mounting				
16 A	7,5 kW	5,5 kW	3LD2017-0TK11	3LD2017-0TK11 + 3LD9200-5C
32 A	11,5 kW	9,5 kW	3LD2217-0TK11	3LD2217-0TK11 + 3LD9200-5C
63 A	22 kW	18,5 kW	3LD2517-0TK11	3LD2517-0TK11 + 3LD9200-5C

Scope of supply:
- Including terminal covers for the infeed side
- Up to 125 A with integrated tolerance compensation

Mounting:
- Up to 125 A using screws or snap-on mounting on 35 mm mounting rails

Accessories, see page 8/32

Quick selection guide, page 8/6

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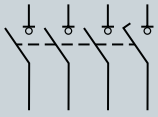
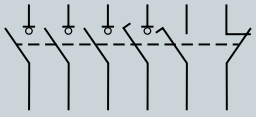
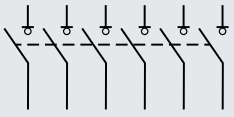
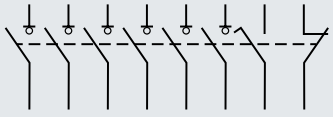
3P+N			6P	
				
Without auxiliary switch	**1 NO + 1 NC (standard version)**		**Without auxiliary switch**	**1 NO + 1 NC (standard version)**
3LD2013-1TL51	3LD2013-1TL51	+ 3LD9200-5C	–	–
3LD2113-1TL51	3LD2113-1TL51	+ 3LD9200-5C	3LD2113-3VK51	3LD2113-4VP51
3LD2213-1TL51	3LD2213-1TL51	+ 3LD9200-5C	–	–
3LD2514-1TL51	3LD2514-1TL51	+ 3LD9200-5C	–	–
3LD2714-0TK51 + 3LD9280-0C	3LD2714-0TK51 + 3LD9280-0C	+ 3LD9200-5C	–	–
3LD2814-0TK51 + 3LD9280-0C	3LD2814-0TK51 + 3LD9280-0C	+ 3LD9200-5C	–	–
3LD2318-1TL11	3LD2318-1TL11	+ 3LD9200-5C	3LD2318-3VK11	3LD2318-3VK11 + 3LD9200-5C
3LD2418-1TL11	3LD2418-1TL11	+ 3LD9200-5C	3LD2418-3VK11	3LD2418-3VK11 + 3LD9200-5C
3LD2044-1TL51	3LD2044-1TL51	+ 3LD9200-5C	–	–
3LD2144-1TL51	3LD2144-1TL51	+ 3LD9200-5C	–	–
3LD2244-1TL51	3LD2244-1TL51	+ 3LD9200-5C	–	–
3LD2545-0TK51 + 3LD9250-0CA	3LD2545-0TK51 + 3LD9250-0CA	+ 3LD9200-5C	–	–
3LD2017-1TL11	3LD2017-1TL11 + 3LD9200-5C		–	–
3LD2217-1TL11	3LD2217-1TL11 + 3LD9200-5C		–	–
3LD2517-1TL11	3LD2517-1TL11 + 3LD9200-5C		–	–

Quick selection guide, page 8/6

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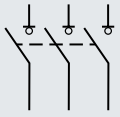
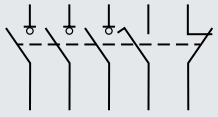
3LD switch disconnectors

3LD2 EMERGENCY-STOP switches, floor mounting, 25 ... 50 kA_{eff}



	Operating mechanisms, red/yellow	
Number of poles	3P	
		
Uninterrupted current I_u At AC-21A, 380 ... 440 V	**Operational power P At AC-23A, 380 ... 440 V**	**Operational power P At AC-3A, 380 ... 440 V**	**Without auxiliary switch**	**1 NO + 1 NC (standard version)**
Door-coupling rotary operating mechanism, four-hole mounting				
16 A	7.5 kW	5.5 kW	3LD2013-0TK53	3LD2013-0TK53 + 3LD9200-5C
25 A	9.5 kW	7.5 kW	3LD2113-0TK53	3LD2113-0TK53 + 3LD9200-5C
32 A	11.5 kW	9.5 kW	3LD2213-0TK53	3LD2213-0TK53 + 3LD9200-5C
63 A	22 kW	18.5 kW	3LD2514-0TK53	3LD2514-0TK53 + 3LD9200-5C
100 A	37 kW	30 kW	3LD2714-0TK53	3LD2714-0TK53 + 3LD9200-5C
125 A	45 kW	37 kW	3LD2814-0TK53	3LD2814-0TK53 + 3LD9200-5C
160 A	75 kW	50 kW	3LD2318-0TK13	3LD2318-0TK13 + 3LD9200-5C
250 A	132 kW	110 kW	3LD2418-0TK13	3LD2418-0TK13 + 3LD9200-5C
Door-coupling rotary operating mechanism, center-hole mounting Ø 22.5 mm				
16 A	7.5 kW	5.5 kW	3LD2044-0TK53	3LD2044-0TK53 + 3LD9200-5C
25 A	9.5 kW	7.5 kW	3LD2144-0TK53	3LD2144-0TK53 + 3LD9200-5C
32 A	11.5 kW	9.5 kW	3LD2244-0TK53	3LD2244-0TK53 + 3LD9200-5C
63 A	22 kW	18.5 kW	3LD2545-0TK53	3LD2545-0TK53 + 3LD9200-5C
Defeatable door-coupling knob-operated mechanism, four-hole mounting				
16 A	7,5 kW	5,5 kW	3LD2017-0TK13	3LD2017-0TK13 + 3LD9200-5C
32 A	11,5 kW	9,5 kW	3LD2217-0TK13	3LD2217-0TK13 + 3LD9200-5C
63 A	22 kW	18,5 kW	3LD2517-0TK13	3LD2517-1TL13 + 3LD9200-5C

Scope of supply:
- Including terminal covers for the infeed side
- Up to 125 A with integrated tolerance compensation

Mounting:
- Up to 125 A using screws or snap-on mounting on 35 mm mounting rails

Accessories, see page 8/32

Quick selection guide, page 8/6

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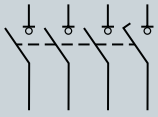
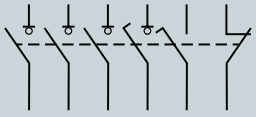
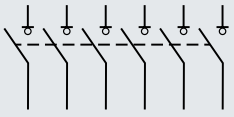
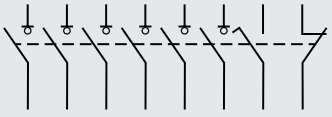
3P+N			6P	
				
Without auxiliary switch	**1 NO + 1 NC (standard version)**		**Without auxiliary switch**	**1 NO + 1 NC (standard version)**
3LD2013-1TL53	3LD2013-1TL53	+ 3LD9200-5C	–	–
3LD2113-1TL53	3LD2113-1TL53	+ 3LD9200-5C	3LD2113-3VK53	3LD2113-4VP53
3LD2213-1TL53	3LD2213-1TL53	+ 3LD9200-5C	–	–
3LD2514-1TL53	3LD2514-1TL53	+ 3LD9200-5C	–	–
3LD2714-0TK53 + 3LD9280-0C	3LD2714-0TK53 + 3LD9280-0C	+ 3LD9200-5C	–	–
3LD2814-0TK53 + 3LD9280-0C	3LD2814-0TK53 + 3LD9280-0C	+ 3LD9200-5C	–	–
3LD2318-1TL13	3LD2318-1TL13	+ 3LD9200-5C	3LD2318-3VK13	3LD2318-3VK13 + 3LD9200-5C
3LD2418-1TL13	3LD2418-1TL13	+ 3LD9200-5C	3LD2418-3VK13	3LD2418-3VK13 + 3LD9200-5C
3LD2044-1TL53	3LD2044-1TL53	+ 3LD9200-5C	–	–
3LD2144-1TL53	3LD2144-1TL53	+ 3LD9200-5C	–	–
3LD2244-1TL53	3LD2244-1TL53	+ 3LD9200-5C	–	–
3LD2545-0TK53 + 3LD9250-0CA	3LD2545-0TK53 + 3LD9250-0CA	+ 3LD9200-5C	–	–
3LD2017-1TL13	3LD2017-1TL13 + 3LD9200-5C		–	–
3LD2217-1TL13	3LD2217-0TK13 + 3LD9200-5C		–	–
3LD2517-1TL13	3LD2517-1TL13 + 3LD9200-5C		–	–

Quick selection guide, page 8/6

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3LD switch disconnectors

Accessories for floor mounting

			3LD20 (16 A)	3LD21 (25 A)	3LD22 (32 A)	3LD25 (63 A)	3LD27 (100 A)	3LD28 (125 A)	3LD23 (160 A)	3LD24 (250 A)
Switching contacts for N conductor (4th contact)										
	**Contacts**	**Article No.**								
	Leading switch-on, lagging switch-off	3LD9220-0C		■	■					
		3LD9250-0CA				■				
		3LD9280-0C					■	■		
		3LD9240-0C							■	■
N/PE terminals										
	**Contacts**	**Article No.**								
	Through-type	3LD9200-2C	■							
		3LD9220-2C		■	■					
		3LD9250-2CA				■				
		3LD9280-2C					■	■		
		3LD9240-2C							■	■
Auxiliary switches (standard version)										
	• For mounting on the left and/or right • Lagging switch-on, leading switch-off									
	Contacts	**Contact surface**	**Article No.**							
	1 NO + 1 NC	Standard	3LD9200-5C	■	■	■	■	■	■	■	■
		Gold-plated	3LD9200-5CF	■	■	■	■	■	■	■	■
Auxiliary switch for mounting on the front										
	• Mounted on the switch shaft • For long leading times (20 ... 150 ms)									
	Contacts	**Contact surface**	**Article No.**							
	1 NO + 1 NC	Standard	3LD9280-5D new	■	■	■	■	■	■		
			3LD9240-5D new							■	■
		Gold-plated	3LD9280-5DF new	■	■	■	■	■	■		
			3LD9240-5DF new							■	■
Rotary operating mechanisms										
	• Lockable in 0 position with up to 3 padlocks									
	Version	**Mounting**	**Article No.**							
	For main control switches	Center-hole mounting	3LD9224-1D	■	■	■					
			3LD9284-1D				■				
		Four-hole mounting	3LD9224-1B	■	■	■					
			3LD9284-1B				■	■	■		
	For EMERGENCY-STOP switches	Center-hole mounting	3LD9224-3D	■	■	■					
			3LD9284-3D				■				
		Four-hole mounting	3LD9224-3B	■	■	■					
			3LD9284-3B				■	■	■		
Knob-operated mechanisms										
	• Lockable in 0 position with up to 3 padlocks									
	Version	**Mounting**	**Article No.**							
	For main control switches	Four-hole mounting	3LD9243-1B						■	■
	For EMERGENCY-STOP switches	Four-hole mounting	3LD9243-3B						■	■
8UC7.. door-coupling rotary operating mechanisms										
	• To achieve defeatability from 3LD27 (100 A) to 3LD24 (250 A)									
	Type	**Version**	**Article No.**							
	8UC71	Standard	8UC7110-1BB					■	■		
		EMERGENCY-STOP	8UC7120-3BB					■	■		
	8UC72	Standard	8UC7210-1BB							■	■
		EMERGENCY-STOP	8UC7220-3BB							■	■

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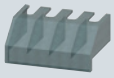
				3LD20 (16 A)	3LD21 (25 A)	3LD22 (32 A)	3LD25 (63 A)	3LD27 (100 A)	3LD28 (125 A)	3LD23 (160 A)	3LD24 (250 A)
Coupling drivers											
	**Version**		**Article No.**								
	For 8UC71 door-coupling rotary operating mechanisms		8UC6011					■	■		
	For 8UC72 door-coupling rotary operating mechanisms		8UC6012							■	■
Switching shafts											
	**Cross-section**	**Length**	**Article No.**								
	6 × 6 mm	300 mm	3LD9205-0C	■	■	■	■	■	■		
		600 mm	3LD9205-2C	■	■	■	■	■	■		
	8 × 8 mm	300 mm	3LD9245-0C							■	■
		600 mm	3LD9245-2C							■	■
Coupling pieces											
	• Without ON-lock										
	Article No.										
			3LD9242-4F							■	■
Terminal covers											
	• Pack of 4 units										
	Number of poles		**Article No.**								
	1-pole		3LD9201-2A	■							
			3LD9221-2A		■	■					
			3LD9251-2A				■				
			3LD9281-2A					■	■		
			3LD9241-2A							■	■
	3-pole		3LD9221-0A		■	■					
			3LD9251-0A				■				
	4-pole		3LD9201-1A	■							
Inscription labels											
	• Pack of 10 units • Cannot be used with defeatable 3LD2.17 door-coupling rotary operating mechanisms										
	Inscription		**Article No.**								
	German / English (Hauptschalter / Main Switch)		3LD9286-1A	■	■	■	■	■	■		
	Without inscription		3LD9286-4A	■	■	■	■	■	■		
Assembly tools											
	• For center-hole mounting with nut • Pack of 5 units										
	Version		**Article No.**								
	For main control switches and EMERGENCY-STOP switches		3LD9256-0A	■	■	■	■				

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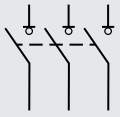
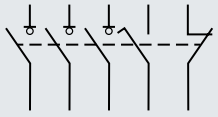
3LD switch disconnectors

3LD2 main control switches, installation in distribution boards, 25 ... 50 kA_{eff}



	Operating mechanisms, black	
Number of poles	3P	
		
Uninterrupted current I_u At AC-21A, 380 ... 440 V	Operational power P At AC-23A, 380 ... 440 V	Operational power P At AC-3A, 380 ... 440 V	Without auxiliary switch	1 NO + 1 NC (standard version)
Knob-operated mechanisms with masking plate				
16 A	7.5 kW	5.5 kW	3LD2030-0TK11	3LD2030-0TK11 + 3LD9200-5C
25 A	9.5 kW	7.5 kW	3LD2130-0TK11	3LD2130-0TK11 + 3LD9200-5C
32 A	11.5 kW	9.5 kW	3LD2230-0TK11	3LD2230-0TK11 + 3LD9200-5C
63 A	22 kW	18.5 kW	3LD2530-0TK11	3LD2530-0TK11 + 3LD9200-5C
100 A	37 kW	30 kW	3LD2730-0TK11	3LD2730-0TK11 + 3LD9200-5C
125 A	45 kW	37 kW	3LD2830-0TK11	3LD2830-0TK11 + 3LD9200-5C
160 A	75 kW	50 kW	3LD2330-0TK11	3LD2330-0TK11 + 3LD9200-5C
250 A	132 kW	110 kW	3LD2430-0TK11	3LD2430-0TK11 + 3LD9200-5C

Scope of supply:
- 3LD23/3LD24 including terminal covers for the infeed side

Mounting:
- Up to 125 A using screws or snap-on mounting on 35 mm mounting rails
- Up to 125 A cap and mounting dimensions acc. to DIN 43880

Accessories

			3LD20 (16 A)	3LD21 (25 A)	3LD22 (32 A)	3LD25 (63 A)	3LD27 (100 A)	3LD28 (125 A)	3LD23 (160 A)	3LD24 (250 A)
Switching contacts for N conductor (4th contact)										
	**Contacts**	**Article No.**								
	Leading switch-on, lagging switch-off	3LD9220-0C		■	■					
		3LD9250-0CA				■				
		3LD9280-0C					■	■		
		3LD9240-0C							■	■
N/PE terminals										
	**Contacts**	**Article No.**								
	Through-type	3LD9200-2C	■							
		3LD9220-2C		■	■					
		3LD9250-2CA				■				
		3LD9280-2C					■	■		
		3LD9240-2C							■	■
Auxiliary switches (standard version)										
	• For mounting on the left and/or right • Lagging switch-on, leading switch-off									
	Contacts	**Contact surface**	**Article No.**							
	1 NO + 1 NC	Standard	3LD9200-5C	■	■	■	■	■	■	■	■
		Gold-plated	3LD9200-5CF	■	■	■	■	■	■	■	■
	2 NO	Standard	3LD9200-6C	■	■	■	■	■	■	■	■

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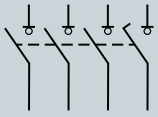
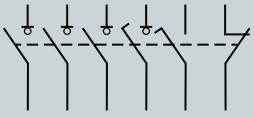
3P+N





Without auxiliary switch	1 NO + 1 NC (standard version)
3LD2030-1TL11	3LD2030-1TL11 + 3LD9200-5C
3LD2130-0TK11 + 3LD9220-0C	3LD2130-0TK11 + 3LD9220-0C + 3LD9200-5C
3LD2230-0TK11 + 3LD9220-0C	3LD2230-0TK11 + 3LD9220-0C + 3LD9200-5C
3LD2530-0TK11 + 3LD9250-0CA	3LD2530-0TK11 + 3LD9250-0CA + 3LD9200-5C
3LD2730-0TK11 + 3LD9280-0C	3LD2730-0TK11 + 3LD9280-0C + 3LD9200-5C
3LD2830-0TK11 + 3LD9280-0C	3LD2830-0TK11 + 3LD9280-0C + 3LD9200-5C
3LD2330-0TK11 + 3LD9240-0C	3LD2330-0TK11 + 3LD9240-0C + 3LD9200-5C
3LD2430-0TK11 + 3LD9240-0C	3LD2430-0TK11 + 3LD9240-0C + 3LD9200-5C

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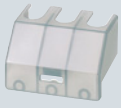
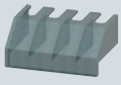
		3LD20 (16 A)	3LD21 (25 A)	3LD22 (32 A)	3LD25 (63 A)	3LD27 (100 A)	3LD28 (125 A)	3LD23 (160 A)	3LD24 (250 A)
Terminal covers									
• Pack of 4 units									
Number of poles	**Article No.**								
 1-pole	3LD9201-2A	■							
	3LD9221-2A		■	■					
	3LD9251-2A				■				
	3LD9281-2A					■	■		
	3LD9241-2A							■	■
 3-pole	3LD9221-0A		■	■					
	3LD9251-0A				■				
 4-pole	3LD9201-1A	■							

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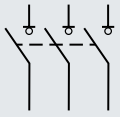
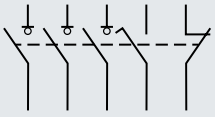
3LD switch disconnectors

3LD2 EMERGENCY-STOP switches, installation in distribution boards, 25 ... 50 kA_{eff}



	Operating mechanisms, red/yellow	
Number of poles	3P	
		
Uninterrupted current I_u At AC-21A, 380 ... 440 V	**Operational power P At AC-23A, 380 ... 440 V**	**Operational power P At AC-3A, 380 ... 440 V**	**Without auxiliary switch**	**1 NO + 1 NC (standard version)**
Knob-operated mechanisms with masking plate				
16 A	7.5 kW	5.5 kW	3LD2030-0TK13	3LD2030-0TK13 + 3LD9200-5C
25 A	9.5 kW	7.5 kW	3LD2130-0TK13	3LD2130-0TK13 + 3LD9200-5C
32 A	11.5 kW	9.5 kW	3LD2230-0TK13	3LD2230-0TK13 + 3LD9200-5C
63 A	22 kW	18.5 kW	3LD2530-0TK13	3LD2530-0TK13 + 3LD9200-5C
100 A	37 kW	30 kW	3LD2730-0TK13	3LD2730-0TK13 + 3LD9200-5C
125 A	45 kW	37 kW	3LD2830-0TK13	3LD2830-0TK13 + 3LD9200-5C
160 A	75 kW	50 kW	3LD2330-0TK13	3LD2330-0TK13 + 3LD9200-5C
250 A	132 kW	110 kW	3LD2430-0TK13	3LD2430-0TK13 + 3LD9200-5C

Scope of supply:
- 3LD23/3LD24 including terminal covers for the infeed side

Mounting:
- Up to 125 A using screws or snap-on mounting on 35 mm mounting rails
- Up to 125 A cap and mounting dimensions acc. to DIN 43880

Accessories

			3LD20 (16 A)	3LD21 (25 A)	3LD22 (32 A)	3LD25 (63 A)	3LD27 (100 A)	3LD28 (125 A)	3LD23 (160 A)	3LD24 (250 A)
Switching contacts for N conductor (4th contact)										
	**Contacts**	**Article No.**								
	Leading switch-on, lagging switch-off	3LD9220-0C		■	■					
		3LD9250-0CA				■				
		3LD9280-0C					■	■		
		3LD9240-0C							■	■
N/PE terminals										
	**Contacts**	**Article No.**								
	Through-type	3LD9200-2C	■							
		3LD9220-2C		■	■					
		3LD9250-2CA				■				
		3LD9280-2C					■	■		
		3LD9240-2C							■	■
Auxiliary switches (standard version)										
	• For mounting on the left and/or right • Lagging switch-on, leading switch-off									
	Contacts	**Contact surface**	**Article No.**							
	1 NO + 1 NC	Standard	3LD9200-5C	■	■	■	■	■	■	■	■
		Gold-plated	3LD9200-5CF	■	■	■	■	■	■	■	■
	2 NO	Standard	3LD9200-6C	■	■	■	■	■	■	■	■

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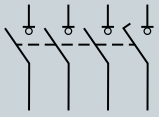
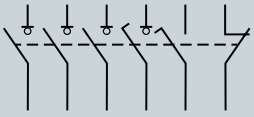
3+N



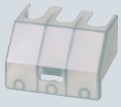


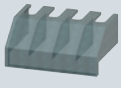
Without auxiliary switch	1 NO + 1 NC (standard version)
3LD2030-1TL13	3LD2030-1TL13 + 3LD9200-5C
3LD2130-0TK13 + 3LD9220-0C	3LD2130-0TK13 + 3LD9220-0C + 3LD9200-5C
3LD2230-0TK13 + 3LD9220-0C	3LD2230-0TK13 + 3LD9220-0C + 3LD9200-5C
3LD2530-0TK13 + 3LD9250-0CA	3LD2530-0TK13 + 3LD9250-0CA + 3LD9200-5C
3LD2730-0TK13 + 3LD9280-0C	3LD2730-0TK13 + 3LD9280-0C + 3LD9200-5C
3LD2830-0TK13 + 3LD9280-0C	3LD2830-0TK13 + 3LD9280-0C + 3LD9200-5C
3LD2330-0TK13 + 3LD9240-0C	3LD2330-0TK13 + 3LD9240-0C + 3LD9200-5C
3LD2430-0TK13 + 3LD9240-0C	3LD2430-0TK13 + 3LD9240-0C + 3LD9200-5C

Terminal covers

- Pack of 4 units







Number of poles	Article No.	3LD20 (16 A)	3LD21 (25 A)	3LD22 (32 A)	3LD25 (63 A)	3LD27 (100 A)	3LD28 (125 A)	3LD23 (160 A)	3LD24 (250 A)
1-pole	3LD9201-2A	■							
	3LD9221-2A		■	■					
	3LD9251-2A				■				
	3LD9281-2A					■	■		
	3LD9241-2A							■	■
3-pole	3LD9221-0A		■	■					
	3LD9251-0A				■				
4-pole	3LD9201-1A	■							

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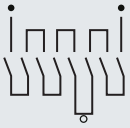
3LD switch disconnectors

DC isolators, 50 kA_{rms}



	Operating mechanisms, black
Number of poles	8P
	

Mains voltage	Rated current I_e At DC-21A, 800 V DC	Rated current I_e At DC-22A, 800 V DC	Without auxiliary switch
Knob-operated mechanisms			
800 V DC	32 A	16 A	3LD2230-8VQ11-0AF6

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3LD switch disconnectors

Accessories for 3LD2 main control and EMERGENCY-STOP switches

Additional poles

				3LD20 (16 A)	3LD21 (25 A)	3LD22 (32 A)	3LD25 (63 A)	3LD27 (100 A)	3LD28 (125 A)	3LD23 (160 A)	3LD24 (250 A)
Switching contacts for N conductor (4th contact)											
	**Version**	**Contacts**	**Article No.**								
	For front mounting	Leading switch-on, lagging switch-off	3LD9220-0B		■	■					
			3LD9250-0BA				■				
			3LD9280-0B					■	■		
			3LD9240-0B							■	■
	For floor mounting, installation in distribution boards	Leading switch-on, lagging switch-off	3LD9220-0C		■	■					
			3LD9250-0CA				■				
			3LD9280-0C					■	■		
			3LD9240-0C							■	■
N/PE terminals											
	**Version**	**Contacts**	**Article No.**								
	For front mounting	Through-type	3LD9200-2B	■							
			3LD9220-2B		■	■					
			3LD9250-2BA				■				
			3LD9280-2B					■	■		
			3LD9240-2B							■	■
	For floor mounting, installation in distribution boards	Through-type	3LD9200-2C	■							
			3LD9220-2C		■	■					
			3LD9250-2CA				■				
			3LD9280-2C					■	■		
			3LD9240-2C							■	■
Auxiliary switches (standard version)											
	• For mounting on the left and/or right • Lagging switch-on, leading switch-off										
	**Version**	**Contacts**	**Article No.**								
	For front mounting	1 NO + 1 NC, standard	3LD9200-5B	■	■	■	■	■	■	■	■
		1 NO + 1 NC, gold-plated	3LD9200-5BF	■	■	■	■	■	■	■	■
	For floor mounting, installation in distribution boards	1 NO + 1 NC, standard	3LD9200-5C	■	■	■	■	■	■	■	■
		1 NO + 1 NC, gold-plated	3LD9200-5CF	■	■	■	■	■	■	■	■
		2 NO, standard	3LD9200-6C	■	■	■	■	■	■	■	■
Auxiliary switch for mounting on the front											
	• Mounted on the front of the switch shaft • For four-hole front mounting and floor mounting only • For long leading times (20 ... 150 ms)										
	Contacts	**Contact surface**	**Article No.**								
	1 NO + 1 NC	Standard	3LD9280-5D new	■	■	■	■	■	■		
			3LD9240-5D new							■	■
		Gold-plated	3LD9280-5DF new	■	■	■	■	■	■		
			3LD9240-5DF new							■	■

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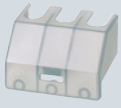
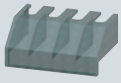
Operating mechanisms

				3LD20 (16 A)	3LD21 (25 A)	3LD22 (32 A)	3LD25 (63 A)	3LD27 (100 A)	3LD28 (125 A)	3LD23 (160 A)	3LD24 (250 A)
Rotary operating mechanisms											
• Lockable in 0 position with up to 3 padlocks • Center-hole mounting, including seal and nut • Four-hole mounting, including seal											
	**Switch**	**Mounting**	**Article No.**								
	For main control switches	Center-hole mounting	3LD9224-1D	■	■	■					
			3LD9284-1D				■	■	■		
		Four-hole mounting	3LD9224-1B	■	■	■					
			3LD9284-1B				■	■	■		
	For EMERGENCY-STOP switches	Center-hole mounting	3LD9224-3D	■	■	■					
			3LD9284-3D				■	■	■		
		Four-hole mounting	3LD9224-3B	■	■	■					
			3LD9284-3B				■	■	■		
Knob-operated mechanisms											
	• Lockable in 0 position with up to 3 padlocks • Including seal										
	Switch	**Mounting**	**Article No.**								
	For main control switches	Four-hole mounting	3LD9243-1B							■	■
	For EMERGENCY-STOP switches	Four-hole mounting	3LD9243-3B							■	■
Switching shafts											
	**Version**	**Cross-section**	**Length**	**Article No.**							
	For floor mounting	6 × 6 mm	300 mm	3LD9205-0C	■	■	■	■	■	■		
			600 mm	3LD9205-2C	■	■	■	■	■	■		
		8 × 8 mm	300 mm	3LD9245-0C							■	■
			600 mm	3LD9245-2C							■	■
Coupling pieces											
	• Without ON-lock										
	Version			**Article No.**							
	For floor mounting			3LD9242-4F						■	■

Other accessories

				3LD20 (16 A)	3LD21 (25 A)	3LD22 (32 A)	3LD25 (63 A)	3LD27 (100 A)	3LD28 (125 A)	3LD23 (160 A)	3LD24 (250 A)
Terminal covers											
• Pack of 4 units											
	Number of poles		**Article No.**								
	1-pole		3LD9201-2A	■							
			3LD9221-2A		■	■					
			3LD9251-2A				■				
			3LD9281-2A					■	■		
			3LD9241-2A							■	■
	3-pole		3LD9221-0A		■	■					
			3LD9251-0A				■				
	4-pole		3LD9201-1A	■							
Inscription labels											
	• Pack of 10 units										
	Inscription		**Article No.**								
	German / English (Hauptschalter / Main Switch)		3LD9286-1A	■	■	■	■	■	■		
	Without inscription		3LD9286-4A	■	■	■	■	■	■		
Assembly tools											
	• For center-hole mounting with nut • Pack of 5 units										
	Switch		**Article No.**								
	For main control switches and EMERGENCY-STOP switches		3LD9256-0A	■	■	■	■				

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3LD switch disconnectors

System overview of 3LD2 switch disconnectors in enclosure

3LD2 main control and EMERGENCY-STOP switches in enclosure


3P / 3P+N
molded-plastic enclosures


3P / 6P
molded-plastic enclosures


3P / 3p+N / 6P
molded-plastic enclosures

3LD2 maintenance and repair switches with EMC shield plate


3P
molded-plastic enclosures new


3P / 6P
molded-plastic enclosures new


3P / 6P
molded-plastic enclosures new

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DC isolators in enclosure


8P DC isolators in a
molded-plastic enclosure


8P DC isolators in a
molded-plastic enclosure

Additional poles and auxiliary switch modules


N switching
contact


N/PE terminals
(through-type)


Auxiliary switches
(standard version)


Auxiliary switch for mounting on
the front new

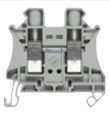
Operating mechanisms



Rotary operators for center-hole mounting

Further accessories


Shield terminal new


Through-type terminal

Note:
You will find a detailed range of accessories with the basic units.

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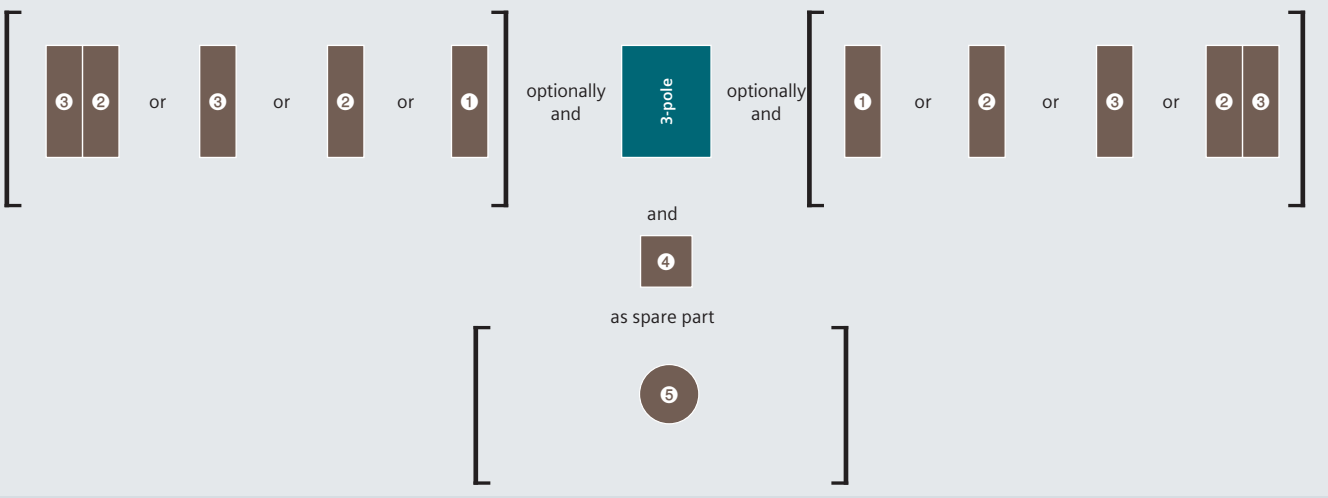
Mounting concept and accessories



Legend

❶ Auxiliary switch
❷ N switching contact [1)]
❸ N/PE terminal
❹ Auxiliary switch for mounting on the front
❺ Rotary operating mechanism, center-hole mounting

[1)] The N switching contact ❷ first has to be mounted on the basic unit
Note: Depending on the enclosure size, not all accessories can be used in combination

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Mounting types

3LD2 main control and EMERGENCY-STOP switches in enclosure



For surface mounting of individual main control and EMERGENCY-STOP switches, molded plastic-enclosed switches with degree of protection IP65 are used. The molded-plastic enclosures each contain an N and/or a PE terminal. As the switches can be locked in the 0 position, they can also be used as maintenance and repair switches.

DC isolators in enclosure



As the switches can be locked in the 0 position, they can also be used as maintenance and repair switches. The DC isolators in the enclosure are suitable for disconnecting loads of up to 800 V DC due to their 8-pole design.

3LD2 maintenance and repair switches with EMC shield plate



The 3LD2 maintenance and repair switch with EMC shield plate is ideal for use between converter and motor. A long leading (20-150ms) NO contact switches the converter group off before the main contacts of the switch open. This produces an AC20 state. The cable shield can be contacted over a large area inside the enclosure using the shield clamps or hose clips included in the scope of delivery.
The switch series provides the greatest possible safety for the user and can be locked in the 0 or I position. Tests have been performed in connection with Sinamics converters and ratings are available for use at frequencies between 0 and 550 Hz.

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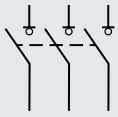
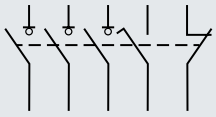
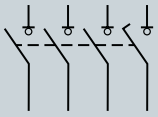
3LD switch disconnectors

3LD2 main control switches in enclosure, 25 ... 50 kA_{eff}





	Operating mechanisms, black		
Number of poles	3P		3P+N
			

Uninterrupted current I_u At AC-21A, 380 ... 440 V	Operational power P At AC-23A, 380 ... 440 V	Operational power P At AC-3A, 380 ... 440 V	Without auxiliary switch		1 NO + 1 NC (standard version)		Without auxiliary switch	
Rotary operating mechanisms with masking plate			Base terminal		Base terminal		Base terminal	
16 A	7.5 kW	5.5 kW	PE+N	3LD2064-0TB51	N	3LD2064-1GP51	PE	3LD2064-1TC51
25 A	9.5 kW	7.5 kW	PE+N	3LD2164-0TB51	N	3LD2164-1GP51	PE	3LD2164-1TC51
32 A	11.5 kW	9.5 kW	PE+N	3LD2264-0TB51	N	3LD2264-1GP51	PE	3LD2264-1TC51
63 A	22 kW	18.5 kW	PE+N	3LD2565-0TB51	N	3LD2565-1GP51	PE	3LD2565-1TC51
100 A	37 kW	30 kW	PE+N	3LD2766-0TB51	N	3LD2766-1GP51	PE+N	3LD2766-0TB51 + 3LD9280-0C
125 A	45 kW	37 kW	PE+N	3LD2866-0TB51	N	3LD2866-1GP51	PE+N	3LD2866-0TB51 + 3LD9280-0C

Accessories

			3LD20 (16 A)	3LD21 (25 A)	3LD22 (32 A)	3LD25 (63 A)	3LD27 (100 A)	3LD28 (125 A)
Switching contacts for N conductor (4th contact)								
	**Contacts**	**Article No.**						
	Leading switch-on, lagging switch-off	3LD9220-0C		■	■			
		3LD9250-0CA				■		
		3LD9280-0C					■	■
N/PE terminals								
	**Contacts**	**Article No.**						
	Through-type	3LD9200-2C	■					
		3LD9220-2C		■	■			
		3LD9250-2CA				■		
		3LD9280-2C					■	■
Auxiliary switches (standard version)								
	• For mounting on the left and/or right • Lagging switch-on, leading switch-off							
	Contacts	**Contact surface**	**Article No.**					
	1 NO + 1 NC	Standard	3LD9200-5C	■	■	■	■	■	■
		Gold-plated	3LD9200-5CF	■	■	■	■	■	■
	2 NO + 1 NC	Standard	3LD9200-6C	■	■	■	■	■	■
Auxiliary switch for mounting on the front								
	• Mounted on the front of the switch shaft • For long leading times (20 ... 150 ms)							
	Contacts	**Contact surface**	**Article No.**					
	1 NO + 1 NC	Standard	3LD9280-5D new	■	■	■	■	■	■
		Gold-plated	3LD9280-5DF new	■	■	■	■	■	■
Rotary operating mechanisms								
	• Lockable in 0 position with up to 3 padlocks							
		Article No.						
		3LD9224-1G	■	■	■			
		3LD9284-1G				■	■	■

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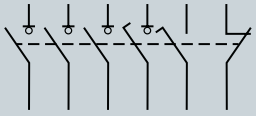
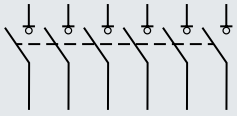
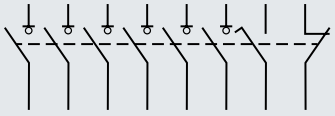
6P



1 NO + 1 NC (standard version)



Without auxiliary switch



1 NO + 1 NC (standard version)

Base terminal			Base terminal		Base terminal	
PE	3LD2064-1TC51	+ 3LD9200-5C		–		–
PE	3LD2164-1TC51	+ 3LD9200-5C	PE+N	3LD2165-3VB51	N	3LD2165-4VD51
PE	3LD2264-1TC51	+ 3LD9200-5C	PE+N	3LD2265-3VB51	N	3LD2265-4VD51
PE	3LD2565-1TC51	+ 3LD9200-5C	PE+N	3LD2566-3VB51	PE+N	3LD2566-4VD51
N	3LD2766-1GP51	+ 3LD9280-0C		–		–
N	3LD2866-1GP51	+ 3LD9280-0C		–		–

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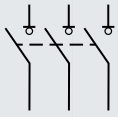
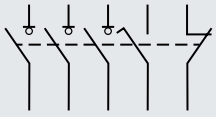
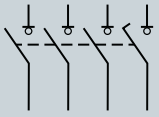
3LD switch disconnectors

3LD2 EMERGENCY-STOP switches in enclosure, 25 ... 50 kA_{eff}





Number of poles			Operating mechanisms, red/yellow							
			3P						3P+N	
										
Uninterrup-ted current I_u At AC-21A, 380 ... 440 V	Operational power P At AC-23A, 380 ... 440 V	Operational power P At AC-3A, 380 ... 440 V	Without auxiliary switch			1 NO + 1 NC (standard version)			Without auxiliary switch	
Rotary operating mechanisms with masking plate			Base terminal			Base terminal			Base terminal	
16 A	7.5 kW	5.5 kW	PE+N	3LD2064-0TB53		N	3LD2064-1GP53		PE	3LD2064-1TC53
25 A	9.5 kW	7.5 kW	PE+N	3LD2164-0TB53		N	3LD2164-1GP53		PE	3LD2164-1TC53
32 A	11.5 kW	9.5 kW	PE+N	3LD2264-0TB53		N	3LD2264-1GP53		PE	3LD2264-1TC53
63 A	22 kW	18,5 kW	PE+N	3LD2565-0TB53		N	3LD2565-1GP53		PE	3LD2565-1TC53
100 A	37 kW	30 kW	PE+N	3LD2766-0TB53		N	3LD2766-1GP53		PE+N	3LD2766-0TB53 + 3LD9280-0C
125 A	45 kW	37 kW	PE+N	3LD2866-0TB53		N	3LD2866-1GP53		PE+N	3LD2866-0TB53 + 3LD9280-0C

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Accessories

				3LD20 (16 A)	3LD21 (25 A)	3LD22 (32 A)	3LD25 (63 A)	3LD27 (100 A)	3LD28 (125 A)
Switching contacts for N conductor (4th contact)									
	**Contacts**		**Article No.**						
	Leading switch-on, lagging switch-off		3LD9220-0C		■	■			
			3LD9250-0CA				■		
			3LD9280-0C					■	■
N/PE terminals									
	**Contacts**		**Article No.**						
	Through-type		3LD9200-2C	■					
			3LD9220-2C		■	■			
			3LD9250-2CA				■		
			3LD9280-2C					■	■
Auxiliary switches (standard version)									
	• For mounting on the left and/or right • Lagging switch-on, leading switch-off								
	Contacts	**Contact surface**	**Article No.**						
	1 NO + 1 NC	Standard	3LD9200-5C	■	■	■	■	■	■
		Gold-plated	3LD9200-5CF	■	■	■	■	■	■
	2 NO + 1 NC	Standard	3LD9200-6C	■	■	■	■	■	■
Auxiliary switch for mounting on the front									
	• Mounted on the front of the switch shaft • For long leading times (20 ... 150 ms)								
	Contacts	**Contact surface**	**Article No.**						
	1 NO + 1 NC	Standard	3LD9280-5D new	■	■	■	■	■	■
		Gold-plated	3LD9280-5DF new	■	■	■	■	■	■
Rotary operating mechanisms									
	• Lockable in 0 position with up to 3 padlocks								
			Article No.						
			3LD9224-3G	■	■	■			
			3LD9284-3G				■	■	■

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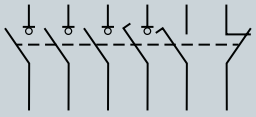
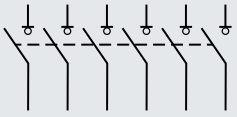
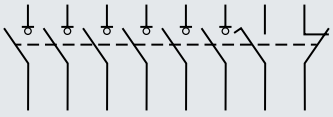


1 NO + 1 NC (standard version)



Without auxiliary switch



1 NO + 1 NC (standard version)

Base terminal			Base terminal		Base terminal	
PE	3LD2064-1TC53	+ 3LD9200-5C		–		–
PE	3LD2164-1TC53	+ 3LD9200-5C	PE+N	3LD2165-3VB53	N	3LD2165-4VD53
PE	3LD2264-1TC53	+ 3LD9200-5C	PE+N	3LD2265-3VB53	N	3LD2265-4VD53
PE	3LD2565-1TC53	+ 3LD9200-5C	PE+N	3LD2566-3VB53	PE+N	3LD2566-4VD53
N	3LD2766-1GP53 + 3LD9280-0C			–		–
N	3LD2866-1GP53 + 3LD9280-0C			–		–

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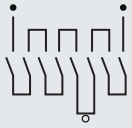
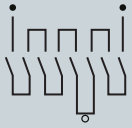
3LD switch disconnectors

3LD2 DC isolators in a molded-plastic enclosure





	Operating mechanisms, black	Operating mechanisms, red/yellow
Number of poles	8P	8P
		

Mains voltage	Rated current I_e At DC-21A, 800 V DC	Rated current I_e At DC-22A, 800 V DC	Without auxiliary switch	
Rotary operating mechanisms				
800 V DC	32 A	16 A	3LD2265-8VQ51-0AF6	3LD2265-8VQ53-0AF6

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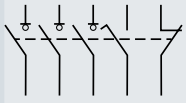
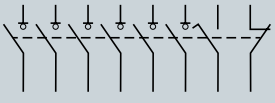
3LD2 maintenance and repair switches with EMC shield plate, 25 ... 50 kA_{eff} new





	Operating mechanisms, black	
Number of poles	3P	6P
		

Uninterrupted current I_u At AC-20, 0 ... 550 Hz, 380 ... 440 V	Operational power P At AC-20, 0 ... 550 Hz, 380 ... 440 V	Uninterrupted current I_n At AC-21, 50/60 Hz, 380 ... 440 V	Operational power AC-23A, 50/60 Hz, 380 ... A440 V	1 NO + 1 NC (Auxiliary switch for mounting on the front) new		1 NO + 1 NC (Auxiliary switch for mounting on the front) new	
Knob-operated mechanisms with masking plate				Base terminal		Base terminal	
10.2 A	4 kW	16 A	7.5 kW	PE	3LD2084-2GP21	2× PE	–
13.2 A	5.5 kW	25 A	9 kW	PE	3LD2184-2GP21	2× PE	3LD2185-5VD21
18 A	7.5 kW	32 A	11.5 kW	PE	3LD2284-2GP21	2× PE	3LD2285-5VD21
38 A	18.5 kW	63 A	22 kW	PE	3LD2585-2GP21	2× PE	3LD2586-5VD21
75 A	37 kW	100 A	37 kW	PE	3LD2786-2GP21	2× PE	–
90 A	45 kW	125 A	45 kW	PE	3LD2886-2GP21	2× PE	–

Scope of supply:
- Incl. shield clamps or hose clips for contacting the cable shield
- The PE terminal as a through-type terminal is insulated from the cable shield

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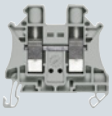
3LD2 maintenance and repair switches with EMC shield plate, 25 ... 50 kA_{eff}

Accessories

			3LD20 (16 A)	3LD21 (25 A)	3LD22 (32 A)	3LD25 (63 A)	3LD27 (100 A)	3LD28 (125 A)
Switching contacts for N conductor (4th contact)								
	**Contacts**	**Article No.**						
	Leading switch-on, lagging switch-off	3LD9220-0C		■	■			
		3LD9250-0CA				■		
		3LD9280-0C					■	■
N/PE terminals								
	**Contacts**	**Article No.**						
	Through-type	3LD9200-2C	■					
		3LD9220-2C		■	■			
		3LD9250-2CA				■		
		3LD9280-2C					■	■
Auxiliary switches (standard version)								
	• For mounting on the left and/or right • Lagging switch-on, leading switch-off							
	Contacts / **Contact surface**	**Article No.**						
	1 NO + 1 NC / Standard	3LD9200-5C	■	■	■	■	■	■
	Gold-plated	3LD9200-5CF	■	■	■	■	■	■
	2 NO / Standard	3LD9200-6C	■	■	■	■	■	■
Auxiliary switch for mounting on the front								
	• Mounted on the front of the switch shaft • For long leading times (20 ... 150 ms)							
	Contacts / **Contact surface**	**Article No.**						
	1 NO + 1 NC / Standard	3LD9280-5D new	■	■	■	■	■	■
	Gold-plated	3LD9280-5DF new	■	■	■	■	■	■
Rotary operating mechanisms								
	• Lockable in 0 position with up to 3 padlocks							
	Version	**Article No.**						
	Main control switches	3LD9224-1G	■	■	■			
		3LD9284-1G				■	■	■
	EMERGENCY-STOP switches	3LD9224-3G	■	■	■			
		3LD9284-3G				■	■	■
Terminal blocks								
	**Version**	**Article No.**						
	Through-type terminal with screw connection	8WH1000-0AF00	■	■	■	■	■	■
Shield terminal								
	**Terminal area**	**Article No.**						
	3 ...12 mm	3LD9228-1G	■	■	■	■	■	■

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3LD switch disconnectors

Accessories for 3LD2 switch disconnectors in enclosure

Additional poles

			3LD20 (16 A)	3LD21 (25 A)	3LD22 (32 A)	3LD25 (63 A)	3LD27 (100 A)	3LD28 (125 A)
Switching contacts for N conductor (4th contact)								
	**Contacts**	**Article No.**						
	Leading switch-on, lagging switch-off	3LD9220-0C		■	■			
		3LD9250-0CA				■		
		3LD9280-0C					■	■
N/PE terminals								
	**Contacts**	**Article No.**						
	Through-type	3LD9200-2C	■					
		3LD9220-2C		■	■			
		3LD9250-2CA				■		
		3LD9280-2C					■	■
Auxiliary switches (standard version)								
	• For mounting on the left and/or right • Lagging switch-on, leading switch-off							
	Contacts	**Contact surface** / **Article No.**						
	1 NO + 1 NC	Standard: 3LD9200-5C	■	■	■	■	■	■
		Gold-plated: 3LD9200-5CF	■	■	■	■	■	■
	2 NO + 1 NC	Standard: 3LD9200-6C	■	■	■	■	■	■
Auxiliary switch for mounting on the front								
	• Mounted on the front of the switch shaft • For long leading times (20 ... 150 ms)							
	Contacts	**Contact surface** / **Article No.**						
	1 NO + 1 NC	Standard: 3LD9280-5D new	■	■	■	■	■	■
		Gold-plated: 3LD9280-5DF new	■	■	■	■	■	■

Operating mechanisms

			3LD20 (16 A)	3LD21 (25 A)	3LD22 (32 A)	3LD25 (63 A)	3LD27 (100 A)	3LD28 (125 A)
Rotary operating mechanisms								
	• Lockable in 0 position with up to 3 padlocks							
	Version	**Article No.**						
	Main control switches	3LD9224-1G	■	■	■			
		3LD9284-1G				■	■	■
	EMERGENCY-STOP switches	3LD9224-3G	■	■	■			
		3LD9284-3G				■	■	■

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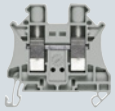
Connection parts

			3LD20 (16 A)	3LD21 (25 A)	3LD22 (32 A)	3LD25 (63 A)	3LD27 (100 A)	3LD28 (125 A)
Reihenklemme								
	**Version**	**Article No.**						
	Through-type terminal with screw connection	8WH1000-0AF00	■	■	■	■	■	■
Shield terminal								
	**Terminal area**	**Article No.**						
	3 ...12 mm	3LD9228-1G	■	■	■	■	■	■

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3LD switch disconnectors

System overview of 3LD5 UL main control and EMERGENCY-STOP switches new

Basic units for front mounting


3LD5020 (3-pole)


3LD5020 (4-pole)


3LD5420 (3-pole)


3LD5420 (4-pole)

Basic units, floor mounting with direct operating mechanism


3LD5000 (3-pole)


3LD5000 (4-pole)


3LD5400 (3-pole)


3LD5400 (4-pole)

Basic units, floor mounting with door-coupling rotary operating mechanism


3LD5010 (3-pole)


3LD5010 (4-pole)


3LD5410 (3-pole)


3LD5410 (4-pole)

Additional poles and auxiliary switches


N switching contact


N/PE terminals (through-type)


Auxiliary switches (standard version)


Auxiliary switch for mounting on the front

Operating mechanisms


Rotary operators for four-hole mounting


Coupling heads with and without tolerance compensation


Supplementary handles for UL508A/NFPA79


Switching shafts

Other accessories


Terminal covers, 1-pole


Terminal covers, 3 and 4-pole



Inscription labels (with and without inscription)

Note:
You will find a detailed range of accessories with the basic units.

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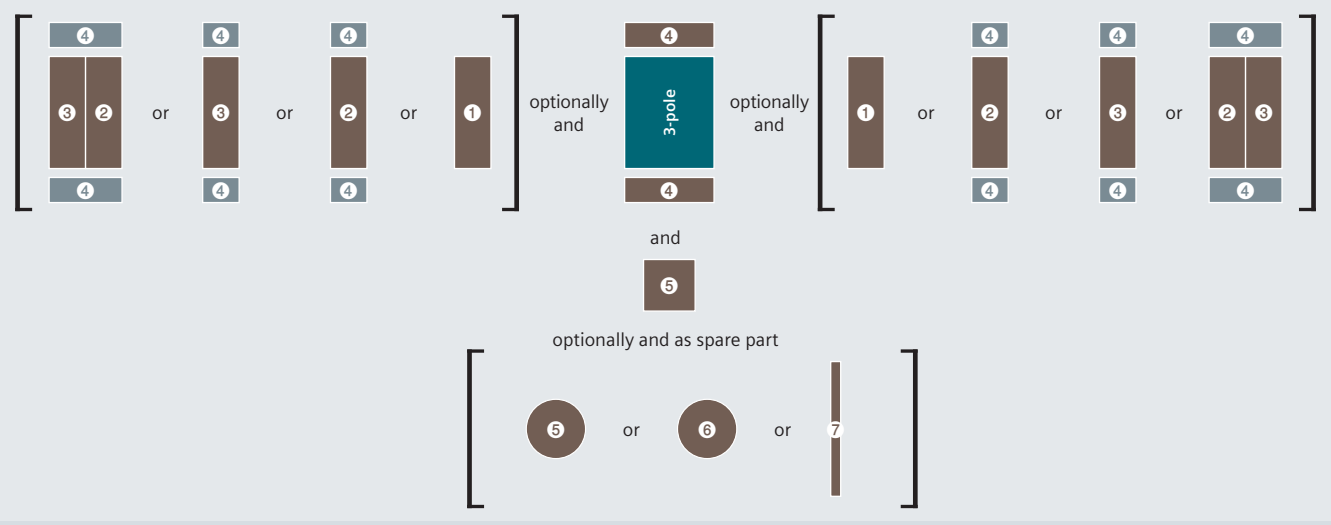
Mounting concept and accessories



Legend

❶ Auxiliary switch
❷ N switching contact [1)]
❸ N/PE terminal
❹ Terminal cover
❺ Rotary operating mechanism, four-hole mounting
❻ Knob-operated mechanism, four-hole mounting
❼ Switching shaft (300 oder 600 mm)

[1)] The N switching contact ❷ first has to be mounted on the basic unit

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Main control switches acc. to UL

The certification according to UL489 makes the 3LD5 UL ideal for use as a main control switch for machinery and plants for export to the NAFTA states. The variety of accessories makes it especially suitable as a main disconnect switch for industrial machinery. The switch is also certified according to UL508 and can also be used as a manual motor controller.

Mounting types

Front mounting of basic units



The switches for front mounting are mounted on the inside of the panel door via the operating mechanism. Installation is achieved by 4-hole mounting of the handle. This switch is especially suitable when door interlocking is not required or is implemented in a different way.

Floor mounting with direct operating mechanism



The switches for floor mounting with direct operating mechanism up to 30 A are snapped onto 35 mm standard mounting rails according to EN 60715 or screw-mounted on mounting panels. The switches for 100 to 160 A (3LD54 ... 3LD58) are exclusively screwed onto mounting panels.

Basic units, floor mounting with door-coupling rotary operating mechanism



The switches for floor mounting up to 30 A (3LD50) are snapped onto 35 mm standard mounting rails according to EN 60715 or screw-mounted on mounting panels. The switches for 100 to 160 A (3LD54 ... 3LD58) are exclusively screwed onto mounting panels. The actuators are connected to the lower section of the switch through a door coupling, which can be released in its zero position, and a 300 mm long switch shaft. The rotary operating mechanisms are also defeatable, i.e. it is possible to open the control cabinet door with a deliberate action while the switch is in the ON position. To meet the requirement acc. to UL508A/NFPA79, a supplementary handle can be mounted on the switch. Combined with the intermediate handle, the shaft can no longer be removed.

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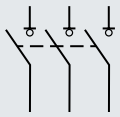
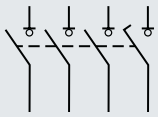
3LD switch disconnectors

3LD5 UL main control and EMERGENCY-STOP switches, front mounting, SCCR 50 - 65 kA





	Operating mechanisms, black	
Number of poles	3P	3P+N
		

Uninterrupted current I_u At AC-21A, 380 ... 440 V	I_n / General use acc. UL489/60947-4-1	Operational power P At AC-23A, 380 ... 440 V		
Rotary operating mechanism, four-hole mounting				
32	30	15	3LD5020-0TK11	3LD5020-0TL11
63	60	30	3LD5220-0TK11	3LD5220-0TL11
100	100	45	3LD5420-0TK11	3LD5420-0TL11
125	125	55	3LD5620-0TK11	3LD5620-0TL11
160	150	75	3LD5820-0TK11	3LD5820-0TL11

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Scope of supply:
- Including terminal covers for the infeed side

Accessories for front mounting

			Article No.	3LD50	3LD52	3LD54	3LD56	3LD58
Switching contacts for N conductor (4th contact)								
	**Contacts**		**Article No.**					
	Leading switch-on, lagging switch-off		3LD9250-0BA	■				
			3LD9280-0B		■			
			3LD9240-0B			■	■	■
N/PE terminals								
	**Contacts**		**Article No.**					
	Through-type		3LD9250-2BA	■				
			3LD9280-2B		■			
			3LD9240-2B			■	■	■
Auxiliary switches (standard version)								
	• For mounting on the left and/or right • Lagging switch-on, leading switch-off							
	Contacts	**Contact surface**	**Article No.**					
	1 NO + 1 NC	Standard	3LD9200-5B	■	■	■	■	■
		Gold-plated	3LD9200-5BF	■	■	■	■	■
Auxiliary switch for mounting on the front								
	• Mounted on the front of the switch shaft • For long leading times (20 ... 150ms)							
	Contacts	**Contact surface**	**Article No.**					
	1 NO + 1 NC	Standard	3LD9280-5D new	■	■			
			3LD9240-5D new			■	■	■
		Gold-plated	3LD9280-5DF new	■	■			
			3LD9240-5DF new			■	■	■
Rotary operating mechanisms								
	• Auxiliary switch for mounting on the front							
	Version		**Article No.**					
	For main control switches		3LD9284-1B	■	■			
	For EMERGENCY-STOP switches		3LD9284-3B	■	■			

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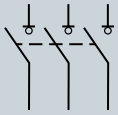
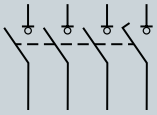
Operating mechanisms, red/yellow	
3P	**3P+N**
	
3LD5020-0TK13	3LD5020-0TL13
3LD5220-0TK13	3LD5220-0TL13
3LD5420-0TK13	3LD5420-0TL13
3LD5620-0TK13	3LD5620-0TL13
3LD5820-0TK13	3LD5820-0TL13

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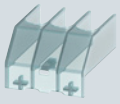
			3LD50	3LD52	3LD54	3LD56	3LD58
Knob-operated mechanisms							
	• Lockable in 0 position with up to 3 padlocks						
	Version	**Article No.**					
	For main control switches	3LD9243-1B			■	■	■
	For EMERGENCY-STOP switches	3LD9284-3B			■	■	■
Terminal covers							
	• Pack of 4 units						
	Number of poles	**Article No.**					
	1-pole	3LD9251-2A	■				
		3LD9281-2A		■			
		3LD9241-2A			■	■	■
	3-pole	3LD9251-0A	■				
Inscription labels							
	• Pack of 10 units						
	Inscription	**Article No.**					
	German / English (Hauptschalter / Main Switch)	3LD9286-1A	■	■			
	Without inscription	3LD9286-4A	■	■			

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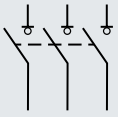
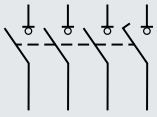
3LD switch disconnectors

3LD5 UL main control and EMERGENCY-STOP switches, floor mounting with direct operating mechanism, SCCR 50 ... 65 kA





	Operating mechanisms, black	
Number of poles	3P	3P+N
		

Uninterrupted current I_u At AC-21A, 380 ... 440 V	I_n / General use acc. UL489/508	Operational power P At AC-23A, 380 ... 440 V		
Rotary operating mechanism, four-hole mounting				
32	30	15	3LD5000-0TK11	3LD5000-0TL11
63	60	30	3LD5200-0TK11	3LD5200-0TL11
100	100	45	3LD5400-0TK11	3LD5400-0TL11
125	125	55	3LD5600-0TK11	3LD5600-0TL11
160	150	75	3LD5800-0TK11	3LD5800-0TL11

Scope of supply:
- Including terminal covers for the infeed side

Accessories for floor mounting with direct operating mechanisms

				3LD50	3LD52	3LD54	3LD56	3LD58
Switching contacts for N conductor (4th contact)								
	**Contacts**		**Article No.**					
	Leading switch-on, lagging switch-off		3LD9250-0CA	■				
			3LD9280-0C		■			
			3LD9240-0C			■	■	■
N/PE terminals								
	**Contacts**		**Article No.**					
	Through-type		3LD9250-2CA	■				
			3LD9280-2C		■			
			3LD9240-2C			■	■	■
Auxiliary switches								
	• For mounting on the left and/or right • Lagging switch-on, leading switch-off							
	Contacts	**Contact surface**	**Article No.**					
	1 NO + 1 NC	Standard	3LD9200-5C	■	■	■	■	■
		Gold-plated	3LD9200-5CF	■	■	■	■	■
Terminal covers								
	• Pack of 4 units							
	Number of poles		**Article No.**					
	1-pole		3LD9251-2A	■				
			3LD9281-2A		■			
			3LD9241-2A			■	■	■
	3-pole		3LD9251-0A	■				

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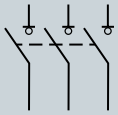
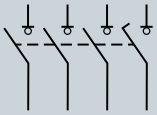
Operating mechanisms, red/yellow

3P	3P+N
	
3LD5000-0TK13	3LD5000-0TL13
3LD5200-0TK13	3LD5200-0TL13
3LD5400-0TK13	3LD5400-0TL13
3LD5600-0TK13	3LD5600-0TL13
3LD5800-0TK13	3LD5800-0TL13

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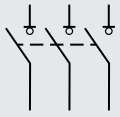
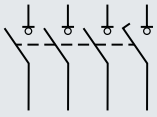
3LD switch disconnectors

3LD5 UL main control and EMERGENCY-STOP switches, floor mounting with door-coupling rotary operating mechanism, SCCR 50 ... 65 kA





Number of poles	Operating mechanisms, black	
	3P	3P+N
		

Uninterrupted current I_u At AC-21A, 380 ... 440 V	I_n / General use acc. UL489/508	Operational power P At AC-23A, 380 ... 440 V		
Rotary operating mechanism, four-hole mounting				
32	30	15	3LD5010-0TK11	3LD5010-0TL11
63	60	30	3LD5210-0TK11	3LD5210-0TL11
100	100	45	3LD5410-0TK11	3LD5410-0TL11
125	125	55	3LD5610-0TK11	3LD5610-0TL11
160	150	75	3LD5810-0TK11	3LD5810-0TL11

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Scope of supply:
- Including terminal covers for the infeed side
- Defeatable door-coupling rotary operating mechanisms
- Without tolerance compensation

Accessories for floor mounting with door mounted rotary operator

				3LD50	3LD52	3LD54	3LD56	3LD58
Switching contacts for N conductor (4th contact)								
	**Contacts**		**Article No.**					
	Leading switch-on, lagging switch-off		3LD9250-0CA	■				
			3LD9280-0C		■			
			3LD9240-0C			■	■	■
N/PE terminals								
	**Contacts**		**Article No.**					
	Through-type		3LD9250-2CA	■				
			3LD9280-2C		■			
			3LD9240-2C			■	■	■
Auxiliary switches (standard version)								
	• For mounting on the left and/or right • Lagging switch-on, leading switch-off							
	Contacts	**Contact surface**	**Article No.**					
	1 NO + 1 NC	Standard	3LD9200-5C	■	■	■	■	■
		Vergoldet	3LD9200-5CF	■	■	■	■	■
Auxiliary switch for mounting on the front								
	• Mounted on the front of the switch shaft • For long leading times (20 ... 150ms)							
	Contacts	**Contact surface**	**Article No.**					
	1 NO + 1 NC	Standard	3LD9280-5D new	■	■			
			3LD9240-5D new			■	■	■
		Gold-plated	3LD9280-5DF new	■	■			
			3LD9240-5DF new			■	■	■
Handles								
	• Supplied with a masking frame, but without an extension shaft or coupling driver • Can be locked with up to 3 padlocks							
	Labeling	**Color**	**Article No.**					
	O-I	Gray	8UD1771-2AD01	■	■			
			8UD1731-2AD01			■	■	■
		Red/yellow	8UD1771-2AD05	■	■			
			8UD1731-2AD05			■	■	■

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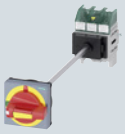
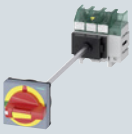
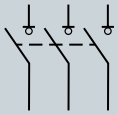
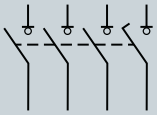



Operating mechanisms, red/yellow

3P	3P+N
	
3LD5010-0TK13	3LD5010-0TL13
3LD5210-0TK13	3LD5210-0TL13
3LD5410-0TK13	3LD5410-0TL13
3LD5610-0TK13	3LD5610-0TL13
3LD5810-0TK13	3LD5810-0TL13

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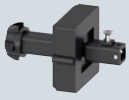
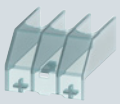
			3LD50	3LD52	3LD54	3LD56	3LD58
Supplementary handles for door-coupling rotary operating mechanism							
	• For requirements according to UL508A/NFPA79 • Can be locked with up to 1 padlocks in 0 position • Can only be switched on by deliberate action						
Labeling	**Color**	**Article No.**					
O-I	Gray	3LD9287-1C	■	■			
		3LD9247-1C			■	■	■
	Red/yellow	3LD9287-3C	■	■			
		3LD9247-3C			■	■	■
Coupling drivers							
	**Version**	**Article No.**					
	With tolerance compensation	8UD1900-1GA00	■	■			
		8UD1900-2GA00			■	■	■
	Without tolerance compensation	8UD1900-1HA00	■	■			
		8UD1900-2HA00			■	■	■
Terminal covers							
	• Pack of 4 units						
	Number of poles	**Article No.**					
	1-pole	3LD9251-2A	■				
		3LD9281-2A		■			
		3LD9241-2A			■	■	■
	3-pole	3LD9251-0A	■				
Inscription labels							
	• Pack of 10 units						
	Inscription	**Article No.**					
	German / English (Hauptschalter / Main Switch)	3LD9286-1A	■	■	■	■	■
	Without inscription	3LD9286-4A	■	■	■	■	■

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3LD switch disconnectors

Accessories for 3LD5 UL main control and EMERGENCY-STOP switches

Additional poles

			3LD50	3LD52	3LD54	3LD56	3LD58
Switching contacts for N conductor (4th contact) for front mounting							
	**Contacts**	**Article No.**					
	Leading switch-on, lagging switch-off	3LD9250-0BA	■				
		3LD9280-0B		■			
		3LD9240-0B			■	■	■
Switching contacts for N conductor (4th contact) for floor mounting							
	**Contacts**	**Article No.**					
	Leading switch-on, lagging switch-off	3LD9250-0CA	■				
		3LD9280-0C		■			
		3LD9240-0C			■	■	■
N/PE terminals for front mounting							
	**Contacts**	**Article No.**					
	Through-type	3LD9250-2BA	■				
		3LD9280-2B		■			
		3LD9240-2B			■	■	■
N/PE terminals for floor mounting							
	**Contacts**	**Article No.**					
	Through-type	3LD9250-2CA	■				
		3LD9280-2C		■			
		3LD9240-2C			■	■	■
Auxiliary switches (standard version) for front mounting							
	• For mounting on the left and/or right • Lagging switch-on, leading switch-off						
	Contacts	**Contact surface** / **Article No.**					
	1 NO + 1 NC	Standard: 3LD9200-5B	■	■	■	■	■
		Gold-plated: 3LD9200-5BF	■	■	■	■	■
Auxiliary switches (standard version) for floor mounting							
	• For mounting on the left and/or right • Lagging switch-on, leading switch-off						
	Contacts	**Contact surface** / **Article No.**					
	1 NO + 1 NC	Standard: 3LD9200-5C	■	■	■	■	■
		Gold-plated: 3LD9200-5CF	■	■	■	■	■
Auxiliary switch for mounting on the front							
	• Mounted on the front of the switch shaft • For long leading times (20 ... 150ms)						
	Contacts	**Contact surface** / **Article No.**					
	1 NO + 1 NC	Standard: 3LD9280-5D new	■	■			
		3LD9240-5D new			■	■	■
		Gold-plated: 3LD9280-5DF new	■	■			
		3LD9240-5DF new			■	■	■

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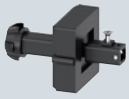
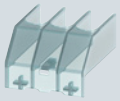
Operating mechanisms

			3LD50	3LD52	3LD54	3LD56	3LD58
Rotary operating mechanism for front mounting							
 • Lockable in 0 position with up to 3 padlocks							
Version		**Article No.**					
For main control switches		3LD9284-1B	■	■			
For EMERGENCY-STOP switches		3LD9284-3B	■	■			
Knob-operated mechanism for front mounting							
 • Lockable in 0 position with up to 3 padlocks							
Version		**Article No.**					
For main control switches		3LD9243-1B			■	■	■
For EMERGENCY-STOP switches		3LD9284-3B			■	■	■
Handles for floor mounting							
 • Supplied with a masking frame, but without an extension shaft or coupling driver • Can be locked with up to 3 padlocks							
Labeling	**Color**	**Article No.**					
O-I	Gray	8UD1771-2AD01	■	■			
		8UD1731-2AD01			■	■	■
	Red/yellow	8UD1771-2AD05	■	■			
		8UD1731-2AD05			■	■	■
Supplementary handles for door-coupling rotary operating mechanism							
 • For requirements according to UL508A/NFPA79 • Can be locked with up to 1 padlocks in 0 position • Can only be switched on by deliberate action							
Labeling	**Color**	**Article No.**					
O-I	Gray	3LD9287-1C	■	■			
		3LD9247-1C			■	■	■
	Red/yellow	3LD9287-3C	■	■			
		3LD9247-3C			■	■	■
Coupling drivers for floor mounting with door-coupling rotary operating mechanism							
							
Version		**Article No.**					
With tolerance compensation		8UD1900-1GA00	■	■			
		8UD1900-2GA00			■	■	■
Without tolerance compensation		8UD1900-1HA00	■	■			
		8UD1900-2HA00			■	■	■

Other accessories

			3LD50	3LD52	3LD54	3LD56	3LD58
Terminal covers							
• Pack of 4 units							
Number of poles		**Article No.**					
 1-pole		3LD9251-2A	■				
		3LD9281-2A		■			
		3LD9241-2A			■	■	■
 3-pole		3LD9251-0A	■				
Inscription labels							
 • Pack of 10 units							
Inscription							
German / English (Hauptschalter / Main Switch)		3LD9286-1A	■		■	■	■
Without inscription		3LD9286-4A	■		■	■	■

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3KD switch disconnectors

System overview

Complete assemblies with direct operating mechanisms



Front operating mechanisms, 3-pole



Front operating mechanisms, 4-pole



Front operating mechanisms, 3-pole



Front operating mechanisms, 4-pole

Basic units



Front operating mechanisms, 3-pole



Front operating mechanisms, 4-pole



Lateral operating mechanisms, 3-pole



Lateral operating mechanisms, 4-pole



Front-mounted devices, 6-pole for DC applications



Front operating mechanisms, 3-pole

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Additional poles and auxiliary switch modules



4th contact elements



N terminals



N/PE terminals



Auxiliary switch modules

Operating mechanisms



Direct operating mechanisms



Door-coupling rotary operating mechanisms



Handles for door-coupling rotary operating mechanisms



Other accessories for door-coupling rotary operating mechanisms

Other accessories and spare parts



Auxiliary switches



Terminal covers



Phase barriers



Blocking pin test function



Mounting elements



Accessories for DC applications

Note:
You will find a detailed range of accessories with the basic units.

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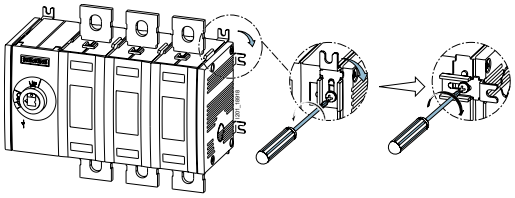
Types of mounting

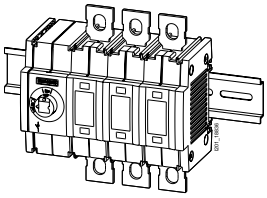
You will find further information ander:
sie.ag/2UlrAvy

Floor mounting



All 3KD switch disconnectors are designed for floor mounting. To ensure that the switch can be flexibly adapted to the relevant installation conditions, the mounting bracket can be rotated through 90° with size 3 or larger.

Standard mounting rail



Sizes 01 and 02 of the 3KD0 and sizes 1 and 2 of the 3KD can be snapped onto a standard mounting rail (TH35 according to EN 60715) as an alternative mounting method.

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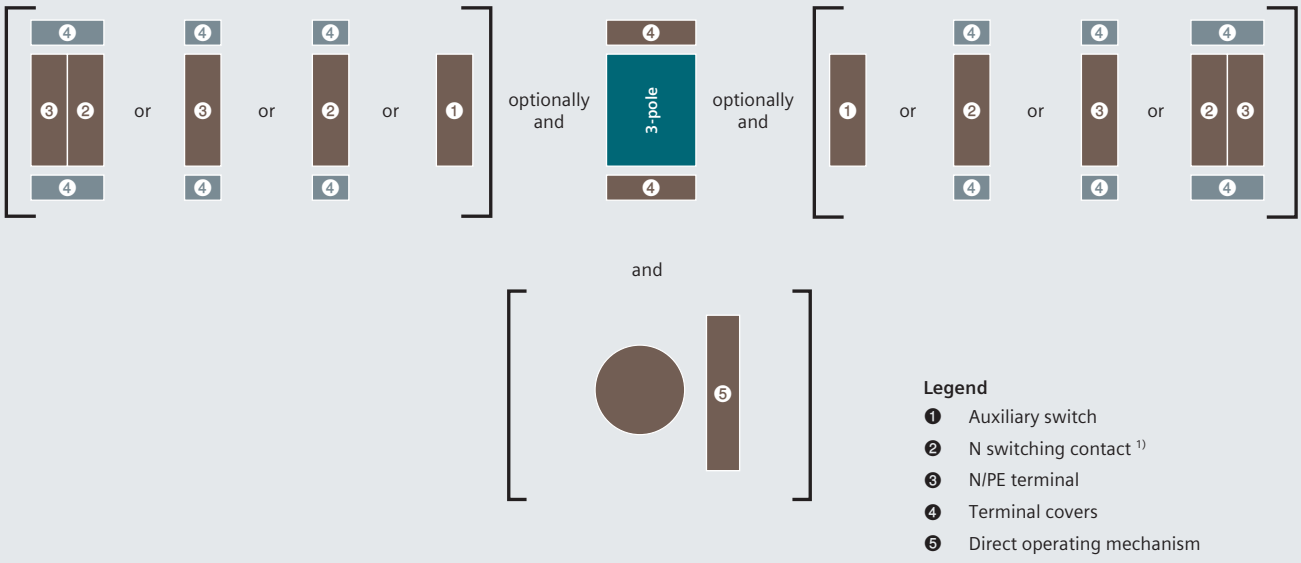
3KD switch disconnectors

Mounting concept and accessories

Front operating mechanism center, size 01 and 02

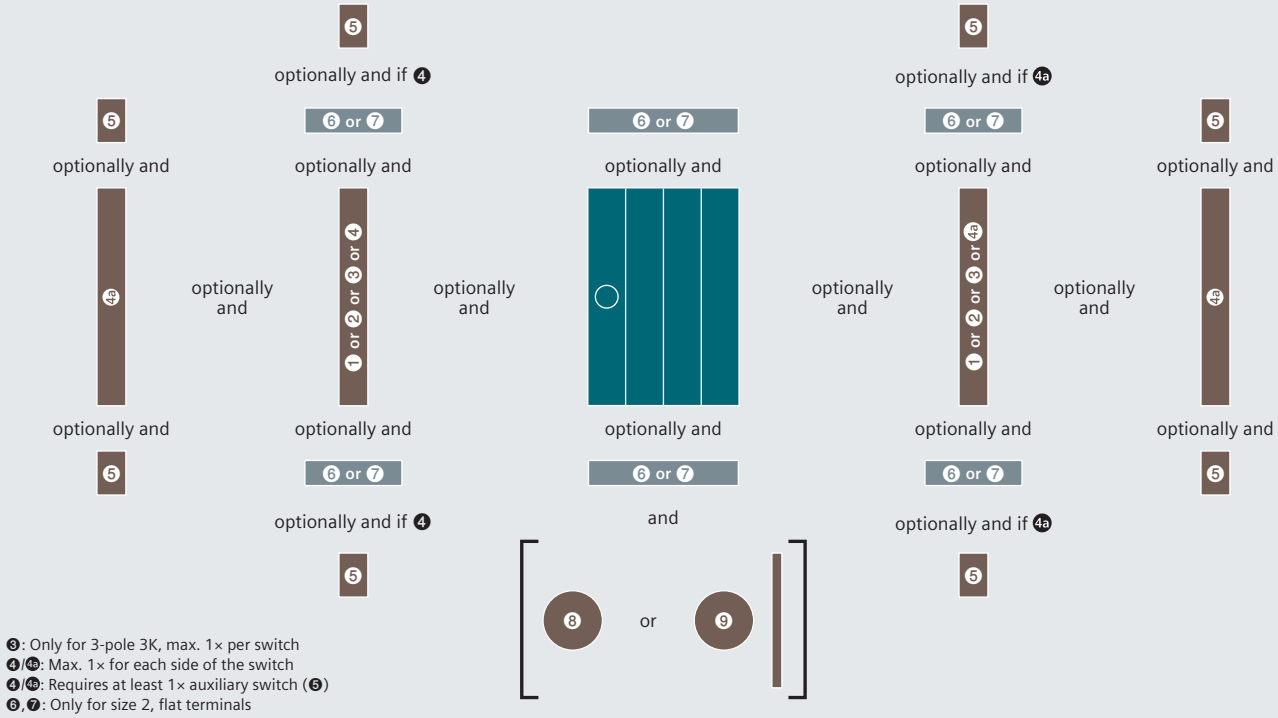


Legend

❶ Auxiliary switch
❷ N switching contact [1)]
❸ N/PE terminal
❹ Terminal covers
❺ Direct operating mechanism

[1)] The N switching contact ❷ first has to be mounted on the basic unit
Note: Design with door-coupling rotary operating mechanism for sizes 01 and 02 only possible for basic unit without operating mechanism

Front operating mechanism left, sizes 1 and 2, 3/4-pole



❸: Only for 3-pole 3K, max. 1× per switch
❹/❹a: Max. 1× for each side of the switch
❹/❹a: Requires at least 1× auxiliary switch (❺)
❻,❼: Only for size 2, flat terminals

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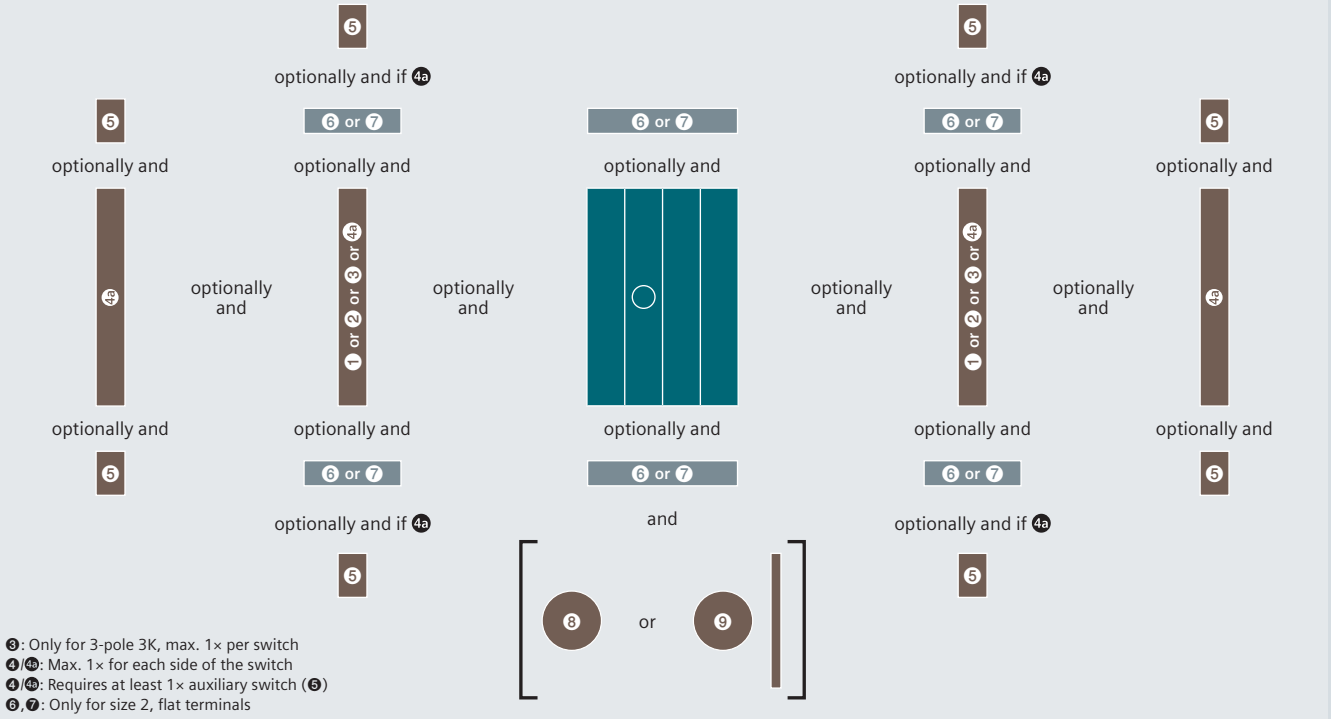
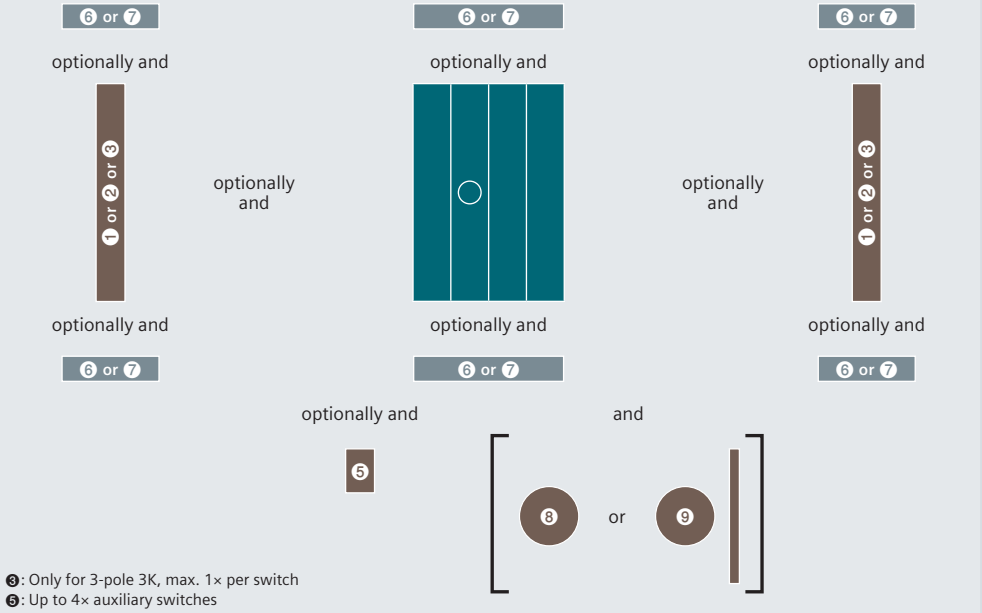
Front operating mechanism center, size 1 and 2, 3/4-pole



❸: Only for 3-pole 3K, max. 1× per switch
❹/❹a: Max. 1× for each side of the switch
❹/❹a: Requires at least 1× auxiliary switch (❺)
❻,❼: Only for size 2, flat terminals

Front operating mechanism center or left, sizes 3 to 5, 3/4-pole



❸: Only for 3-pole 3K, max. 1× per switch
❺: Up to 4× auxiliary switches

Legend

❶ Neutral conductor terminal
❷ N/PE terminal
❸ 4th contact element
❹ Auxiliary switch module, version with test function and version with leading NO contact and test function
❹a Auxiliary switch module for auxiliary switches, standard version
❺ Auxiliary switch
❻ Phase barrier
❼ Terminal cover
❽ Direct operating mechanism
❾ Door-coupling rotary operating mechanism

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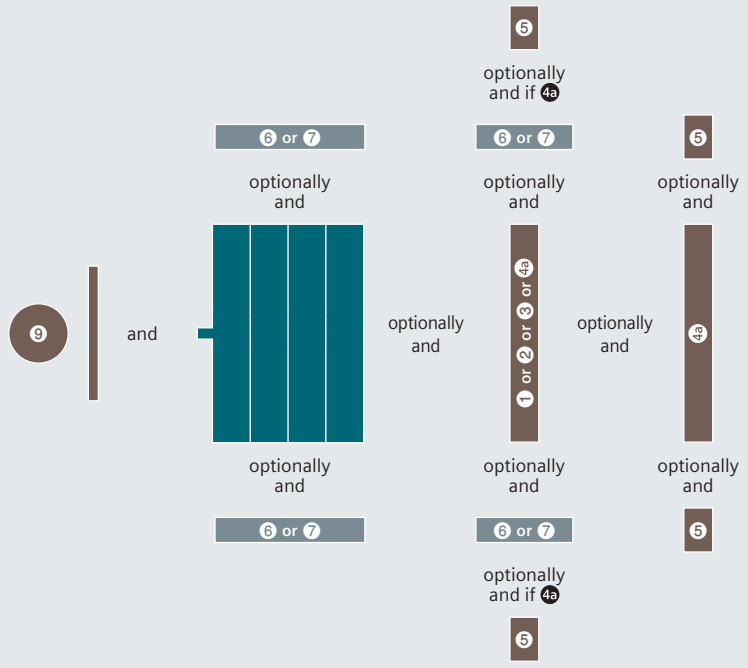
3KD switch disconnectors

Mounting concept and accessories

Lateral operating mechanism left, sizes 1 and 2, 3/4-pole

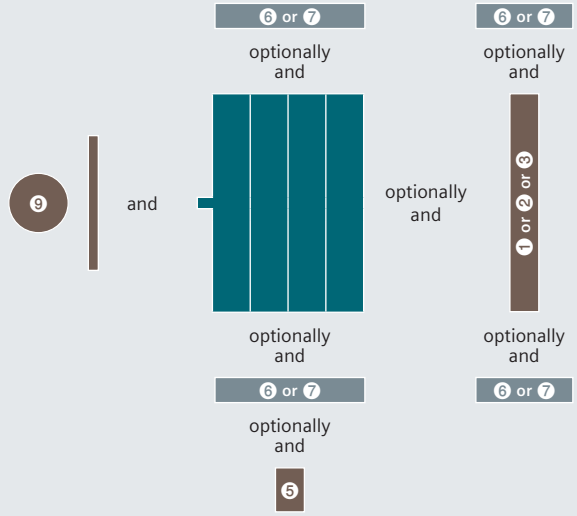


❸: Only for 3-pole 3K
❹b: Max. 1× per switch
❹a: Requires at least 1× auxiliary switch (❺)
❻,❼: Only for size 2, flat terminals

Legend

❶ Neutral conductor terminal
❷ N/PE terminal
❸ 4th contact element
❹a Auxiliary switch module for auxiliary switches, standard version
❺ Auxiliary switch
❻ Phase barrier
❼ Terminal cover
❾ Door-coupling rotary operating mechanism

Lateral operating mechanism left, sizes 3 to 5, 3/4-pole



❸: Only for 3-pole 3K
❺: Up to 4× auxiliary switches

Legend

❶ Neutral conductor terminal
❷ N/PE terminal
❸ 4th contact element
❺ Auxiliary switch
❻ Phase barrier
❼ Terminal cover
❾ Door-coupling rotary operating mechanism

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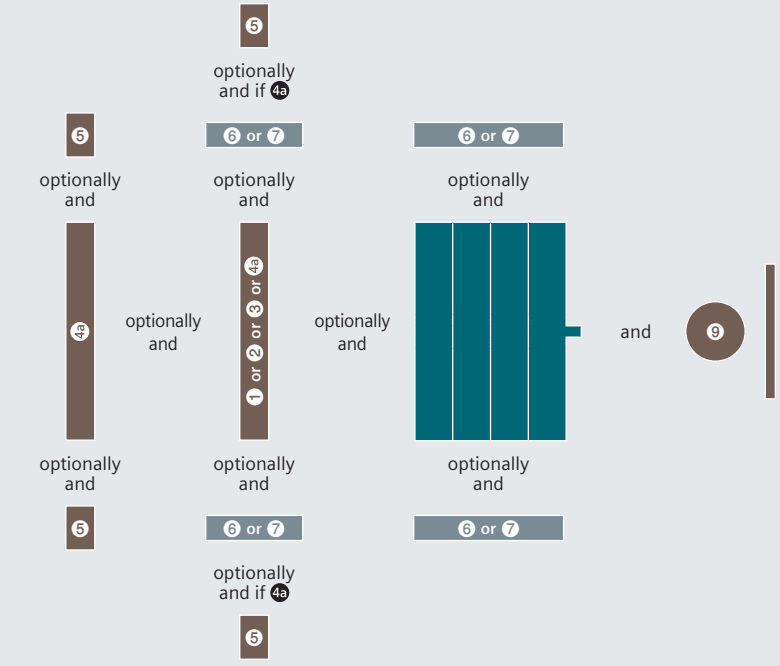
Lateral operating mechanism right, sizes 1 and 2, 3/4-pole

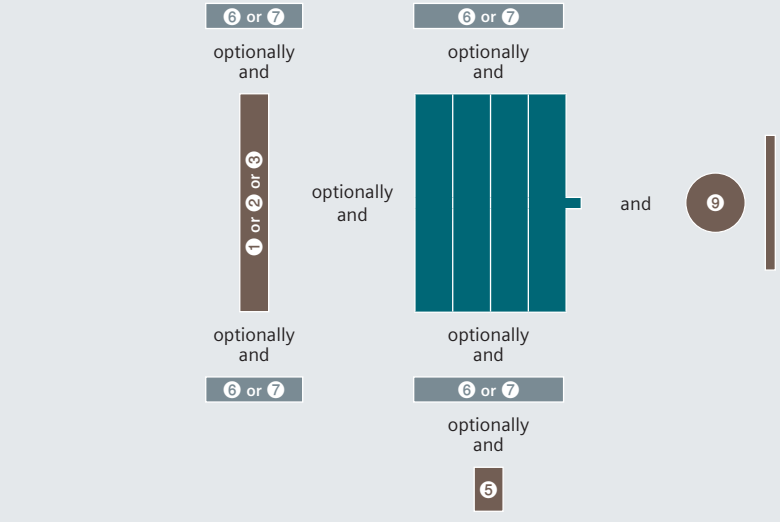


❸: Only for 3-pole 3K
❹b: Max. 1× per switch
❹b: Requires at least 1× auxiliary switch (❺)
❻,❼: Only for size 2, flat terminals

Legend

❶ Neutral conductor terminal
❷ N/PE terminal
❸ 4th contact element
❹a Auxiliary switch module for auxiliary switches, standard version
❺ Auxiliary switch
❻ Phase barrier
❼ Terminal cover
❾ Door-coupling rotary operating mechanism

Lateral operating mechanism right, sizes 3 to 5, 3/4-pole



❸: Only for 3-pole 3K
❺: Up to 4× auxiliary switches

Legend

❶ Neutral conductor terminal
❷ N/PE terminal
❸ 4th contact element
❺ Auxiliary switch
❻ Phase barrier
❼ Terminal cover
❾ Door-coupling rotary operating mechanism

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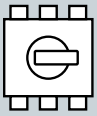
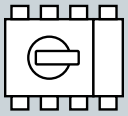
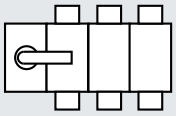
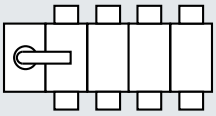
3KD switch disconnectors

Complete assemblies with direct operating mechanisms






		Drive, gray Front operating mechanism Center		Drive, gray Front operating mechanism Left	
Number of poles		3P	4P	3P	4P
					
Size	**Uninterrupted current I_u**				
Box terminals					
01 new	16 A	3KD0132-2KG20-3	3KD0142-2KG20-3	–	–
	32 A	3KD0232-2KG20-3	3KD0242-2KG20-3	–	–
	63 A	3KD0332-2KG20-3	–	–	–
02 new	63 A	3KD0332-2LG20-3	3KD0342-2LG20-3	–	–
	80 A	3KD0432-2LG20-3	3KD0442-2LG20-3	–	–
	100 A	3KD0532-2LG20-3	3KD0542-2LG20-3	–	–
	125 A	3KD0632-2LG20-3	3KD0642-2LG20-3	–	–
1	16 A	–	–	3KD1632-2ME10-0	3KD1642-2ME10-0
	32 A	–	–	3KD2232-2ME10-0	3KD2242-2ME10-0
	63 A	–	–	3KD2632-2ME10-0	3KD2642-2ME10-0
	80 A new	–	–	3KD2832-2ME10-0	3KD2842-2ME10-0
	100 A new	–	–	3KD3032-2ME10-0	3KD3042-2ME10-0
2	80 A	–	–	3KD2832-2NE10-0	3KD2842-2NE10-0
	100 A	–	–	3KD3032-2NE10-0	3KD3042-2NE10-0
	125 A	–	–	3KD3232-2NE10-0	3KD3242-2NE10-0
	160 A	–	–	3KD3432-2NE10-0	3KD3442-2NE10-0
Flat terminals					
2	80 A	–	–	3KD2832-0NE10-0	3KD2842-0NE10-0
	100 A	–	–	3KD3032-0NE10-0	3KD3042-0NE10-0
	125 A	–	–	3KD3232-0NE10-0	3KD3242-0NE10-0
	160 A	–	–	3KD3432-0NE10-0	3KD3442-0NE10-0
	200 A	–	–	3KD3632-0NE10-0	3KD3642-0NE10-0
	250 A new	–	–	3KD3832-0NE10-0	3KD3842-0NE10-0
3	200 A	–	–	3KD3632-0PE10-0	3KD3642-0PE10-0
	250 A	–	–	3KD3832-0PE10-0	3KD3842-0PE10-0
	315 A	–	–	3KD4032-0PE10-0	3KD4042-0PE10-0
	400 A	–	–	3KD4232-0PE10-0	3KD4242-0PE10-0
	500 A new	–	–	3KD4432-0PE10-0	3KD4442-0PE10-0
4	500 A	–	–	3KD4432-0QE10-0	3KD4442-0QE10-0
	630 A	–	–	3KD4632-0QE10-0	3KD4642-0QE10-0
	800 A	–	–	3KD4832-0QE10-0	3KD4842-0QE10-0
	1000 A new	–	–	3KD5032-0QE10-0	3KD5042-0QE10-0
5	1000 A	–	–	3KD5032-0RE10-0	3KD5042-0RE10-0
	1250 A	–	–	3KD5232-0RE10-0	3KD5242-0RE10-0
	1600 A	–	–	3KD5432-0RE10-0	3KD5442-0RE10-0
	2000 A new	–	–	3KD5632-0RE10-0	3KD5642-0RE10-0

Scope of supply:
- Incl. terminal covers on input and output side for 3KD0 sizes 01 and 02
- Incl. phase barriers on the input and output side for size 2 with flat terminals
- Terminal covers must be ordered separately for switch disconnectors with flat terminals and direct operating mechanisms

Mounting:
- The switch disconnectors are designed for floor mounting and the sizes 01, 02, 1 and 2 can optionally also be mounted on standard mounting rails

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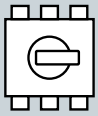
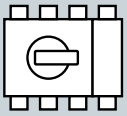
Drive, red/yellow
Front operating mechanism
Center

3P	4P
	
3KD0133-2KG20-3	3KD0143-2KG20-3
3KD0233-2KG20-3	3KD0243-2KG20-3
3KD0333-2KG20-3	–
3KD0333-2LG20-3	3KD0343-2LG20-3
3KD0433-2LG20-3	3KD0443-2LG20-3
3KD0533-2LG20-3	3KD0543-2LG20-3
3KD0633-2LG20-3	3KD0643-2LG20-3
–	–
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Note:
- The complete assemblies with a direct operating mechanism are not suitable for conversion to door-coupling rotary operating mechanisms; the basic units are to be used for this purpose
- All basic units without handles are suitable for use with door-coupling rotary operating mechanisms, from size 1 to size 5 these can also be equipped with direct operating mechanisms
- The switch disconnectors with lateral operating mechanism are suitable for door-coupling rotary operating mechanisms
- For 3KD switch disconnectors and lateral operating mechanism (left or right), only 8UD door-coupling rotary operating mechanisms without the test function can be used

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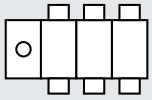
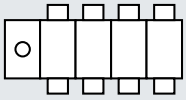
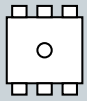
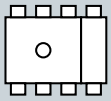
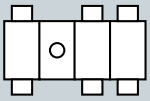
3KD switch disconnectors

Basic units without handles







	Front operating mechanism Left		Front operating mechanism Center		
Number of poles	3P	4P	3P	4P	3P
					

Size	Uninterrupted current I_u					
Box terminals						
01 new	16 A	–	–	3KD0130-2KG20-3	3KD0140-2KG20-3	–
	32 A	–	–	3KD0230-2KG20-3	3KD0240-2KG20-3	–
	63 A	–	–	3KD0330-2KG20-3	–	–
02 new	63 A	–	–	3KD0330-2LG20-3	3KD0340-2LG20-3	–
	80 A	–	–	3KD0430-2LG20-3	3KD0440-2LG20-3	–
	100 A	–	–	3KD0530-2LG20-3	3KD0540-2LG20-3	–
	125 A	–	–	3KD0630-2LG20-3	3KD0640-2LG20-3	–
1	16 A	3KD1630-2ME10-0	3KD1640-2ME10-0	–	–	3KD1630-2ME20-0
	32 A	3KD2230-2ME10-0	3KD2240-2ME10-0	–	–	3KD2230-2ME20-0
	63 A	3KD2630-2ME10-0	3KD2640-2ME10-0	–	–	3KD2630-2ME20-0
	80 A new	3KD2830-2ME10-0	3KD2840-2ME10-0	–	–	3KD2830-2ME20-0
	100 A new	3KD3030-2ME10-0	3KD3040-2ME10-0	–	–	3KD3030-2ME20-0
2	80 A	3KD2830-2NE10-0	3KD2840-2NE10-0	–	–	3KD2830-2NE20-0
	100 A	3KD3030-2NE10-0	3KD3040-2NE10-0	–	–	3KD3030-2NE20-0
	125 A	3KD3230-2NE10-0	3KD3240-2NE10-0	–	–	3KD3230-2NE20-0
	160 A	3KD3430-2NE10-0	3KD3440-2NE10-0	–	–	3KD3430-2NE20-0
Flat terminals						
2	80 A	3KD2830-0NE10-0	3KD2840-0NE10-0	–	–	3KD2830-0NE20-0
	100 A	3KD3030-0NE10-0	3KD3040-0NE10-0	–	–	3KD3030-0NE20-0
	125 A	3KD3230-0NE10-0	3KD3240-0NE10-0	–	–	3KD3230-0NE20-0
	160 A	3KD3430-0NE10-0	3KD3440-0NE10-0	–	–	3KD3430-0NE20-0
	200 A	3KD3630-0NE10-0	3KD3640-0NE10-0	–	–	3KD3630-0NE20-0
	250 A new	3KD3830-0NE10-0	3KD3840-0NE10-0	–	–	3KD3830-0NE20-0
3	200 A	3KD3630-0PE10-0	3KD3640-0PE10-0	–	–	3KD3630-0PE20-0
	250 A	3KD3830-0PE10-0	3KD3840-0PE10-0	–	–	3KD3830-0PE20-0
	315 A	3KD4030-0PE10-0	3KD4040-0PE10-0	–	–	3KD4030-0PE20-0
	400 A	3KD4230-0PE10-0	3KD4240-0PE10-0	–	–	3KD4230-0PE20-0
	500 A new	3KD4430-0PE10-0	3KD4440-0PE10-0	–	–	3KD4430-0PE20-0
4	500 A	3KD4430-0QE10-0	3KD4440-0QE10-0	–	–	3KD4430-0QE20-0
	630 A	3KD4630-0QE10-0	3KD4640-0QE10-0	–	–	3KD4630-0QE20-0
	800 A	3KD4830-0QE10-0	3KD4840-0QE10-0	–	–	3KD4830-0QE20-0
	1000 A new	3KD5030-0QE10-0	3KD5040-0QE10-0	–	–	3KD5030-0QE20-0
5	1000 A	3KD5030-0RE10-0	3KD5040-0RE10-0	–	–	3KD5030-0RE20-0
	1250 A	3KD5230-0RE10-0	3KD5240-0RE10-0	–	–	3KD5230-0RE20-0
	1600 A	3KD5430-0RE10-0	3KD5440-0RE10-0	–	–	3KD5430-0RE20-0
	2000 A new	3KD5630-0RE10-0	3KD5640-0RE10-0	–	–	3KD5630-0RE20-0

Scope of supply:
- Incl. terminal covers on input and output side for 3KD0 sizes 01 and 02
- Incl. phase barriers on the input and output side for size 2 with flat terminals
- Terminal covers must be ordered separately for switch disconnectors with flat terminals and direct operating mechanisms

Mounting:
- The switch disconnectors are designed for floor mounting and the sizes 01, 02, 1 and 2 can optionally also be mounted on standard mounting rails

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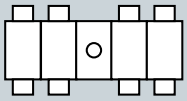
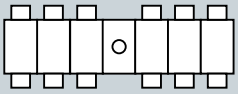
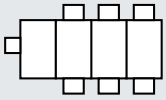
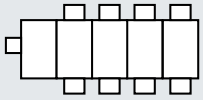
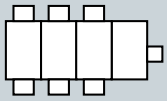
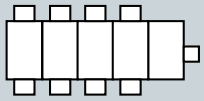
Front operating mechanism Center		Lateral operating mechanism Left		Right	
4P	6P for DC applications	3P	4P	3P	4P
					
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3KD1640-2ME20-0	3KD1660-2ME20-0	3KD1634-2ME10-0	3KD1644-2ME10-0	3KD1634-2ME40-0	3KD1644-2ME40-0
3KD2240-2ME20-0	3KD2260-2ME20-0	3KD2234-2ME10-0	3KD2244-2ME10-0	3KD2234-2ME40-0	3KD2244-2ME40-0
3KD2640-2ME20-0	3KD2660-2ME20-0	3KD2634-2ME10-0	3KD2644-2ME10-0	3KD2634-2ME40-0	3KD2644-2ME40-0
3KD2840-2ME20-0	–	3KD2834-2ME10-0	3KD2844-2ME10-0	3KD2834-2ME40-0	3KD2844-2ME40-0
3KD3040-2ME20-0	–	3KD3034-2ME10-0	3KD3044-2ME10-0	3KD3034-2ME40-0	3KD3044-2ME40-0
3KD2840-2NE20-0	3KD2860-2NE20-0	3KD2834-2NE10-0	3KD2844-2NE10-0	3KD2834-2NE40-0	3KD2844-2NE40-0
3KD3040-2NE20-0	3KD3060-2NE20-0	3KD3034-2NE10-0	3KD3044-2NE10-0	3KD3034-2NE40-0	3KD3044-2NE40-0
3KD3240-2NE20-0	3KD3260-2NE20-0	3KD3234-2NE10-0	3KD3244-2NE10-0	3KD3234-2NE40-0	3KD3244-2NE40-0
3KD3440-2NE20-0	3KD3460-2NE20-0	3KD3434-2NE10-0	3KD3444-2NE10-0	3KD3434-2NE40-0	3KD3444-2NE40-0
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3KD3040-0NE20-0	3KD3060-0NE20-0	3KD3034-0NE10-0	3KD3044-0NE10-0	3KD3034-0NE40-0	3KD3044-0NE40-0
3KD3240-0NE20-0	3KD3260-0NE20-0	3KD3234-0NE10-0	3KD3244-0NE10-0	3KD3234-0NE40-0	3KD3244-0NE40-0
3KD3440-0NE20-0	3KD3460-0NE20-0	3KD3434-0NE10-0	3KD3444-0NE10-0	3KD3434-0NE40-0	3KD3444-0NE40-0
3KD3640-0NE20-0	–	3KD3634-0NE10-0	3KD3644-0NE10-0	3KD3634-0NE40-0	3KD3644-0NE40-0
3KD3840-0NE20-0	–	3KD3834-0NE10-0	3KD3844-0NE10-0	3KD3834-0NE40-0	3KD3844-0NE40-0
3KD3640-0PE20-0	3KD3660-0PE20-0	3KD3634-0PE10-0	3KD3644-0PE10-0	3KD3634-0PE40-0	3KD3644-0PE40-0
3KD3840-0PE20-0	3KD3860-0PE20-0	3KD3834-0PE10-0	3KD3844-0PE10-0	3KD3834-0PE40-0	3KD3844-0PE40-0
3KD4040-0PE20-0	3KD4060-0PE20-0	3KD4034-0PE10-0	3KD4044-0PE10-0	3KD4034-0PE40-0	3KD4044-0PE40-0
3KD4240-0PE20-0	3KD4260-0PE20-0	3KD4234-0PE10-0	3KD4244-0PE10-0	3KD4234-0PE40-0	3KD4244-0PE40-0
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3KD5040-0QE20-0	–	3KD5034-0QE10-0	3KD5044-0QE10-0	3KD5034-0QE40-0	3KD5044-0QE40-0
3KD5040-0RE20-0	3KD5060-0RE20-0	3KD5034-0RE10-0	3KD5044-0RE10-0	3KD5034-0RE40-0	3KD5044-0RE40-0
3KD5240-0RE20-0	3KD5260-0RE20-0	3KD5234-0RE10-0	3KD5244-0RE10-0	3KD5234-0RE40-0	3KD5244-0RE40-0
3KD5440-0RE20-0	3KD5460-0RE20-0	3KD5434-0RE10-0	3KD5444-0RE10-0	3KD5434-0RE40-0	3KD5444-0RE40-0
3KD5640-0RE20-0	–	3KD5634-0RE10-0	3KD5644-0RE10-0	3KD5634-0RE40-0	3KD5644-0RE40-0

Note:

- The complete assemblies with a direct operating mechanism are not suitable for conversion to door-coupling rotary operating mechanisms; the basic units are to be used for this purpose
- All basic units without handles are suitable for use with door-coupling rotary operating mechanisms, from size 1 to size 5 these can also be equipped with direct operating mechanisms
- The switch disconnectors with lateral operating mechanism are suitable for door-coupling rotary operating mechanisms
- For 3KD switch disconnectors and lateral operating mechanism (left or right), only 8UD door-coupling rotary operating mechanisms without the test function can be used

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3KD switch disconnectors

Accessories

Additional poles

Note:

- Additional poles (4th contact element, N or N/PE terminal) must always be mounted directly adjacent to the switch disconnector on the left or right. Accordingly, an auxiliary switch module must not be mounted between the basic unit and an additional pole on sizes 1 and 2.
- For installation, it is important to note that only a 3-pole 3KD switch disconnector may be retrofitted with an additional switching pole with contact system (4th contact element).

4th contact elements (switching pole)

- For upgrading a 3-pole to a 4-pole switch disconnector
- For sizes 1 to 5, identical to the factory-fitted poles
- For sizes 01 and 02, leading switch-on, lagging switch-off
- Sizes 01 and 02 equipped at the factory with terminal covers for the input and output side.

Connection	Article No.	Size 01	Size 02	Size 1	Size 2	Size 3	Size 4	Size 5
Box terminals	3KD9015-2 new	■						
N—N	3KD9025-2 new		■					
	3KD9105-2			■				
	3KD9205-2				■			
Flat terminals	3KD9205-0				■			
N—N	3KD9305-0					■		
	3KD9405-0						■	
	3KD9505-0							■

N terminals (neutral conductor terminal) with removable jumper

- A jumper can be removed in order to interrupt the electrical connection between the terminals

Connection	Article No.	Size 01	Size 02	Size 1	Size 2	Size 3	Size 4	Size 5
Box terminals	3KD9106-2			■				
	3KD9206-2				■			
Flat terminals	3KD9206-0				■			
	3KD9306-0					■		
	3KD9406-0						■	
	3KD9506-0							■

N/PE terminals with permanent jumper

- Permanent electrical connection between the terminals, cannot be broken

Connection	Article No.	Size 01	Size 02	Size 1	Size 2	Size 3	Size 4	Size 5
Box terminals	3KD9016-8 new	■						
	3KD9026-8 new		■					
	3KD9106-8			■				
	3KD9206-8				■			
Flat terminals	3KD9206-7				■			
	3KD9306-7					■		
	3KD9406-7						■	
	3KD9506-7							■

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Operating mechanisms

Direct operating mechanisms, standard version

- Can be locked with up to 3 padlocks
- Requires additional mounting depth in locked state





Labeling	Color	Article No.	Size 01	Size 02	Size 1	Size 2	Size 3	Size 4	Size 5
Test – O – I	Gray	3KD9101-1			■				
		3KD9201-1				■			
		3KD9301-1					■		
		3KD9401-1						■	
		3KD9501-1							■
	Red/yellow	3KD9101-2			■				
		3KD9201-2				■			
		3KD9301-2					■		
		3KD9401-2						■	
		3KD9501-2							■

Direct operating mechanisms, flat version

- Suitable for distribution boards
- Can be locked with 1 padlock
- No additional mounting depth in locked state





Labeling	Color	Article No.	Size 01	Size 02	Size 1	Size 2	Size 3	Size 4	Size 5
Test – O – I	Gray	3KD9101-0			■				
		3KD9201-0				■			
	Red/yellow	3KD9101-8			■				
		3KD9201-8				■			

Direct operating mechanisms, distribution boards



Number of poles	Color	Article No.	Size 01	Size 02	Size 1	Size 2	Size 3	Size 4	Size 5
3-pole	Gray	3KD9011-0C	■						
	Red/yellow	3KD9011-8C	■						
4-pole	Gray	3KD9011-0D	■						
	Red/yellow	3KD9011-8D	■						

Door-coupling rotary operating mechanisms, complete

- **Scope of supply:**
  - Handle with masking plate (Sizes 01 and 02 without test function)
  - Coupling driver
  - Shaft 300 mm
- Can be locked with up to 3 padlocks







Labeling	Tolerance compensation	Defeat function	Color	Article No.	Size 01	Size 02	Size 1	Size 2	Size 3	Size 4	Size 5
O – I	With new	With	Gray	8UD1171-1AD21	■	■					
			Red/yellow	8UD1171-1AD25	■	■					
	Without	Without	Gray	3KD9001-5 new	■	■					
			Red/yellow	3KD9001-6 new	■	■					
		With	Gray	8UD1171-1AD21			■	■			
			Red/yellow	8UD1171-1AD25			■	■			
Test – O – I	With	With	Gray	8UD1171-2AF21			■	■			
				8UD1141-2AF21					■		
				8UD1151-3AF21						■	
				8UD1161-4AF21							■
			Red/yellow	8UD1171-2AF25			■	■			
				8UD1141-2AF25					■		
				8UD1151-3AF25						■	
				8UD1161-4AF25							■

Note:
- For 3KD switch disconnectors and lateral operating mechanism (left or right), only 8UD door-coupling rotary operating mechanisms without the test function can be used
- The door-coupling rotary operating mechanisms of the 3KD90 type are mounted on the inside of the door by means of center-hole mounting

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3KD switch disconnectors

Accessories

Accessories for door-coupling rotary operating mechanisms

					Size 01	Size 02	Size 1	Size 2	Size 3	Size 4	Size 5
Handles											
	• Supplied with a masking frame, but without an extension shaft or coupling driver • Can be locked with up to 3 padlocks										
	Labeling	**Lighting**	**Color**	**Article No.**							
	O – I	Without	Gray	8UD1771-2AD01	■	■	■	■			
				8UD1841-2AD01					■		
				8UD1851-3AD01						■	
				8UD1861-4AD01							■
			Red/yellow	8UD1771-2AD05	■	■	■	■			
				8UD1841-2AD05					■		
				8UD1851-3AD05						■	
				8UD1861-4AD05							■
		With	Gray	8UD1771-2CD01			■	■			
				8UD1841-2CD01					■		
				8UD1851-3CD01						■	
				8UD1861-4CD01							■
			Red/yellow	8UD1771-2CD05			■	■			
				8UD1841-2CD05					■		
				8UD1851-3CD05						■	
				8UD1861-4CD05							■
	Test – O – I	Without	Gray	8UD1771-2AF01			■	■			
				8UD1841-2AF01					■		
				8UD1851-3AF01						■	
				8UD1861-4AF01							■
			Red/yellow	8UD1771-2AF05			■	■			
				8UD1841-2AF05					■		
				8UD1851-3AF05						■	
				8UD1861-4AF05							■
		With	Gray	8UD1771-2CF01			■	■			
				8UD1841-2CF01					■		
				8UD1851-3CF01						■	
				8UD1861-4CF01							■
			Red/yellow	8UD1771-2CF05			■	■			
				8UD1841-2CF05					■		
				8UD1851-3CF05						■	
				8UD1861-4CF05							■
Extension shafts											
	• A shaft jack is required for the 8UD1 handle when the 600 mm long shaft is used and for sizes 01, 02, 1 and 2										
	Length			**Article No.**							
	300 mm			3KD9002-0 new	■	■					
				8UC6032			■	■	■		
				8UC6033						■	
				8UC6034							■
	600 mm			3KD9002-1 new	■	■					
				8UC6082			■	■	■		
				8UC6083						■	
				8UC6084							■
Shaft jack for 8UD1 handle											
	**Version**			**Article No.**							
	For shaft 600 mm			8UD1900-0FA00	■	■	■	■			

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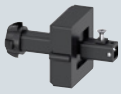
Accessories for door-coupling rotary operating mechanisms

Coupling drivers

	Version	Article No.	Size 01	Size 02	Size 1	Size 2	Size 3	Size 4	Size 5
	With tolerance compensation	8UD1900-1GA00 new	■	■					
		8UD1900-2GA00			■	■			
		8UD1900-6GA00					■		
		8UD1900-3GA00						■	
		8UD1900-4GA00							■
	Without tolerance compensation	8UD1900-1HA00 new	■	■					
		8UD1900-2HA00			■	■			
		8UD1900-6HA00					■		
		8UD1900-3HA00						■	
		8UD1900-4HA00							■

Shaft couplings

	Article No.	Size 01	Size 02	Size 1	Size 2	Size 3	Size 4	Size 5
	8UC6022			■	■	■		
	8UC6023						■	
	8UC6024							■

Other accessories and spare parts

Auxiliary switch modules



- Auxiliary switch modules are supplied without auxiliary switches. A maximum of 2 auxiliary switches can be installed per auxiliary module
- The 3KD9103-6 and 3KD9103-7 auxiliary switch modules can only be used with 3KD directly on the operating mechanism if the operating mechanism is on the front or on the left

Variant	Article No.	Size 01	Size 02	Size 1	Size 2	Size 3	Size 4	Size 5
Standard version	3KD9103-5			■	■			
With test function	3KD9103-6			■	■			
With leading NO contact and test function	3KD9103-7			■	■			

Auxiliary switches

- Auxiliary switches for sizes 01 and 02 are snapped onto the side of the switches
- Auxiliary switches for sizes 3 to 5 have screw terminals and are mounted on the operating mechanism module of the 3KD. Auxiliary switches with spring-type terminals from the 3SU1 range can also be used.
- All auxiliary switches for sizes 3 to 5 can be used as leading auxiliary switches, depending on the mounting position of the auxiliary switch (see Operating Instructions).

	Variant	Contacts	Contact surface	Article No.	Size 01	Size 02	Size 1	Size 2	Size 3	Size 4	Size 5
	With connecting cables	1 CO	Standard	3KD9103-1			■	■			
			Solid-state compatible	3KD9103-3			■	■			
	Without connecting cables	1 NO + 1 NC	Standard	3KD9003-2 new	■	■					
			Solid-state compatible	3KD9003-4 new	■	■					
		1 CO	Standard	3KD9103-2			■	■			
			Solid-state compatible	3KD9103-4			■	■			
		1 NO	Standard	3SU1400-1AA10-1BA0					■	■	■
			Gold-plated	3SU1400-1AA10-1LA0					■	■	■
		1 NC	Standard	3SU1400-1AA10-1CA0					■	■	■
			Gold-plated	3SU1400-1AA10-1MA0					■	■	■
		1 NO + 1 NC	Standard	3SU1400-1AA10-1FA0					■	■	■
			Gold-plated	3SU1400-1AA10-1QA0					■	■	■
		2 NO	Standard	3SU1400-1AA10-1DA0					■	■	■
			Gold-plated	3SU1400-1AA10-1NA0					■	■	■
		2 NC	Standard	3SU1400-1AA10-1EA0					■	■	■
			Gold-plated	3SU1400-1AA10-1PA0					■	■	■

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3KD switch disconnectors

Accessories

Other accessories and spare parts

Phase barriers



- For 3KD with flat terminals
- For 3KD size 2 with flat terminals, phase barriers are already contained in the scope of supply

Version	Scope of supply	Article No.	Size 01	Size 02	Size 1	Size 2	Size 3	Size 4	Size 5
For 3-pole devices	6 units	3KD9108-6				■			
		3KD9308-6					■		
		3KD9408-6						■	
		3KD9508-6							■
For 4-pole devices	8 units	3KD9108-8				■			
		3KD9308-8					■		
		3KD9408-8						■	
		3KD9508-8							■

Klemmenabdeckungen



- For sizes 01 and 02, terminal covers are already part of the scope of supply and must therefore only be used as spare parts
- For 3KD with flat terminals
- Not permissible for 2000 A devices

Version	Scope of supply	Variante	Article No.	Size 01	Size 02	Size 1	Size 2	Size 3	Size 4	Size 5
For 1-pole devices	4 units		3KD9014-1B	■						
new			3KD9024-1B		■					
For 3-pole devices	4 units		3KD9014-3B	■						
For 3-pole devices	6 units	Standard length	3KD9204-6				■			
			3KD9304-6					■		
			3KD9404-6						■	
			3KD9504-6							■
		Short version	3KD9204-7				■			
			3KD9304-7					■		
			3KD9404-7						■	
For 4-pole devices	8 units	Standard length	3KD9204-8				■			
			3KD9304-8					■		
			3KD9404-8						■	
			3KD9504-8							■
		Short version	3KD9204-5				■			
			3KD9304-5					■		
			3KD9404-5						■	

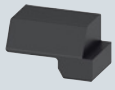
Spare part for terminal covers



- Not permissible for 2000 A devices

Scope of supply	Variante	Article No.	Size 01	Size 02	Size 1	Size 2	Size 3	Size 4	Size 5
1 unit	Standard length	3KD9504-1							■
	Short version	3KD9204-1				■			
		3KD9304-1					■		
		3KD9404-1						■	

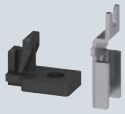
Blocking pin test function



- Enables permanent deactivation of the test function for auxiliary switches
- It is installed in the operating mechanism module of the 3KD switch disconnector

Scope of supply	Article No.	Size 01	Size 02	Size 1	Size 2	Size 3	Size 4	Size 5
10 units	3KF9112-1AA00			■	■			
	3KF9412-1AA00					■	■	
	3KF9512-1AA00							■

Mounting brackets



- Spare part, included in the scope of supply of the 3KD

Scope of supply	Article No.	Size 01	Size 02	Size 1	Size 2	Size 3	Size 4	Size 5
4 units	3KD9120-1			■	■			
	3KF9212-0AA00					■		
	3KF9412-0AA00						■	
	3KF9512-0AA00							■

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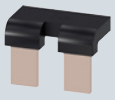
Other accessories and spare parts

		Size 01	Size 02	Size 1	Size 2	Size 3	Size 4	Size 5
Slide for mounting on a standard mounting rail								
 • Spare part, included in the scope of supply of the 3KD								
Scope of supply	**Article No.**							
5 units	3KF9112-0BA00			■	■			

Accessories for DC applications

		Size 01	Size 02	Size 1	Size 2	Size 3	Size 4	Size 5
Connecting bridges								
• Suitable for connecting two poles • For 3KD switch disconnectors with 400 A, 800 A, 1250 A and 1600 A, two units are required.								
Connection	**Article No.**							
 Box terminals	3KD9118-1			■				
	3KD9218-1				■			
 Flat terminals	3KD9218-0				■			
	3KD9318-0					■		
	3KD9418-0						■	
	3KD9518-0							■
Terminal covers for connecting bridges								
 • For 3KD with flat terminals								
	Article No.							
	3KD9204-0				■			
	3KD9304-0					■		
	3KD9404-0						■	
	3KD9504-0							■

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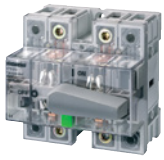
5TE1 switch disconnectors

System overview

Switch disconnectors



Transparent



Red/yellow

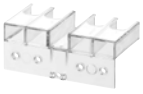
Accessories



Auxiliary switches



Cage terminals



Terminal covers

Note:
You will find a detailed range of accessories with the basic units.

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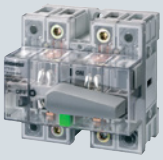
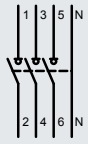
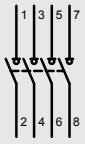
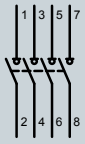
18 ... 33 kA_{rms}





			Switch disconnectors, transparent				Switch disconnectors, red/yellow	
		Number of poles	2P	3P	3P+N	4P	3P	4P
								
Mounting width	Rated operational current I_e	Rated operational voltage U_e						
5 MW	100 A	690 V	5TE1210	5TE1310	5TE1610	5TE1410	5TE1315	5TE1415
	125 A	690 V	5TE1220	5TE1320	5TE1620	5TE1420	5TE1325	5TE1425
8 MW	160 A	690 V	5TE1230	5TE1330	5TE1630	5TE1430	5TE1335	5TE1435
	200 A	690 V	5TE1240	5TE1340	5TE1640	5TE1440	5TE1345	5TE1445

Accessories

Auxiliary switches



- Can be mounted optionally left or right or on both sides (2 units)

Contact load	Contacts	I_e	U_e	Article No.
Min. 24 V, 50 mA	1 CO	6 A	230 V	5TE9005
	2 CO	6 A	230 V	5TE9006

Rotary operating mechanisms with extension shafts



- For mounting on hinged doors or enclosure lids, lockable

Degree of protection	Color	Shaft length	Article No.
IP65	Black knob	200 mm	5TE9010
		400 mm	5TE9011
	Red knob	200 mm	5TE9012
		400 mm	5TE9013

Conversion kit, 4-pole



- For connection of busbars or cables with cable lugs
- For busbars max. 15 mm wide including terminal cover

Version	Article No.
For 100 A and 125 A switch disconnectors	5TE9015

Cage terminals



- Terminal diameter 14.5 mm for 35-mm^2 cables
- Hexagon socket-head screw 5 mm

Version	Number of poles	Scope of supply	Article No.
For 160 A and 200 A switch disconnectors	3-pole	1 set = 3 units	5TE9003
	4-pole	1 set = 4 units	5TE9004

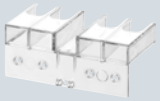
Locking units



- For up to three padlocks with max. diam. 8 mm

	Article No.
	5TE9014

Terminal covers, sealable





Version	Article No.
For 100 A and 125 A switch disconnectors	5TE9000
For 160 A and 200 A switch disconnectors	5TE9001

Quick selection guide, page 8/6

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Fuse switch disconnectors

Quick selection guide



3NP1



Size			000	00	1	2	3
General technical details acc. to IEC 60947-3							
Basic data							
Rated uninterrupted current I_u		A	160 [2]	160	250	400	630
For fuse links acc. to IEC 60269-2		Size	000	00 and 000	1 and 0	2 and 1	3 and 2
Rated operational voltage U_e	At 50/60 Hz AC	V			690		
	At DC (3 conducting paths in series)	V			440		
	At DC (2 conducting paths in series)	V			240		
	At DC	V			–		
	For utilization category AC-20B or DC-20B	V			690 [1]		
Operating and short-circuit behavior							
Rated operational current I_e	At AC-21B, 400 V AC	A	160 [2]	160	250	400	630
	At AC-22B, 400 V AC	A	160 [2]	160	250	400	630
	At AC-23B, 400 V AC	A	160 [2]	160	250	400	630
	At AC-21B, 500 V AC	A	160 [2]	160	250	400	630
	At AC-22B, 500 V AC	A	125 [2]	160	250	400	630
	At AC-23B, 500 V AC	A	40	63	200	315	500
	At AC-21B, 690 V AC	A	160 [2]	160	250	400	630
	At AC-22B, 690 V AC	A	50	125	250	400	500
	At AC-23B, 690 V AC	A	25	35	100	125	200
	At DC-21B (2 conducting paths in series), 240 V DC	A	160 [2]	160	250	400	630
	At DC-22B (2 conducting paths in series), 240 V DC	A	100	160	250	400	630
	At DC-23B (2 conducting paths in series), 240 V DC	A	80	100	200	250	400
	At DC-21B (3 conducting paths in series), 440 V DC	A	100	160	250	400	630
	At DC-22B (3 conducting paths in series), 440 V DC	A	50	125	200	315	500
	At DC-23B (3 conducting paths in series), 440 V DC	A	25	63	100	160	250
Rated conditional short-circuit current with fuses (by fast switch on)	Rated current at 400 V/500 V/690 V	kA	80/80/80	80/80/80	80/80/50	80/80/50	50/50/50
	Permissible let-through current of the fuses, peak value	kA	10	15	25	40	50
Short-circuit strength with fuses (with closed disconnector)	Rated current at 500 V/690 V	kA	120/100	120/100	120/100	100/100	100/100
	Permissible let-through I^2t value of the fuses	kA^2s	223	223	780	2150	5400
	Permissible let-through current of the fuses, peak value	kA	15	23	32	40	60
Rated making capacity	With isolating blades at 500 V AC	kA	2	6	17	17	17
Rated short-time withstand current I_{cw}		kA	–	–	–	–	–
Rated insulation voltage U_i		V	690 [1]	690 [1]	690 [1]	690 [1]	690 [1]
Rated impulse withstand voltage U_{imp}		kV	8	8	8	8	8
Power loss per pole of the switch at I_{th} (without fuses)		W	5	5	8	14	30
Maximum power loss of the usable fuses (per fuse)		W	7.5 [3]	12	23	34	48
Mechanical endurance, operating cycles			2000	2000	1600	1000	1000
Degree of protection							
Without masking plate or terminal cover – switch closed / open			IP30/IP20	IP30/IP20	IP30/IP20	IP30/IP20	IP30/IP20
With masking plate or terminal cover – switch closed / open			IP40/IP20	IP40/IP20	IP40/IP20	IP40/IP20	IP40/IP20
Certifications and approvals							
					VDE, CCC, LR, cULus		
More information							
Catalog LV 10 – 10/2020					see page 8/82		

The technical specifications apply to the standard types stated below.
For the complete specifications for all versions, see the Online Support
3NP1: 3-pole and 4-pole devices without fuse monitoring
3NP5: Devices without fuse monitoring
3NJ4/5: Disconnectors for cable and line protection without fuse monitoring, not for transformer protection

[1] Applies to degree of pollution 3 (for degree of pollution 2, use up to U_i 1000 V possible)
[2] Only with use of the infeed terminal, otherwise up to 100 A
[3] Max. 9 W for operation up to 160 A

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3NP5				3NJ4/3NJ5					5SG76
									
00	**1**	**2**	**3**	**00**	**1**	**2**	**3**	**4a**	**D01**
160	250	400	630	160	250	400	630	1250	16
00	1 and 0	2 and 1	3 and 2	00 and 000	1 and 0	2 and 1	3 and 2	4a	D01
690						690			400, 415
440						–			–
220						–			110
–						–			48
690						–			–
160	250	400	630	160	250	400	630	1250	16
160	250	400	630	160	250	400	630	1250	16
160	250	400	630	–	250	400	–	–	–
160	250	400	630	160	250	400	630	1250	–
160	250	400	630	160	250	400	630	1250	–
160	250	400	630	–	–	–	–	–	–
160	250	400	630	100	250	400	630	1250	–
160	250	400	630	100	250	–	–	–	–
100	160	315	400	–	–	–	–	–	–
160	250	400	630	–	–	–	–	–	–
160	250	400	630	–	–	–	–	–	–
160	250	400	630	–	–	–	–	–	–
160	250	400	630	–	–	–	–	–	–
160	250	400	630	–	–	–	–	–	–
160	250	400	630	–	–	–	–	–	–
50/50/–	50/50/–	50/50/–	50/50/–	–	–	–	–	–	50/–/–
15	25	40	50	–	–	–	–	–	–
100/–	100/–	50/–	50/–	80	120	120	120	80	–
223	780	2150	5400	–	–	–	–	–	–
23	32	40	60	–	–	–	–	–	–
6	17	17	17	–	–	–	–	–	–
–	–	–	–	–	14.5	14.5	14.5	35	–
690 [1]	690 [1]	690 [1]	690 [1]	800	1000	1000	1000	1000	400
6	6	6	6	8	12	12	12	12	2.5
7.8	7.5	15	39	18	23	54	115	190	–
12	23	34	48	12	32	45	48	110	2.5
1600	1600	1600	1600	1400	1400	800	800	500	–
IP00/IP00	IP00/IP00	IP00/IP00	IP00/IP00	IP00/IP00	IP00/IP00	IP00/IP00	IP00/IP00	IP00/IP00	IP20/IP20
IP30/IP10	IP30/IP10	IP30/IP10	IP30/IP10	IP30/IP10	IP30/IP10	IP30/IP10	IP30/IP10	IP10/IP00	IP20/IP20
CCC									
see page 8/96				see page 8/100					see page 8/112

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3NP1 fuse switch disconnectors

System overview

Basic units



1, 3, 4-pole for floor mounting



3 and 4-pole mounting on busbar systems

Connection parts



Terminals for retrofitting to 3NP1



Auxiliary conductor connections

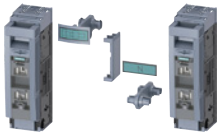


Three-phase busbars

Assembly kits



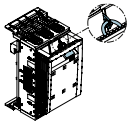
Standard rail mounting



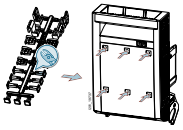
Mechanical connection



1/4-pole busbar mounting



Locking function

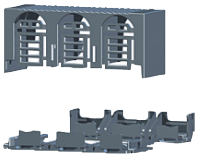


Protection against power theft

Masking frames and covers



Masking frames and supports



Cable connection covers



Reach-around protection for busbar

Other accessories



Auxiliary switches



Isolating blades



Fuse carriers with and without fuse monitoring

Note:
You will find a detailed range of accessories with the basic units.

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General information

Modular design

Directly to 3NP1 configurator under: sie.ag/3IlXQZH

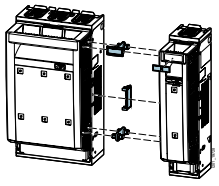


The 3NP1 fuse switch disconnector has a modular design.
A wide variety of switch combinations can be created by connecting two devices or by subsequently fitting accessories. All common switch combinations are available from the factory ready for installation and can be found on the following ordering overviews. An overview of the possibilities offered by the modular design is provided on these information pages.

The fastest and simplest way to find the right switch combination is to use our 3NP1 configurator in the Siemens Industry Mall.

Number of poles

You will find further information under: sie.ag/2UlrAvy

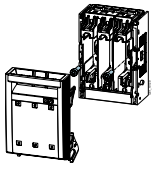


3NP1 fuse switch disconnectors are available from the factory in 1, 3 and 4-pole device versions.
4-pole types are available in all common versions from the factory ready for installation (without fuse monitoring, N-pole on the right-hand side).

All other conceivable device combinations, such as 2-pole 3NP1s, 4-pole with fuse monitoring or with a neutral conductor on the left-hand side can simply be put together on site by combining two 3NP1s.
All that is needed for this in addition to the two 3NP1 basic units is the matching connection assembly kit (see accessories).

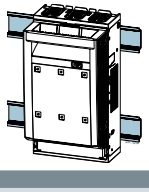
Floor mounting and standard mounting rail

You will find further information under: sie.ag/2UlrAvy



All sizes of the 3NP1 fuse switch disconnectors are available in floor mounting versions.

The 3NP1 is mounted on a mounting panel with screws.



The devices for floor mounting of sizes 000, 00 and 1 can also be mounted on a standard mounting rail using accessories. For this purpose, the assembly kit for mounting on a standard mounting rail is simply mounted on the rear panel of the 3NP1.

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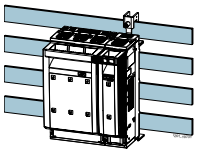
3NP1 fuse switch disconnectors

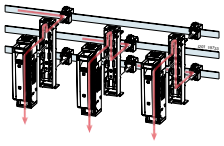
General information

Mounting on busbar systems

You will find further information under: sie.ag/2UlrAvy



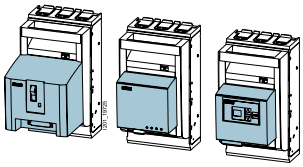
3-pole and 4-pole 3NP1 are available for mounting on busbar systems. In the case of 4-pole devices, the infeed for the fourth pole is supplied by the neutral conductor bar located above the 3 phases.



1-pole 3NP1 devices for wall mounting in sizes 000 and 00 can be adapted to the 8US 60 mm busbar system using the assembly kit for 1-pole busbar mounting. Due to the modular design of the assembly kit, any phase can be selected for the infeed.

Fuse monitoring

You will find further information under: sie.ag/2UlrAvy



MFM EFM10/15 EFM20/25

The fuse monitoring is used to detect, indicate and signal that a fuse has tripped.

The fuse monitors are permanently installed on the handle of the 3NP1. They have floating contacts for remote signaling of a tripped fuse and also indicate this locally.

Various versions of fuse monitors are available, which can be selected to suit the requirements of the application (functionality, see table).

MFM electromechanical fuse monitoring with an installed SIRIUS circuit breaker

EFM electronic fuse monitoring with evaluation electronics
The EFM15 series is a cost-optimized version of the EFM10. EFM20/25 are versions with additional functions (display indication, detection and signaling of overvoltage/undervoltage with adjustable limits, phase failure detection).

Common combinations of the 3NP1 basic unit and fuse monitoring are available from the factory ready for installation. A fuse monitor can also be easily retrofitted by replacing the fuse carrier. (Fuse carriers for all fuse monitoring versions are available as accessories.)

Note
Fuses with insulated grip lugs cannot be used for 3NP1 with fuse monitoring.

		MFM 3-pole	EFM10 3-pole	EFM15					EFM20 3-pole	EFM25 3-pole
				1-pole			3-pole			
				AC/DC	AC	DC	AC	DC		
Local indication	Toggle switch position	■	-	-	-	-	-	-	-	-
	Indication via LEDs for each phase	-	■	■	■	■	■	■	-	-
	Indication via display for each phase	-	-	-	-	-	-	-	■	■
External power supply required		-	-	24 V DC	24 V DC	24 V DC	24 V DC	24 V DC	-	-
Permissible operational voltage	AC	max. 690 V	230 ... 690 V	24 ... 230 V	110 ... 690 V	-	190 ... 690 V	-	230 ... 690 V	-
	DC	max. 440 V	-	24 ... 250 V	-	120 ... 440 V	-	220 ... 440 V	-	220 ... 440 V
Detection and indication of	Overvoltage	-	-	-	-	-	-	-	■	■
	Undervoltage	-	-	-	-	-	-	-	■	■
	Phase failure	-	-	-	-	-	-	-	■	-

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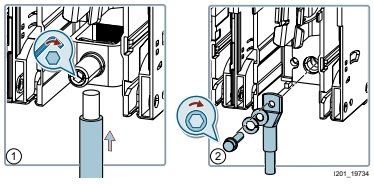
Electrical connection

You will find further information under: sie.ag/2UlrAvy



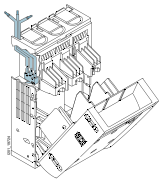
3NP1 are available in versions with box terminals (all sizes) or flat terminals (sizes 00 and larger).

Various additional types of terminal are available as accessories for adaptation to the respective wiring situation, e.g. prism, saddle or triple terminals.

Other accessories

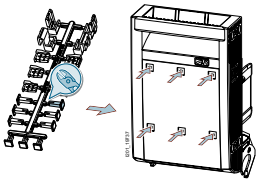
You will find further information under: sie.ag/2UlrAvy

Auxiliary switches



Auxiliary switches enable remote querying of the switch position of the 3NP1. Up to two auxiliary switches can be installed.

Power theft



The assembly kit for protection from power theft seals the holes on the front of the 3NP1 (for voltage testing) permanently, which reliably prevents unauthorized access to live parts.

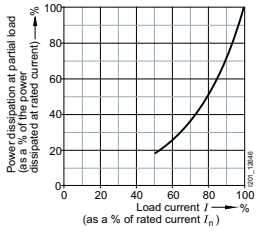
Isolating blades



4-pole 3NP1s are used in 3-phase AC systems with switched neutral conductors. They are supplied without an isolating blade for the N pole. The switching instant is selected by choosing the appropriate isolating blade.

Suitable fuses

You will find further information under: sie.ag/2UlrAvy



The 3NP5 fuse switch disconnector is suitable for all fuses with LV HRC design in sizes 000 to 3 that comply with IEC 60269-2, including fuses for
cable and line protection and motor protection.
Fuses for semiconductor protection (Siemens trademark SITOR) can also be used. However, some of these fuses have substantially higher power losses than fuses according to IEC 60269-2. This means that the load current has to be reduced until the value that is permissible in the fuse switch disconnector is not exceeded.
For use of SITOR semiconductor fuses, ready-made derating tables are available in the linked document.

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3NP1 fuse switch disconnectors

For a complete and valid configuration of your fuse switch disconnectors, please use our online configurator at www.siemens.com/lowvoltage/3np1-configurator

		Flat terminals			
		NH00	NH1	NH2	NH3
					
Fuse monitoring	**Number of poles**	**I_u = 160 A**	**I_u = 250 A**	**I_u = 400 A**	**I_u = 630 A**
Floor mounting					
Without	1-pole	3NP1131-1CA10	3NP1141-1DA10	3NP1151-1DA10	3NP1161-1DA10
	3-pole	3NP1133-1CA10	3NP1143-1DA10	3NP1153-1DA10	3NP1163-1DA10
	4-pole	3NP1134-1CA10	3NP1144-1DA10	3NP1154-1DA10	3NP1164-1DA10
MFM	3-pole	3NP1133-1CA11	3NP1143-1DA11	3NP1153-1DA11	3NP1163-1DA11
EFM10	3-pole	3NP1133-1CA12	3NP1143-1DA12	3NP1153-1DA12	3NP1163-1DA12
EFM15	1-pole	3NP1131-1CA14	3NP1141-1DA14	3NP1151-1DA14	3NP1161-1DA14
	3-pole	3NP1133-1CA14	3NP1143-1DA14	3NP1153-1DA14	3NP1163-1DA14
EFM20	3-pole	3NP1133-1CA13	3NP1143-1DA13	3NP1153-1DA13	3NP1163-1DA13
Mounting on 60 mm busbar systems with reach-around protection for Siemens 8US					
Without FM	3-pole	3NP1133-1BC10	3NP1143-1BC10	3NP1153-1BC10	3NP1163-1BC10
	4-pole	3NP1134-1BC10	3NP1144-1BC10	3NP1154-1BC10	3NP1164-1BC10
MFM	3-pole	3NP1133-1BC11	3NP1143-1BC11	3NP1153-1BC11	3NP1163-1BC11
EFM10	3-pole	3NP1133-1BC12	3NP1143-1BC12	3NP1153-1BC12	3NP1163-1BC12
EFM15	3-pole	3NP1133-1BC14	3NP1143-1BC14	3NP1153-1BC14	3NP1163-1BC14
EFM20	3-pole	3NP1133-1BC13	3NP1143-1BC13	3NP1153-1BC13	3NP1163-1BC13
Mounting on 60 mm busbar systems with reach-around protection for Rittal					
Without FM	3-pole	3NP1133-1JC10	3NP1143-1JC10	3NP1153-1JC10	3NP1163-1JC10
MFM	3-pole	3NP1133-1JC11	3NP1143-1JC11	3NP1153-1JC11	3NP1163-1JC11
EFM10	3-pole	3NP1133-1JC12	3NP1143-1JC12	3NP1153-1JC12	3NP1163-1JC12
EFM20	3-pole	3NP1133-1JC13	3NP1143-1JC13	3NP1153-1JC13	3NP1163-1JC13
Mounting on 40 mm busbar systems with reach-around protection for Siemens 8US					
Without FM	3-pole	3NP1133-1BB10	–	–	–
MFM	3-pole	3NP1133-1BB11	–	–	–
EFM10	3-pole	3NP1133-1BB12	–	–	–
EFM20	3-pole	3NP1133-1BB13	–	–	–
Mounting on 40 mm busbar systems with reach-around protection for Rittal					
Without FM	3-pole	3NP1133-1JB10	–	–	–
MFM	3-pole	3NP1133-1JB11	–	–	–
EFM10	3-pole	3NP1133-1JB12	–	–	–
EFM20	3-pole	3NP1133-1JB13	–	–	–

Notes:
- On the 3NP1 with fuse monitoring, the permissible operating voltage is limited by the fuse monitoring
- Permissible operational voltage with fuse monitoring:
  - MFM AC max. 690 V (L – L) / max. 440 V (L+ – L–)
  - EFM10 230 ... 690 V AC (L – L)
  - EFM15 3-pole 190 ... 690 V AC (L – L)
  - EFM15 1-pole 24 ... 240 V AC (L – N) / 24 ... 250 V DC (L+ – L–)
  - EFM20 230 ... 690 V AC (L – L)
- Additional variants are available as accessories:
  - EFM15 with further operating voltage ranges
  - EFM25 – DC version of the EFM20
- Devices for busbar mounting with reach-around protection
  - For Siemens 8US, mounting is possible on the Wöhner Classic and Rittal RiLine systems without a floor pan
  - For Rittal, mounting is possible on the RiLine60 system with a floor pan

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Box terminals

NH000	NH00	NH1	NH2	NH3
				
I_u = 100 A	I_u = 160 A	I_u = 250 A	I_u = 400 A	I_u = 630 A
3NP1121-1CA20	3NP1131-1CA20	3NP1141-1DA20	3NP1151-1DA20	3NP1161-1DA20
3NP1123-1CA20	3NP1133-1CA20	3NP1143-1DA20	3NP1153-1DA20	3NP1163-1DA20
3NP1124-1CA20	3NP1134-1CA20	3NP1144-1DA20	3NP1154-1DA20	3NP1164-1DA20
–	3NP1133-1CA21	3NP1143-1DA21	3NP1153-1DA21	3NP1163-1DA21
3NP1123-1CA22	3NP1133-1CA22	3NP1143-1DA22	3NP1153-1DA22	3NP1163-1DA22
3NP1121-1CA24	3NP1131-1CA24	3NP1141-1DA24	3NP1151-1DA24	3NP1161-1DA24
3NP1123-1CA24	3NP1133-1CA24	3NP1143-1DA24	3NP1153-1DA24	3NP1163-1DA24
3NP1123-1CA23	3NP1133-1CA23	3NP1143-1DA23	3NP1153-1DA23	3NP1163-1DA23
3NP1123-1BC20	3NP1133-1BC20	3NP1143-1BC20	3NP1153-1BC20	3NP1163-1BC20
3NP1124-1BC20	3NP1134-1BC20	3NP1144-1BC20	3NP1154-1BC20	3NP1164-1BC20
–	3NP1133-1BC21	3NP1143-1BC21	3NP1153-1BC21	3NP1163-1BC21
3NP1123-1BC22	3NP1133-1BC22	3NP1143-1BC22	3NP1153-1BC22	3NP1163-1BC22
3NP1123-1BC24	3NP1133-1BC24	3NP1143-1BC24	3NP1153-1BC24	3NP1163-1BC24
3NP1123-1BC23	3NP1133-1BC23	3NP1143-1BC23	3NP1153-1BC23	3NP1163-1BC23
3NP1123-1JC20	3NP1133-1JC20	3NP1143-1JC20	3NP1153-1JC20	3NP1163-1JC20
–	3NP1133-1JC21	3NP1143-1JC21	3NP1153-1JC21	3NP1163-1JC21
3NP1123-1JC22	3NP1133-1JC22	3NP1143-1JC22	3NP1153-1JC22	3NP1163-1JC22
3NP1123-1JC23	3NP1133-1JC23	3NP1143-1JC23	3NP1153-1JC23	3NP1163-1JC23
3NP1123-1BB20	3NP1133-1BB20	–	–	–
–	3NP1133-1BB21	–	–	–
3NP1123-1BB22	3NP1133-1BB22	–	–	–
3NP1123-1BB23	3NP1133-1BB23	–	–	–
3NP1123-1JB20	3NP1133-1JB20	–	–	–
–	3NP1133-1JB21	–	–	–
3NP1123-1JB22	3NP1133-1JB22	–	–	–
3NP1123-1JB23	3NP1133-1JB23	–	–	–

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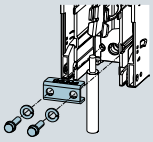
3NP1 fuse switch disconnectors

Accessories

Connection technology – Terminals

- For adaptation to the respective wiring situation
- Contain enough parts to retrofit one side of a 3NP1 accordingly (three terminals for 3-pole 3NP1, one terminal for 1-pole unit)
- If the incoming cable and cable outlet are retrofitted, two packages must be ordered

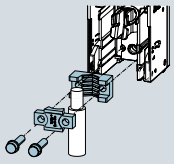
Saddle terminals



- Allow connection of stripped circular conductors to 3NP1 with flat terminals

Connection	Conductor cross-section	1-pole Article No.	3-pole Article No.	NH000	NH00	NH1	NH2	NH3
	1,5 ... 70 mm²	3NP1931-1BA00	3NP1933-1BA00		■			
	70 ... 120 mm²	3NP1941-1BA00	3NP1943-1BA00			■		
	120 ... 240 mm²	3NP1951-1BA00	3NP1953-1BA00				■	
	150 ... 300 mm²	3NP1961-1BA00	3NP1963-1BA00					■

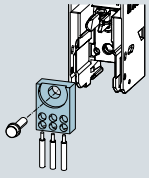
Prism terminals



- Allow connection of stripped circular conductors to 3NP1 with flat terminals
- Also approved for connection of aluminum conductors, available for one or two conductors

Variant	Conductor cross-section	1-pole Article No.	3-pole Article No.	NH000	NH00	NH1	NH2	NH3
single	35 ... 95 mm²	3NP1931-1BB10	3NP1933-1BB10		■			
	70 ... 150 mm²	3NP1941-1BB10	3NP1943-1BB10			■		
	120 ... 240 mm²	3NP1951-1BB10	3NP1953-1BB10				■	
	150 ... 300 mm²	3NP1961-1BB10	3NP1963-1BB10					■
double	2× 35 ... 70 mm²	3NP1941-1BB20	3NP1943-1BB20			■		
	2× 70 ... 120 mm²	3NP1951-1BB20	3NP1953-1BB20				■	
	2× 150 ... 185 mm²	3NP1961-1BB20	3NP1963-1BB20					■

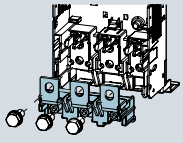
Three-tier terminal



- Distributes one outgoing feeder directly to three smaller loads

Variant	Conductor cross-section	1-pole Article No.	3-pole Article No.	NH000	NH00	NH1	NH2	NH3
for 3NP1 with flat terminals	3× 1,5 ...16 mm²	3NP1931-1BE10	3NP1933-1BE10		■			
for 3NP1 with box terminals	3× 1,5 ...16 mm²	3NP1921-1BE20	3NP1923-1BE20	■	■			

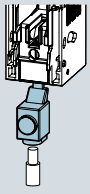
Connection module



- Used with a 3NP1 for busbar mounting if a masking frame is to be supported on the 32 mm cover plane (installation of the terminals under the masking frame)
- For 3NP1 with flat terminals

Variant	Conductor cross-section	1-pole Article No.	3-pole Article No.	NH000	NH00	NH1	NH2	NH3
Connection module	3× 6 ... 70 mm²	3NP1931-1BC00	3NP1933-1BC00		■			

Feeder terminal



- Extends the conductor cross-section of a 000 with box terminal to up to 95 mm²

Version	Conductor cross-section	1-pole Article No.	3-pole Article No.	NH000	NH00	NH1	NH2	NH3
Feeder terminal	16 ... 95 mm²	3NP1921-1BD00	3NP1923-1BD00	■				

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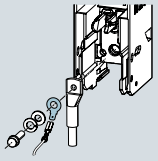
Connection technology

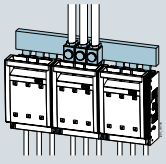
Auxiliary conductor connections



- For connecting small loads directly to the terminals of the 3NP1
- Connection via commercially available flat tab sleeves 6.3 × 0.8 mm, max. 5 A load
- Scope of supply: 3 units

3NP1 connection	Article No.	3-pole	NH000	NH00	NH1	NH2	NH3
With flat terminals	3NP1933-1BG10			■			
	3NP1943-1BG10				■		
	3NP1943-1BG10					■	
	3NP1943-1BG10						■
With box terminals	3NP1923-1BG40		■				
	3NP1933-1BG40			■			
	3NP1943-1BG40				■		
	3NP1953-1BG40					■	
	3NP1953-1BG40						■
With retrofitted prism and saddle terminals	3NP1933-1BG30			■			
	3NP1943-1BG30				■		
	3NP1953-1BG30					■	
	3NP1953-1BG30						■

Three-phase busbar system



- For connection of up to 4 3NP1 NH000 for floor mounting on the infeed side
- Infeed is routed through feeder terminals
- With the connection bar, two blocks of bridged 3NP1 can be connected
- Using the cover cap, the connection tags of the busbar are covered on unused feeders to ensure they are safe to touch
- The maximum current-carrying capacity of the interconnected 3NP1 is 225 A in total for the three-phase busbar system

Version	Scope of supply	Article No.	NH000	NH00	NH1	NH2	NH3
for 2× 3NP1	1 pack = 5 units	3NP1923-1BF20	■				
for 3× 3NP1	1 pack = 5 units	3NP1923-1BF30	■				
for 4× 3NP1	1 pack = 3 units	3NP1923-1BF40	■				
Connection bars	1 pack = 3 units	3NP1923-1BF50	■				
Covering caps	1 pack = 20 units	3NP1923-1BF10	■				
Feeder terminal	1 pack = 3 units	3NP1923-1BD00	■				

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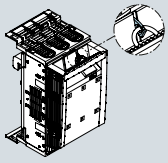
3NP1 fuse switch disconnectors

Accessories

Assembly kits

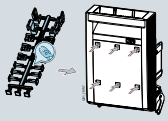
Retrofitting of locking function



- For all versions of the 3NP1
- If required for locking with a padlock (not necessary for the 1-pole 3NP1)

Scope of supply	Article No.	NH000	NH00	NH1	NH2	NH3
1 pack = 10 units	3NP1900-1HA00	■	■	■	■	■

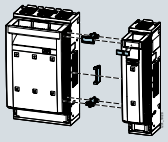
Protection against power theft



- Closes the holes on the front of the 3NP1 (holes for voltage testing) and secures the front window such that power theft is not possible without visible damage to the 3NP1 (when the 3NP1 is locked or sealed)

Scope of supply	Article No.	NH000	NH00	NH1	NH2	NH3
1 pack = 5 units	3NP1900-1EF00	■	■	■	■	■

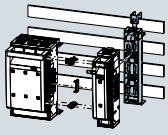
Mechanical connection of 1-pole and 3-pole 3NP1 devices



- For 3NP1 with floor mounting
- By combining two 3NP1s for floor mounting, any 2-pole and 4-pole devices can be created

	Article No.	NH000	NH00	NH1	NH2	NH3
	3NP1921-1EC00	■				
	3NP1931-1EC00		■			
	3NP1941-1EC00			■	■	■

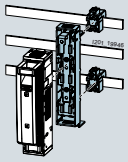
4-pole connecting kit for mounting on a 8US 60-mm busbar



- Connects a 3-pole 3NP1 for busbar mounting 60 mm 8US to a 1-pole 3NP1 for floor mounting
- The 1-pole 3NP1 switches the neutral conductor of a 3+N system in this combination

3NP1 connection	Article No.	NH000	NH00	NH1	NH2	NH3
With flat terminals	3NP1934-1ED20		■			
With box terminals	3NP1924-1ED10	■				
	3NP1934-1ED10		■			
With flat terminals or box terminals	3NP1944-1ED00			■		
	3NP1954-1ED00				■	■

1-pole connecting kit for mounting on a 8US 60-mm busbar



- Permits adaptation of a 1-pole 3NP1 for floor mounting to a 3-pole busbar system
- The feeding busbar (L1, L2 or L3) can be chosen freely
- If two such 3NP1 are combined by mechanical connection using the assembly kit, 2-pole 3NP1 for busbar mounting can also be assembled

3NP1 connection	Article No.	NH000	NH00	NH1	NH2	NH3
With box terminals	3NP1921-1EE10	■				
	3NP1931-1EE10		■			

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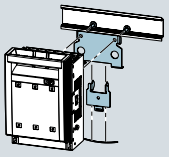
Assembly kits



- Must be mounted on the rear of a 3NP1 for floor mounting
- Mounting of the 3NP1 on a standard mounting rail is achieved for size NH000 by mounting on a mounting rail, and for sizes NH00 and NH1 between two mounting rails that are 125 or 150 mm apart

	1-/2-pole	3-pole	4-pole	NH000	NH00	NH1	NH2	NH3
Assembly kits for mounting on standard mounting rail								
	Article No.	**Article No.**	**Article No.**					
	3NP1921-1EA00	3NP1923-1EA00	3NP1924-1EA00	■				
	3NP1931-1EB00	3NP1933-1EB00	3NP1933-1EB00		■			
	3NP1943-1EB00	3NP1943-1EB00	3NP1943-1EB00			■		

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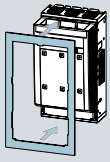
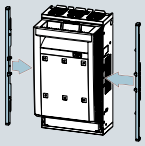
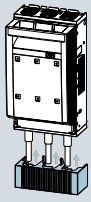
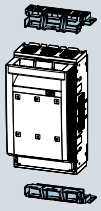
3NP1 fuse switch disconnectors

Accessories

Masking frames and covers

	1-pole	3-pole	NH000	NH00	NH1	NH2	NH3
Masking frames							
 • Used to cover an existing gap for a masking frame mounted on the application side							
Outer dimensions (H×W)	**Article No.**	**Article No.**					
215 × 130 mm	–	3NP1923-1DA00	■				
215 × 130 mm	–	3NP1933-1DA00		■			
375 × 220 mm	–	3NP1943-1DA00			■		
375 × 245 mm	–	3NP1953-1DA00				■	
375 × 290 mm	–	3NP1963-1DA00					■
Masking frame supports							
 • Are mounted on the side of the 3NP1 and prevent the supported masking frame from sagging (pack of 2 units)							
	Article No.	**Article No.**					
	3NP1923-1CF00	3NP1923-1CF00	■				
	3NP1933-1CF00	3NP1933-1CF00		■			
	3NP1943-1CF00	3NP1943-1CF00			■	■	■
Cable connection covers							
 • Extends the terminal covers integrated in the 3NP1 • In the version with rear reach-around protection, the underside is also covered							
Version	**Article No.**	**Article No.**					
Without rear reach-around protection	3NP1921-1CB00	3NP1923-1CB00 [1]	■				
	3NP1931-1CB00	3NP1933-1CB00 [2]		■			
	3NP1941-1CB00	3NP1943-1CB00			■		
	3NP1951-1CB00	3NP1953-1CB00				■	
	3NP1961-1CB00	3NP1963-1CB00					■
With rear reach-around protection	–	3NP1933-1CC00 [1]		■			
	3NP1931-1CD00	3NP1933-1CD00 [3]		■			
	3NP1941-1CD00	3NP1943-1CD00			■		
	3NP1951-1CD00	3NP1953-1CD00				■	
	3NP1961-1CD00	3NP1963-1CD00					■
Reach-around protection for busbar (spare part)							
 • Covers the busbar • For conversion of a 3NP1 to another busbar system							
For busbar systems	**Article No.**	**Article No.**					
Siemens 8US	–	3NP1923-1CA10	■				
	–	3NP1933-1CA10		■			
	3NP1941-1CA10	–			■	■	■
	–	3NP1943-1CA10			■		
	–	3NP1953-1CA10				■	
	–	3NP1963-1CA10					■
Siemens 8US compact	–	3NP1923-1CA30	■				
Rittal	–	3NP1923-1CA20	■				
	–	3NP1933-1CA20		■			
	–	3NP1943-1CA20			■		
	–	3NP1953-1CA20				■	
	–	3NP1963-1CA20					■

[1] Only for 3NP1 for mounting on busbar systems
[2] Only for 3NP1 with flat terminals
[3] Only for 3NP1 with flat terminals for floor mounting

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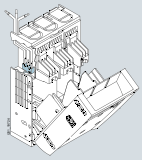
Other accessories

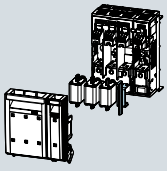
Auxiliary switches



- Up to 2 auxiliary switches can be mounted
- From size NH00, it is possible to choose whether the auxiliary switch will switch simultaneously with the fuses or leading on switch-on. (Only leading possible for size NH000)

Contacts	Article No.	NH000	NH00	NH1	NH2	NH3
1 CO	3NP1920-1FA00	■				
	3NP1930-1FA00		■			
	3NP1940-1FA00			■	■	■
1 CO, solid-state compatible	3NP1920-1FB00	■				
	3NP1930-1FB00		■			
	3NP1940-1FB00			■	■	■

Isolating blades



- Are used if only the isolating function of a 3NP1 is required and not protection with fuses or in the neutral conductor of a 4-pole 3NP1.
- The isolating blade, which is leading on switch-on and lagging on switch-off, is used in the neutral conductor of a 4-pole 3NP1 if shifting of the neutral point of the 3+N system has to be avoided during switching.

Version	Article No.	NH000	NH00	NH1	NH2	NH3
Switching simultaneously with fuses	3NG1002	■	■			
	3NG1202			■		
	3NG1302				■	
	3NG1402					■
Leading switch-on, lagging switch-off	3NP1924-1MA20	■				
	3NP1934-1MA20		■			
	3NP1944-1MA20			■		
	3NP1954-1MA20				■	
	3NP1964-1MA20					■

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3NP1 fuse switch disconnectors

Other accessories

		1-pole	3-pole	NH000	NH00	NH1	NH2	NH3
Fuse carriers (spare part)								
	• For retrofitting fuse monitoring on an existing 3NP1							
	Version	**Article No.**	**Article No.**					
	Standard – without fuse monitoring	3NP1921-1GA00	3NP1923-1GA00	■				
		3NP1931-1GA00	3NP1933-1GA00		■			
		3NP1941-1GA00	3NP1943-1GA00			■		
		3NP1951-1GA00	3NP1953-1GA00				■	
		3NP1961-1GA00	3NP1963-1GA00					■
	MFM - for operating voltage 24 ... 690 V AC (L-L) / 24 ... 240 V DC (L+ - L-)	–	3NP1923-1GB10	■				
		–	3NP1933-1GB10		■			
		–	3NP1943-1GB10			■		
		–	3NP1953-1GB10				■	
		–	3NP1963-1GB10					■
	EFM10 - 230 ... 690 V AC (L-L)	–	3NP1923-1GB20	■				
		–	3NP1933-1GB20		■			
		–	3NP1943-1GB20			■		
		–	3NP1953-1GB20				■	
		–	3NP1963-1GB20					■
	EFM15 - for operating voltage 24 ... 240 V AC(L - N) / 24 ... 250 V DC (L+ - L-)	3NP1921-1GB43	–	■				
		3NP1931-1GB43	–		■			
		3NP1941-1GB43	–			■		
		3NP1951-1GB43	–				■	
		3NP1961-1GB43	–					■
	EFM15 - for operating voltage 110 ... 690 V AC (L - N)	3NP1921-1GB41	–	■				
		3NP1931-1GB41	–		■			
		3NP1941-1GB41	–			■		
		3NP1951-1GB41	–				■	
		3NP1961-1GB41	–					■
	EFM15 - for operating voltage 120 ... 440 V DC (L - N)	3NP1921-1GB44	–	■				
		3NP1931-1GB44	–		■			
		3NP1941-1GB44	–			■		
		3NP1951-1GB44	–				■	
		3NP1961-1GB44	–					■
	EFM15 - for operating voltage 190 ... 690 V AC (L - L)	–	3NP1923-1GB42	■				
		–	3NP1933-1GB42		■			
		–	3NP1943-1GB42			■		
		–	3NP1953-1GB42				■	
		–	3NP1963-1GB42					■
	EFM15 - for operating voltage 220 ... 440 V DC (L+ - L-)	–	3NP1923-1GB45	■				
		–	3NP1933-1GB45		■			
		–	3NP1943-1GB45			■		
		–	3NP1953-1GB45				■	
		–	3NP1963-1GB45					■
	EFM20 - for operating voltage 230 ... 690 V AC (L - L)	–	3NP1923-1GB30	■				
		–	3NP1933-1GB30		■			
		–	3NP1943-1GB30			■		
		–	3NP1953-1GB30				■	
		–	3NP1963-1GB30					■
	EFM25 - for operating voltage 220 ... 440 V DC (L+ - L-)	–	3NP1923-1GB50	■				
		–	3NP1933-1GB50		■			
		–	3NP1943-1GB50			■		
		–	3NP1953-1GB50				■	
		–	3NP1963-1GB50					■

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3NP5 fuse switch disconnectors

System overview

Basic units



Floor mounting



For 40 mm busbar system

Connection parts



Clamp terminals



Busbar adapters for 60 mm systems

Masking frames and covers



Molded-plastic masking frames



Cable connection covers

Other accessories



Auxiliary switches



Arc chutes



Assembly kits for flush mounting



Fuse carriers

Note:
You will find a detailed range of accessories with the basic units.

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General information

System description

You will find further information under:
sie.ag/2UlrAvy


3NP50


3NP52


3NP54

The 3NP5 fuse switch disconnector is an extremely robust device for extreme operating conditions.
The fuse carrier has a pretensioned spring that prevents accidental, slow closure.
All 3NP5 are designed for mounting on a mounting plate. Size NH00 is also available in versions for 40 mm busbar systems.
All sizes can also be mounted using adapters on 60 mm busbar systems.

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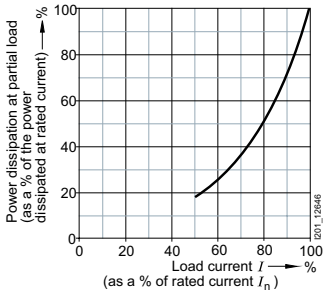
Suitable fuses

You will find further information under:
sie.ag/2UlrAvy



The 3NP5 fuse switch disconnector is suitable for all fuses with LV HRC design in sizes 000 to 3 that comply with IEC 60269-2, including fuses for cable and line protection and motor protection.
Fuses for semiconductor protection (Siemens trademark SITOR) can also be used. However, some of these fuses have substantially higher power losses than fuses according to IEC 60269-2. This means that the load current has to be reduced until the value that is permissible in the fuse switch disconnector is not exceeded.
For use of Siemens SITOR semiconductor fuses, ready-made derating tables are available in the linked document.

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3NP5 fuse switch disconnectors

		Flat terminals			
		NH00	NH1	NH2	NH3
					
Types of mounting	**Auxiliary switches**	**I_u = 160 A**	**I_u = 250 A**	**I_u = 400 A**	**I_u = 630 A**
Without fuse monitoring					
Floor mounting	Without	3NP5060-0CA00	3NP5260-0CA00	3NP5360-0CA00	3NP5460-0CA00
	1 NO + 1 NC	3NP5060-0CA10	3NP5260-0CA10	3NP5360-0CA10	3NP5460-0CA10
Mounting on 40 mm busbar systems	Without	3NP5065-1CF00	–	–	–
	1 NO + 1 NC	3NP5065-1CF10	–	–	–
Electromechanical fuse monitoring with 1 NO + 1 NC as a signaling contact					
Floor mounting	1 NO + 1 NC	3NP5060-0EA86	3NP5260-0EA86	3NP5360-0EA86	3NP5460-0EA86
Mounting on 40 mm busbar systems	1 NO + 1 NC	3NP5065-1EF86	–	–	–
Electromechanical fuse monitoring with 2 NO as a signaling contact					
Floor mounting	1 NO + 1 NC	3NP5060-0EA26	3NP5260-0EA26	3NP5360-0EA26	3NP5460-0EA26
Mounting on 40 mm busbar systems	1 NO + 1 NC	3NP5065-1EF26	–	–	–
Electronic fuse monitoring with 1 NO + 1 NC as a signaling contact					
Floor mounting	1 NO + 1 NC	3NP5060-0HA13	3NP5260-0HA13	3NP5360-0HA13	3NP5460-0HA13
Mounting on 40 mm busbar systems	1 NO + 1 NC	3NP5065-1HF13	–	–	–

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Accessories

Clamp terminals



Version	Scope of supply	Article No.	NH00	NH1	NH 2	NH3
For retrofitting to 3NP5 with flat terminals	3 units	3NY1903	■			
		3NY1907		■		

Busbar adapters



- For 60 mm busbar system

Version	Article No.	NH00	NH1	NH 2	NH3
For adaptation of a 3NP5, for floor mounting on a 60-mm busbar system	8US1291-4SB00	■			
	8US1210-4AG00		■	■	■

Covers for cable lug connections



Version	Scope of supply	Article No.	NH00	NH1	NH 2	NH3
Can be screwed onto the free end of the screw	6 units	3NY1241		■		
		3NY1245			■	■

Covers for 3NP5, with auxiliary switch mounted



- With punched cutouts for auxiliary switches

Color	Version	Dimensions	Article No.	NH00	NH1	NH 2	NH3
Gray	Flat	215 × 135 mm	3NY1115	■			
Black	Flat, with additional bending edges	290 × 135 mm	3NY1116	■			

Covers for 3NP5, without auxiliary switches mounted



- With prepunched cutouts for retrofitting an auxiliary switch

Color	Version	Dimensions	Article No.	NH00	NH1	NH 2	NH3
Gray	Flat	215 × 135 mm	3NY1105	■			
Black	Flat	290 × 135 mm	3NY1106	■			
	Angled	265 × 135 mm	3NY1107	■			
	Flat, with additional bending edges	290 × 135 mm	3NY1108	■			

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Accessories

Auxiliary switches



Version	Article No.	NH00	NH1	NH 2	NH3
1 NO + 1 NC, including mounting kit	3NY3033	■			
	3NY3034		■	■	■

Arc chutes



- Spare part for arc chutes installed in the factory, one unit per switch is required for NH00, three units for NH1 to NH3

Article No.	NH00	NH1	NH 2	NH3
3NY4031	■			
3NY4011		■		
3NY4012			■	■

Assembly kits for flush mounting in front panel



Version	Article No.	NH00	NH1	NH 2	NH3
Assembly kit with cover and mounting accessories	3NY1208	■			
	3NY1210		■		
	3NY1211			■	
	3NY1212				■
Covers (spare part for assembly kit)	3NY1102		■		
	3NY1103			■	
	3NY1104				■

Fuse carriers



Version	Article No.	NH00	NH1	NH 2	NH3
Without fuse monitoring	3NY1074	■			
	3NY1371		■		
	3NY1372			■	
	3NY1373				■
With electromechanical fuse monitoring by circuit breakers, signaling contact 1 NO + 1 NC, without connecting cable	3NY1420	■			
	3NY1421		■		
	3NY1422			■	
	3NY1423				■
With electromechanical fuse monitoring, signaling contact 1 NO + 1 NC, without connecting cable	3NY1513-0	■			
	3NY1513-2		■		
	3NY1513-3			■	
	3NY1513-4				■

Connectors and connecting cables



Version	Length	Article No.	NH00	NH1	NH 2	NH3
For electromechanical fuse monitoring	1 m	3NY1910	■	■	■	■
	3 m	3NY1911	■	■	■	■
For electronic fuse monitoring	3 m	3NY1915	■	■	■	■

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3NJ4 fuse switch disconnectors

System overview

1-pole switchable



Standard



For integratable current transformers

3-pole switchable



Standard



For integratable current transformers



With electronic fuse monitoring

Accessories



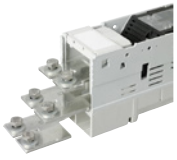
Covers



Adapters on busbar systems



Mounting and assembly elements



Busbar connection assembly kits



Fuses



Current transformers

Note:
You will find a detailed range of accessories with the basic units.

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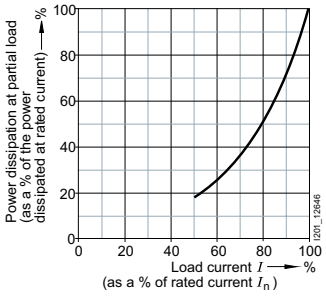
General information

Suitable fuses

You will find further information under:
sie.ag/2UlrAvy



The 3NJ4 fuse switch disconnector is suitable for all fuses with LV HRC design in sizes 000 to 3 that comply with IEC 60269-2, including fuses for cable and line protection.

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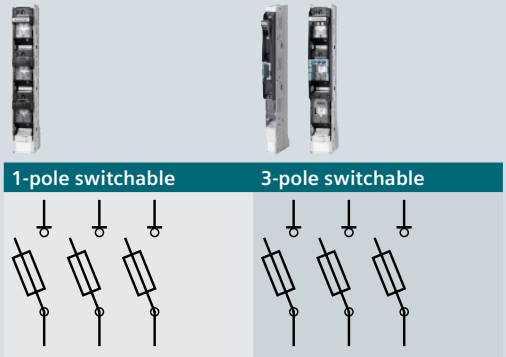
3NJ4 fuse switch disconnectors



Connection	Size of fuse	Busbar center-to-center spacing	Rated operational current I_e		
Standard					
M8 flat connector	NH00 / NH000 [1]	185 mm	160 A	3NJ4101-3BF01	3NJ4103-3BF01
	NH00 / NH000	100 mm	160 A	–	3NJ4103-3BF02
F70 box terminal	NH00 / NH000	100 mm	160 A	–	3NJ4103-3BR02
M10 flat connector	NH1	185 mm	250 A	3NJ4121-3BF01	3NJ4123-3BF01
M12 flat connector	NH2	185 mm	400 A	3NJ4131-3BF01	3NJ4133-3BF01
	NH3	185 mm	630 A	3NJ4141-3BF01	3NJ4143-3BF01
M12 stud terminal	NH1	185 mm	250 A	–	3NJ4123-3BJ01
	NH2	185 mm	400 A	–	3NJ4133-3BJ01
	NH3	185 mm	630 A	–	3NJ4143-3BJ01
M16 × 60 stud terminal	NH4a	185 mm	1250 A	3NJ5643-0BB00	–
V terminal	NH1	185 mm	250 A	–	3NJ4123-3BT01
	NH2	185 mm	400 A	–	3NJ4133-3BT01
	NH3	185 mm	630 A	–	3NJ4143-3BT01
For integratable current transformers					
M8 flat connector	NH00 / NH000	100 mm	160 A	–	3NJ4103-3BF12
M10 flat connector	NH1	185 mm	250 A	3NJ4121-3BF11	3NJ4123-3BF11
M12 flat connector	NH2	185 mm	400 A	3NJ4131-3BF11	3NJ4133-3BF11
	NH3	185 mm	630 A	3NJ4141-3BF11	3NJ4143-3BF11
With electronic fuse monitoring devices EFM					
M8 flat connector	NH00 / NH000	100 mm	160 A	–	3NJ4103-3CF02
M10 flat connector	NH1	185 mm	250 A	–	3NJ4123-3CF01
M12 flat connector	NH2 / NH1	185 mm	400 A	–	3NJ4133-3CF01
	NH3 / NH2	185 mm	630 A	–	3NJ4143-3CF01
For integratable current transformers, with EFM electronic fuse monitoring					
M8 flat connector	NH00 / NH000	100 mm	160 A	–	3NJ4103-3CF12
M10 flat connector	NH1	185 mm	250 A	–	3NJ4123-3CF11
M12 flat connector	NH2 / NH1	185 mm	400 A	–	3NJ4133-3CF11
	NH3 / NH2	185 mm	630 A	–	3NJ4143-3CF11
For secondary-side fusing of transformers and incoming block					
Flat connector 2× M12	NH3	185 mm	1000 A	–	3NJ4153-3BF01
Flat connector 2× M12	NH3	185 mm	1250 A	–	3NJ4183-3BF01
Flat connector 3× M12	NH3	185 mm	1600 A	–	3NJ4163-3BF01
Flat connector 4× M12	NH3	185 mm	2000 A	–	3NJ4173-3BF01

[1] If mounted together with device sizes NH1 to NH3, a 3NJ5930-3BB adapter is required as an accessory to compensate for differences in height.

Note:
- Fixing screws for mounting on busbars must be ordered separately.

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3NJ4 fuse switch disconnectors

Accessories

Covers



- Additional touch protection when using cable lugs and as spacer

Size	Busbar center-to-center spacing	Version	Article No.
NH00	100 mm	Top and bottom	3NJ4912-1DA02
	185 mm	100 mm for bottom	3NJ4912-1FA01
		132 mm for top	3NJ4912-1FA00
NH1 ... NH3	Connection from the top		3NJ4912-1AA01
NH3	For double in-line disconnectors		3NJ4912-1EA00

Blanking covers



Version	Length	Width	Busbar center-to-center spacing	Article No.
For switchboard cutout	299 mm	50 mm	100 mm only	3NJ4912-2CA00
	633 mm	50 mm		3NJ4912-2AA00
	633 mm	100 mm		3NJ4912-2BA00

Lateral masking frame supports

- 3 clips with T profile

Size	Article No.
NH00 ... NH3	3NJ4912-2DA00

Fixing clips



Scope of supply	Article No.
1 set = 4 units, including fixing accessories	3NJ4918-0AA00

Unequipped section covers



Busbar center-to-center spacing	Width	Article No.
185 mm	50 mm	3NJ4912-3AA00
	100 mm	3NJ4912-3BA01
100 mm	50 mm	3NJ4912-3CA00

Adapters for screw fixing on busbar systems



- Adapters for screw fixing on busbar systems with 185 mm busbar center-to-center spacing
- For mounting 2 fuse switch disconnectors

Version	Fuse switch disconnectors	Article No.
Adaptation to sizes 1 ... 3	From 100 mm to 185 mm	3NJ4918-0DA02
	From 185 mm to 185 mm	3NJ5930-3BB
Adaptation to sizes 1 ... 3, with busbar terminal	From 100 mm to 185 mm	3NJ4918-0DB02

Adapters for screw fixing on busbar systems



- For fitting one fuse switch disconnector (= 3 separate brackets)

Version	Article No.
Adaptation of 100 mm to busbar system with 60 mm busbar center-to-center spacing	3NJ4918-0EA00

Fixing screws

- For fitting 3NJ4103 switch disconnectors with integratable current transformers onto adapters

Scope of supply	Article No.
1 set = 3 units	3NJ4918-0DC02

[1] Touch protection only suitable for 3NJ4103-3BF02
[2] Touch protection only suitable for 3NJ4101-3BF01 and 3NJ4103-3BF01

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3NJ4101	3NJ4103	3NJ412	3NJ413	3NJ414	3NJ415	3NJ416	3NJ417	3NJ418
	■ 1)							
■ 2)	■ 2)							
■ 2)	■ 2)							
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3NJ4 fuse switch disconnectors

Accessories

Busbar supports



- For screwing on the busbars

Version	Article No.
For 100 and 185 mm busbar center-to-center spacing	3NJ5974-0AB

Grounding kit



Version	Article No.
With connecting cable 25 mm²	3NJ4910-1AA00

Busbar terminals



- Not for devices with transformer installation

Version	Article No.
For each fuse switch disconnector, 3 units are required	3NJ4911-3AA00
For more rapid mounting of the switch disconnectors onto the busbars (1 set = 3 units)	3NJ4911-3BA01

Saddle terminals



- 1 set = 3 units

Connection	Article No.
Cu 1.5 ... 70 mm²	3NJ4911-4AA00

Prism terminal assembly kits



- 1 set = 3 units

Connection	Article No.
Al/Cu 10 ... 70 mm²	3NJ4911-1AA00

Box terminal assembly kits



- For connection to version with flat connector
- 1 set = 3 units

Connection	Article No.
Al/Cu 95 ... 240 mm²	3NJ4911-2BQ00

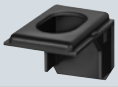
Auxiliary switch mounting kits



- For 3-pole switchable switch disconnectors only

Version	Contacts	Article No.
For NH00 ... NH3 with connecting cables	1 CO	3NJ4913-1AA01

Mounting hook



- 1 per in-line disconnector required

Article No.
3NJ4918-1AA00

Distance compensation



Version	Article No.
For NH00	3NJ4915-1BA00
For fuse switch disconnectors, with integratable current transformers if no current transformer is built in	3NJ4915-2BA00

Terminal strips



Article No.
3NJ4915-1CA00

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3NJ4101	3NJ4103	3NJ412	3NJ413	3NJ414	3NJ415	3NJ416	3NJ417	3NJ418
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3NJ4 fuse switch disconnectors

Accessories

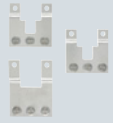
Busbar connection assembly kits for NH1, NH2 and NH3



- With flat terminals

Screws	Conductor cross-section	Article No.
M12	2× 240 mm²	3NJ4911-5AA00
	2× 300 mm² / 3× 120 mm²	3NJ4911-5BA00
M16	1× 400 mm²	3NJ4911-5CA00

Busbar connection assembly kits for NH3



Version	Conductor cross-section	Article No.
For NH3 as double in-line disconnectors	3× 300 mm² / 4× 185 mm²	3NJ4911-6AA00
	4× 240 mm²	3NJ4911-6BA00



Mechanical coupling of operating handles		3NJ4911-6CA00

Fuses NH3



- Minimum order quantity 3 units

Version	Article No.
For protection of transformers, 630 kVA, 909 A	3NJ4914-8AA00

Isolating blades NH3

Rated current I_e	Article No.
1250 A	3NJ4914-8BA00

Current transformers .../1 A





Rated current I_e	Accuracy class	Rated power P_n	Article No.
100/1 A	0.5	1.5 VA	3NJ4915-1EA10
	1	2.0 VA	3NJ4915-1EA20
150/1 A	0.5	2.5 VA	3NJ4915-1FA10
	0.5 calibrated	2.5 VA	3NJ4915-1FA11
	1	3.0 VA	3NJ4915-1FA20
75/1 A	1	1.5 VA	3NJ4915-2DA20
100/1 A	0.5	1.5 VA	3NJ4915-2EA10
	1	2.0 VA	3NJ4915-2EA20
150/1 A	1	2.5 VA	3NJ4915-2FA20
250/1 A	0.5	2.5 VA	3NJ4915-2GA10
	0.5 calibrated	2.5 VA	3NJ4915-2GA11
	1	5.0 VA	3NJ4915-2GA20
400/1 A	0.5	2.5 VA	3NJ4915-2HA10
	0.5 calibrated	2.5 VA	3NJ4915-2HA11
	1	5.0 VA	3NJ4915-2HA20
500/1 A	0.5	2.5 VA	3NJ4915-2JA10
	1	5.0 VA	3NJ4915-2JA20
600/1 A	0.5	2.5 VA	3NJ4915-2KA10
	0.5 calibrated	2.5 VA	3NJ4915-2KA11
	1	5.0 VA	3NJ4915-2KA20

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3NJ4101	3NJ4103	3NJ412	3NJ413	3NJ414	3NJ415	3NJ416	3NJ417	3NJ418
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3NJ4 fuse switch disconnectors

Accessories

Current transformers .../5 A



Rated current I_e	Accuracy class	Rated power P_n	Article No.
100/5 A	0.5	1.0 VA	3NJ4915-1EB10
	1	1.5 VA	3NJ4915-1EB20
150/5 A	0.5	1.5 VA	3NJ4915-1FB10
	0.5 calibrated	1.5 VA	3NJ4915-1FB11
	1	2.5 VA	3NJ4915-1FB20
75/5 A	1	1.5 VA	3NJ4915-2DB20
100/5 A	0.5	1.0 VA	3NJ4915-2EB10
	1	2.0 VA	3NJ4915-2EB20
150/5 A	0.5	1.5 VA	3NJ4915-2FB10
	1	2.5 VA	3NJ4915-2FB20
250/5 A	0.5	2.5 VA	3NJ4915-2GB10
	0.5 calibrated	2.5 VA	3NJ4915-2GB11
	1	3.75 VA	3NJ4915-2GB20
400/5 A	0.5	2.5 VA	3NJ4915-2HB10
	0.5 calibrated	2.5 VA	3NJ4915-2HB11
	1	5.0 VA	3NJ4915-2HB20
500/5 A	0.5	2.5 VA	3NJ4915-2JB10
	1	5.0 VA	3NJ4915-2JB20
600/5 A	0.5	2.5 VA	3NJ4915-2KB10
	0.5 calibrated	2.5 VA	3NJ4915-2KB11
	1	5.0 VA	3NJ4915-2KB20

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3NJ4101	3NJ4103	3NJ412	3NJ413	3NJ414	3NJ415	3NJ416	3NJ417	3NJ418
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5SG76 fuse switch disconnectors

System overview

MINIZED fuse switch disconnectors


1P


1P+N


2P


3P


3P+N

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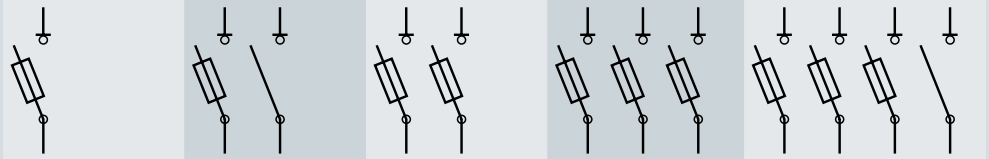

Number of poles	1P	1P+N	2P	3P	3P+N
Size of fuse	**Rated current I_n**	**Mounting width 1 MW**	**Mounting width 2 MW**	**Mounting width 2 MW**	**Mounting width 3 MW**	**Mounting width 4 MW**
MINIZED fuse switch disconnectors						
D01	6 A [1]	5SG7611-0KK06	–	–	5SG7631-0KK06	–
	10 A	5SG7611-0KK10	–	–	5SG7631-0KK10	–
	16 A	5SG7611-0KK16	5SG7651-0KK16	5SG7621-0KK16	5SG7631-0KK16	5SG7661-0KK16

[1] For 2 A, 4 A, 6 A fuses

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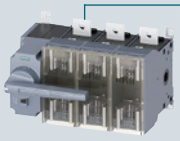
Switch disconnectors with fuses

Quick selection guide



3KF LV HRC



Size			1	1	1	2	2	3	4	5	5
General technical specifications acc. to IEC 60947-3											
Basic data											
Rated uninterrupted current I_u		A	32	63	80	125	160	250	400	630	800
For fuse links acc. to IEC 60269-2					000 and 00			0 and 1	1 and 2	2 and 3	
Rated operational voltage U_e	At 50/60 Hz AC	V AC					690				
	At DC - 2 conducting paths in series	V DC					220				
	At DC - 3 conducting paths in series	V DC					440				
	At DC	V DC					–				
Operating and short-circuit behavior											
Rated operational current I_e [1]	At AC-21A | AC-21B at 400 V	A	32	63	80	125	160	250	400	630	800
	At AC-21A | AC-21B at 500 V	A	–	–	–	–	–	–	–	–	–
	At AC-21A | AC-21B at 690 V	A	32	63	80	125	160	250	400	630	800
	At AC-22A | AC-22B at 400 V	A	32	63	80	125	160	250	400	630	800
	At AC-22A | AC-22B at 500 V	A	–	–	–	–	–	–	–	–	–
	At AC-22A | AC-22B at 690 V	A	32	63	80	125	160	250	400	630	800
	At AC-23A | AC-23B at 400 V	A	32	63	80	125	160	250	400	630	800
	At AC-23A | AC-23B at 500 V	A	–	–	–	–	–	–	–	–	–
	At AC-23A | AC-23B at 690 V	A	32	63	80	125	160	250	400	630	800
	At DC-21A | DC-21B at 48 V	A	–	–	–	–	–	–	–	–	–
	At DC-21A | DC-21B at 110 V	A	–	–	–	–	–	–	–	–	–
	At DC-21A | DC-21B at 220 V	A	32	63	80	125	160	250	400	630	800
	At DC-21A | DC-21B at 400 V	A	–	–	–	–	–	–	–	–	–
	At DC-21A | DC-21B at 440 V	A	32	63	80	125	160	250	400	630	800
	At DC-22A | DC-22B at 48 V	A	–	–	–	–	–	–	–	–	–
	At DC-22A | DC-22B at 110 V	A	–	–	–	–	–	–	–	–	–
	At DC-22A | DC-22B at 220 V	A	32	63	80	125	160	250	400	630	800
	At DC-22A | DC-22B at 400 V	A	–	–	–	–	–	–	–	–	–
	At DC-22A | DC-22B at 440 V	A	32	63	80	125	160	250	400	630	800
	At DC-23A | DC-23B at 48 V	A	–	–	–	–	–	–	–	–	–
	At DC-23A | DC-23B at 110 V	A	–	–	–	–	–	–	–	–	–
	At DC-23A | DC-23B at 220 V	A	32	63	80	125	160	250	400	630	800
	At DC-23A | DC-23B at 400 V	A	–	–	–	–	–	–	–	–	–
	At DC-23A | DC-23B at 440 V	A	32	63	80	125	160	250	400	630	800
Motor switching capacity [2]	At AC-23A at 400 V	kW	15	30	37	55	90	132	220	355	400
	At AC-23A at 500 V	kW	18.5	37	55	75	110	160	280	400	560
	At AC-23A at 690 V	kW	30	55	75	110	132	250	400	630	800
Rated conditional short-circuit current with upstream fuse [3]	At 400/500 V AC	kA	100	100	100	100	100	100	100	100	100
	At 690 V AC	kA	100	100	100	100	100	100	100	80	80
Let-through current I_c of usable fuses, max. [3]	At 400/500 V AC	kA	11.8	11.8	11.8	18	18	33.7	37.1	77.4	77.4
	At 690 V AC	kA	11.5	11.5	11.5	25.5	25.5	37.7	47	65	65
Let-through current I^2t value of usable fuses, max. [3]	At 400/500 V AC	kA^2s	34	34	34	223	223	1500	2150	10400	10400
	At 690 V AC	kA^2s	55	55	55	360	360	940	2600	7000	7000
Maximum power loss of the usable fuses (per fuse)		W	6.5	7.5	8.5	11	12	25.5	34	48	60
Degree of protection											
Maximum IP degree of protection (with a rotary operating mechanism)						IP65				IP65	
Maximum IP degree of protection						–				–	

[1] Values valid even at +10% line voltage tolerance in case of AC

[2] Values are provided as a guide only and may vary depending on the make of motor

[3] Valid for combination of 3KF and fuse type 3NA/3ND, characteristic gG/aM

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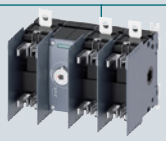
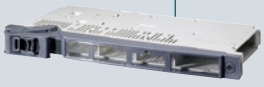
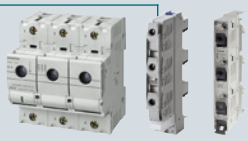
3KF SITOR									3NJ62								5SG7		
																			
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32	63	80	125	160	250	400	630	800	–	–	–	–	–	–	–	–	63	63	63
000 and 00					0 and 1	1 and 2	2 and 3		000 and 00				1	1 and 2	2 and 3		D02	D02	D02
690									500 ... 690				690		230 ... 690		400, 415	400	400
220									230 ... 440				230 ... 440		–		130	110	–
440									–				–	–	–		–	–	–
–									–				–	–	–		65	–	–
32	63	80	125	160	250	400	630	800	–	–	–	–	–	–	–	–	–	–	–
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32	63	80	125	160	250	400	630	800	–	–	–	–	–	–	–	–	–	–	–
32	63	80	125	160	250	400	630	800	–	–	–	–	–	–	–	–	–|63	–	–|63
–	–	–	–	–	–	–	–	–	–	–	–	160	–	–	–	630	–|63	–	–|63
32	63	80	125	160	250	400	630	800	–	–	125	–	250	400	500	–	–|63	–	–|63
32	63	80	125	160	250	400	630	800	–	–	–	–	–	–	–	–	–	63|–	–
–	–	–	–	–	–	–	–	–	–	–	–	160	–	–	–	630	–	–	–
32	63	80	125	160	250	400	630	800	63	100	125	–	250	400	500	–	–	–	–
–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–|63	–
–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–|63	–
32	63	80	125	160	250	400	630	800	–	–	–	–	–	–	–	–	–	–|63	–
–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–|63	–
32	63	80	125	160	250	400	630	800	–	–	–	–	250	400	–	630	–	–|63	–
–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–|63	–	–
–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–|63	–	–
32	63	80	125	160	250	400	630	800	–	–	–	–	–	–	–	–	–|63	–	–
–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–|63	–	–
32	63	80	125	160	250	400	630	800	–	–	–	–	–	–	–	–	–|63	–	–
–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
32	63	80	125	160	250	400	630	800	–	–	–	160	250	400	–	630	–	–	–
–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
32	63	80	125	160	250	400	630	800	–	–	–	–	–	–	–	–	–	–	–
15	30	37	55	90	132	220	355	400	–	–	–	–	–	–	–	–	–	–	–
18.5	37	55	75	110	160	280	400	560	–	–	–	–	–	–	–	–	–	–	–
30	55	75	110	132	250	400	630	800	–	–	–	–	–	–	–	–	–	–	–
100	100	100	100	100	100	100	100	100	–								50/–	50/–	50/–
100	100	100	100	100	100	100	80	80	60 ... 100 kA_{eff}								–	–	–
11.8	11.8	11.8	18	18	33.7	37.1	77.4	77.4	–								–	–	–
11.5	11.5	11.5	25.5	25.5	37.7	47	65	65	–								–	–	–
34	34	34	223	223	1500	2150	10400	10400	–								–	–	–
55	55	55	360	360	940	2600	7000	7000	–								–	–	–
7	8	12	20	26	36	55	68	85	–								5.5	5.5	5.5
IP65									IP41								–	–	–
–									–								IP20	–	–

8

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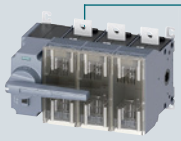
Switch disconnectors with fuses

Quick selection guide (continued)



3KF LV HRC



Size			1	1	1	2	2	3	4	5	5
General technical specifications acc. to UL											
Basic data											
Certification according to UL standard			–	–	–	–	–	–	–	–	–
I_n acc. to UL 508		A	–	–	–	–	–	–	–	–	–
U_e acc. to UL 508			–	–	–	–	–	–	–	–	–
Operating and short-circuit behavior											
Operational power, three-phase	At 240 V	kA	–	–	–	–	–	–	–	–	–
	At 480 V	kA	–	–	–	–	–	–	–	–	–
	At 600 V	kA	–	–	–	–	–	–	–	–	–
Short circuit current rating (SCCR)			–	–	–	–	–	–	–	–	–
Fuse type			–	–	–	–	–	–	–	–	–

More information	
Catalog LV 10 – 10/2020	see page 8/118
Technical specifications	Configuration in SIMARIS

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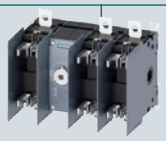
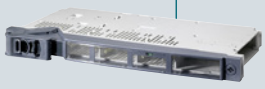
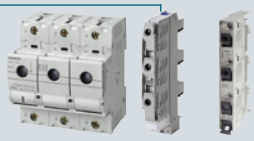
3KF SITOR



3NJ62



5SG7



1	1	1	2	2	3	4	5	5	00	00	00	00	1	2	3	3	5SG71.	5SG7230	5SG7234.
				UL 508					–	–	–	–	–	–	–	–	–	–	–
32	56	56	125	125	500	320	530	530	–	–	–	–	–	–	–	–	–	–	–
				600					–	–	–	–	–	–	–	–	–	–	–
10	15	15	25	30	60	100	125	150	–	–	–	–	–	–	–	–	–	–	–
25	30	40	60	75	150	250	300	300	–	–	–	–	–	–	–	–	–	–	–
30	40	40	50	50	1255	250	300	350	–	–	–	–	–	–	–	–	–	–	–
100	100	100	100	100	100	100	100	100	–	–	–	–	–	–	–	–	–	–	–
K-1, RK1, CC, J, T	K-1, RK1, CC, J, T	K-1, RK1, CC, J, T	K-1, RK1, J, T	K-1, RK1, J, T	K-1, RK1, J, T	K-1, RK1, CC, J, T	K-1, RK1, J, T	K-1, RK1, J, T	–	–	–	–	–	–	–	–	–	–	–
see page 8/118									see page 8/134								see page 8/146		
Configuration in SIMARIS									Configuration in SIMARIS								Configuration in SIMARIS		

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3KF switch disconnectors with fuses

System overview

Complete assemblies with direct operating mechanisms


Front operating mechanisms, 3-pole


Front operating mechanisms, 4-pole

Basic units


Front operating mechanisms, 3-pole


Front operating mechanisms, 4-pole


Lateral operating mechanisms, 3-pole


Lateral operating mechanisms, 4-pole


3KF SITOR

Additional poles


4th contact elements


N terminals


N/PE terminals


Auxiliary switch modules

Operating mechanisms

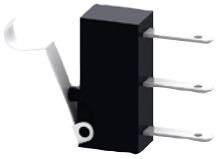

Direct operating mechanisms


Door-coupling rotary operating mechanisms


Handles for door-coupling rotary operating mechanisms


Other accessories for door-coupling rotary operating mechanisms

Other accessories and spare parts


Auxiliary switches


Fuse monitoring


Terminal covers


Mounting elements


Fuse covers

Note:
You will find a detailed range of accessories with the basic units.

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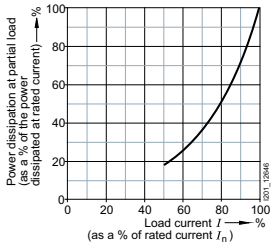
3KF switch disconnectors with fuses

General information

Suitable fuses

You will find further information under: sie.ag/2UlrAvy



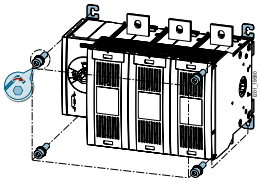
The 3KF switch disconnector with fuses is suitable for all fuses with LV HRC design in sizes 000 to 3 that comply with IEC 60269-2. These include fuses for cable and line protection and motor protection.
Fuses for semiconductor protection (Siemens trademark SITOR) can also be used. However, some of these fuses have substantially higher power losses than fuses according to IEC 60269-2. This means that the load current has to be reduced until the value that is permissible in the switch disconnector with fuses is not exceeded.
For use of Siemens semiconductor fuses (SITOR), ready-made derating tables are available in the linked document.

8

Types of mounting

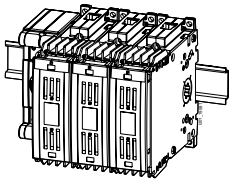
You will find further information under: sie.ag/2UlrAvy

Floor mounting



All 3KF switch disconnectors with fuses are designed for floor mounting.

Standard mounting rail

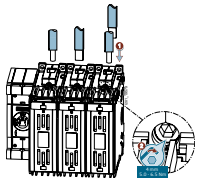


Size 1 can be snapped onto a standard mounting rail (TH35 according to EN 60715) as an alternative mounting method.

Electrical connection

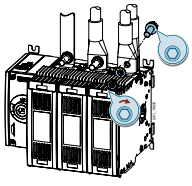
You will find further information under: sie.ag/2UlrAvy

Box terminals



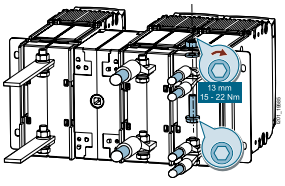
The box terminals for size 1 (32 A ... 80 A) are designed to allow the rapid connection of stripped conductors.

Flat terminals



Sizes 2 ... 5 are available with flat terminals, for the connection of cable lugs or busbar systems.

Flat terminals at rear



Sizes 1 and 2 (32 A, 63 A and 125 A) are available with rear flat terminals, for the connection of cable lugs or busbar systems.

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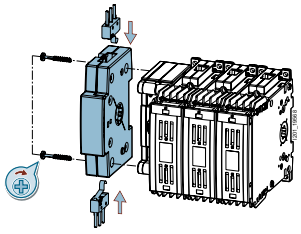
Auxiliary switch modules and auxiliary switches

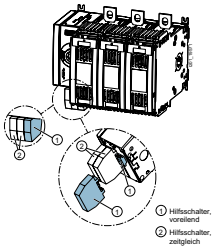
You will find further information under: sie.ag/2UlrAvy

Size 1



The auxiliary switches used for size 1 are microswitches (changeover contacts), which can be snapped into an auxiliary switch module. This auxiliary switch module is mounted on the side of the switch disconnector with fuses in the same way as an additional pole. A maximum of two microswitches can be installed in each auxiliary switch module.

Sizes 2 ... 5



For sizes 2 ... 5, the auxiliary switches are directly attached to the operating mechanism module. The auxiliary switch with the leading switch function is always installed in the right-hand mounting location. The other locations are provided for simultaneously switching with the main contacts. Auxiliary switches with spring-type terminals from the 3SU1 range can also be used.

Differentiation 3KF SITOR and derating tables for SITOR fuses

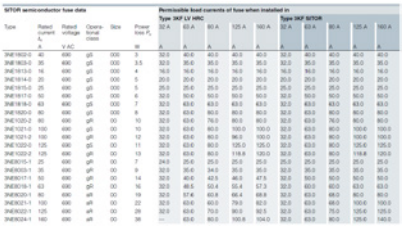
You will find further information under: sie.ag/2UlrAvy

Size 1



3KF SITOR is a variation of the proven switch disconnector with 3KF LV HRC fuses and provides optimized heat dissipation and permits the use of fuses with substantially higher power losses. All 3KF SITOR types are approved according to UL508.

Sizes 2 ... 5



Siemens provides you with pretested load currents of the SITOR semiconductor fuses for installation in the 3KF SITOR. The derating tables are provided both for IEC constraints and for UL constraints and are intended to help you with selection. The permissible load faults for the 3KF LV HRC were calculated from the test results of the 3KF SITOR.

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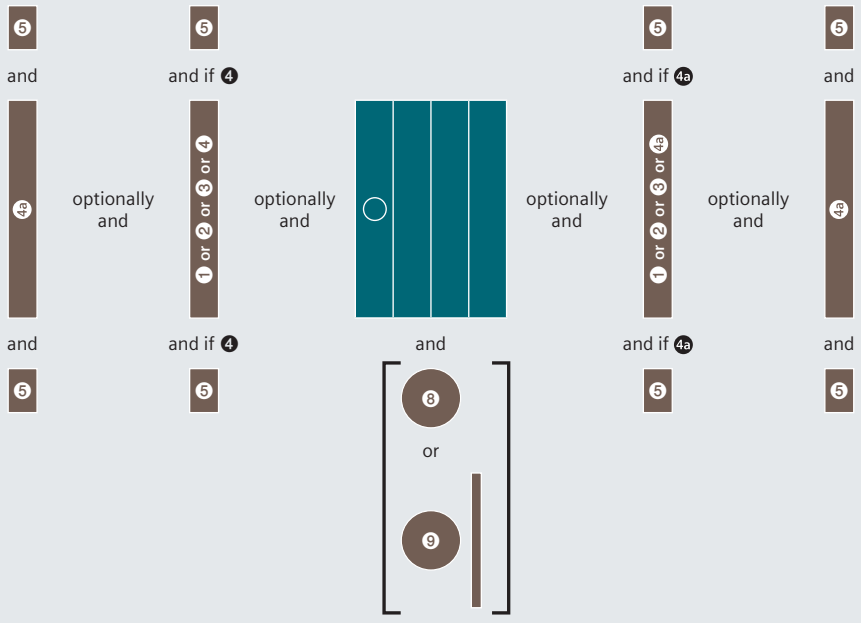
3KF switch disconnectors with fuses

Mounting concept and accessories 3KF

Front operating mechanism left, size 1, 3/4-pole

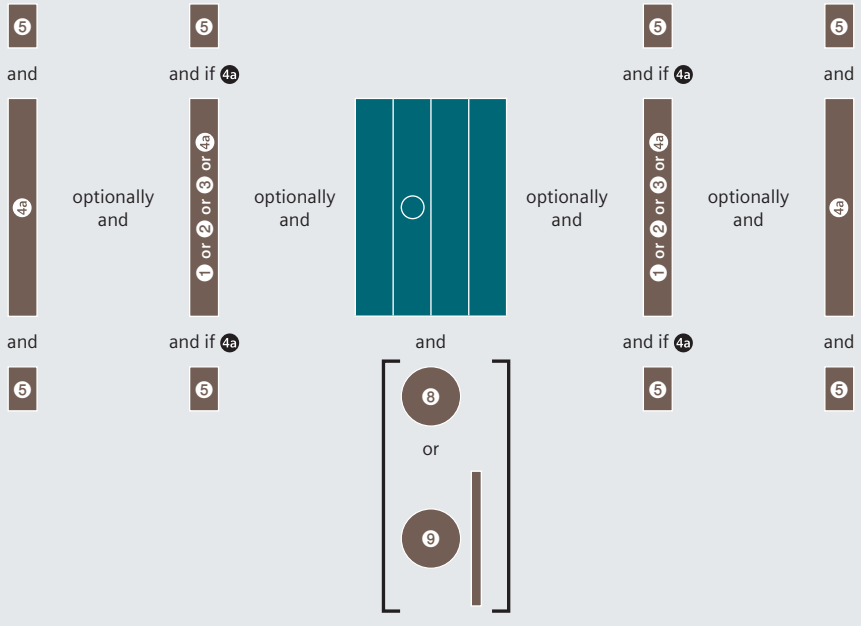


❸: Only for 3-pole 3K, max. 1×
❹/4a: Max. 1×

Legend

- ❶ Neutral conductor terminal
- ❷ N/PE terminal
- ❸ 4th contact element
- ❹ Auxiliary switch module, leading, with test function
- 4a Auxiliary switch module for auxiliary switches
- ❺ Auxiliary switch
- ❽ Direct operating mechanism
- ❾ Door-coupling rotary operating mechanism

Front operating mechanism right, size 1, 3/4-pole



❸: Only for 3-pole 3K, max. 1×
4a: Max. 1×

Legend

- ❶ Neutral conductor terminal
- ❷ N/PE terminal
- ❸ 4th contact element
- 4a Auxiliary switch module for auxiliary switches
- ❺ Auxiliary switch
- ❽ Direct operating mechanism
- ❾ Door-coupling rotary operating mechanism

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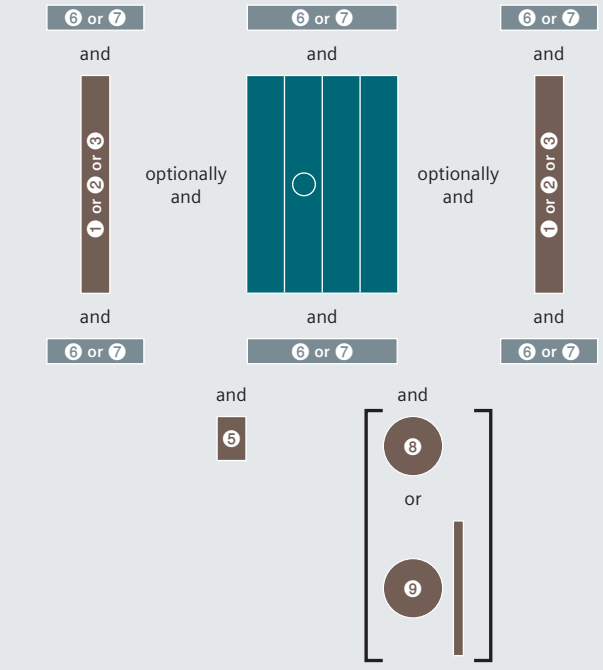
Front operating mechanism center or left, sizes 2 to 5, 3/4-pole



❸: Only for 3-pole 3K, max. 1×
❺: Max. 4×

Legend

❶ Neutral conductor terminal
❷ N/PE terminal
❸ 4th contact element
❺ Auxiliary switch
❻ Phase barrier
❼ Terminal cover
❽ Direct operating mechanism
❾ Door-coupling rotary operating mechanism

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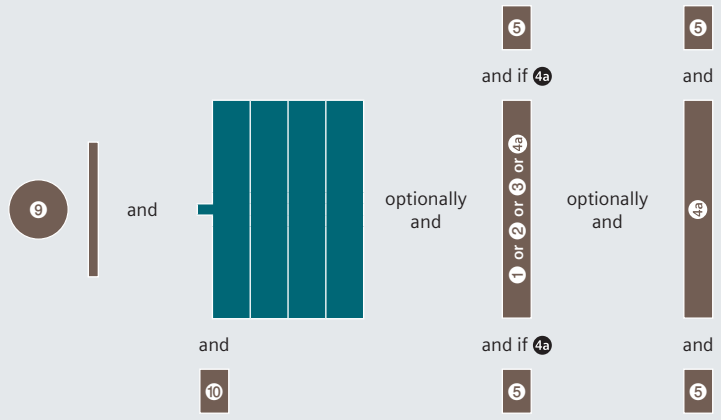
3KF switch disconnectors with fuses

Mounting concept and accessories 3KF

Lateral operating mechanism left, size 1, 3/4-pole

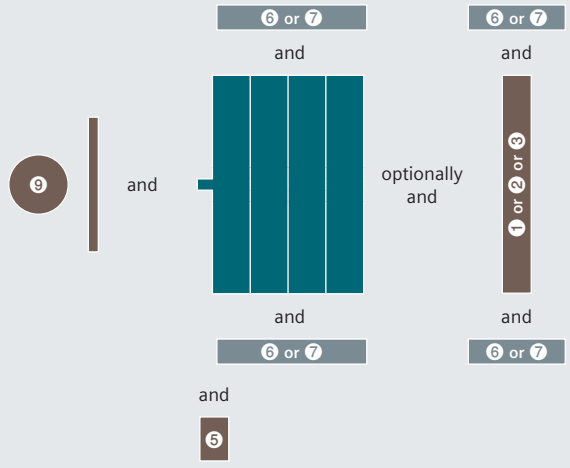


❸: Only for 3-pole 3K, max. 1×
❹a: Max. 1×

Legend

❶ Neutral conductor terminal
❷ N/PE terminal
❸ 4th contact element
❹a Auxiliary switch module for auxiliary switches
❺ Auxiliary switch
❾ Door-coupling rotary operating mechanism
❿ Lateral auxiliary switch module

Lateral operating mechanism left, sizes 2 to 5, 3/4-pole



❸: Only for 3-pole 3K, max. 1×
❺: Max. 4×

Legend

❶ Neutral conductor terminal
❷ N/PE terminal
❸ 4th contact element
❺ Auxiliary switch
❻ Phase barrier
❼ Terminal cover
❾ Door-coupling rotary operating mechanism

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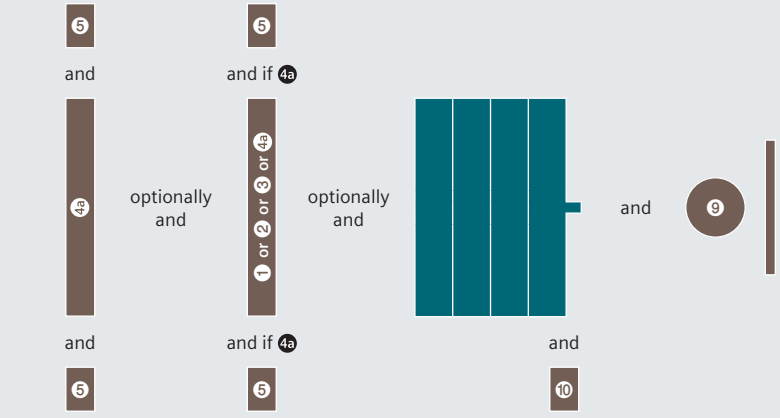
Lateral operating mechanism right, size 1, 3/4-pole

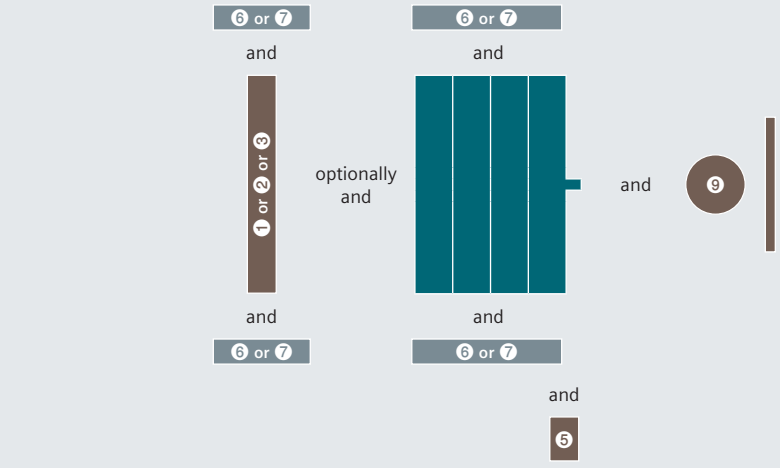


❸: Only for 3-pole 3K, max. 1×
❹a: Max. 1×

Legend

❶ Neutral conductor terminal
❷ N/PE terminal
❸ 4th contact element
❹a Auxiliary switch module for auxiliary switches
❺ Auxiliary switch
❾ Door-coupling rotary operating mechanism
❿ Lateral auxiliary switch module

Lateral operating mechanism right, sizes 2 to 5, 3/4-pole



❸: Only for 3-pole 3K, max. 1×
❺: Max. 4×

Legend

❶ Neutral conductor terminal
❷ N/PE terminal
❸ 4th contact element
❺ Auxiliary switch
❻ Phase barrier
❼ Terminal cover
❾ Door-coupling rotary operating mechanism

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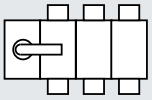
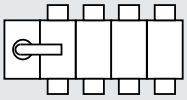
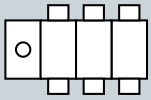
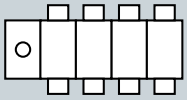
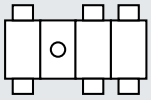
3KF switch disconnectors with fuses

3KF LV HRC switch disconnector



		Complete assemblies with direct operating mechanisms, front operating mechanisms Left		Basic units without handle, front operating mechanisms Left		Front operating mechanism Center
Number of poles		3P	4P	3P	4P	3P
						
Size	**Uninterrupted current I_u**					
Box terminals						
1	32 A	3KF1303-2LB11	3KF1403-2LB11	3KF1303-0LB11	3KF1403-0LB11	3KF1303-0MB11
	63 A	3KF1306-2LB11	3KF1406-2LB11	3KF1306-0LB11	3KF1406-0LB11	3KF1306-0MB11
	80 A	3KF1308-2LB11	3KF1408-2LB11	3KF1308-0LB11	3KF1408-0LB11	3KF1308-0MB11
Flat terminals at rear						
1	32 A	–	–	–	–	3KF1303-0MR11
	63 A	–	–	–	–	3KF1306-0MR11
2	125 A	–	–	–	–	3KF2312-0MR11
Flat terminals						
2	125 A	3KF2312-2LF11	3KF2412-2LF11	3KF2312-0LF11	3KF2412-0LF11	3KF2312-0MF11
	160 A	3KF2316-2LF11	3KF2416-2LF11	3KF2316-0LF11	3KF2416-0LF11	3KF2316-0MF11
3	250 A	3KF3325-2LF11	3KF3425-2LF11	3KF3325-0LF11	3KF3425-0LF11	3KF3325-0MF11
4	400 A	3KF4340-2LF11	3KF4440-2LF11	3KF4340-0LF11	3KF4440-0LF11	3KF4340-0MF11
5	630 A	3KF5363-2LF11	3KF5463-2LF11	3KF5363-0LF11	3KF5463-0LF11	3KF5363-0MF11
	800 A	3KF5380-2LF11	3KF5480-2LF11	3KF5380-0LF11	3KF5480-0LF11	3KF5380-0MF11

Note:
- NH00 and NH000: For 3KF sizes 1 and 2
- NH1 and NH0: For 3KF size 3
- NH2 and NH1: For 3KF size 4
- NH3 and NH2: For 3KF size 5
- For 3KF with lateral operating mechanism (left or right), only door-coupling rotary operating mechanisms without "Test" can be used.
- The complete assemblies with a direct operating mechanism are not suitable for conversion to door-coupling rotary operating mechanisms; the basic units are to be used for this purpose.

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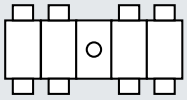
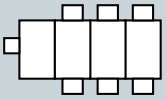
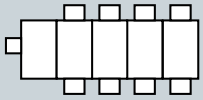
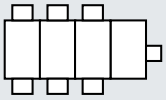
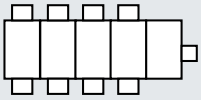
	Lateral operating mechanism Left		Lateral operating mechanism Right	
4P	3P	4P	3P	4P
				
3KF1403-0MB11	3KF1303-4LB11	3KF1403-4LB11	3KF1303-4RB11	3KF1403-4RB11
3KF1406-0MB11	3KF1306-4LB11	3KF1406-4LB11	3KF1306-4RB11	3KF1406-4RB11
3KF1408-0MB11	3KF1308-4LB11	3KF1408-4LB11	3KF1308-4RB11	3KF1408-4RB11
–	–	–	–	–
–	–	–	–	–
–	–	–	–	–
3KF2412-0MF11	3KF2312-4LF11	3KF2412-4LF11	3KF2312-4RF11	3KF2412-4RF11
3KF2416-0MF11	3KF2316-4LF11	3KF2416-4LF11	3KF2316-4RF11	3KF2416-4RF11
3KF3425-0MF11	3KF3325-4LF11	3KF3425-4LF11	3KF3325-4RF11	3KF3425-4RF11
3KF4440-0MF11	3KF4340-4LF11	3KF4440-4LF11	3KF4340-4RF11	3KF4440-4RF11
3KF5463-0MF11	3KF5363-4LF11	3KF5463-4LF11	3KF5363-4RF11	3KF5463-4RF11
3KF5480-0MF11	3KF5380-4LF11	3KF5480-4LF11	3KF5380-4RF11	3KF5480-4RF11

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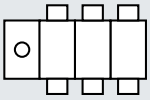
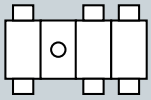
3KF switch disconnectors with fuses

3KF SITOR switch disconnectors





		Basic units without handle	
		Front operating mechanism Left	Front operating mechanism Center
Number of poles		3P	3P
			
Size	**Uninterrupted current I_u**		
Box terminals			
1	32 A	3KF1303-0LB51	–
	63 A	3KF1306-0LB51	–
	80 A	3KF1308-0LB51	–
Flat terminals			
2	125 A	–	3KF2312-0MF51
	160 A	–	3KF2316-0MF51
3	250 A	–	3KF3325-0MF51
4	400 A	–	3KF4340-0MF51
5	630 A	–	3KF5363-0MF51
	800 A	–	3KF5380-0MF51

Note:
- Use of standard LV HRC fuses gG, gL, aM in 3KF SITOR is possible without restriction

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Accessories for 3KF LV HRC and 3KF SITOR switch disconnectors

Additional poles

Note:

- Additional poles (4th contact element, N or N/PE terminal) must always be mounted directly adjacent to the switch disconnector on the left or right. Accordingly, an auxiliary switch module must not be mounted between the basic unit and an additional pole on size 1.
- For installation, it is important to note that only a 3-pole 3KF switch disconnector may be retrofitted with an additional switching pole with contact system (4th contact element).

4th contact element (switching pole) for 3KF LV HRC



Connection	Article No.	Size 1	Size 2	Size 3	Size 4	Size 5
Box terminals	3KF9105-2AA00	■				
Flat terminals at rear	3KF9105-1AA00	■				
	3KF9205-1AA00		■			
Flat terminals	3KF9205-0AA00		■			
	3KF9305-0AA00			■		
	3KF9405-0AA00				■	
	3KF9505-0AA00					■

4th contact element (switching pole) for 3KF SITOR



Connection	Article No.	Size 1	Size 2	Size 3	Size 4	Size 5
Box terminals	3KF9105-2BA00	■				
Flat terminals	3KF9205-0BA00		■			
	3KF9305-0BA00			■		
	3KF9405-0BA00				■	
	3KF9505-0BA00					■

Neutral conductor terminals with removable jumper, for 3KF LV HRC and 3KF SITOR



Connection	Article No.	Size 1	Size 2	Size 3	Size 4	Size 5
Box terminals	3KF9106-2AA00	■				
Flat terminals at rear	3KF9106-1AA00	■				
	3KF9206-1AA00		■			
Flat terminals	3KF9206-0AA00		■			
	3KF9306-0AA00			■		
	3KF9406-0AA00				■	
	3KF9506-0AA00					■

N/PE terminals with permanent jumper, for 3KF LV HRC and 3KF SITOR



Connection	Article No.	Size 1	Size 2	Size 3	Size 4	Size 5
Box terminals	3KF9106-8AA00	■				
Flat terminals at rear	3KF9106-6AA00	■				
	3KF9206-6AA00		■			
Flat terminals	3KF9206-7AA00		■			
	3KF9306-7AA00			■		
	3KF9406-7AA00				■	
	3KF9506-7AA00					■

Operating mechanisms

Direct operating mechanisms, for 3KF LV HRC



Version	Color	Article No.	Size 1	Size 2	Size 3	Size 4	Size 5
Can be locked with up to 3 padlocks	Gray	3KF9101-1AA00	■				
		3KF9201-1AA00		■			
		3KF9301-1AA00			■		
		3KF9401-1AA00				■	
		3KF9501-1AA00					■
	Red/yellow	3KF9101-2AA00	■				
		3KF9201-2AA00		■			
		3KF9301-2AA00			■		
		3KF9401-2AA00				■	
		3KF9501-2AA00					■

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3KF switch disconnectors with fuses

Accessories for 3KF LV HRC and 3KF SITOR switch disconnectors

Operating mechanisms

Door-coupling rotary operating mechanisms, for 3KF LV HRC and 3KF SITOR



- **Scope of supply**:
  - Handle with masking plate
  - Coupling driver with tolerance compensation
  - Shaft 300 mm
- Can be locked with up to 3 padlocks

Labeling	Color	Article No.	Size 1	Size 2	Size 3	Size 4	Size 5
Labeling Test – O – I	Gray	8UD1171-2AF21	■				
		8UD1141-2AF21		■			
		8UD1141-3AF21			■		
		8UD1151-3AF21				■	
		8UD1161-4AF21					■
	Red/yellow	8UD1171-2AF25	■				
		8UD1141-2AF25		■			
		8UD1141-3AF25			■		
		8UD1151-3AF25				■	
		8UD1161-4AF25					■

Handles, for 3KF LV HRC and 3KF SITOR

- With masking plate
- Can be locked with up to 3 padlocks









Labeling	Lighting	Color	Article No.	Size 1	Size 2	Size 3	Size 4	Size 5
O – I	Without	Gray	8UD1771-2AD01	■				
			8UD1841-2AD01		■	■		
			8UD1851-3AD01				■	
			8UD1861-4AD01					■
		Red/yellow	8UD1771-2AD05	■				
			8UD1841-2AD05		■	■		
			8UD1851-3AD05				■	
			8UD1861-4AD05					■
	With	Gray	8UD1771-2CD01	■				
			8UD1841-2CD01		■	■		
			8UD1851-3CD01				■	
			8UD1861-4CD01					■
		Red/yellow	8UD1771-2CD05	■				
			8UD1841-2CD05		■	■		
			8UD1851-3CD05				■	
			8UD1861-4CD05					■
Test – O – I	Without	Gray	8UD1771-2AF01	■				
			8UD1841-2AF01		■	■		
			8UD1851-3AF01				■	
			8UD1861-4AF01					■
		Red/yellow	8UD1771-2AF05	■				
			8UD1841-2AF05		■	■		
			8UD1851-3AF05				■	
			8UD1861-4AF05					■
	With	Gray	8UD1771-2CF01	■				
			8UD1841-2CF01		■	■		
			8UD1851-3CF01				■	
			8UD1861-4CF01					■
		Red/yellow	8UD1771-2CF05	■				
			8UD1841-2CF05		■	■		
			8UD1851-3CF05				■	
			8UD1861-4CF05					■

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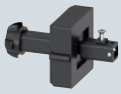
Operating mechanisms

		Size 1	Size 2	Size 3	Size 4	Size 5
Extension shaft, for 3KF LV HRC and 3KF SITOR						
 • A shaft jack is required for the 8UD1 handle when the 600 mm long shaft is used and for sizes 1 and 2						
Length	**Article No.**					
300 mm	8UC6032	■	■			
	8UC6033			■	■	
	8UC6034					■
600 mm	8UC6082	■	■			
	8UC6083			■	■	
	8UC6084					■
Shaft jack for 8UD1 handle, for 3KF LV HRC and 3KF SITOR						
 **Version**	**Article No.**					
For shaft 600 mm	8UD1900-0FA00	■	■			
Coupling drivers, for 3KF LV HRC and 3KF SITOR						
Version	**Article No.**					
 With tolerance compensation	8UD1900-2GA00	■				
	8UD1900-6GA00		■			
	8UD1900-3GA00			■	■	
	8UD1900-4GA00					■
 Without tolerance compensation	8UD1900-2HA00	■				
	8UD1900-6HA00		■			
	8UD1900-3HA00			■	■	
	8UD1900-4HA00					■
Shaft couplings, for 3KF LV HRC and 3KF SITOR						
 **Shaft size**	**Article No.**					
8 × 8 mm	8UC6022	■	■			
10 × 10 mm	8UC6023			■	■	
12 × 12 mm	8UC6024					■

Other accessories and spare parts

		Size 1	Size 2	Size 3	Size 4	Size 5
Auxiliary switch modules, for 3KF LV HRC and 3KF SITOR						
• Auxiliary switch modules are supplied without auxiliary switches • The 3KF9112-0AB00 mounting bracket is additionally required for mounting the auxiliary switch modules with the rear terminal • The 3KD9103-6 and 3KD9103-7 auxiliary switch modules and those with a leading NO contact can only be used with 3KF if they have the operating mechanism on the front or on the left						
 **Variant**	**Article No.**					
Standard version	3KD9103-5	■	■			
With test function	3KD9103-6	■	■			
With leading NO contact and test function	3KD9103-7	■	■			
Mounting brackets for auxiliary switch modules, for 3KF size 1 with rear terminals						
 • For mounting auxiliary switch modules on 3KF switch disconnectors with rear terminal						
	Article No.					
	3KF9112-0AB00	■				

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3KF switch disconnectors with fuses

Accessories for 3KF LV HRC and 3KF SITOR switch disconnectors

Other accessories and spare parts

Auxiliary switches, for 3KF LV HRC and 3KF SITOR

- Auxiliary switches for sizes 2 to 5 have screw terminals and are mounted on the operating mechanism module of the 3KF. Auxiliary switches with spring-type terminals from the 3SU1 range can also be used.
- All auxiliary switches for sizes 2 to 5 can be used as leading auxiliary switches, depending on the mounting position of the auxiliary switch (see Operating Instructions).



Variant	Contacts	Contact surface	Article No.	Size 1	Size 2	Size 3	Size 4	Size 5
With connecting cables	1 CO	Standard	3KD9103-1	■				
		Solid-state compatible	3KD9103-3	■				
Without connecting cables	1 CO	Standard	3KD9103-2	■				
		Solid-state compatible	3KD9103-4	■				
	1 NO	Standard	3SU1400-1AA10-1BA0		■	■	■	■
		Gold-plated	3SU1400-1AA10-1LA0		■	■	■	■
	1 NC	Standard	3SU1400-1AA10-1CA0		■	■	■	■
		Gold-plated	3SU1400-1AA10-1MA0		■	■	■	■
	1 NO + 1 NC	Standard	3SU1400-1AA10-1FA0		■	■	■	■
		Gold-plated	3SU1400-1AA10-1QA0		■	■	■	■
	2 NO	Standard	3SU1400-1AA10-1DA0		■	■	■	■
		Gold-plated	3SU1400-1AA10-1NA0		■	■	■	■
	2 NC	Standard	3SU1400-1AA10-1EA0		■	■	■	■
		Gold-plated	3SU1400-1AA10-1PA0		■	■	■	■

Electronic fuse monitoring, for 3KF LV HRC and 3KF SITOR



Version	Article No.	Size 1	Size 2	Size 3	Size 4	Size 5
For remote display of tripped fuses	3KF9010-1AA00	■	■	■	■	■

Phase barriers, for 3KF LV HRC and 3KF SITOR



Version	Scope of supply	Article No.	Size 1	Size 2	Size 3	Size 4	Size 5
For 3-pole devices	6 units	3KD9308-6		■			
		3KD9408-6			■	■	
		3KD9508-6					■
For 4-pole devices	8 units	3KD9308-8		■			
		3KD9408-8			■	■	
		3KD9508-8					■

Terminal covers, for 3KF LV HRC



Version	Scope of supply	Variant	Article No.	Size 1	Size 2	Size 3	Size 4	Size 5
For 3-pole devices	6 units	Standard length	3KD9304-6		■			
			3KF9304-6			■		
			3KD9404-6				■	
			3KD9504-6					■
		Short version	3KD9304-7		■			
			3KF9304-7			■		
			3KD9404-7				■	
For 4-pole devices	8 units	Standard length	3KD9304-8		■			
			3KF9304-8			■		
			3KD9404-8				■	
			3KD9504-8					■
		Short version	3KD9304-5		■			
			3KF9304-5			■		
			3KD9404-5				■	

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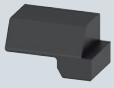
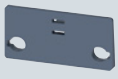
Other accessories and spare parts

			Size 1	Size 2	Size 3	Size 4	Size 5
Spare part for terminal covers, for 3KF LV HRC							
	**Scope of supply**	**Variant**	**Article No.**				
	1 unit	Standard length	3KD9504-1				■
		Short version	3KD9304-1		■		
			3KF9304-1			■	
			3KD9404-1				■
Blocking pin test function, for 3KF LV HRC and 3KF SITOR							
	• Enables permanent deactivation of the test function for auxiliary switches • It is installed in the operating mechanism module of the 3KF switch disconnector						
	Scope of supply		**Article No.**				
	10 units		3KF9112-1AA00	■			
			3KF9412-1AA00		■		■
			3KF9512-1AA00				■
Mounting brackets, for 3KF LV HRC							
	• The 3KF9112-0AB00 mounting bracket is needed if an auxiliary switch module is mounted on a 3KF1 with rear terminals						
	Connection		**Article No.**				
	Box terminals, flat terminals		3KF9112-0AA00	■			
			3KF9212-0AA00		■		
	Flat terminals at rear		3KF9212-0AB00	■	■		
Mounting brackets, for 3KF SITOR							
	**Connection**		**Article No.**				
	Box terminals, flat terminals		3KF9112-0AA10	■			
			3KF9212-0AA10		■		
Mounting brackets, for 3KF LV HRC and 3KF SITOR							
	**Connection**		**Article No.**				
	Flat terminals		3KF9412-0AA00			■	■
			3KF9512-0AA00				■
Phase barriers, for 3KF LV HRC and 3KF SITOR							
	**Version**	**Scope of supply**	**Article No.**				
	For mounting on standard mounting rail	5 units	3KF9112-0BA00	■			
Fuse covers, for 3KF LV HRC							
	**Connection**		**Article No.**				
	Box terminals, flat terminals		3KF9112-0CA00	■			
			3KF9212-0CA00		■		
			3KF9312-0CA00			■	
			3KF9412-0CA00				■
			3KF9512-0CA00				■
	Flat terminals at rear		3KF9212-0CB00		■		

			NH000	NH00	NH1	NH2	NH3
LV HRC isolating blades, for 3KF LV HRC and 3KF SITOR							
	**Version**	**Article No.**					
	With insulated grip lugs	3NG1002	■	■			
		3NG1202			■		
		3NG1302				■	
		3NG1402					■

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3NJ62 switch disconnectors with fuses

System overview

Fuse links



For LV HRC fuses



For BS fuses

Accessories



Connection terminals and covers



Auxiliary switches



Current transformers



Ammeters



Guide rails

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Note:
You will find a detailed range of accessories with the basic units.

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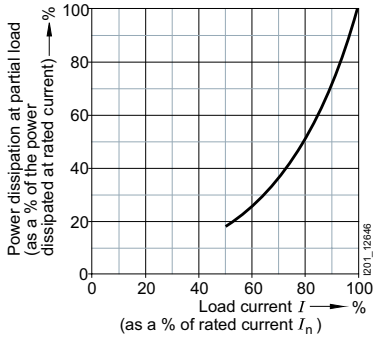
General information

Suitable fuses

You will find further information under: sie.ag/2UlrAvy



The 3NJ62 switch disconnector with fuses is suitable for all fuses with LV HRC design in sizes 000 to 3 that comply with IEC 60269-2, including fuses for cable and line protection.

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3NJ62 switch disconnectors with fuses

Configuration

For a complete and valid configuration of your switch disconnectors with fuses, please use our online configurator at www.siemens.com/lowvoltage/3nj62-configurator

	6	7	8	9	10	11	12	13	14	15	16
3NJ62			–	A		0		–			

Size and type of fuse	LV HRC fuse	00	160 A	0
		1	250 A	1
		2	400 A	2
		3	630 A	3
	BS 88 fuse	A3	63 A	4
		A3	100 A	5
		00T	160 A	6
		B2	250 A	7
		B4	400 A	8
		3T	630 A	9

Number of poles	2-pole [1]	2
	3-pole	3
	4-pole [2]	4

Breaking capacity	Standard breaking capacity S	AC-22B	Manually operated	1
			Motorized operating mechanism	2
	High breaking capacity H	AC-23B, DC-23B, DC-21B	Manually operated	3
			Motorized operating mechanism	4

Electronic fuse monitoring	Without			A
	≤AC 690 V	Operate voltage <20 V	EFM10	B
	≤AC 690 V with line monitoring	Operate voltage <13 V	EFM20	C
	≤DC 440 V	Operate voltage <20 V	EFM25	E

Auxiliary switches	Without	0
	1 NC	1
	1 NO	2
	1 NO + 1 NC	3

[1] Not available for standard breaking capacity S
[2] Pas possible pour pouvoir de coupure élevé H

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		6	7	8	9	10	11	12	13	14	15	16
3NJ62				–					–			
Type of ammeter	Without								0			
	Moving iron								1			
	Bi-metal								2			
Wiring version of the current transformer	Without									A		
	1 current transformer to multi-function plug									B		
	3 current transformers to multi-function plug									C		
	1 current transformer to 1 ammeter									D		
	1 current transformer to 1 ammeter and multi-function plug									E		
	3 current transformers to 1 ammeter and multi-function plug									F		
Current transformer primary current	Without										A	
	50 A										B	
	100 A										D	
	150 A										E	
	200 A										F	
	250 A										G	
	300 A										H	
	400 A										J	
	500 A										K	
	600 A										L	
Current transformer secondary current	Without	Without accuracy class										0
	1 A	Accuracy class 1										1
	1 A	Accuracy class 0.5										2
	1 A	Accuracy class 0.5 calibrated										3
	5 A	Accuracy class 1										4
	5 A	Accuracy class 0.5										5
	5 A	Accuracy class 0.5 calibrated										6

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3NJ62 switch disconnectors with fuses

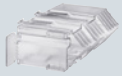
Accessories

Terminals



Variant	Article No.
For 2/3-pole devices	3NJ6923-1BA00
	3NJ6933-1BA00
	3NJ6943-1CA00
For 4-pole devices	3NJ6924-1BA00
	3NJ6934-1BA00
	3NJ6944-1CA00

Terminal covers



Variant	Version	Article No.
For 2/3-pole devices	–	3NJ6923-1DA00
		3NJ6933-1DA01
		3NJ6943-1DA00
	As an internal terminal cover	3NJ6933-1DB00
For 4-pole devices		3NJ6904-1DA00

Contact extensions



Number of poles	Article No.
3-pole	3NJ6923-1EB00
	3NJ6933-1EB00
	3NJ6943-1EB00
4-pole	3NJ6924-1EB00
	3NJ6934-1EB00
	3NJ6944-1EB00

Electronic fuse monitoring and line monitoring devices



Variant	Version	Article No.
EFM 10	–	3NJ6920-3FB00
		3NJ6930-3FB00
		3NJ6940-3FB00
EFM 20	With line monitoring for AC networks	3NJ6920-3FC00
		3NJ6930-3FC00
		3NJ6940-3FC00
EFM 25	–	3NJ6920-3FE00
		3NJ6930-3FE00
		3NJ6940-3FE00

Auxiliary switches



Contacts	Version	Article No.
1 NO contact (1 NO)	With cover	3NJ6920-2BB00
		3NJ6930-2BB00
		3NJ6940-2BB00
	Without cover	3NJ6900-2BC00
1 NC contact (1 NC)	With cover	3NJ6920-2CB00
		3NJ6930-2CB00
		3NJ6940-2CB00
	Without cover	3NJ6900-2CC00

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NH00	NH1	NH2	NH3	BS A3	BS 00T	BS B2	BS B4	BS 3T
■				■	■			
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3NJ62 switch disconnectors with fuses

Accessories

Current transformers for main devices and contact extensions



Rated current I_e	Class	Apparent power consumption	Feed-through opening diameter	Article No.
50 A/1 A	1	1 VA	Ø 21 mm	3NJ6920-3BB11
50 A/5 A	1	1 VA	Ø 21 mm	3NJ6920-3BB21
100 A/1 A	1	2.5 VA	Ø 21 mm	3NJ6920-3BD11
	0.5	1.5 VA	Ø 21 mm	3NJ6920-3BD12
	0.5 calibrated	1.5 VA	Ø 14 mm	3NJ6920-3BD13
100 A/5 A	1	2.5 VA	Ø 21 mm	3NJ6920-3BD21
	0.5	1.5 VA	Ø 21 mm	3NJ6920-3BD22
	0.5 calibrated	1.5 VA	Ø 14 mm	3NJ6920-3BD23
150 A/1 A	1	2.5 VA	Ø 21 mm	3NJ6920-3BE11
	0.5	1.5 VA	Ø 21 mm	3NJ6920-3BE12
	0.5 calibrated	1.5 VA	Ø 14 mm	3NJ6920-3BE13
150 A/5 A	1	2.5 VA	Ø 21 mm	3NJ6920-3BE21
	0.5	1.5 VA	Ø 21 mm	3NJ6920-3BE22
	0.5 calibrated	1.5 VA	Ø 14 mm	3NJ6920-3BE23
200 A/1 A	1	2.5 VA	Ø 21 mm	3NJ6930-3BF11
	0.5	3,75 VA	Ø 21 mm	3NJ6930-3BF12
200 A/5 A	1	2.5 VA	Ø 21 mm	3NJ6930-3BF21
	0.5	5 VA	Ø 21 mm	3NJ6930-3BF22
250 A/1 A	1	5 VA	Ø 21 mm	3NJ6930-3BG11
	0.5	5 VA	Ø 21 mm	3NJ6930-3BG12
250 A/5 A	1	2.5 VA	Ø 21 mm	3NJ6930-3BG21
	0.5	2.5 VA	Ø 21 mm	3NJ6930-3BG22
300 A/1 A	1	5 VA	–	3NJ6940-3BH11
	0.5	5 VA	–	3NJ6940-3BH12
	0.5 calibrated	5 VA	–	3NJ6940-3BH13
300 A/5 A	1	5 VA	–	3NJ6940-3BH21
	0.5	5 VA	–	3NJ6940-3BH22
	0.5 calibrated	5 VA	–	3NJ6940-3BH23
400 A/1 A	1	5 VA	–	3NJ6940-3BJ11
	0.5	5 VA	–	3NJ6940-3BJ12
	0.5 calibrated	5 VA	–	3NJ6940-3BJ13
400 A/5 A	1	5 VA	–	3NJ6940-3BJ21
	0.5	5 VA	–	3NJ6940-3BJ22
	0.5 calibrated	5 VA	–	3NJ6940-3BJ23
500 A/1 A	1	5 VA	–	3NJ6940-3BK11
	0.5	5 VA	–	3NJ6940-3BK12
	0.5 calibrated	5 VA	–	3NJ6940-3BK13
500 A/5 A	1	5 VA	–	3NJ6940-3BK21
	0.5	5 VA	–	3NJ6940-3BK22
	0.5 calibrated	5 VA	–	3NJ6940-3BK23
600 A/1 A	1	5 VA	–	3NJ6940-3BL11
	0.5	5 VA	–	3NJ6940-3BL12
	0.5 calibrated	5 VA	–	3NJ6940-3BL13
600 A/5 A	1	5 VA	–	3NJ6940-3BL21
	0.5	5 VA	–	3NJ6940-3BL22
	0.5 calibrated	5 VA	–	3NJ6940-3BL23

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NH00	NH1	NH2	NH3	BS A3	BS 00T	BS B2	BS B4	BS 3T
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3NJ62 switch disconnectors with fuses

Accessories

Current transformer busbars



Variant	Version	Article No.
For current transformers with feed-through opening diameter 21 mm	For 1 current transformer	3NJ6920-3DB00
		3NJ6930-3DB00
	For 3 current transformers	3NJ6920-3DC00
		3NJ6930-3DC00
	For 4 current transformers	3NJ6920-3DD00
		3NJ6930-3DD00
For current transformers with feed-through opening diameter 14 mm	For 1 current transformer	3NJ6920-3DE00
	For 3 current transformers	3NJ6920-3DF00
	For 4 current transformers	3NJ6920-3DG00

Holders



Version	Article No.
For ammeters	3NJ6900-4GA00

Ammeters





Variant	Version	Rated current I_e	Article No.
Moving-iron measuring instruments	For measurements on transformer x/1 A with double overload	50 A/1 A	3NJ6900-4HB11
		100 A/1 A	3NJ6900-4HD11
		150 A/1 A	3NJ6900-4HE11
		200 A/1 A	3NJ6900-4HF11
		250 A/1 A	3NJ6900-4HG11
		300 A/1 A	3NJ6900-4HH11
		400 A/1 A	3NJ6900-4HJ11
		500 A/1 A	3NJ6900-4HK11
		600 A/1 A	3NJ6900-4HL11
	For measurements on transformer x/5 A with double overload	50 A/5 A	3NJ6900-4HB21
		100 A/5 A	3NJ6900-4HD21
		150 A/5 A	3NJ6900-4HE21
		200 A/5 A	3NJ6900-4HF21
		250 A/5 A	3NJ6900-4HG21
		300 A/5 A	3NJ6900-4HH21
		400 A/5 A	3NJ6900-4HJ21
		500 A/5 A	3NJ6900-4HK21
		600 A/5 A	3NJ6900-4HL21
Bi-metal measuring instruments	For measurements on transformer x/1 A with 1.2-times overload	50 A/1 A	3NJ6900-4HB12
		100 A/1 A	3NJ6900-4HD12
		150 A/1 A	3NJ6900-4HE12
		200 A/1 A	3NJ6900-4HF12
		250 A/1 A	3NJ6900-4HG12
		300 A/1 A	3NJ6900-4HH12
		400 A/1 A	3NJ6900-4HJ12
		500 A/1 A	3NJ6900-4HK12
		600 A/1 A	3NJ6900-4HL12
	For measurements on transformer x/5 A with 1.2-times overload	50 A/5 A	3NJ6900-4HB22
		100 A/5 A	3NJ6900-4HD22
		150 A/5 A	3NJ6900-4HE22
		200 A/5 A	3NJ6900-4HF22
		250 A/5 A	3NJ6900-4HG22
		300 A/5 A	3NJ6900-4HH22
		400 A/5 A	3NJ6900-4HJ22
		500 A/5 A	3NJ6900-4HK22
		600 A/5 A	3NJ6900-4HL22

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NH00	NH1	NH2	NH3	BS A3	BS 00T	BS B2	BS B4	BS 3T
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3NJ62 switch disconnectors with fuses

Accessories

Multi-function plugs



Version	Dimensions	Article No.
With fixing screws	6 × 2.5 mm²	3NJ6920-3EB01
	8 × 2.5 mm²	3NJ6920-3ED01
		3NJ6940-3EC00
Without fixing screws	8 × 2.5 mm²	3NJ6940-3ED00
	10 × 1.5 mm² and 8 × 2.5 mm²	3NJ6920-3EE01
	12 × 1.5 mm² and 8 × 2.5 mm²	3NJ6940-3EF00

Front panels



Purpose	Version	Article No.
3NJ6203-1AA... and 3NJ6203-3AA... with/without EFM	With LV HRC fuse	3NJ6923-4BB00
	With BS 88 fuse	3NJ6923-4BC00
3NJ6213-1AA... and 3NJ6213-3AA... with/without EFM	With LV HRC fuse	3NJ6933-4BB00
	With BS 88 fuse	3NJ6933-4BC00
3NJ6223-1AA... and 3NJ6223-3AA... with/without EFM	With LV HRC fuse	3NJ6943-4BB00
	With BS 88 fuse	3NJ6943-4BC00
3NJ6233-1AA... and 3NJ6233-3AA... with/without EFM	With LV HRC fuse	3NJ6953-4BB00
	With BS 88 fuse	3NJ6953-4BC00

Busbar covers



Article No.
3NJ6916-4EA00

Blanking covers



Article No.
3NJ6900-4CB00

Connection modules



Article No.
3NJ6915-3BA00

Guide rails



Overall depth	Article No.
200 mm	3NJ6900-4FB00
400 mm	3NJ6900-4FC00

LV HRC fuse puller tongs

Version	Article No.
For NH00	XPT:8PT9624
For NH1, NH2, NH3	XPT:8PT9625

Locking devices for padlocks



Article No.
3NJ6900-4LL

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NH00	NH1	NH2	NH3	BS A3	BS 00T	BS B2	BS B4	BS 3T
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5SG switch disconnectors with fuses

System overview

MINIZED switch disconnectors with fuses


1P


3P

NEOZED SR60 bus-mounting switch disconnectors


3P


3P, with terminals

Accessories


Auxiliary switches




Lateral modules


Reducers

Note:
You will find a detailed range of accessories with the basic units.

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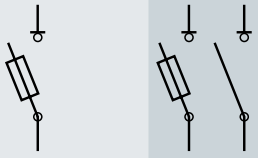
Number of poles	1P	1P+N	2P	3P		3P+N
						

Size of fuse	Rated current I_n	Mounting width 1.5 MW	Mounting width 3 MW	Mounting width 3 MW	Mounting width 1.5 MW	Mounting width 4.5 MW	Mounting width 6 MW
MINIZED switch disconnectors with fuses [1) 3)]							
D02	63 A	5SG7113	5SG7153	5SG7123	–	5SG7133	5SG7163
MINIZED switch disconnectors with fuses – version for Austria only [2) 3)]							
D02	25 A	–	–	–	–	5SG7133-8BA25	–
	35 A	–	–	–	–	5SG7133-8BA35	–
	50 A	–	–	–	–	5SG7133-8BA50	–
NEOZED SR60 bus-mounting switch disconnectors							
D02	63 A	–	–	–	5SG7230 [4)]	–	–
NEOZED SR60 bus-mounting switch disconnectors, without LED signal detector							
D02	63 A	–	–	–	5SG7234-1 [4)]	–	–
NEOZED SR60 bus-mounting switch disconnectors, with LED signal detector							
D02	63 A	–	–	–	5SG7234-2 [5)]	–	–

[1)] Using draw-out technology with touch protection according to BGV A3, adapter sleeves not included in the scope of delivery
[2)] With permanently fitted adapter sleeves, incl. fuse link
[3)] Do not use fuse links with nickel-plated contact caps
[4)] In the case of permanent load over 35 A, we recommend the use of 5SH5526 lateral modules. Please observe EN 60439-1, Table 1
[5)] In the case of permanent load over 35 A, we recommend the use of 5SH5533 lateral modules. Please observe EN 60439-1, Table 1

Accessories

Auxiliary switches

	Version	Variant	Mounting width	Contacts	Article No.
	For MINIZED D02 switch disconnectors	Standard	0.5 MW	1 NO + 1 NC	5ST3010
				2 NO	5ST3011
				2 NC	5ST3012
		With test button	0.5 MW	1 NO + 1 NC	5ST3010-2
				2 NO	5ST3011-2
				2 NC	5ST3012-2
	For NEOZED SR60 bus-mounting switch disconnectors	Standard	0.5 MW	1 CO	5SH5525

Lateral modules

	Version	Variant	Mounting width	Article No.
	For NEOZED SR60 bus-mounting switch disconnectors	5SG7230	0.5 MW	5SH5526
		5SG7234-1 and -2	0.5 MW	5SH5533

Reducers

	Version	Article No.
	For D01 fuse links	5SH5527

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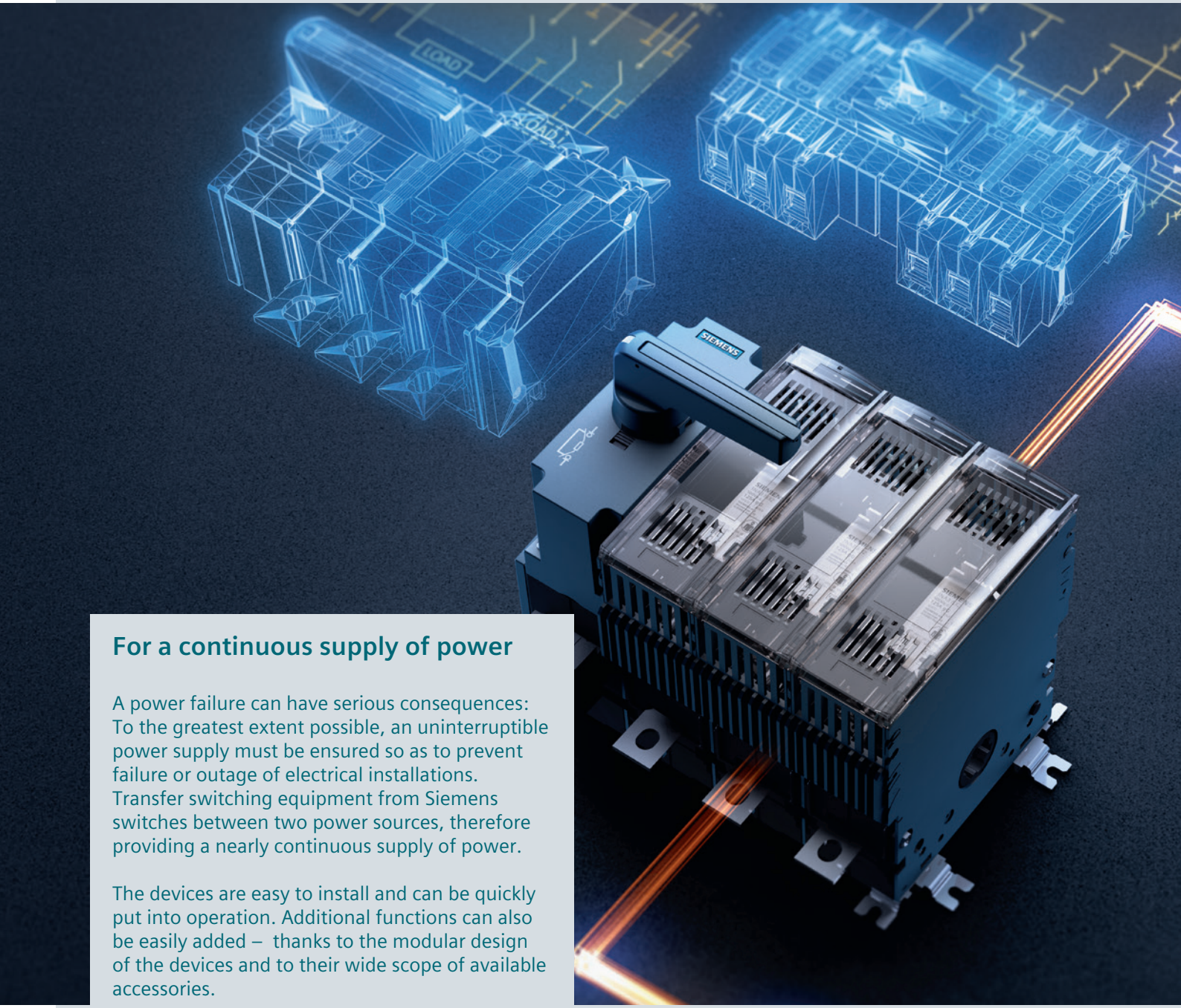

For a continuous supply of power

A power failure can have serious consequences: To the greatest extent possible, an uninterruptible power supply must be ensured so as to prevent failure or outage of electrical installations. Transfer switching equipment from Siemens switches between two power sources, therefore providing a nearly continuous supply of power.

The devices are easy to install and can be quickly put into operation. Additional functions can also be easily added – thanks to the modular design of the devices and to their wide scope of available accessories.

Convenient ordering processes and fast delivery optimize stock keeping and save you time and money. You can also use our CAx data for automated and streamlined planning and configuration.

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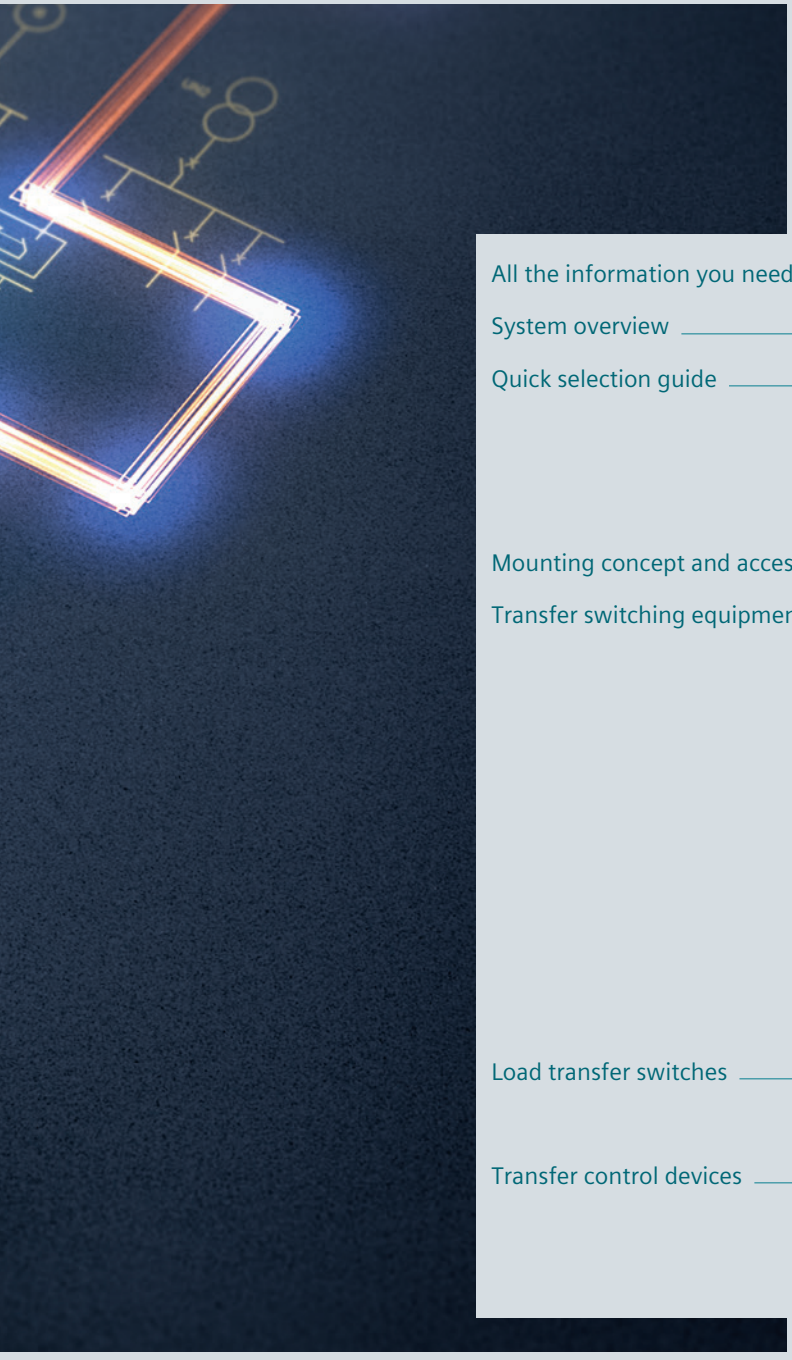
Transfer Switching Equipment and Load Transfer Switches



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- Applications 9/6
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Mounting concept and accessories 9/12

Transfer switching equipment 9/16

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- 3KC6 and 3KC8 automatic transfer switching equipment (ATSE) 9/17
- Accessories for remote transfer switching equipment (RTSE) and automatic transfer switching equipment (ATSE) 9/18
- 3KC0 manual transfer switching equipment (MTSE) 9/24
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Load transfer switches 9/30

- 3LD2 load transfer switches 9/30

Transfer control devices 9/32

- 3KC ATC transfer control devices 9/32
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A multitude of additional information ...

Information + ordering

All the important things at a glance

Information to get you started

For information about transfer switching equipment and load transfer switches, please visit our website www.siemens.com/switching-devices

Our white paper provides you with a good overview of the transfer switching equipment sie.ag/2XBonIi

Contact persons in your region

We are there when you need us

You can find your local contacts at www.siemens.com/lowvoltage/contact

Your product in detail

The Siemens Industry Online Support portal provides comprehensive information www.siemens.com/lowvoltage/product-support

- Technical basic information – Switch disconnectors and transfer switching equipment (109763354)

The relevant tender specifications can be found at www.siemens.com/lowvoltage/tenderspecifications

Use our conversion tool for quick and easy conversion to Siemens products www.siemens.com/conversion-tool

Everything you need for your order

Refer to the Industry Mall for an overview of your products

- Switch disconnectors and transfer switching equipment sie.ag/2mmMw6g

Direct forwarding to the individual products in the Industry Mall by clicking on the Article No. in the catalog or by entering this web address incl. Article No. www.siemens.com/product?Article No.

Order supports are available in Siemens Industry Online Support at www.siemens.com/lowvoltage/catalogs

- Order support – 3KC automatic transfer switching equipment (ATSE) – End-to-end safety for user and systems (109755620)
- Order support – 3KC remotely operated transfer switching equipment (RTSE) – End-to-end safety for user and systems (109755627)
- Order support – 3KC manual transfer switching equipment (MTSE) – End-to-end safety for user and systems (109750227)

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… can be found in our online services

Commissioning + operation

Your product in detail

The Siemens Industry Online Support portal provides detailed technical information
www.siemens.com/lowvoltage/product-support

- Operating instructions
- Certificates

Engineering data for CAD or CAE systems are available in the CAx Download Manager at
www.siemens.com/lowvoltage/cax

Manuals

Manuals are available for downloading in Siemens Industry Online Support at
www.siemens.com/lowvoltage/manuals

- Configuration manual – Transfer switching equipment and load transfer switches (109769745)
- Equipment manual – 3KC3 and 3KC6 transfer switching equipment (109754954)
- Equipment manual – 3KC0 manual transfer switching equipment (109763232)
- Equipment manual – 3KC4 and 3KC8 transfer switching equipment (109738725)
- Equipment manual – 3KC ATC3100 transfer control device (100341671)
- Equipment manual – 3KC ATC6300 transfer control device (109755149)
- Equipment manual – 3KC ATC6500 transfer control device (109758018)

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You can find further information on services at
www.siemens.com/service-catalog

Technical overview – Transfer switching equipment and load transfer switches

The fast way to get you to our online services

This page provides you with comprehensive information and links on transfer switching equipment and load transfer switches

www.siemens.com/lowvoltage/product-support (109764946)

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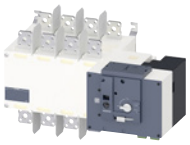
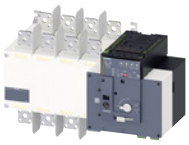
System overview

Remote (RTSE) and automatic (ATSE) transfer switching equipment

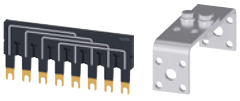

3KC3 (RTSE), 4-pole


3KC4 (RTSE), 3- and 4-pole

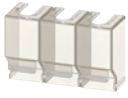

3KC6 (ATSE), 4-pole


3KC8 (ATSE), 3- and 4-pole

Accessories, RTSE and ATSE

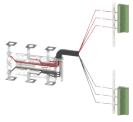

Bridging bars


Auxiliary switches


Terminal covers


Autotransformers

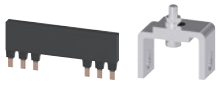

Dual power supply


Power supply and voltage sensing cables

Manual transfer switching equipment (MTSE)


3KC0 (MTSE), 3- and 4-pole

Accessories, MTSE


Bridging bars


4th contact element


Auxiliary switches


Direct operating mechanisms


Door-coupling rotary operating mechanisms


Phase barriers


Terminal covers

Note:
You will find a detailed range of accessories in the Accessories section.

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Load transfer switches



Front mounting 3LD2



Floor mounting 3LD2



Molded-plastic enclosures 3LD2

Accessories



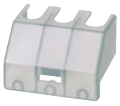
4th contact element



N/PE terminal



Auxiliary switches



Terminal covers

Transfer control devices



3KC ATC3100



3KC ATC6300



3KC ATC6500

Accessories



Expansion modules



Front interface



Protective seal

Note:
You will find a detailed range of accessories in the Accessories section.

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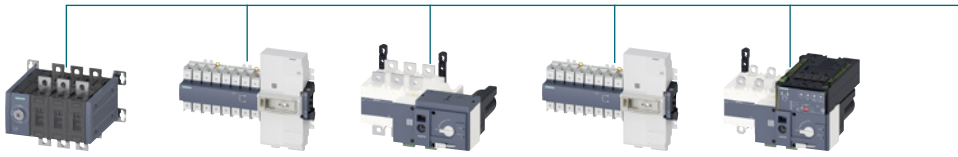
Applications

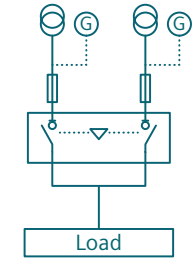
Switching with switch disconnectors (without protection function)



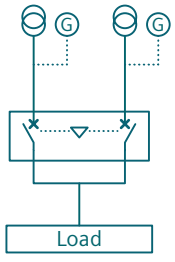
			3KC0	3KC3	3KC4	3KC6	3KC8
Transfer types	Load transfer	AC	■	■	■	–	–
		DC	–	–	■	–	–
	Transfer control	AC	■	■	■	■	■
Method of operation	Manual (MTSE)		■	■	■	■	■
	Remote (RTSE)		–	■	■	–	■
	Automatic (ATSE)		–	With ATC6300	With ATC6300	■	■
Transfer control	Network/network	AC	■	■	■	■	■
	Network/generator	AC	■	■	■	–	■
	Generator/generator	AC	■	■	■	–	–
Rated operating current			16 ... 1600 A	40 ... 160 A	250 ... 3200 A	40 ... 160 A	250 ... 3200 A
Number of poles			3 and 4	4	3 and 4	4	3 and 4
Communication			–	With ATC6300	With ATC6300	–	–
Automatic load shedding			–	–	–	–	–
More information			from page 9/24	from page 9/16	from page 9/16	from page 9/17	from page 9/17

[1] Manual load transfer switch, not an MTSE

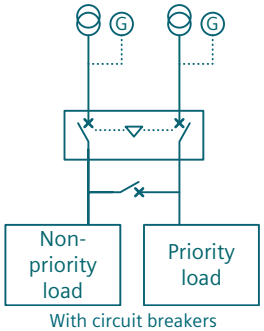
Transfer control



With switch disconnectors

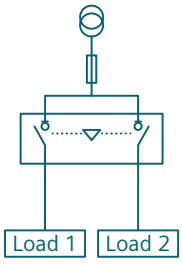


With circuit breakers



With circuit breakers and automatic load shedding

Load transfer



With switch disconnectors

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Switching with circuit breakers (with protection function)

			
3LD2	3KC ATC3100 (+ 3VA/3WL)	3KC ATC6300 (+ 3VA/3WL)	3KC ATC6500 (+ 3VA/3WL)
■	–	–	–
–	–	–	–
–	■	■	■
■ [1]	–	–	–
–	■	■	■
–	■	■	■
–	■	■	■
–	■	■	■
–	–	■	■
25 ... 250 A	3VA: 16 ... 630 A, 3WL: 630 ... 6300 A	3VA: 16 ... 630 A, 3WL: 630 ... 6300 A	3VA: 16 ... 1600 A, 3WL: 630 ... 6300 A
3 and 4	3 and 4	3 and 4	3 and 4
–	–	■	■
–	–	–	■
from page 9/30	from page 9/32	from page 9/32	from page 9/32

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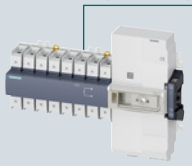
Transfer switching equipment and load transfer switches

Remote transfer switching equipment (RTSE), automatic transfer switching equipment (ATSE)



			3KC3424 3KC6424	3KC3426 3KC6426	3KC3428 3KC6428	3KC3430 3KC6430	3KC3432 3KC6432	3KC3434 3KC6434
Rated uninterrupted current I_u			**40 A**	**63 A**	**80 A**	**100 A**	**125 A**	**160 A**
Connection			Box terminal					
Switch positions			I – O – II					
Number of poles			4					
Size			–					
General technical details								
Operating voltage at 50/60 Hz AC in acc. to IEC 60947-6-1		V	415					
Operating voltage at 50/60 Hz AC in acc. to IEC 60947-3 (load transfer switch)		V	415					
Impulse withstand voltage (U_{imp}) for main circuit		kV	6					
Impulse withstand voltage (U_{imp}) for control circuit (RTSE / ATSE)		kV	4 (RTSE) / 2.5 (ATSE)					
Operational current in acc. to IEC 60947-6-1	AC-31 A/B, at 415 V	A	40	63	80	100	100/125	100/160
	AC-32 A/B, at 415 V	A	40	63	80	100	100/125	100/160
	AC-33 B, at 415 V	A	40	63	80	100	125	125
Operational current in acc. to IEC 60947-3 (load transfer switch)	AC-21 A/B, at 415 V	A	40	63	80	100	125	125/160
	AC-21 A/B, at 690 V	A	40	63	80	100	125	125
	AC-22 A/B, at 415 V	A	40	63	80	100	125	125/160
	AC-22 A/B, at 690 V	A	40	63	80	80	100/125	100/125
	AC-23 A/B, at 415 V	A	40	63	80	100	125	125/160
	AC-23 A/B, at 690 V	A	40	63	63	80	80	80
Operational power in acc. to IEC 60947-3 (load transfer switch)	AC-23 A/B, at 415 V [1]	kW	22	37	45	55	60	75
	AC-23 A/B, at 690 V [2]	kW	37	55	55	75	75	75
	AC-3 motor load switch at 380 ... 440 V	kW	–					
	AC-3 motor load switch at 660 ... 690 V	kW	–					
Short-circuit behavior								
Short-circuit current ratings in acc. to IEC 60947-6-1	Conditional short-circuit current with gG fuse (415 V)	kA	50	50	50	50	50	40
Short-circuit current ratings in acc. to IEC 60947-3 (load transfer switch)	Conditional short-circuit current with gG fuse (415 V)	kA	50	50	50	50	50	40
	Conditional short-circuit current with gG fuse (690 V)	kA	–					
Transfer switching properties (in acc. to IEC 60947-6-1)								
Switching time I – O and II – O		s	0.045					
Switch-off time I – O – II and II – O – I		s	0.15					
Transfer time I – O – II and II – O – I without/with network monitoring		s	0.18/1.4					
Degree of protection								
IP maximum degree of protection			IP20					
Standards UL/CSA, in acc. to UL508								
Rated operational voltage U_e AC		V	–					
Rated uninterrupted current I_u		A	–					
Maximum rated power (AC-3), three-phase, 40 ... 60 Hz	480 V	hp	–					
	600 V	hp	–					
More information								
Catalog LV 10 – 10/2020			from page 9/16					

[1] For 3LD2 at 380 ... 440 V [2] For 3LD2 at 660 ... 690 V

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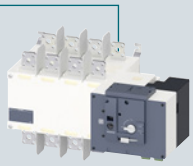
Remote transfer switching equipment (RTSE), automatic transfer switching equipment (ATSE)



3KC4.38 3KC8.38	3KC4.42 3KC8.42	3KC4.46 3KC8.46	3KC4.48 3KC8.48	3KC4.50 3KC8.50	3KC4.52 3KC8.52	3KC4.54 3KC8.54	3KC4.56 3KC8.56	3KC4.58 3KC8.58	3KC4.60 3KC8.60
250 A	**400 A**	**630 A**	**800 A**	**1000 A**	**1250 A**	**1600 A**	**2000 A**	**2500 A**	**3200 A**
Flat terminal									
I – O – II									
3 and 4									
–									
415									
690									
12									
4									
–/250	–/400	–/630	–/800	–/1000	–/1250	–/1600	–/2000	–/2500	–/3200
–/200	–/400	–/500	–/800	–/1000	–/1250	–/1600	–/2000	–/2000	–/2000
200	200	400	800	800	1000	1000	1250	1250	1250
250	400	630	800	1000	1250	1600	–/2000	–/2500	–/3200
200	200	500	800	1000	1250	1600	–/2000	–/2000	–/2000
250	400	630	800	1000	1250	1600	–/2000	–/2500	–/3200
160	160	400	630	800	1000	1000	–	–	–
200	400	500/630	800	1000	1250	1250	–/1600	–/1600	–/1600
125	125	400	630	630	800	800	–	–	–
110	220	335	450	700	800	900	–	–	–
110	110	400	400	630	800	800	–	–	–
–									
–									
50	50	50	50	50	100	100	–	–	–
–									
50	50	50	50	50	100	100	–	–	–
0.5	0.5	0.6	1.4	1.4	1.4	1.4	1.6	1.6	1.6
0.4	0.4	0.4	1.4	1.4	1.4	1.5	1.2	1.2	1.2
0.9/1.0	0.9/1.0	1.0/1.1	2.8/3.1	2.8/3.1	2.8/3.1	2.9/3.3	2.8/2.8	2.8/2.8	2.8/2.8
IP20									
–									
–									
–									
–									

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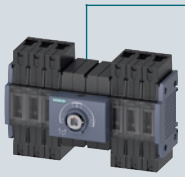
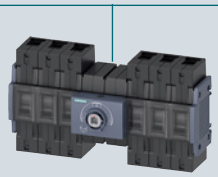
Transfer switching equipment and load transfer switches

Manual transfer switching equipment (MTSE)





			3KC0.16	3KC0.22	3KC0.26	3KC0.28	3KC0.30	3KC0.32	3KC0.34
Rated uninterrupted current I_u			**16 A**	**32 A**	**63 A**	**80 A**	**100 A**	**125 A**	**160 A**
Connection			Box terminal			Box terminal			
Switch positions			I–O–II			I–O–II			
Number of poles			3 and 4			3 and 4			
Size			1			2			
General technical details									
Operating voltage at 50/60 Hz AC in acc. to IEC 60947-6-1		V	415			415			
Operating voltage at 50/60 Hz AC in acc. to IEC 60947-3 (load transfer switch)		V	690			690			
Impulse withstand voltage (U_{imp}) for main circuit		kV	8			8			
Impulse withstand voltage (U_{imp}) for control circuit (RTSE / ATSE)		kV	–			–			
Operational current in acc. to IEC 60947-6-1	AC-31 A/B, at 415 V	A	–/16	–/32	–/63	–/80	–/100	–/125	–/160
	AC-32 A/B, at 415 V	A	–/16	–/32	–/63	–/80	–/100	–/125	–/160
	AC-33 B, at 415 V	A	16	32	63	80	100	125	160
Operational current in acc. to IEC 60947-3 (load transfer switch)	AC-21 A/B, at 415 V	A	16/16	32/32	63/63	80/80	100/100	125/125	160/160
	AC-21 A/B, at 690 V	A	16/16	32/32	63/63	80/80	100/100	125/125	160/160
	AC-22 A/B, at 415 V	A	16/16	32/32	63/63	80/80	100/100	125/125	160/160
	AC-22 A/B, at 690 V	A	16/16	32/32	63/63	80/80	100/100	125/125	160/160
	AC-23 A/B, at 415 V	A	16/16	32/32	63/63	80/80	100/100	125/125	160/160
	AC-23 A/B, at 690 V	A	16/16	32/32	63/63	80/80	100/100	125/125	160/160
Operational power in acc. to IEC 60947-3 (load transfer switch)	AC-23 A/B, at 415 V [1]	kW	7.5/7.5	15/15	30/30	37/37	55/55	55/55	90/90
	AC-23 A/B, at 690 V [2]	kW	11/11	30/30	55/55	75/75	90/90	110/110	110/110
	AC-3 motor load switch at 380 ... 440 V	kW	–			–			
	AC-3 motor load switch at 660 ... 690 V	kW	–			–			
Short-circuit behavior									
Short-circuit current ratings in acc. to IEC 60947-6-1	Conditional short-circuit current with gG fuse (415 V)	kA	100			100			
Short-circuit current ratings in acc. to IEC 60947-3 (load transfer switch)	Conditional short-circuit current with gG fuse (415 V)	kA	100			100			
	Conditional short-circuit current with gG fuse (690 V)	kA	100			65			
Transfer switching properties (in acc. to IEC 60947-6-1)									
Switching time I – O and II – O		s	–			–			
Switch-off time I – O – II and II – O – I		s	–			–			
Transfer time I – O – II and II – O – I without/with network monitoring		s	–			–			
Degree of protection									
IP maximum degree of protection			IP20			IP20			
Standards UL/CSA, in acc. to UL508									
Rated operational voltage U_e AC		V	–			–			
Rated uninterrupted current I_u		A	–			–			
Maximum rated power (AC-3), three-phase, 40 ... 60 Hz	480 V	hp	–			–			
	600 V	hp	–			–			
More information									
Catalog LV 10 – 10/2020			from page 9/24			from page 9/24			

[1] For 3LD2 at 380 ... 440 V [2] For 3LD2 at 660 ... 690 V

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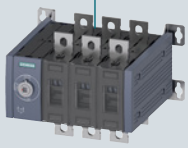
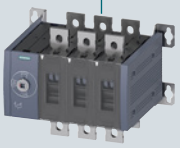
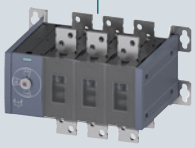
Manual transfer switching equipment (MTSE)

Load transfer switches



3KC0.36	3KC0.38	3KC0.40	3KC0.42	3KC0.44	3KC0.46	3KC0.48	3KC0.50	3KC0.52	3KC0.54	3LD21	3LD22	3LD25	3LD27	3LD23	3LD24
200 A	**250 A**	**315 A**	**400 A**	**500 A**	**630 A**	**800 A**	**1000 A**	**1250 A**	**1600 A**	**25 A**	**32 A**	**63 A**	**100 A**	**160 A**	**250 A**
Flat terminal				Flat terminal			Flat terminal			Box terminal				Box terminal	
I–O–II				I–O–II			I–O–II			I–O–II				I–O–II	
3 and 4				3 and 4			3 and 4			3				3 and 4	
3				4			5			–				–	
415				415			415			–				–	
690				690			690			690				690	
12				12			12			6				6	
–				–			–			–				–	
–/200	–/250	–/315	–/400	–/500	–/630	–/800	–/1000	–/1250	–/1600	–				–	
–/200	–/250	–/315	–/350	–/500	–/630	–/800	–/1000	–/1250	–/1250	–				–	
200	250	315	315	500	500	500	800	800	800	–				–	
200/200	250/250	315/315	400/400	500/500	630 /630	800/800	1000/1000	1250/1250	1600/1600	25	32	63	100	160	250
200/200	250/250	315/315	400/400	500/500	630 /630	800/800	1000/1000	1250/1250	1600/1600	25	32	63	100	160	250
200/200	250/250	315/315	400/400	500/500	630 /630	800/800	1000/1000	1250/1250	1600/1600	25	32	63	100	140	230
200/200	250/250	315/315	400/400	500/500	630 /630	800/800	1000/1000	1250/1250	1600/1600	25	32	63	100	140	230
200/200	250/250	315/315	400/400	500/500	630 /630	670/670	800/800	800/800	800/800	20	22	43	70	132	224
200/200	250/250	315/315	315/315	500/500	500/500	500/500	800/800	800/800	800/800	11.5	13.5	22	34	47	58
110/110	132/132	160/160	220/220	280/280	355/355	355/355	400/400	400/400	400/400	9.5	11.5	22	37	75	132
185/185	220/220	280/280	355/355	500/500	500/500	500/500	800/800	800/800	800/800	9.5	11.5	18.5	30	45	55
–				–			–			7.5	9.5	18.5	30	50	110
–				–			–			7.5	9.5	15	22	37	45
100	100	65	65	100	100	65	100	80	80	–				–	
100	100	65	65	100	100	65	100	80	80	50	50	50	50	50	50
65	65	35	35	65	65	50	–	–	–	50	50	50	50	50	50
–				–			–			–				–	
–				–			–			–				–	
–				–			–			–				–	
IP20				IP20			IP20			IP65					
–				–			–			600	600	600	600	600	600
–				–			–			20	30	60	100	160	250
–				–			–			10	20 (15) [3]	40	60	75	100
–				–			–			15	30 (20) [3]	50	75	75	75
from page 9/24				from page 9/24			from page 9/24			from page 9/30					

[3] Values in brackets apply to devices in molded-plastic enclosure.

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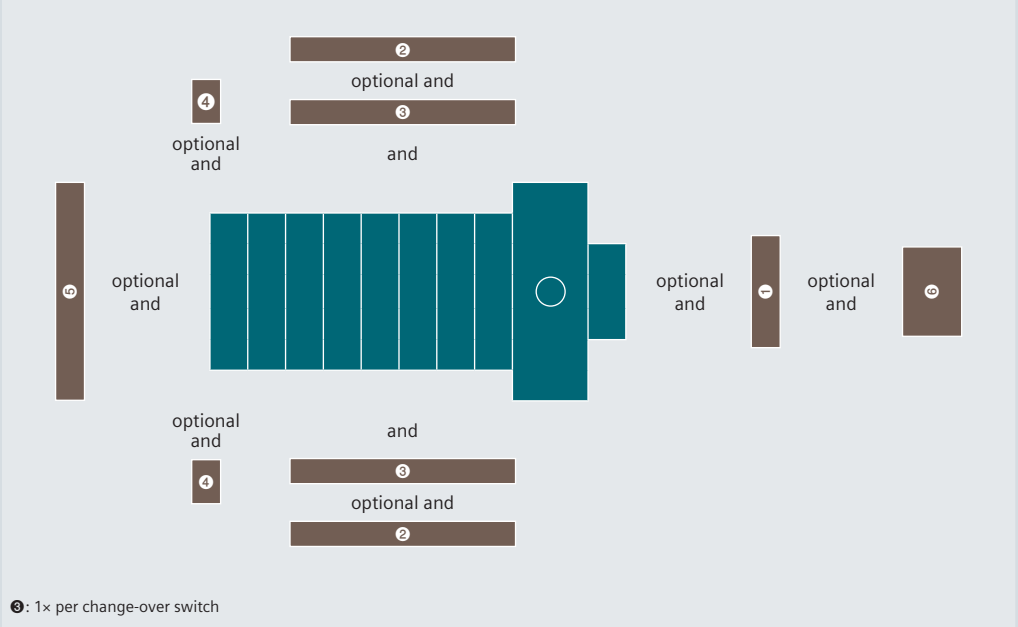
Mounting concept and accessories

3KC3 (RTSE) 4-pole

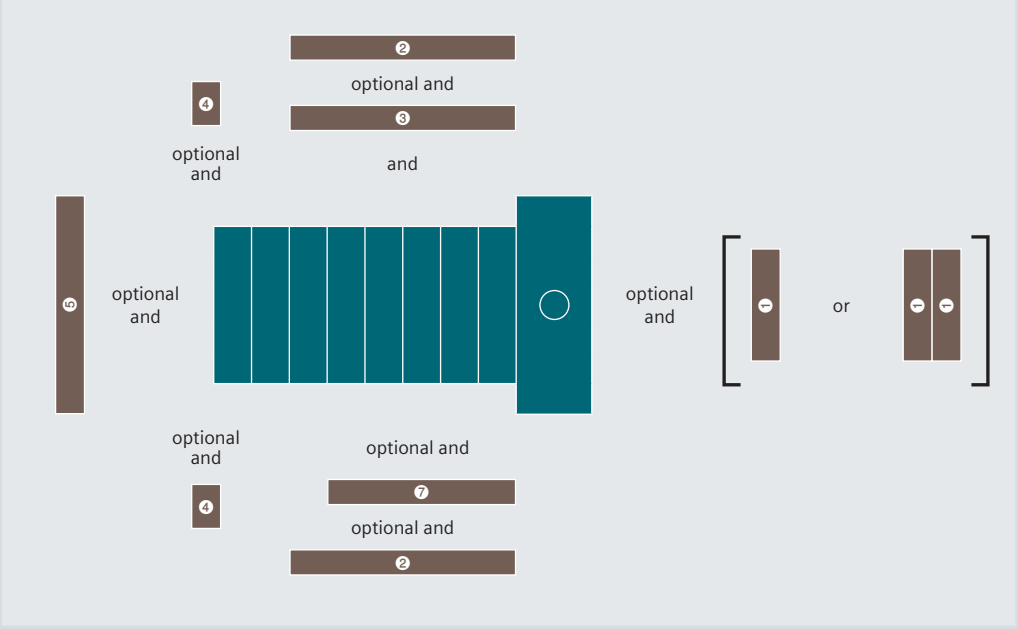


❸: 1× per change-over switch

Legend

❶ Auxiliary switches
❷ Terminal covers
❸ Bridging bar
❹ Aux. conductor terminal
❺ Autotransformers
❻ Dual power supply

3KC6 (ATSE), 4-pole



Legend

❶ Auxiliary switches
❷ Terminal covers
❸ Bridging bar
❹ Aux. conductor terminal
❺ Autotransformers
❻ Dual power supply
❼ Sealable cover

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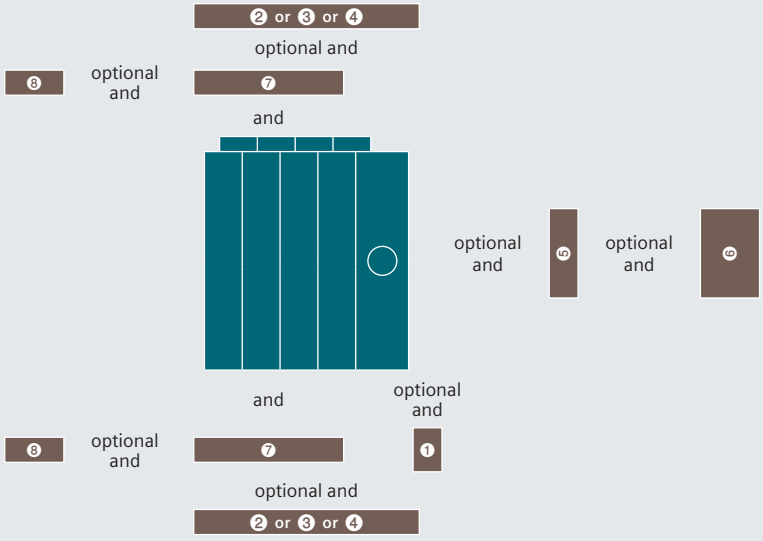
3KC4 (RTSE) 3-pole or 4-pole



❽: 3× with 3-pole change-over switch, 4× with 4-pole change-over switch

Legend

❶ Auxiliary switches
❷ Phase barriers
❸ Terminal covers
❹ Terminal plates
❺ Autotransformers
❻ Dual power supply
❼ Bridging bar
❽ Copper bar connection kit

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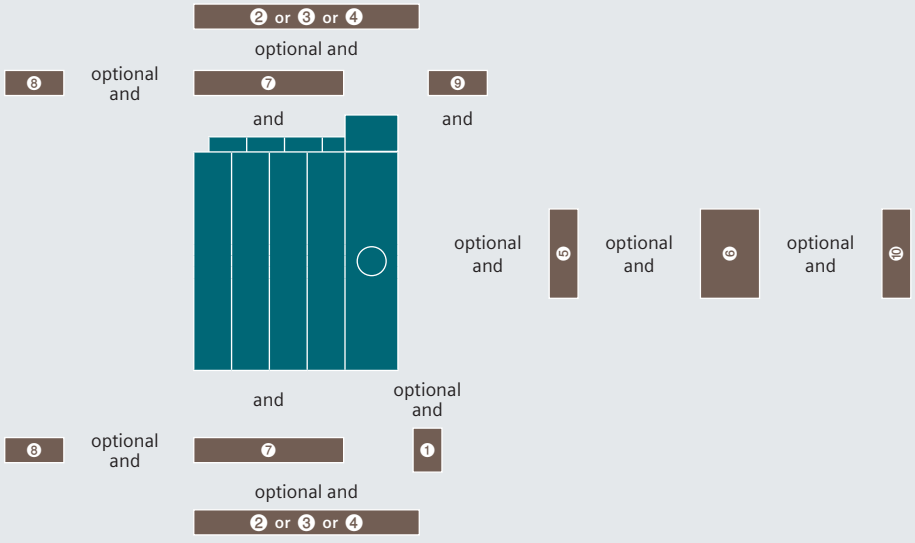
3KC8 (ATSE) 3-pole or 4-pole



❽: 3× with 3-pole change-over switch, 4× with 4-pole change-over switch

Legend

❶ Auxiliary switches
❷ Phase barriers
❸ Terminal covers
❹ Terminal plates
❺ Autotransformers
❻ Dual power supply
❼ Bridging bar
❽ Copper bar connection kit
❾ Power supply cables
❿ External display

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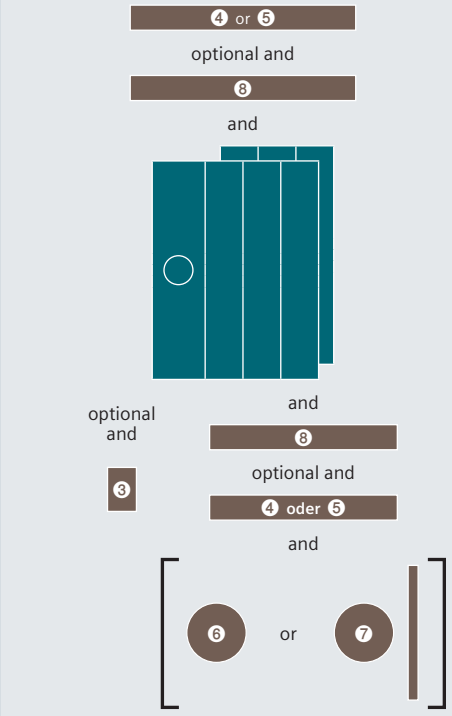
Mounting concept and accessories

3KC0 (MTSE) front operating mechanism on left, 3-pole or 4-pole, sizes 3 to 5

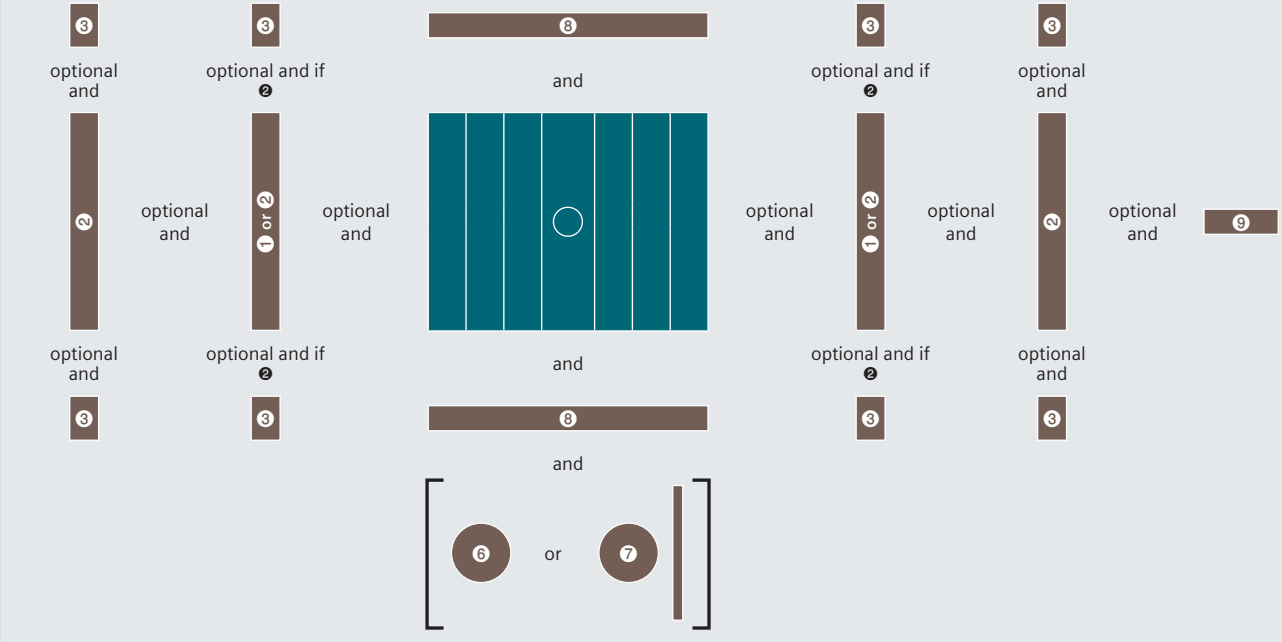


❸: Up to 4 auxiliary switches

❺: Side plate cover must be ordered separately from the terminal cover

❽: 3× with 3-pole change-over switch, 4× with 4-pole change-over switch

Legend
- ❸ Auxiliary switches
- ❹ Phase barrier
- ❺ Side plate cover and terminal cover
- ❻ Direct operating mechanism
- ❼ Door-coupling rotary operating mechanism
- ❽ Bridging bar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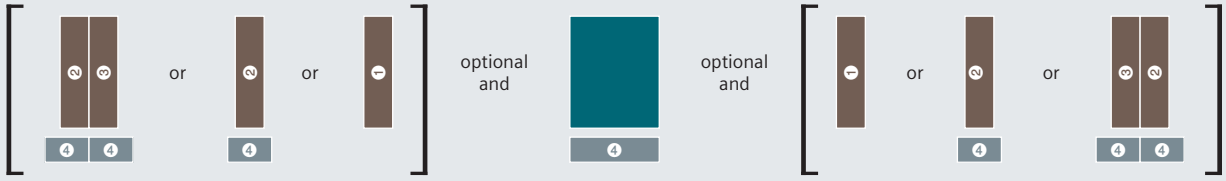
3LD2 load transfer switch mounting concept



❸: N switching contact must first be installed on the basic unit

Legend

❶ Auxiliary switches
❷ N/PE terminal
❸ N switching contacts
❹ Terminal covers

System overview, page 9/1

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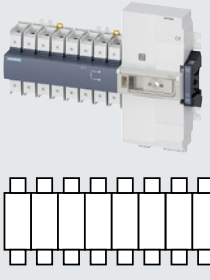
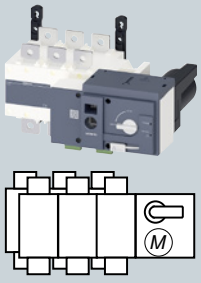
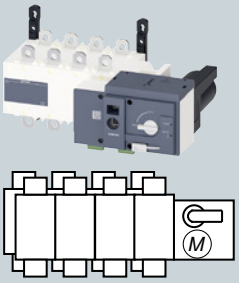
3KC3 and 3KC4 remote transfer switching equipment (RTSE)

40 to 3200 A

	Box terminal 3KC3 (RTSE)	Flat terminal 3KC4 (RTSE)
Version	With motorized operating mechanism and additional handle	With motorized operating mechanism and additional handle
Operating mechanism	Operating mechanism on right	Operating mechanism on right
Mounting	Floor and DIN rail mounting	Floor mounting
Bridging bars	Additionally required for connection side	Additionally required for connection side
Scope of supply	Including 3KC9603 auxiliary switches	







Rated uninterrupted current I_u	4-pole	3-pole	4-pole
Box terminal			
40 A	3KC3424-2AA22-0AA3	–	–
63 A	3KC3426-2AA22-0AA3	–	–
80 A	3KC3428-2AA22-0AA3	–	–
100 A	3KC3430-2AA22-0AA3	–	–
125 A	3KC3432-2AA22-0AA3	–	–
160 A	3KC3434-2AA22-0AA3	–	–
Flat terminal			
250 A	–	3KC4338-0CA21-0AA3	3KC4438-0CA21-0AA3
400 A	–	3KC4342-0DA21-0AA3	3KC4442-0DA21-0AA3
630 A	–	3KC4346-0EA21-0AA3	3KC4446-0EA21-0AA3
800 A	–	3KC4348-0FA21-0AA3	3KC4448-0FA21-0AA3
1000 A	–	3KC4350-0FA21-0AA3	3KC4450-0FA21-0AA3
1250 A	–	3KC4352-0GA21-0AA3	3KC4452-0GA21-0AA3
1600 A	–	3KC4354-0HA21-0AA3	3KC4454-0HA21-0AA3
2000 A	–	3KC4356-0JA21-0AA3	3KC4456-0JA21-0AA3
2500 A	–	3KC4358-0JA21-0AA3	3KC4458-0JA21-0AA3
3200 A	–	3KC4360-0JA21-0AA3	3KC4460-0JA21-0AA3

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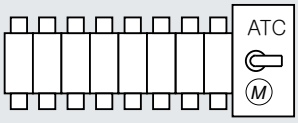
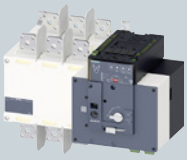
3KC6 and 3KC8 automatic transfer switching equipment (ATSE)

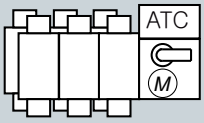
40 to 3200 A

	Box terminal 3KC6 (ATSE)	Flat terminal 3KC8 (ATSE)
Version	With motorized operating mechanism, integrated controller and additional handle	With motorized operating mechanism, integrated controller and additional handle
Operating mechanism	Operating mechanism on right	Operating mechanism on right
Mounting	Floor and DIN rail mounting	Floor mounting
Bridging bars	Additionally required for connection side	Additionally required for connection side
Scope of supply	Wired ready for operation (including power supply)	Without power supply and voltage sensing cables

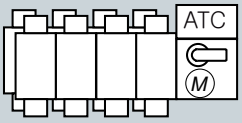












Rated uninterrupted current I_u	4-pole	3-pole	4-pole
Box terminal			
40 A	3KC6424-2TA20-0TA3	–	–
63 A	3KC6426-2TA20-0TA3	–	–
80 A	3KC6428-2TA20-0TA3	–	–
100 A	3KC6430-2TA20-0TA3	–	–
125 A	3KC6432-2TA20-0TA3	–	–
160 A	3KC6434-2TA20-0TA3	–	–
Flat terminal			
250 A	–	3KC8338-0CA22-0GA3	3KC8438-0CA22-0GA3
400 A	–	3KC8342-0DA22-0GA3	3KC8442-0DA22-0GA3
630 A	–	3KC8346-0EA22-0GA3	3KC8446-0EA22-0GA3
800 A	–	3KC8348-0FA22-0GA3	3KC8448-0FA22-0GA3
1000 A	–	3KC8350-0FA22-0GA3	3KC8450-0FA22-0GA3
1250 A	–	3KC8352-0GA22-0GA3	3KC8452-0GA22-0GA3
1600 A	–	3KC8354-0HA22-0GA3	3KC8454-0HA22-0GA3
2000 A	–	3KC8356-0JA22-0GA3	3KC8456-0JA22-0GA3
2500 A	–	3KC8358-0JA22-0GA3	3KC8458-0JA22-0GA3
3200 A	–	3KC8360-0JA22-0GA3	3KC8460-0JA22-0GA3

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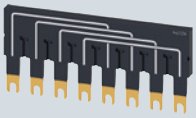
Accessories

For remote transfer switching equipment (RTSE) and automatic transfer switching equipment (ATSE)

Bridging bar





- For load-side connection
- For 3KC4/3KC8 3-pole transfer switches 3 units,
  For 3KC4/3KC8 4-pole transfer switches 4 units are required

Version	Number of poles	Scope of supply	Article No.	RTSE	ATSE
For 40 ... 125 A	4-pole	1 unit	3KC9618-2	■	■
For 160 A	4-pole	1 unit	3KC9618-3	■	■
For 250 A	1-pole	1 unit	3KC9818-2	■	■
For 400 A	1-pole	1 unit	3KC9818-3	■	■
For 630 A	1-pole	1 unit	3KC9818-4	■	■
For 800 ... 1000 A	1-pole	1 unit	3KC9818-5	■	■
For 1250 A	1-pole	1 unit	3KC9818-6	■	■
For 1600 A	1-pole	1 unit	3KC9818-7	■	■
For 2000 ... 3200 A	1-pole	1 unit	3KC9818-8	■	■

Auxiliary conductor terminal



Version	Scope of supply	Article No.	RTSE	ATSE
For 40 ... 160 A	2 units	3KC9622-2	■	■

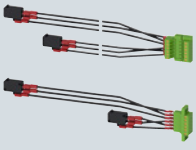
Auxiliary switches for 40 ... 160 A



- For 250 V AC/5 A or for 24 V/2 A DC
- 1 change-over contact for each position O, I, II
- Max. 2 auxiliary switches can be installed per transfer switching equipment unit

Version	Contact configuration	Article No.	RTSE	ATSE
For 40 ... 160 A	With separate contacts	3KC9603-1	■	■
	With linked common contacts	3KC9603-2	■	■

Auxiliary switches for 250 ... 1600 A



- One auxiliary switch contains 2 leading changeover contacts, one changeover contact for position I and one changeover contact for position II (incl. bolt set)
- Max. two auxiliary switches can be installed per transfer switching equipment unit
- For 2000 ... 3200 A transfer switching equipment the auxiliary switch is included in the basic unit
- 250 V AC / 12 A (AC-13), 24 V DC / 14 A (DC-13)

Version	Article No.	RTSE	ATSE
For 250 ... 630 A	3KC9803-1	■	■
For 800 ... 1600 A	3KC9803-2	■	■
For 2000 ... 2500 A (included in the basic unit)	–	■	■

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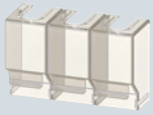
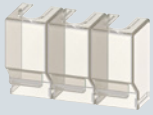
Terminal covers

Version	Number of poles	Scope of supply	Article No.	RTSE	ATSE
 For 40 ... 160 A	4-pole	2 units (1 unit covers 4 poles)	3KC9604-2	■	■
 For 250 ... 400 A	3-pole	3 units (1 unit covers 1 pole)	3KC9804-1	■	■
	4-pole	4 units (1 unit covers 1 pole)	3KC9804-2	■	■
 For 630 A	3-pole	3 units (1 unit covers 1 pole)	3KC9804-3	■	■
	4-pole	4 units (1 unit covers 1 pole)	3KC9804-4	■	■

Sealable cover

Version	Scope of supply	Article No.	RTSE	ATSE
 For 3KC6 (ATSE) 40 ... 160 A	Incl. bolt set and sealing ribbons	3KC9721-1	–	■
 For 3KC8 (ATSE) 250 ... 3200 A	Incl. bolt set and sealing ribbons	3KC9821-0	–	■

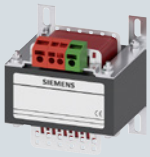
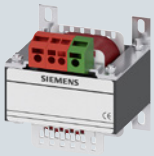
Sealing ribbon



- Also as spare part for sealable cover

Version	Scope of supply	Article No.	RTSE	ATSE
For 40 ... 3200 A	10 units	3KC9621-2	–	■

Autotransformers

Version	Technical data	Article No.	RTSE	ATSE
 For 40 ... 160 A	400 V AC / 230 V; 400 VA	3KC9624-1	■	■
 For 250 ... 3200 A, 3-pole	400 V AC / 230 V; 200 VA	3KC9824-1	■	■

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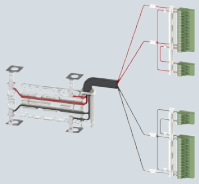
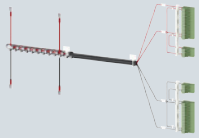
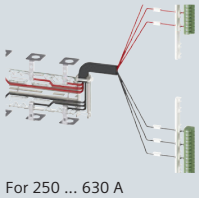
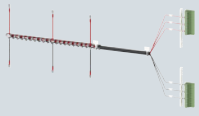
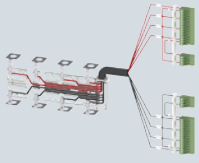
Accessories

For remote transfer switching equipment (RTSE) and automatic transfer switching equipment (ATSE)

Power supply and voltage sensing cables for ATSE

	Application	Infeed	Switches	Version	Article No.	RTSE	ATSE
 For 250 ... 630 A	2-pole	From below, with power supply	3-pole	For 250 A	3KC9833-1	–	■
				For 400 A	3KC9833-2	–	■
				For 630 A	3KC9833-3	–	■
				For 800 ... 1000 A	3KC9833-4	–	■
				For 1250 A	3KC9833-5	–	■
				For 1600 A	3KC9833-6	–	■
				For 2000 ... 3200 A	3KC9833-7	–	■
 For 800 ... 3200 A		From above, with power supply	3-pole	For 250 A	3KC9834-1	–	■
				For 400 A	3KC9834-2	–	■
				For 630 A	3KC9834-3	–	■
				For 800 ... 1000 A	3KC9834-4	–	■
				For 1250 A	3KC9834-5	–	■
				For 1600 A	3KC9834-6	–	■
				For 2000 ... 3200 A	3KC9834-7	–	■
 For 250 ... 630 A	3-pole	From below, without power supply	3-pole	For 250 A	3KC9822-1	–	■
				For 400 A	3KC9822-2	–	■
				For 630 A	3KC9822-3	–	■
				For 800 ... 1000 A	3KC9822-4	–	■
				For 1250 A	3KC9822-5	–	■
				For 1600 A	3KC9822-6	–	■
				For 2000 ... 3200 A	3KC9822-7	–	■
 For 800 ... 3200 A		From above, without power supply	3-pole	For 250 A	3KC9832-1	–	■
				For 400 A	3KC9832-2	–	■
				For 630 A	3KC9832-3	–	■
				For 800 ... 1000 A	3KC9832-4	–	■
				For 1250 A	3KC9832-5	–	■
				For 1600 A	3KC9832-6	–	■
				For 2000 ... 3200 A	3KC9832-7	–	■
 For 250 ... 630 A	4-pole	From below, with power supply	4-pole	For 250 A	3KC9830-1	–	■
				For 400 A	3KC9830-2	–	■
				For 630 A	3KC9830-3	–	■
				For 800 ... 1000 A	3KC9830-4	–	■
				For 1250 A	3KC9830-5	–	■
				For 1600 A	3KC9830-6	–	■
				For 2000 ... 3200 A	3KC9830-7	–	■
 For 800 ... 3200 A		From above, with power supply	4-pole	For 250 A	3KC9831-1	–	■
				For 400 A	3KC9831-2	–	■
				For 630 A	3KC9831-3	–	■
				For 800 ... 1000 A	3KC9831-4	–	■
				For 1250 A	3KC9831-5	–	■
				For 1600 A	3KC9831-6	–	■
				For 2000 ... 3200 A	3KC9831-7	–	■

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Dual power supply



Version	Technical data	Article No.	RTSE	ATSE
For 3KC3 and 3KC4 (RTSE) 40 ... 3200 A	240 V AC, 3 A	3KC9625-1	■	–

External display



- For installing in the control cabinet door

Version	Article No.	RTSE	ATSE
For 3KC8 (ATSE) 250 ... 3200 A	3KC9823-0	–	■

Connection cable



- 3 m RJ45 cable for external display

Version	Article No.	RTSE	ATSE
For 250 ... 3200 A	3KC9823-2	–	■

Phase barrier



- For 800 ... 3200 A transfer switching equipment included in the scope of supply of the basic unit

Version	Number of poles	Scope of supply	Article No.	RTSE	ATSE
For 250 ... 400 A	3-pole	2 units	3KC9808-1	■	■
	4-pole	3 units	3KC9808-6	■	■
For 630 A	3-pole	2 units	3KC9808-2	■	■
	4-pole	3 units	3KC9808-7	■	■

Cover frame for ATSE



- For a clean and safe door cut-out
- To enable access to the front of the 3KC8 transfer switching equipment (electronic module and operation of the motorized operating mechanism)

Version	Article No.	RTSE	ATSE
250 ... 630 A	3KC9820-4	–	■
800 ... 3200 A	3KC9820-5	–	■

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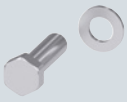
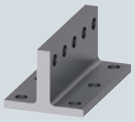
Accessories

For remote transfer switching equipment (RTSE) and automatic transfer switching equipment (ATSE)

Copper bar connection kit

	Version	Designation	Scope of supply	Article No.	RTSE	ATSE
	For 2000 ... 2500A	C-bracket, part A	1 unit	3KC9811-0	■	■
	For 2000 ... 3200 A	Bolt set, part B	1 unit	3KC9811-1	■	■
				3KC9811-2	■	■
		T-bracket, part C	1 unit	3KC9811-3	■	■
		L-bracket, part D	2 units	3KC9811-4	■	■
		Bridging bars, part E	1 unit	3KC9818-8	■	■

Terminal plates

- For protecting the front side at the upper and lower connecting terminals

	Version	Number of poles	Article No.	RTSE	ATSE
	For 250 ... 400 A	3-pole	3KC9827-1	■	■
		4-pole	3KC9828-1	■	■
	For 630 A	3-pole	3KC9827-2	■	■
		4-pole	3KC9828-2	■	■
	For 800 ... 1250 A	3-pole	3KC9827-3	■	■
		4-pole	3KC9828-3	■	■
	For 1600 A	3-pole	3KC9827-4	■	■
		4-pole	3KC9828-4	■	■
	For 2000 ... 3200 A	3-pole	3KC9827-5	■	■
		4-pole	3KC9828-5	■	■

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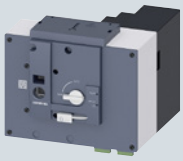
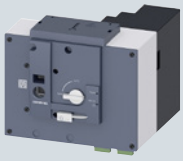
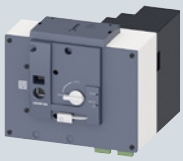
Motorized operating mechanism as spare part

	Version	Article No.	RTSE	ATSE
	For 250 ... 400 A	3KC9826-1	■	■
	For 630 A	3KC9826-2	■	■
	For 800 ... 1250 A	3KC9826-3	■	■
	For 1600 A	3KC9826-4	■	■
	For 2000 ... 3200 A	3KC9826-5	■	■

Controller (electronic module) as spare part

	Version	Article No.	RTSE	ATSE
	For 250 ... 3200 A	3KC9826-0	–	■

Mounting kit as spare part new



- Comprising two device holders, each with two plastic covers

Version	Article No.	RTSE	ATSE
For 250 ... 630 A	3KC9820-6	■	■

Copper bar connection kit

You will find further information at: sie.ag/36U7MCb

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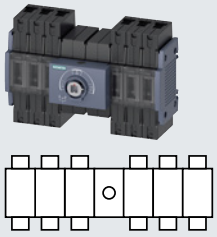
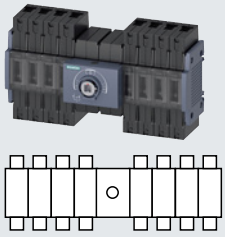
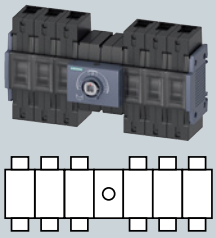
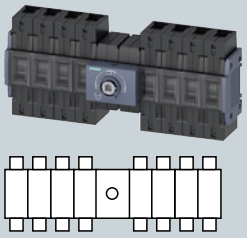
3KC0 manual transfer switching equipment (MTSE)

16 to 1600 A

	Box terminal			
	Size 1		Size 2	
Version	Basic unit without handle		Basic unit without handle	
Operating mechanism	Front operating mechanism		Front operating mechanism	
Mounting	Standard mounting rail and floor mounting [1]		Standard mounting rail and floor mounting [1]	
Bridging bars	Additionally required for connection side		Additionally required for connection side	
				

Rated uninterrupted current I_u	3-pole	4-pole	3-pole	4-pole
Box terminal				
16 A	3KC0316-2ME00-0AA0	3KC0416-2ME00-0AA0	–	–
32 A	3KC0322-2ME00-0AA0	3KC0422-2ME00-0AA0	–	–
63 A	3KC0326-2ME00-0AA0	3KC0426-2ME00-0AA0	–	–
80 A	–	–	3KC0328-2NE00-0AA0	3KC0428-2NE00-0AA0
100 A	–	–	3KC0330-2NE00-0AA0	3KC0430-2NE00-0AA0
125 A	–	–	3KC0332-2NE00-0AA0	3KC0432-2NE00-0AA0
160 A	–	–	3KC0334-2NE00-0AA0	3KC0434-2NE00-0AA0
Flat terminal				
200 A	–	–	–	–
250 A	–	–	–	–
315 A	–	–	–	–
400 A	–	–	–	–
500 A	–	–	–	–
630 A	–	–	–	–
800 A	–	–	–	–
1000 A	–	–	–	–
1250 A	–	–	–	–
1600 A	–	–	–	–

[1] An assembly kit is required for floor mounting

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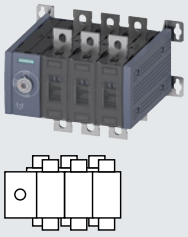
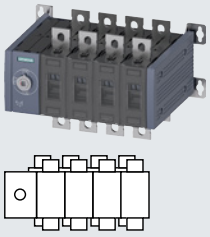
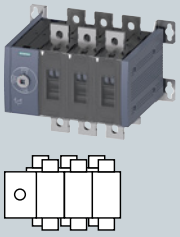
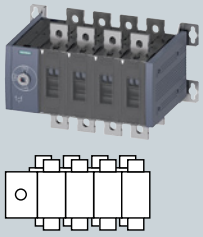
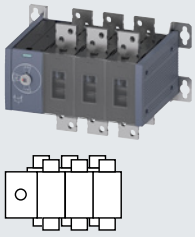
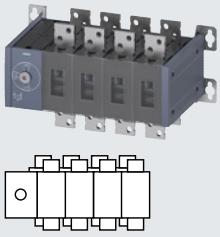
Flat terminal					
Size 3		**Size 4**		**Size 5**	
Basic unit without handle		Basic unit without handle		Basic unit without handle	
Front operating mechanism		Front operating mechanism		Front operating mechanism	
Floor mounting		Floor mounting		Floor mounting	
Additionally required for connection side		Additionally required for connection side		Additionally required for connection side	
					
3-pole	**4-pole**	**3-pole**	**4-pole**	**3-pole**	**4-pole**
–	–	–	–	–	–
–	–	–	–	–	–
–	–	–	–	–	–
–	–	–	–	–	–
–	–	–	–	–	–
–	–	–	–	–	–
–	–	–	–	–	–
3KC0336-0PE00-0AA0	3KC0436-0PE00-0AA0	–	–	–	–
3KC0338-0PE00-0AA0	3KC0438-0PE00-0AA0	–	–	–	–
3KC0340-0PE00-0AA0	3KC0440-0PE00-0AA0	–	–	–	–
3KC0342-0PE00-0AA0	3KC0442-0PE00-0AA0	–	–	–	–
–	–	3KC0344-0QE00-0AA0	3KC0444-0QE00-0AA0	–	–
–	–	3KC0346-0QE00-0AA0	3KC0446-0QE00-0AA0	–	–
–	–	3KC0348-0QE00-0AA0	3KC0448-0QE00-0AA0	–	–
–	–	–	–	3KC0350-0RE00-0AA0	3KC0450-0RE00-0AA0
–	–	–	–	3KC0352-0RE00-0AA0	3KC0452-0RE00-0AA0
–	–	–	–	3KC0354-0RE00-0AA0	3KC0454-0RE00-0AA0

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Accessories

For manual transfer switching equipment (MTSE)

Box terminal (4th contact element, switching pole)



Connection	Article No.	Size 1	Size 2	Size 3	Size 4	Size 5
N — N	3KD9105-2	■				
	3KD9205-2		■			

Auxiliary switch module



- **Delivery:** Does not include auxiliary switch
- A maximum of 2 auxiliary switches can be installed per auxiliary switch module.
- The auxiliary switches indicate the switch position of the respective switching equipment (I or II) to which the auxiliary switch module is connected.

Variant	Article No.	Size 1	Size 2	Size 3	Size 4	Size 5
Standard version	3KD9103-5	■	■			

Auxiliary switches

- Auxiliary switches for sizes 3 to 5 have a screw terminal and are mounted on the 3K operating mechanism module. Auxiliary switches with spring-type terminals from the 3SU1 program can also be used.
- All auxiliary switches for sizes 3 to 5 can be used as leading auxiliary switches, depending on the mounting position of the auxiliary switch (see operating instructions).



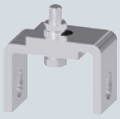




Variant	Contacts	Contact surface	Article No.	Size 1	Size 2	Size 3	Size 4	Size 5
With connecting cables	1 CO contact	Standard	3KD9103-1	■	■			
		Solid-state compatible	3KD9103-3	■	■			
Without connecting cables	1 CO contact	Standard	3KD9103-2	■	■			
		Solid-state compatible	3KD9103-4	■	■			
	1 NO contact	Standard	3SU1400-1AA10-1BA0			■	■	■
		Gold-plated	3SU1400-1AA10-1LA0			■	■	■
	1 NC contact	Standard	3SU1400-1AA10-1CA0			■	■	■
		Gold-plated	3SU1400-1AA10-1MA0			■	■	■
	1 NO contact + 1 NC contact	Standard	3SU1400-1AA10-1FA0			■	■	■
		Gold-plated	3SU1400-1AA10-1QA0			■	■	■
	2 NO contacts	Standard	3SU1400-1AA10-1DA0			■	■	■
		Gold-plated	3SU1400-1AA10-1NA0			■	■	■
	2 NC contacts	Standard	3SU1400-1AA10-1EA0			■	■	■
		Gold-plated	3SU1400-1AA10-1PA0			■	■	■

Bridging bars

- For load-side connection
- For 3-pole transfer switches (sizes 3 to 5) 3 units, for 4-pole transfer switches (sizes 3 to 5) 4 units are required







Number of poles		Article No.	Size 1	Size 2	Size 3	Size 4	Size 5
1-pole	1 unit	3KC9318-0			■		
		3KC9418-0				■	
		3KC9518-0					■
3-pole	1 unit	3KC9118-1	■				
		3KC9218-1		■			
4-pole	1 unit	3KC9118-2	■				
		3KC9218-2		■			

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				Size 1	Size 2	Size 3	Size 4	Size 5
Direct operating mechanism standard version								
• Can be locked with up to max. 3 padlocks • Requires additional mounting depth in locked state								
Color			**Article No.**					
Gray			3KC9201-3	■	■			
			3KC9301-1			■		
			3KC9401-1				■	
			3KC9501-1					■
Red/yellow			3KC9301-2			■		
			3KC9401-2				■	
			3KC9501-2					■
Flat direct operating mechanism for distribution boards								
• Can be locked with one padlock • No additional mounting depth in locked state								
Color			**Article No.**					
Gray			3KC9101-4	■				
Door-coupling rotary operating mechanism, 8UD1 series								
• Handle with masking plate • Coupling driver with tolerance compensation • Shaft 300 mm • Can be locked with up to max. 3 padlocks • Labeling I – O – II								
Color	**Handle length**	**Shaft**	**Article No.**					
Gray	55 mm	8 × 8 mm	8UD1131-2AE21	■	■			
	100 mm	8 × 8 mm	8UD1141-2AE21			■		
	140 mm	10 × 10 mm	8UD1151-3AE21				■	
	200 mm	12 × 12 mm	8UD1161-4AE21					■
Handles for door-coupling rotary operating mechanisms, 8UD1 series								
• Without extension shaft and coupling driver • With masking plate • Can be locked with up to max. 3 padlocks • Labeling I – O – II								
Color	**Handle length**	**Shaft**	**Article No.**					
Gray	55 mm	8 × 8 mm	8UD1731-2AE01	■	■			
	100 mm	8 × 8 mm	8UD1841-2AE01			■		
	140 mm	10 × 10 mm	8UD1851-3AE01				■	
	200 mm	12 × 12 mm	8UD1861-4AE01					■
Red/yellow	55 mm	8 × 8 mm	8UD1731-2AE05	■	■			
	100 mm	8 × 8 mm	8UD1841-2AE05			■		
	140 mm	10 × 10 mm	8UD1851-3AE05				■	
	200 mm	12 × 12 mm	8UD1861-4AE05					■

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Accessories

For manual transfer switching equipment (MTSE)

Extension shaft for door-coupling rotary operating mechanism, 8UD1 series



- A shaft jack is required for the 8UD1 handle when the 600 mm long shaft is used and for sizes 1/2.

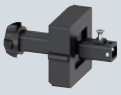
Length	Cross-section	Article No.	Size 1	Size 2	Size 3	Size 4	Size 5
300 mm	8 × 8 mm	8UC6032	■	■	■		
	10 × 10 mm	8UC6033				■	
	12 × 12 mm	8UC6034					■
600 mm	8 × 8 mm	8UC6082	■	■	■		
	10 × 10 mm	8UC6083				■	
	12 × 12 mm	8UC6084					■

Shaft jack for handle 8UD1 for shaft, 600 mm



Shaft	Article No.	Size 1	Size 2	Size 3	Size 4	Size 5
8 × 8 mm	8UD1900-0FA00	■	■			

Coupling drivers









Variant	Shaft	Article No.	Size 1	Size 2	Size 3	Size 4	Size 5
With tolerance compensation	8 × 8 mm	8UD1900-2GA00	■	■			
	8 × 8 mm	8UD1900-6GA00			■		
	10 × 10 mm	8UD1900-3GA00				■	
	12 × 12 mm	8UD1900-4GA00					■
Without tolerance compensation	8 × 8 mm	8UD1900-2HA00	■	■			
	8 × 8 mm	8UD1900-6HA00			■		
	10 × 10 mm	8UD1900-3HA00				■	
	12 × 12 mm	8UD1900-4HA00					■

Adapter



- Non-interchangeability features (rivet and lug)

Shaft	Article No.	Size 1	Size 2	Size 3	Size 4	Size 5
8 × 8 mm	8UC6022	■	■			
8 × 8 mm	8UC6022			■		
10 × 10 mm	8UC6023				■	
12 × 12 mm	8UC6024					■

Phase barriers



- For manual transfer switching equipment (MTSE) with flat terminals
- One pack (6 or 8 units) is required for the infeed side and the load side

Number of poles, switch	Scope of supply	Article No.	Size 1	Size 2	Size 3	Size 4	Size 5
3-pole	6 units	3KD9308-6			■		
	6 units	3KD9408-6				■	
	6 units	3KD9508-6					■
4-pole	8 units	3KD9308-8			■		
	8 units	3KD9408-8				■	
	8 units	3KD9508-8					■

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Terminal covers

- For manual transfer switching equipment (MTSE) with flat terminals
- One pack (6 or 8 units) is required for the infeed side and the load side
- Additional side plates for terminal covers are required for the terminal side, where bridging bars are used (normally the lead side)





Length	Number of poles, switch	Scope of supply	Article No.	Size 1	Size 2	Size 3	Size 4	Size 5
Standard length	3-pole	6 units	3KD9304-6			■		
			3KD9404-6				■	
			3KD9504-6					■
	4-pole	8 units	3KD9304-8			■		
			3KD9404-8				■	
			3KD9504-8					■
Short version	3-pole	6 units	3KD9304-7			■		
			3KD9404-7				■	
	4-pole	8 units	3KD9304-5			■		
			3KD9404-5				■	

Terminal covers as spare parts





Length	Scope of supply	Article No.	Size 1	Size 2	Size 3	Size 4	Size 5
Standard length	1 unit	3KD9504-1					■
Short version	1 unit	3KD9304-1			■		
		3KD9404-1				■	

Side plates



- For lateral touch protection on the terminal side, where bridging bars are used (normally the load side)
- Suitable for terminal covers in standard length

Length	Scope of supply	Article No.	Size 1	Size 2	Size 3	Size 4	Size 5
Standard length	2 units	3KC9304-0			■		
		3KC9404-0				■	
		3KC9504-0					■

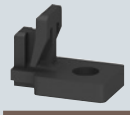
Assembly kit for floor mounting



- For floor mounting of sizes 1 and 2
- Contains 4 mounting brackets and 2 mounting plates for 3-pole and 4-pole devices

Article No.	Size 1	Size 2	Size 3	Size 4	Size 5
3KC9120-1	■	■			

Mounting bracket as spare part



- Spare part, included in the scope of supply of the assembly kit for 3-pole and 4-pole devices

Scope of supply	Article No.	Size 1	Size 2	Size 3	Size 4	Size 5
4 units	3KD9120-1	■	■			

Slide for mounting on DIN rail as spare part



- Spare part included in the scope of supply for the 3KC0 slide for DIN rail mounting

Scope of supply	Article No.	Size 1	Size 2	Size 3	Size 4	Size 5
5 units	3KF9112-0BA00	■	■			

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3LD2 load transfer switches

Up to 250 A

	Front mounting Direct operating mechanism (knob-operated mechanism)
Actuator color	Black
Locking device	3LD23 and 3LD24 lockable with up to 3 padlocks with a hasp thickness of 4 to 6 mm (all other versions non-lockable)
Mounting	Four-hole mounting
Bridging bars	Pre-assembled



Rated uninterrupted current I_u (AC-21A, 380 ... 440 V)	Rated operational power (50/60 Hz, 380 ... 440 V)		3P	3P+N
	at AC-23A	at AC-3		
25 A	9.5 kW	7.5 kW	3LD2123-7UK01	–
32 A	11.5 kW	9.5 kW	3LD2223-7UK01	–
63 A	22.0 kW	18.5 kW	3LD2524-7UK01	–
100 A	37.0 kW	30.0 kW	3LD2724-7UK01	–
160 A	75 kW	50 kW	3LD2305-7UK01	3LD2305-7UL01
250 A	132 kW	110 kW	3LD2405-7UK01	3LD2405-7UL01

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Accessories



4th contact (N conductor)

- Leading switch-on, lagging switch-off
- Bridging bars for the switchable N pole are not included in the scope of supply

Load transfer switch design	Article No.	3LD21 (25 A)	3LD22 (32 A)	3LD25 (63 A)	3LD27 (100 A)	3LD23 (160 A)	3LD24 (250 A)
Front mounting	3LD9220-0B	■	■				
	3LD9250-0BA			■			
	3LD9280-0B				■		
	3LD9240-0B					■	■
Floor mounting	3LD9240-0C					■	■
Molded-plastic enclosures	3LD9220-0C	■	■				
	3LD9250-0CA [1]			■			
	3LD9280-0C [1]				■		



N or PE terminals

- Through-type

Load transfer switch design	Article No.	3LD21 (25 A)	3LD22 (32 A)	3LD25 (63 A)	3LD27 (100 A)	3LD23 (160 A)	3LD24 (250 A)
Front mounting	3LD9220-2B	■	■				
	3LD9250-2BA			■			
	3LD9280-2B				■		
	3LD9240-2B					■	■
Floor mounting	3LD9240-2C					■	■

[1] Can only be used as a spare part, as no additional poles can be installed in the enclosure.

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Floor mounting Door-coupling rotary operating mechanism (knob-operated mechanism)		Molded-plastic enclosures Direct operating mechanism (knob-operated mechanism)
Black		Black
Lockable in OR position with up to 3 padlocks with a hasp thickness of 4 to 6 mm		3LD21 and 3LD22 lockable in OR position with up to 3 padlocks with a hasp thickness of 4 to 6 mm (all other versions non-lockable)
Four-hole mounting		Metric screw connection
Pre-assembled		Pre-assembled
		
3P	**3P+N**	**3P + N and PE base terminal**
–	–	3LD2165-7UB01
–	–	3LD2265-7UB01
–	–	3LD2566-7UB01
–	–	3LD2766-7UB01
3LD2318-7UK01	3LD2318-7UL01	–
3LD2418-7UK01	3LD2418-7UL01	–

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Auxiliary switches



- For mounting on the left and/or right, lagging switch-on, leading switch-off
- For 3-pole load transfer switches only
- Indicate the switch position of the respective load transfer switch (I or II) to which the auxiliary switch module is connected

Load transfer switch design	Contacts	Type of contact	Article No.	3LD21 (25 A)	3LD22 (32 A)	3LD25 (63 A)	3LD27 (100 A)	3LD23 (160 A)	3LD24 (250 A)
Front mounting	1 NO + 1 NC	Standard	3LD9200-5B	■	■	■	■	■	■
		Gold-plated	3LD9200-5BF	■	■	■	■	■	■
Floor mounting and molded-plastic enclosure	1 NO + 1 NC	Standard	3LD9200-5C	■	■	■	■	■	■
		Gold-plated	3LD9200-5CF	■	■	■	■	■	■
	2 NO	Standard	3LD9200-6C	■	■	■	■	■	■

Terminal covers as additional touch protection

- For mounting on load side only





Number of poles	Scope of supply	Article No.	3LD21 (25 A)	3LD22 (32 A)	3LD25 (63 A)	3LD27 (100 A)	3LD23 (160 A)	3LD24 (250 A)
1-pole	4 units	3LD9221-2A	■	■				
		3LD9251-2A			■			
		3LD9281-2A				■		
		3LD9241-2A					■	■
3-pole	4 units	3LD9221-0A	■	■				
		3LD9251-0A			■			

Shaft coupling



- No ON-lock

Load transfer switch design	Article No.	3LD21 (25 A)	3LD22 (32 A)	3LD25 (63 A)	3LD27 (100 A)	3LD23 (160 A)	3LD24 (250 A)
Floor mounting	3LD9242-4F					■	■

Quick selection guide, page 9/10

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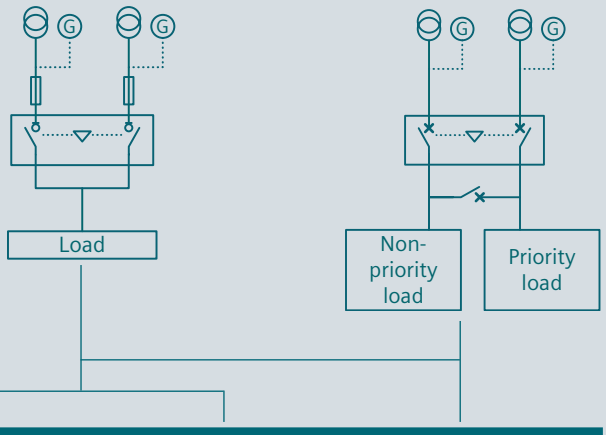
3KC ATC transfer control devices



Version	Controllable switching devices	Interfaces	ATC3100	ATC6300	ATC6500
					
For fast parameterization without software	2	–	3KC9000-8EL10	–	–
For programming with user-friendly software, with programmable inputs and outputs	2	Optional communications interface and LCD display	–	3KC9000-8TL40	–
	3	Integrated RS485 interface and LCD display	–	–	3KC9000-8TL50

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Further technical specifications

		ATC3100	ATC6300	ATC6500
Application				
Transfer between		Network/network, network/generator	Network/network, network/generator, generator/generator	
Controllable switching devices		2		3
In-phase transition		–		Yes
Implementation of transfer with		3VA, 3VL, 3VT, 3WL, 3WT	3WL FSI-III, 3WT, 3KC3, 3KC4, 3VA, 3VL	3WL FSI-III, 3WL10, 3WT, 3VA
Measuring inputs				
Max. rated voltage U_n	Phase-phase	400 V AC	480 V AC	600 V AC
	Phase-neutral conductor	230 V AC	277 V AC	346 V AC
Measuring range	Phase-phase	–	50 ... 576 V AC	50 ... 720 V AC
	Phase-neutral conductor	161 ... 264 V AC	50 ... 333 V AC	30 ... 415 V AC
Frequency range		50/60 Hz	45 ... 65 Hz	
Relative error of measurement method		±5%	±0.25%	
Communication				
Integrated RS485 interface (Modbus RTU)		–		Yes
Optional RS485 interface (Modbus RTU)		–	Yes	Ready-integrated
Optional Ethernet interface (Modbus TCP)		–	Yes	
Power supply				
Auxiliary power supply	Rated voltage U_n AC	220 ... 240 V	100 ... 240 V	
	Rated voltage U_n DC	–	110 ... 250 V	
	Frequency range	50/60 Hz	45 ... 65 Hz	
Battery power supply	Rated voltage U_n DC	12/24 V		12/24/48 V
Digital inputs				
Number of inputs		5	6	8
Freely programmable		–	All	
Relay outputs				
Number of outputs		7	7	
Freely programmable		–	All	
Contact configuration		–	6× 1 NO, 8 A, 250 V AC (AC-1) 1× 1 CO, 8 A, 250 V AC (AC-1)	2× 1 NO, 12 A, 250 V AC (AC-1) 2× 1 NO, 8 A, 250 V AC (AC-1) 3× 1 CO, 8 A, 250 V AC (AC-1)
Real time clock and event log				
ATC component		No	Yes	
Operating time without voltage		–	300 s	14 days
Max. number of events that can be stored		–	100	250
Connections				
Terminal type		Removable/plug-in		
Cable cross-section	IEC	0.5 ... 2.5 mm²	0.2 ... 2.5 mm²	
Enclosures				
Version		Door installation, standard rail mounting, floor mounting	Door installation	
Degree of protection		IP41 on the front, IP20 on the rear side	IP40 on the front, IP20 on the rear side	

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Accessories for transfer control devices

3KC ATC3100 transfer switching equipment

Connecting cable for 3KC ATC3100

- Measurement and control cable for connection of 3KC ATC3100 to 3VL or 3WL

Cable length	Article No.
1.8 m	3KC9000-8EL62

For 3KC ATC6300 and 3KC ATC6500 transfer switching equipment

Expansion modules with digital inputs and outputs



ATC6 expansion module	Features	Article No.
4DI	• 4 digital inputs • Including insulated 24 V DC/1 W power supply for digital inputs and sensors	3KC9000-8TL60
4DO, SSR	• 4 solid-state-compatible digital outputs • 4 NO contacts at the solid-state-compatible output max. 55 mA at 30 V AC or 40 V DC	3KC9000-8TL61
2DI/2DO, SSR	• 2 digital inputs and 2 solid-state compatible digital outputs • Including insulated 24 V DC/1 W power supply for digital inputs and sensors • 2 NO contacts at the solid-state-compatible output max. 55 mA at 30 V AC or 40 V DC	3KC9000-8TL62
2DO, relay	• 2 relay outputs • 2 CO contacts at relay output, 5 A, 250 V AC (AC-1)	3KC9000-8TL63
2DI/2DO, relay	• 2 digital inputs and 2 relay outputs • 2 NO contacts at relay output, 5 A, 250 V AC (AC-1)	3KC9000-8TL64

Expansion modules with communication interfaces



- **Note**: The 3KC ATC6500 transfer switching equipment comes with an integrated RS485 interface

ATC6 expansion module	Features	Article No.
RS485	• RS485 interface, Modbus RTU	3KC9000-8TL74
Ethernet	• Ethernet interface, Modbus TCP	3KC9000-8TL75

Front interface



- For parameterization on the front using software

ATC6 front interface	Features	Article No.
USB	• Mini-USB cable, 1.8 m	3KC9000-8TL73

Protective seal



- For front IP65 protection

Suitable for	Version	Article No.
3KC ATC6300	144 × 144 mm	3KC9000-8TL67
3KC ATC6500	240 × 180 mm	3KC9000-8TL68

System overview, page 9/4

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System overview, page 9/4

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Easy, reliable, cost-efficient

There are many advantages to be had from keeping a watchful eye on your energy consumption: in addition to cost savings through optimized consumption, you ensure increased resilience with the monitoring of power supply systems and network quality in infrastructure and industrial plants.

At the same time, systematic power monitoring increases your awareness of actual energy consumption, making it a key prerequisite for greater energy efficiency.

Integration into open IoT operating systems such as MindSphere results in even greater optimization potential.

What is more, with a power monitoring system you lay the foundation for regular energy audits and a corporate energy management system according to ISO 50001 and ISO 50003.

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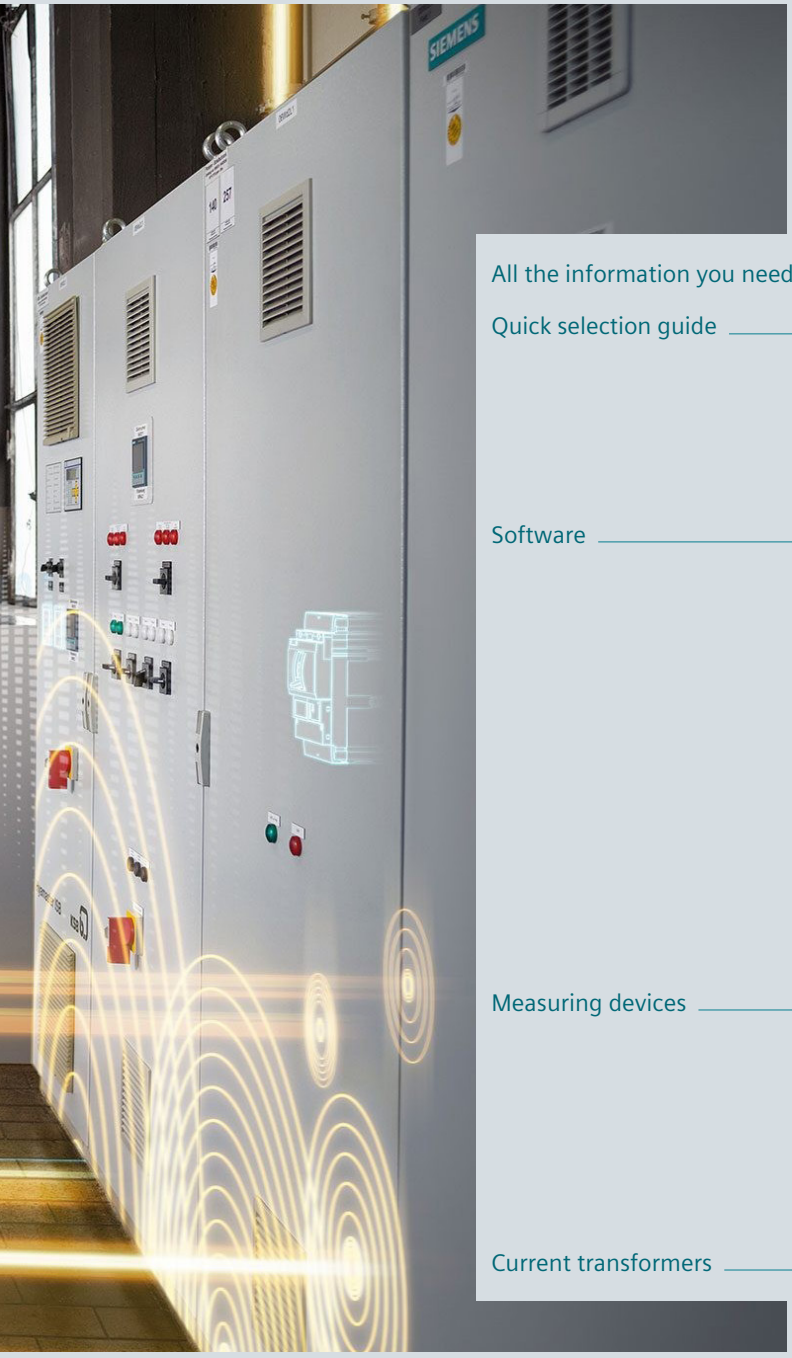
Measuring Devices, Power Monitoring and Digitalization Solutions



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- Power monitoring 10/4
- Hardware components 10/6
- Accessories 10/8

Software 10/10

- SENTRON powerconfig 10/10
- SENTRON powermanager V3 10/11
- SENTRON powermanager V4 10/12
- 7KN Powercenter 10/13
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Measuring devices 10/18

- 7KM PAC measuring devices 10/18
- 7KT PAC measuring devices 10/22
- SEM3 multichannel current measuring system 10/24
- Time and pulse counters 10/26

Current transformers 10/28

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A multitude of additional information ...

Information + ordering

All the important things at a glance

Information to get you started

For information about measuring devices, power monitoring and digitalization solutions, please visit our websites
www.siemens.com/powermonitoring

www.siemens.com/lowvoltage/digitalization

Contact persons in your region

We are there when you need us

You can find your local contacts at
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Your product in detail

The Siemens Industry Online Support portal provides comprehensive information
www.siemens.com/lowvoltage/product-support

- Technical basic information – SENTRON power monitoring and digital solutions (109769851)
- Brochure – Reliable, sustainable, and efficient – TÜV-certified power monitoring system in accordance with ISO 50001 (109744679)
- Brochure – SENTRON portfolio for power monitoring (109744725)

The relevant tender specifications can be found at
www.siemens.com/lowvoltage/tenderspecifications

Our video range

Siemens YouTube channel

- Power monitoring (general)
  bit.ly/2lZ9QqC

Everything you need for your order

Refer to the Industry Mall for an overview of your products

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  sie.ag/2kTH9Lz
- Digitalization solutions sie.ag/2olIiNi
- Library for SIMATIC sie.ag/2kpbwcs
- SENTRON powermanager / SENTRON powerconfig
  sie.ag/2kTJjuF

Direct forwarding to the individual products in the Industry Mall by clicking on the Article No. in the catalog or by entering this web address incl. Article No.
www.siemens.com/product?Article No.

… can be found in our online services

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SENTRON powerconfig

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- Certificates

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Manuals

Manuals are available for downloading in Siemens Industry Online Support at
www.siemens.com/lowvoltage/manuals

- Configuration manual – Measuring devices and power monitoring (45315973)
- Equipment manual – 7KT PAC1600 energy meter (109759827)
- Equipment manual – 7KT PAC1600 multimeter (109760293)
- System manual – 7KT multichannel current measuring system (109483442)
- Equipment manual – PAC2200 measuring device (109746835)
- Equipment manual – SENTRON PAC3200 power monitoring device (26504150)
- Equipment manual – PAC3200T measuring device (109746833)
- System manual – SENTRON PAC4200 power monitoring devices (34261595)
- Equipment manual – PAC3100 measuring device (37881976)
- Equipment manual – SENTRON PAC5100/5200 7KM5212/5412 (109477872)
- Equipment manual – 7KM PAC3120 and 7KM PAC3220 (109767307)
- Communication manual – SENTRON PAC5100/5200 7KM5212/5412 (109477870)
- Communication manual – 3VA with IEC and UL certification (98746267)
- SEM3™ – Embedded Micro Metering Module™ (109748928)
- Equipment manual – 7KN Powercenter 3000 (109763838)
- Quick Installation Guide – 7KN POWERCENTER 3000 (109766001)

Training and tutorials

Our training courses can be found at
www.siemens.com/sitrain-lowvoltage

- Power monitoring with SENTRON (WT-LVAEM)
- Energy management – Basic training (LV-EMSENTB)
- Energy management – Training for experts (LV-EMSENTE)
- Communication with SENTRON components (LV-COM)

Technical overview – Measuring devices, power monitoring and digitalization solutions

The fast way to get you to our online services

This page provides you with comprehensive information and links on measuring devices, power monitoring and digitalization solutions

www.siemens.com/lowvoltage/product-support (109764480)

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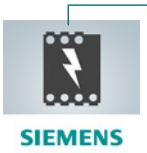
Power monitoring

Software

Local monitoring systems

	Web	App	
			
	Web-Interface integriert	7KT PAC1200	SENTRON powerconfig

Functions for power monitoring

Commissioning of measuring devices and circuit breakers	–	–	■
Displaying current data	■	■	■
Displaying / evaluating current / historical values	■	■	■
Prepared analyses / reports	–	–	–
Customized reporting	–	–	–
Data analysis in the cloud			

Additionally for energy management

Switching loads on and off	–	–	–

Operating environment

Use	Free of Charge	Free of Charge	Free of Charge
System requirements	Browser	Android, iOS	Android, iOS
Suitable according to ISO 50001	–	–	–
Connection of non-Siemens devices	–	–	–
Integrated cloud interface	–	–	–
More information		from page 10/23	from page 10/10

Measuring devices and circuit breakers

Measuring devices for industrial applications 	7KM PAC1020	–	–	–
	7KM PAC2200 / PAC2200 CLP	■	–	–
	7KM PAC3200T	■	–	–
	7KM PAC3120	–	–	–
	7KM PAC3220	■	–	■
	7KM PAC4200	■	–	■
	7KM PAC5100	■	–	–
	7KM PAC5200	■	–	–
Measuring devices for buildings and infrastructure 	7KT PAC1200	■	■	–
	7KT PAC1600	–	–	–
	SEM3	■	–	–
Circuit breakers 	3WL	–	–	■
	3WL10 / 3VA27	–	–	–
	3VA ETU5/8	–	–	■
Other Modbus devices 		–	–	■

■ Function available □ Available with limited functionality – Function not available

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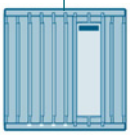
PC-basiert			Cloud	World of SIMATIC	
				TIA Portal	
					
SENTRON powerconfig	**SENTRON powermanager**	**7KN Powercenter 3000**	**SENTRON powermind (MindSphere)**	**SIMATIC TIA Portal integrated**	**SIMATIC TIA Portal capable**
■	–	–	–	■	–
■	■	■	■	■	■
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–	■	–	–	–	–
	■	–	■	–	–
–	■	–	–	■	■
Free of Charge	License and trial license	–	Subscription	–	–
Windows X64	Windows X64	–	Browser	–	–
–	■ (TÜV)	■	■	–	–
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–	■	■	■	–	–
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Hardware components

Industry








	7KM PAC1020 new	7KM PAC2200	7KM PAC2200 CLP new	7KM PAC3200T	7KM PAC3120	7KM PAC3220
Installation type						
Front mounting | Standard mounting rail | Screw mounting	■ | – | –	– | ■ | –	– | ■ | –	– | ■ | –	■ | – | –	■ | – | –
Withdrawable | Fixed-mounted	– | –	– | –	– | –	– | –	– | –	– | –
Measuring connection						
Direct measurement	–	■	■	–	–	–
Transformer measurement	■	■	■	■	■	■
Multichannel measuring system	–	–	–	–	–	–
Suitable transformers						
Window-type current transformers	■	■	■	■	■	■
Folding transformer	■	■	■	■	■	■
Integrated transformer	–	–	–	–	–	–
Commissioning						
MID version	– | –	■ | –	■ | ■	– | –	– | –	– | –
Max. input voltage L-L/L-N	400 V / 230 V	400 V / 230 V	400 V / 230 V	400 V / 230 V	690 V / 400 V	690 V / 400 V
Transformer connection version	x/1 A or x/5 A	x/1 A or x/5 A	x/1 A or x/5 A	x/1 A or x/5 A	x/1 A or x/5 A	x/1 A or x/5 A
Direct connection version	–	65 A	65 A	–	–	–
DC power supply unit with extra-low voltage version	–	–	–	–	DC 22 ... 65 V	DC 22 ... 65 V
Single-phase counter version	–	■	–	–	–	–
Electrically isolated voltage inputs	–	–	–	–	–	–
Version without display (for web interface)	–	–	–	■	–	–
Evaluation						
Measured quantities						
Average value of measured values	–	■	■	■	■	■
Voltage, current, frequency	■	■	■	■	■	■
Power, power factor	■	■	■	■	■	■
Energy measurement						
Daily energy storage	–	60 days	60 days	60 days	60 days	60 days
Apparent | Active | Reactive energy | cos φ	– | ■ | ■ | –	■ | ■ | ■ | –	■ | ■ | ■ | –	■ | ■ | ■ | –	■ | ■ | ■ | –	■ | ■ | ■ | –
Distortion factor THD (voltage, current)	–	–	–	■	■	■
Harmonics (voltage, current)	–	–	–	–	–	–
Phase angle/phase chart	–	–	–	–	–	–
Load profile recording	–	–	■	–	–	–
Flicker acc. to IEC 61000-4-15	–	–	–	–	–	–
Monitoring functions						
Operating hours counter	–	–	–	■	■	■
Limit monitoring	–	–	–	■	■	■
Logic functions	–	–	–	■	■	■
Event log	–	–	–	–	–	–
Gateway function	–	–	–	–	–	–
Reporting acc. to EN 50160	–	–	–	–	–	–
Integrated fault recorder	–	–	–	–	–	–
Integrated communication interfaces						
Digital inputs/digital outputs	1/1	1/1	1/1	1/1	2/2	2/2
S0-Interface	■	■	■	■	■	■
M-Bus	–	■	–	–	–	–
RS485 (Modbus RTU)	■	■	–	–	■	–
Ethernet with Modbus TCP	–	■	■	■	–	■
BACnet	–	–	–	–	–	–
More information						
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	Industry			Buildings and infrastructure			Circuit breakers		
									
	7KM PAC4200	**7KM PAC5100**	**7KM PAC5200**	**7KT PAC1200**	**7KT PAC1600**	**SEM3**	**3WL**	**3WL10 / 3VA27**	**3VA ETU8**
	■ | – | –	■ | ■ | –	■ | ■ | –	– | ■ | –	– | ■ | –	– | – | ■	– | – | –	– | – | –	– | – | –
	– | –	– | –	– | –	– | –	– | –	– | –	■ | ■	■ | ■	– | ■
	–	–	–	■	■	–	–	–	–
	■	■	■	■	■	–	–	–	–
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	– | –	– | –	– | –	– | –	■ | –	– | –	– | –	– | –	– | –
	690 V / 400 V x/1 A or x/5 A	690 V / 400 V x/1 A or x/5 A	690 V / 400 V x/1 A or x/5 A	400 V / 230 V x/5 A	400 V / 230 V x/5 A	480 V / 277 V 50 ... 1200 A / 0,1 A	690 V / 400 V integrated	690 V / 400 V integrated	690 V / 400 V integrated
	–	–	–	40 / 63 A	63 / 80 A	–	–	–	–
	DC 22 ... 65 V	–	–	–	–	–	DC 24 V	DC 24 V	DC 24 V
	–	–	–	■	■	■	–	–	–
	–	■	■	–	–	–	–	–	–
	–	■	■	■	–	■	–	–	–
	■	–	–	–	–	–	■	–	–
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	■ | ■ | ■ | ■	■ | ■ | ■ | ■	■ | ■ | ■ | ■	– | ■ | ■ | –	■ | ■ | ■ | –	■ | ■ | ■ | ■	■ | ■ | ■ | ■	■ | ■ | ■ | ■	■ | ■ | ■ | ■
	■	■	■	–	–	–	■	–	■
	2nd to 64th	2nd to 40th	2nd to 40th	–	–	–	2nd to 29th	–	–
	■	■	■	–	–	–	–	–	–
	■	–	■	–	–	■	■	■	■
	–	–	■	–	–	–	–	–	–
	■	–	–	–	■	–	■	–	■
	■	■	■	–	■	–	■	■	■
	■	■	■	–	–	■	–	–	–
	>4000 events	■	■	–	–	■	■	■	■
	■	–	–	–	–	–	–	–	–
	–	–	■	–	–	–	–	–	–
	–	–	■	–	–	–	–	–	–
	2 / 2	0 / 2	0 / 2	–	1 / 1	2 / 1	■	■	■
	■	–	–	–	■	–	–	■	■
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	■	■	■	■	–	■	■	■	■
	–	–	–	–	–	■	–	–	–
	See page 10/18	See page 10/18	See page 10/18	See page 10/23	See page 10/22	See page 10/24	See page 1/4	See page 1/4 See page 2/12	See page 2/12

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Accessories

Communication modules





		7KM Switched Ethernet PROFINET / Modbus TCP	7KM PROFIBUS DP	7KM RS485 Modbus RTU
Industry				
	7KM PAC1020 new	–	–	–
	7KM PAC2200	–	–	–
	7KM PAC2200 CLP new	–	–	–
	7KM PAC3200T	–	–	–
	7KM PAC3120	–	–	–
	7KM PAC3220	■	■	■
	7KM PAC4200	■	■	■
	7KM PAC5100	–	–	–
	7KM PAC5200	–	–	–
Buildings and infrastructure				
	7KT PAC1200	–	–	–
	7KT PAC1600	–	–	–
	SEM3	–	–	–
Circuit breakers				
	3WL	–	–	–
	3WL10 / 3VA27	–	–	–
	3VA ETU5/8	■	■	■

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Expansion modules		Current transformers		
				
7KM PAC 4DI/2DO	**7KM PAC I(N), I(Diff), analog**	**4NC Current transformers**	**7KT Current transformers**	**3NJ calibrated current transformers**
–	–	■	■	■
–	–	■	■	■
–	–	–	–	■
–	–	■	■	■
–	–	■	■	■
■	■	■	■	■
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SENTRON powerconfig

Configuration software for commissioning and maintenance

SENTRON powerconfig is available free of charge at
www.siemens.com/powerconfig

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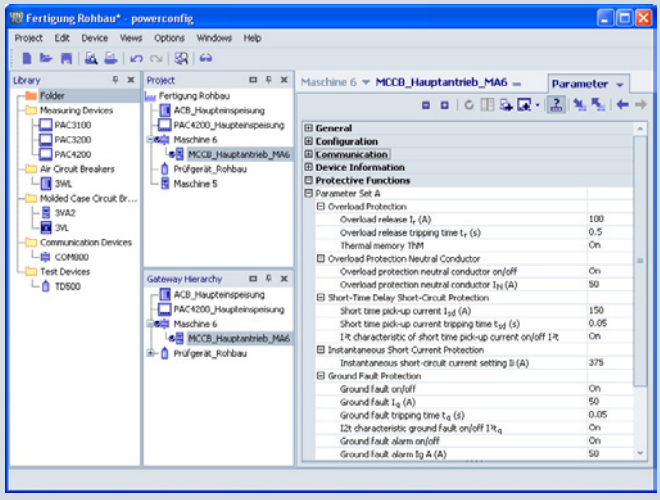
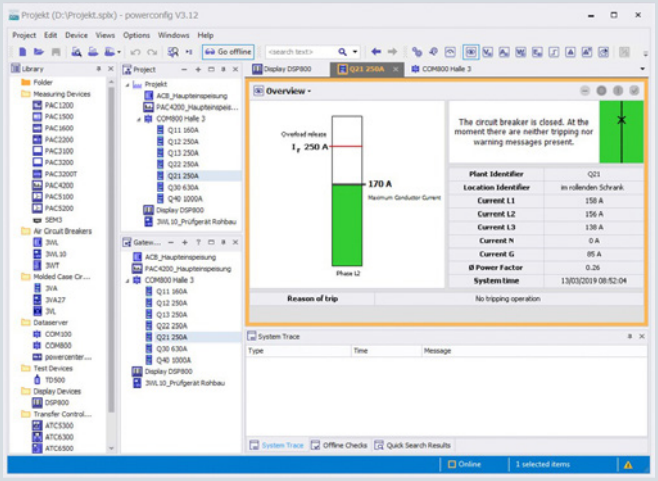
Free download SENTRON powerconfig mobile via:

App Store Play Store

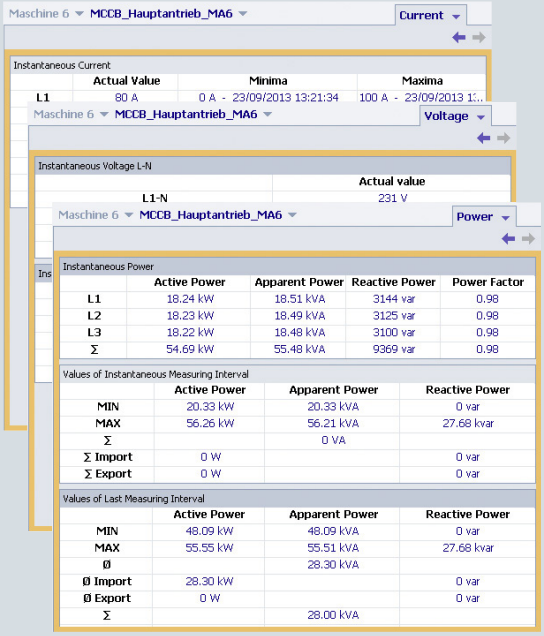
- Software tool for the efficient commissioning and diagnostics of communication-capable SENTRON components
- Supports all PAC measuring devices incl. expansion modules, 3WL/3VA circuit breakers and further communication-capable components, e.g. ATC6300
- Service functions:
  - Firmware updates
  - Switching of language packs for 7KM PAC measuring devices
- General range of functions:
  - Facilitates the parameterization of the devices
  - Saving and printing of device settings
  - Monitoring, saving and printing of instantaneous measured quantities
  - Execution of specific device functions, such as resetting of devices and setting of energy counters
- Additional functional scope with 7KM PAC4200 and 3VA:
  - Readout of data stored in the device (events, load profile history, daily energy counters)
  - Saving in csv format



Setting of parameter values



Display of the circuit breaker state



Display of actual measured quantities

10

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SENTRON powermanager V3



PC-based power monitoring software

New in SENTRON powermanager 3.6

- Support of new devices:
  - PAC3120
  - PAC3220 with firmware V2.1

Version	Description	Article No.
powermanager V3.5		
Basic Package	Full product license for up to 10 devices, installation for client/server, web access	3ZS2711-0CC30-0YA0
Trial license	Full product license limited to 60 days for up to 10 devices, incl. "Expert" and "Web" option packs Available free of charge at https://support.industry.siemens.com/cs/ww/en/view/64850998	
V3.x device expansions		
Device Pack (20)	Device expansion license for up to 20 devices	3ZS2711-0CC30-0YD0
Device Pack (50)	Device expansion license for up to 50 devices	3ZS2712-0CC30-0YD0
Device Pack (100)	Device expansion license for up to 100 devices	3ZS2713-0CC30-0YD0
Device Pack (200)	Device expansion license for up to 200 devices	3ZS2714-0CC30-0YD0
Device Pack (500)	Device expansion license for up to 500 devices	3ZS2715-0CC30-0YD0
Device Pack (1000)	Device expansion license for up to 1000 devices	3ZS2716-0CC30-0YD0
Option packs		
"Expert" option pack	Option for creating/presenting any number of freely configured images	3ZS2710-2CC20-0YH0
"Client (5)" option pack	Expansion for up to 5 clients	3ZS2710-3CC00-0YD0
"Distributed Systems (2)" option pack	Option for the connection of 2 autonomous powermanager systems for the exchange of measured values and alarms	3ZS2718-1CC00-0YH0
"Distributed Systems (5)" option pack	Option for the connection of 5 autonomous powermanager systems for the exchange of measured values and alarms	3ZS2718-2CC00-0YH0
„Distributed Systems (10)" option pack	Option for the connection of 10 autonomous powermanager systems for the exchange of measured values and alarms	3ZS2718-3CC00-0YH0
„OPC UA Server" option pack	Option pack for data exchange with other processing platforms via OPC UA	3ZS2710-4CC30-0YD0
Update powermanager V2.0 to V3.0		
Update license	From V2.0 Lean to V3.x (10)	3ZS2711-0CC30-0YE0
Update license	From V2.0 Standard to V3.x (50)	3ZS2712-0CC30-0YE0
Update license	From V2.0 Maximum to V3.x (100)	3ZS2713-0CC30-0YE0
Update license	From V2.0 Maximum to V3.x (200)	3ZS2714-0CC30-0YE0

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SENTRON powermanager V4

PC-based power monitoring software



SENTRON powermanager V4.2

SENTRON powermanager V4 is based on a new platform with advanced graphical capabilities and a standard SQL database. The workflows for setting up the system, creating devices, graphically displaying the device data and processing it in reports have been fundamentally revised. Unlike with V4.1, PAC3120 and PAC3220 are now also supported.

Two additional graphical options can now be used to create customer-specific graphics. The „Graphics Editor 60 Days" option is limited to 60 days of use and is aimed at end users who want to create graphics during the setup phase. While the „Engineering License" option is valid for 1 year and is aimed at Siemens partners such as control cabinet builders who create SENTRON powermanager applications for end users; the option is enabled via a „dongle".

The „Trial" license gives customers the opportunity to gain initial experience with SENTRON powermanager during a 60-day test phase. The application can still be used by purchasing a regular license.

The migration of existing SENTRON powermanager V3.x projects will be supported as of a future SENTRON powermanager version.

You can find more information on the Internet at
www.siemens.com/powermanager

You can find training courses on the Internet at
www.siemens.com/sitrain-lowvoltage

Version	Description	Article No.
powermanager V4.2		
Extended Package	Full product license for up to 10 devices, installation for client/server, web access	7KN2710-2CE40-0YC0
Trial license	Full product license limited to 60 days for up to 10 devices, incl. all functions; software download via SIOS Portal https://support.industry.siemens.com/cs/ww/en/view/109771760 A free license for one-time use (limited to 60 days) must also be requested via powermanagerlicence.de@siemens.com	
Device expansions		
Device Pack (20)	Device expansion license for up to 20 devices	7KN2711-1CE40-0YC0
Device Pack (50)	Device expansion license for up to 50 devices	7KN2711-2CE40-0YC0
Device Pack (100)	Device expansion license for up to 100 devices	7KN2711-3CE40-0YC0
Device Pack (200)	Device expansion license for up to 200 devices	7KN2711-4CE40-0YC0
Device Pack (500)	Device expansion license for up to 500 devices	7KN2711-5CE40-0YC0
Device Pack (1000)	Device expansion license for up to 1000 devices	7KN2711-6CE40-0YC0
Option packs		
"Graphics Editor 60 Days" option pack	Option for creating/presenting any number of freely configured images, Validity period limited to 60 days	7KN2712-0CE40-0YC0
„Engineering License" option pack	Option for creating custom-made SENTRON powermanager applications, e.g. graphics; especially suitable for partners such as Solution Providers, control cabinet builders, etc.	7KN2712-0CE40-0YC1 new
"Client (2)" option pack	Expansion for up to 2 clients	7KN2712-1CE40-0YC0
"Client (5)" option pack	Expansion for up to 5 clients	7KN2712-2CE40-0YC0
"powermanager Server" option pack	Additionally, powermanager server license for distributed systems without devices, web, etc.	7KN2712-4CE40-0YC0
System packages		
System 1	Package comprising 1× powermanager Extended 1× PAC4200 1× PAC3120 1× RS485 modules	7KN2715-1CE40-0YC0
System 3	Package comprising 1× powermanager Extended 3× PAC3220	7KN2715-3CE40-0YC0
System 4	Package comprising 1× powermanager Extended 1× PAC4200 4× PAC1600 1× RS485 module	7KN2715-4CE40-0YC0
System 5	Package comprising 1× powermanager Extended 5× PAC2200 transformer measurement Modbus TCP	7KN2715-5CE40-0YC0

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7KN Powercenter

Edge/IoT-based data acquisition and visualization for low-voltage power distribution

7KN Powercenter 3000

- Offers a range of interfaces for the digitalization of low-voltage power distribution
  - One web interface for a clear overview of all connected devices
  - Very simple communication with the SENTRON MindSphere application. See MindSphere Apps
  - Low-voltage power distribution data interface to MindSphere, the IoT operating system from Siemens
  - Communication interface via Modbus TCP for diverse applications, e.g. SENTRON powermanager
- Provision of the 15 min energy values over 14 months for the connected devices as a basis for energy management according to ISO 50001.
  - Periodic emails
  - Explicit emails
  - Explicitly stored as a csv file
- Event message via email and web interface
- Flexible IT security features for protection against unauthorized access
- Easy commissioning using powerconfig
- Compact design, 24 V DC supply
- Events from the devices are sent as emails
- Display and export of daily trends
- Support of SENTRON powermind made easy
- Third-party devices can be used in the SENTRON environment, e.g. web interface and SENTRON powermind
- Applications in other clouds, e.g. aws, Azure, can be supplied with data via 7KN Powercenter 3000.
- Web interface in up to 10 languages

You can find more information on the Internet at
www.siemens.com/powermonitoring

Mounting	Interfaces	Protocols	Article No.
Standard rail mounting	2× Ethernet	Modbus TCP, http, MindSphere	7KN1310-0MC00-0AA8

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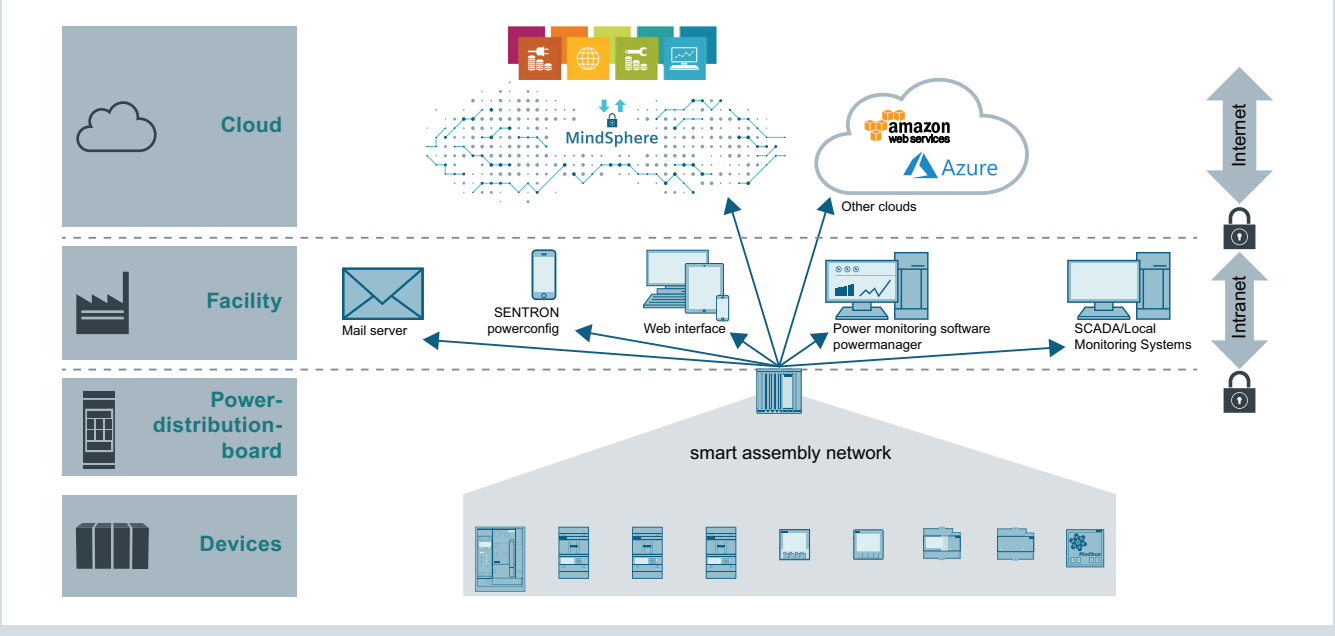

Application areas 7KN Powercenter 3000

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SENTRON powermind new



Cloud-based solution for data visualization and analysis in power distribution systems

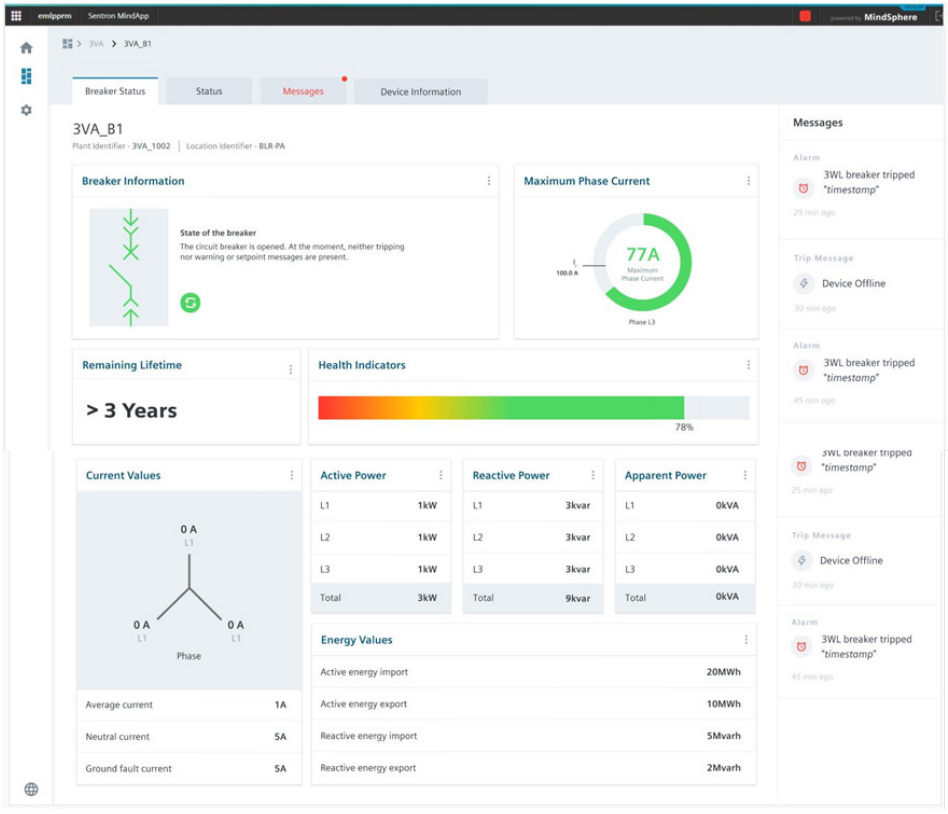
SENTRON powermind is aimed equally at energy managers, facility managers and/or operators. For energy managers, predefined, automated representations and analyses of energy data are available, such as:

- Comparison of energy consumption on weekdays and weekend with percentage day-by-day representation of the distribution of energy consumption to identify unnecessary energy consumption
- Comparison of energy consumption and power import during a selected period as compared with a reference period to assess the effectiveness of energy efficiency measures
- Day-by-day representation of the 15 min power demand, incl. min and max values to assess power peaks

SENTRON powermind offers the operator the following information and analyses:

- Status of the switching and protection devices, such as 3VA and 3WL
- Display of the maximum current value of an individual phase in relation to In
- Condition monitoring information about the condition of the contact system of each circuit breaker and also as an overview of all circuit breakers

You can find more information on the MindSphere Store at
www.dex.siemens.com/mindsphere/applications



Creating transparency
- Representation of device status/data, e.g. open, closed, tripped and maximum phase current, total power ...
- Notification on unusual deviations, for example, by email

Status display
- Information about the state of health of the device to take action proactively

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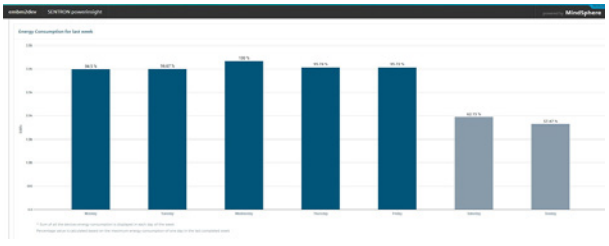
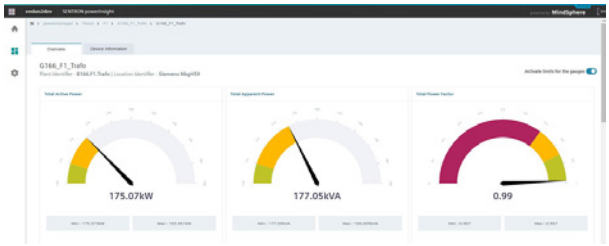
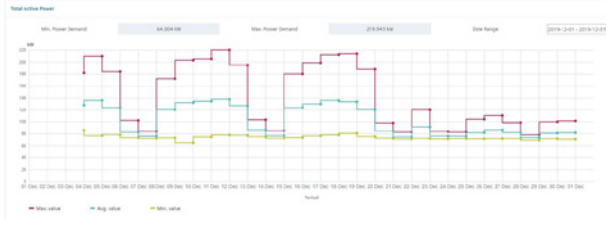




Creating transparency
- Representation of the power flow/power import in various parts of the power distribution system
- Comparison of the weekly energy consumption (percentage distribution of weekdays in comparison to weekend) to identify unusual energy consumption patterns and saving measures





Energy management
- Comparison of the energy consumption of two periods, for example, to assess the effectiveness of energy saving measures
- Representation of the active power as mean and min/max values

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SIMATIC Energy Suite

For integrated energy management

Highlights

- Simple and intuitive configuration instead of programming
- Automatic generation of the PLC energy program
- Convenient integration of measuring components from the Siemens portfolio and from other manufacturers
- Integrated into the TIA Portal and the automation system
- Archiving in WinCC Professional or PLC
- Seamless interfacing to Energy Manager PRO and Energy
- Analytics

Additional information on the SIMATIC Energy Suite:
www.siemens.com/energysuite

SIMATIC Modbus/TCP SENTRON PAC

For 7KM PAC3200/4200 measuring devices

Use and version	Valid for	Type	Article No.
Communication via the integrated PN interface for reading values out of PAC 3200 and PAC PAC 4200 devices, single license	1 CPU and up to 20 SENTRON PACs	Modbus/TCP 20 SENTRON PAC	6AV6676-6MA30-0AX0
	1 CPU and up to 100 SENTRON PACs	Modbus/TCP 100 SENTRON PAC	6AV6676-6MA30-1AX0
	1 CPU and up to 512 SENTRON PACs	Modbus/TCP 512 SENTRON PAC	6AV6676-6MA30-2AX0

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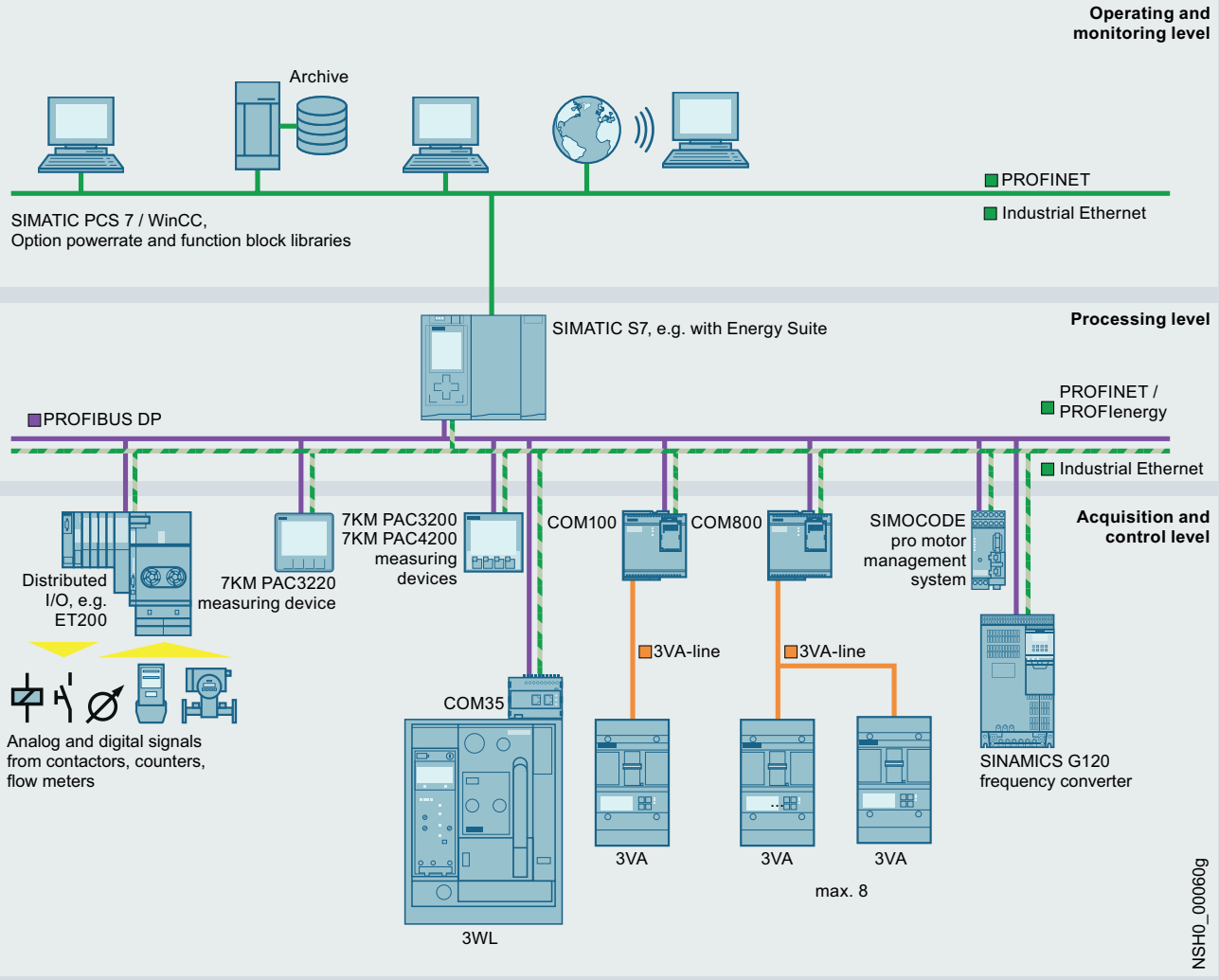
PAC/3WL/3VA SIMATIC PCS 7 library

For 7KM PAC3200/3220/4200 measuring devices and 3WL/3VA/3VL circuit breakers

Application	Version	Type of delivery	Article No.
PAC/3WL/3VA SIMATIC PCS 7 library			
• AS blocks and faceplates for integrating the 3WL/3VA/3VL circuit breakers into SIMATIC PCS 7, V8.x or V9.0 SP2 • For each SIMATIC PCS 7 Operator Station of the single station/server version, a license containing the following is required: – Engineering license for one SIMATIC PCS 7 Operator Station of the single station/server version – Runtime license for one automation system (1 required per automation system, further AS runtime licenses can be ordered separately)	Engineering and runtime software, software class A, 2-language (English, German), single license for one installation	Software and electronic documentation on DVD, engineering and runtime license as Certificate of License	3ZS2787-1CC30-0YG0
AS runtime license for PAC/3WL/3VA library for SIMATIC PCS 7			
License for one automation system in each case	Runtime software, software class A, 2-language (English, German), single license for one installation	Runtime license as Certificate of License without software and documentation	3ZS2787-1CC30-6YH0



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7KM PAC measuring devices

Basic units





Connections	Power supply	Display	Interface	MID	PTB-A50.7	7KM PAC1020	7KM PAC2200 / PAC2200 CLP	7KM PAC3200T
Transformer measurement								
Screw terminals	Self-powered	With	M-Bus	With	Without	–	7KM2200-2EA30-1GA1	–
				Without	Without	–	7KM2200-2EA30-1CA1	–
			Modbus RTU	With	Without	–	7KM2200-2EA30-1HA1	–
				Without	Without	–	7KM2200-2EA30-1DA1	–
			Modbus TCP	With	With	–	7KM2200-2EA00-1JB1 new	–
					Without	–	7KM2200-2EA30-1JA1	–
				Without	Without	–	7KM2200-2EA30-1EA1	–
	AC/DC wide-voltage power supply unit	With	Modbus RTU	Without	Without	7KM1020-0BA01-1DA0 new	–	–
			Modbus TCP	Without	Without	–	–	–
		Without	Modbus TCP	Without	Without	–	–	7KM3200-0CA01-1AA0
	DC power supply unit with extra-low voltage	With	Modbus TCP	Without	Without	–	–	–
			Modbus RTU	Without	Without	–	–	–
Ring cable lug connection	AC/DC wide-voltage power supply unit	With	Modbus TCP	Without	Without	–	–	–
Direct measurement								
Screw terminals	Self-powered	With	M-Bus	With	Without	–	7KM2200-2EA40-1GA1	–
				Without	Without	–	7KM2200-2EA40-1CA1	–
			Modbus RTU	With	Without	–	7KM2200-2EA40-1HA1	–
				Without	Without	–	7KM2200-2EA40-1DA1	–
			Modbus TCP	With	With	–	7KM2200-2EA40-1JB1 new	
					Without	–	7KM2200-2EA40-1JA1	–
				Without	Without	–	7KM2200-2EA40-1EA1	–

Further technical specifications		7KM1020-..	7KM2200-..	7KM3200-..	7KM3120-0..	7KM3120-1..
Basic data						
Installation		Front mounting	Standard mounting rail		Front mounting	
Mounting width		–	6 TE		–	
Control panel instrument		96 × 96 mm	–		96 × 96 mm	
External auxiliary voltage	50/60 Hz AC	100 ... 250 V	–	90 ... 276 V	100 ... 250 V ±10 %	–
	DC	110 ... 250 V ±10 %	–	110 ... 275 V	110 ... 250 V ±10 %	24 ... 60 V ±20 %
Measuring inputs						
Transformer connection	Secondary input current I_e	x/1 A or x/5 A	x/1 A or x/5 A		x/1 A or x/5 A	
Direct connection	Input voltage U_e 3 AC 50/60 Hz	400/230 V			690/400 V	
	Rated current I_n	–	65 A	–		

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7KM PAC3120	7KM PAC3220	7KM PAC4200	7KM PAC5100	7KM PAC5200
–	–	–	–	–
–	–	–	–	–
–	–	–	–	–
–	–	–	–	–
–	–	–	–	–
–	–	–	–	–
–	–	–	–	–
7KM3120-0BA01-1DA0	–	–	–	–
–	7KM3220-0BA01-1DA0	7KM4212-0BA00-3AA0	7KM5212-6BA00-1EA2	7KM5412-6BA00-1EA2
–	–	–	7KM5212-6CA00-1EA8	7KM5412-6CA00-1EA8
–	7KM3220-1BA01-1EA0	7KM4211-1BA00-3AA0	–	–
7KM3120-1BA01-1EA0	–	–	–	–
–	–	7KM4212-0BA00-2AA0	–	–
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–	–	–	–	–

7KM3220-0..	7KM3220-1..	7KM4212-..	7KM4211-..	7KM5212-	7KM5412
Front mounting				Front mounting / Standard mounting rail	
–					
96 × 96 mm					
100 ... 250 V ±10 %	–	95 ... 240 V ±10 %	–	110 ... 230 V ±10 %	
100 ... 250 V ±10 %	24 ... 60 V ±20 %	110 ... 340 V ±10 %	22 ... 65 V ±10 %	24 ... 250 V ±10 %	
x/1 A or x/5 A					
690 / 400 V			500 / 289 V	690 / 400 V	
–					

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7KM PAC measuring devices

Accessories

		7KM PAC1020	7KM PAC3120 7KM PAC3220 7KM PAC4200
7KM PAC TMP2 standard mounting rail adapter			
	• Two-tier adapter for mounting a measuring device on a standard mounting rail • Front display • For manual intervention	7KM9900-0XA00-0AA0	
7KM PAC TMP mounting plate			
	• Adapter for mounting a measuring device on standard mounting rail • Display faces backwards towards standard mounting rail • Readout and evaluation of measurements solely via mains operation	7KM9900-0YA00-0AA0	
Compact holder			
	• Device holder for 7KM PAC3100 /3120/3200/3220/4200 • 10 holders for 5 PAC devices • For seamless side-by-side mounting of the devices (without spaces)	7KM9900-0GA00-0AA0	
Spare parts 7KM PAC			
	• Spare parts comprising: – Device holders for panel mounting (2X) – Screw terminal for connection of voltage inputs – Screw terminal for connection of current inputs – Terminal block inputs/outputs for 7KM PAC3100/4200 – Terminal block inputs/outputs for 7KM PAC3200 – RS485 terminal blocks for 7KM PAC3100	–	7KM9900-0SA00-0AA0

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Expansion and communication modules

	7KM PAC3220 7KM PAC4200	COM100/800 (3VA)
7KM Switched Ethernet PROFINET communication module		
 • Latest PROFINET switching properties • S2 system redundancy for operation in H systems • CiR Configuration in Run • Firmware update via the modules for PAC4200 and PAC3220		
	7KM9300-0AE02-0AA0	
7KM PROFIBUS DP communication module		
		
	7KM9300-0AB01-0AA0	
7KM RS485 communication module		
		
	7KM9300-0AM00-0AA0 [1]	
7KM PAC 4DI/2DO expansion module		
		
	7KM9200-0AB00-0AA0	–
7KM PAC I(N), I(Diff), analog expansion module		
 • To add the following functions to the measuring inputs: – N conductor measurement – Two analog inputs, also for measuring non-electrical quantities such as temperature, water or air pressure – Residual current measurement via type A or type B summation current transformers		
	7KM9200-0AD00-0AA0	–

[1] Suitable for 7KM PAC4200 (especially for the Modbus TCP/RTU Gateway)

Residual-current transformers for 7KM PAC I(N), I(Diff), analog expansion module, see page 11/1

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7KT PAC measuring devices

Basic unit PAC1600



Connections	Version	Power supply	Display	Interface	MID	7KT PAC1600
Transformer measurement						
Screw terminals	3-phase	Self-powered	With	Modbus RTU	Without	7KT1661
					With	7KT1662
				M-Bus	Without	7KT1663
					With	7KT1664
				S0-Interface	Without	7KT1672
					With	7KT1673
	3-phase, universal	Auxiliary power: 100 ... 240 V AC, 110 ... 250 V DC 50/60Hz	With	–	Without	7KT1681
				Modbus RTU	Without	7KT1682
Direct measurement						
Screw terminals	1-phase	Self-powered	With	Modbus RTU	Without	7KT1651
					With	7KT1652
				M-Bus	Without	7KT1653
					With	7KT1654
				S0-Interface	Without	7KT1655
					With	7KT1656
	3-phase	Self-powered	With	Modbus RTU	Without	7KT1665
					With	7KT1666
				M-Bus	Without	7KT1667
					With	7KT1668
				S0-Interface	Without	7KT1670
					With	7KT1671

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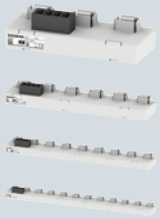
PAC1200 multichannel current measuring system



Connections	Version	Power supply	Display	Interface	MID	7KT PAC1200
Direct measurement						
Screw terminals	3-phase	Self-powered	Without	Modbus TCP	Without	7KT1260

PAC1200		**7KT PAC1200**
Data manager with 7KT1260, sensor bars		
	**Number of connections**	**Article No.**
	3	7KT1233
	6	7KT1236
	9	7KT1238
	12	7KT1242
Data manager with 7KT1260, sensors		
	**Current I_e**	**Article No.**
	40 A	7KT1254
	63 A	7KT1255

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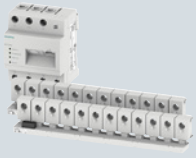
PAC1200 Bundles





Data manager	Sensor bars	Sensors	18 bundle	24 bundle
1× data manager 7KT1260	2× 9-sensor bar 7KT1238	18× sensors 40 A 7KT1254	7KT1222	–
1× data manager 7KT1260	2× 12-sensor bar 7KT1242	24× sensors 40 A 7KT1254	–	7KT1223

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SEM3 multichannel current measuring system

Data manager



Connections	Version	Power supply	Display	Interface	MID	
Transformer measurement						
Screw terminals	3-phase	Self-powered	Without	Modbus TCP RS485 Modbus RTU	Without	US2:SEM3CONTROLLER

Further technical specifications	SEM3
Basic data	
Installation	Screw mounting
Measuring inputs	
Max. input voltage 50/60 Hz AC	480 V / 277 V
Standard current transformers	50 ... 1200 A / 0.1 A
Folding transformer	50 ... 2000 A / 0.1 A

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Accessories

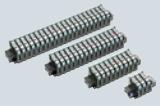
Metering modules



- For recording measured values
- Accuracy of 0.2% or 1% for the entire measurement including current transformer
- Simple setting of phase configuration by means of slide switch
- Connection of a current transformer for measuring a phase
- Metering module is plugged into meter rack

Measuring accuracy	Article No.
0.2%	US2:SEM3PHAMETER
1%	US2:SEM3PLAMETER

Meter racks



Version	Article No.
For 3 metering modules	US2:SEM3RACK3
For 9 metering modules	US2:SEM3RACK9
For 15 metering modules	US2:SEM3RACK15
For 21 metering modules	US2:SEM3RACK21

Connecting cables



- 600 V insulated special cable for connecting meter racks to the data manager

Length	Article No.
0.3 m	US2:SEM3CAB12INCH
0.6 m	US2:SEM3CAB24INCH
0.9 m	US2:SEM3CAB36INCH

Standard current transformers



- Standard power cable brown and yellow, 1.82 m long
- Can be extended up to 100 m while still maintaining accuracy
- Transformer configuration is carried out in the data manager

Output signal	Transformer transmission ratio	Article No.
100 mA	50 : 0.1	US2:SEM3SCCT50
	125 : 0.1	US2:SEM3SCCT125
	250 : 0.1	US2:SEM3SCCT250
	400 : 0.1	US2:SEM3SCCT400
	600 : 0.1	US2:SEM3SCCT600
	800 : 0.1	US2:SEM3SCCT800
	1200 : 0.1	US2:SEM3SCCT1200

Folding transformers



- Standard power cable brown and yellow, 1.82 m long
- Can be extended up to 100 m while still maintaining accuracy
- Transformer configuration is carried out in the data manager

Output signal	Transformer transmission ratio	Article No.
100 mA	50 : 0.1	7KT1280-5MA00
	125 : 0.1	7KT1280-5MA01
	250 : 0.1	7KT1280-5MA02
	400 : 0.1	7KT1280-5MA03
	600 : 0.1	7KT1280-5MA04
	800 : 0.1	7KT1280-5MA05
	1200 : 0.1	7KT1280-5MA06
	1600 : 0.1	7KT1280-5MA07
	2000 : 0.1	7KT1280-5MA08

DIN rail adapters



- 5 adapters for snapping onto standard mounting rail
- 1 adapter each for data manager and for meter racks with 3, 9, 15 and 21 metering modules
- Adapters are screwed onto the data manager or the meter racks

Article No.
US2:SEM3DINKIT

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Time and pulse counters

Mechanical counting mechanisms






Display	Resetting	Rated frequency	Rated control supply voltage U_c	48 × 48 mm	72 × 72 mm	–
Time counter						
00000.00 h	Without	–	10 ... 80 V DC	7KT5500	–	–
			10 ... 50 V DC	–	7KT5600	–
			12 ... 24 V DC	–	–	7KT5801
		50 Hz	24 V AC	7KT5505	–	7KT5802
			115 V AC	7KT5501	7KT5601	7KT5803
			230 V AC	7KT5502	7KT5602	7KT5804
		60 Hz	115 V AC	7KT5503	7KT5603	7KT5806
			230 V AC	7KT5504	7KT5604	7KT5807
Pulse counter						
0000000	Without	–	12 ... 24 V DC	–	–	7KT5811
		50/60 Hz	24 V AC	–	–	7KT5812
			230 V AC	–	–	7KT5814

Further technical specifications

	7KT55..	7KT56..	7KT58..
Basic data			
Installation	Front mounting		Standard mounting rail
Mounting width	–		2 MW
Front frame	48 × 48 mm	72 × 72 mm	–
Display	Drum-type register		
Version	–	With narrow frame according to DIN 43700	–

Accessories

			7KT55..	7KT56..	7KT58..
Cover					
	Size		**Article No.**	**Article No.**	**Article No.**
	55 × 55 mm		7KT9020	–	–
Sealing ring for cover					
	Degree of protection	**Scope of supply**	**Article No.**	**Article No.**	**Article No.**
	IP43 (in switchboards with smooth surfaces)	1 set = 5 units	7KT9000	–	–
Terminal cover					
	Degree of protection		**Article No.**	**Article No.**	**Article No.**
	IP20 (with connected conductors)		–	7KT9021	–

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Electronic counting mechanisms



Display	Resetting	Rated frequency	Rated control supply voltage U_c	
Time counter				
000000.0 h	Without	50/60 Hz	24 ... 240 V AC, 12 ... 150 V DC	7KT5821
	Electrical	50/60 Hz	24 ... 240 V AC, 12 ... 150 V DC	7KT5822
	Electrical and mechanical	50/60 Hz	24 ... 240 V AC, 12 ... 150 V DC	7KT5823
Pulse counter				
0000000	Electrical and mechanical	50/60 Hz	24 ... 240 V AC, 12 ... 150 V DC	7KT5833

Further technical specifications

	7KT58..
Basic data	
Installation	Standard mounting rail
Mounting width	2 MW
Display	LCD display

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Current transformers

For measuring purposes

				4NC [1]		7KT	3NJ [1]	
				1-phase		3-phase	1-phase	
								
Size	Rated operational voltage U_e	Rated primary current I_{pr}	Rated power P_n	I_{sr} = 5 A	I_{sr} = 1 A	I_{sr} = 5 A	I_{sr} = 5 A	I_{sr} = 1 A
Accuracy class 0.2s								
1	720 V	150 A	1 VA	4NC5121-2FA21	–	–	–	–
		200 A	2,5 VA	4NC5122-2FC21	–	–	–	–
		250 A	2,5 VA	4NC5123-2FC21	–	–	–	–
		300 A	5 VA	4NC5124-2FE21	–	–	–	–
		400 A	5 VA	4NC5125-2FE21	–	–	–	–
		500 A	5 VA	4NC5126-2FE21	–	–	–	–
5	720 V	600 A	5 VA	4NC5227-2FE21	–	–	–	–
		700 A	5 VA	4NC5228-2FE21	–	–	–	–
		800 A	5 VA	4NC5231-2FE21	–	–	–	–
		1000 A	5 VA	4NC5232-2FE21	–	–	–	–
Accuracy class 0.5								
1	720 V	100 A	1 VA	4NC5117-2DA21	4NC5117-0DA21	–	–	–
		150 A	2,5 VA	4NC5121-2DC21	4NC5121-0DC21	–	–	–
		200 A	5 VA	4NC5122-2DE21	4NC5122-0DE21	–	–	–
		250 A	5 VA	4NC5123-2DE21	4NC5123-0DE21	–	–	–
2	720 V	200 A	5 VA	4NC5222-2DE21	4NC5222-0DE21	–	–	–
		250 A	5 VA	4NC5223-2DE21	4NC5223-0DE21	–	–	–
		300 A	5 VA	4NC5224-2DE21	4NC5224-0DE21	–	–	–
		400 A	5 VA	4NC5225-2DE21	4NC5225-0DE21	–	–	–
3	720 V	400 A	5 VA	4NC5325-2DE21	4NC5325-0DE21	–	–	–
		500 A	5 VA	4NC5326-2DE21	4NC5326-0DE21	–	–	–
		600 A	5 VA	4NC5327-2DE21	4NC5327-0DE21	–	–	–
		750 A	5 VA	4NC5330-2DE21	4NC5330-0DE21	–	–	–
		800 A	5 VA	4NC5331-2DE21	–	–	–	–
4	720 V	800 A	10 VA	4NC5431-2DH21	4NC5431-0DH21	–	–	–
		1000 A	10 VA	4NC5432-2DH21	4NC5432-0DH21	–	–	–
		1200 A	10 VA	4NC5433-2DH21	4NC5433-0DH21	–	–	–
		1500 A	10 VA	4NC5435-2DH21	4NC5435-0DH21	–	–	–
		1600 A	15 VA	4NC5436-2DK21	–	–	–	–
		2000 A	20 VA	4NC5438-2DL21	–	–	–	–
		2500 A	25 VA	4NC5440-2DM21	–	–	–	–
		3000 A	30 VA	4NC5441-2DN21	–	–	–	–
Accuracy class 0.5 calibrated								
1	720 V	100 A	1,5 VA	–	–	–	3NJ6920-3BD23	3NJ6920-3BD13
		150 A	2,5 VA	–	–	–	3NJ6920-3BE23	3NJ6920-3BE13
		300 A	5 VA	–	–	–	3NJ6940-3BH23	3NJ6940-3BH13
		400 A	5 VA	–	–	–	3NJ6940-3BJ23	3NJ6940-3BJ13
		500 A	5 VA	–	–	–	3NJ6940-3BK23	3NJ6940-3BK13
		600 A	5 VA	–	–	–	3NJ6940-3BL23	3NJ6940-3BL23

[1] Überstrom-Begrenzungsfaktor FS5

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				4NC [1]		7KT	3NJ [1]	
				1-phase		3-phase	1-phase	
								
Size	**Rated operational voltage U_e**	**Rated primary current I_{pr}**	**Rated power P_n**	**I_{sr} = 5 A**	**I_{sr} = 1 A**	**I_{sr} = 5 A**	**I_{sr} = 5 A**	**I_{sr} = 1 A**
Accuracy class 1,0								
1	720 V	50 A	1,2 VA	4NC5112-2CB21	4NC5112-0CB21	–	–	–
		60 A	1,2 VA	4NC5113-2CB21	4NC5113-0CB21	–	–	–
			1,25 VA	–	–	7KT1200	–	–
		75 A	2,5 VA	4NC5115-2CC21	4NC5115-0CC21	–	–	–
		100 A	2,5 VA	4NC5117-2CC21	4NC5117-0CC21	7KT1201	–	–
		150 A	2,5 VA	4NC5121-2CC21	4NC5121-0CC21	–	–	–
			3,75 VA	–	–	7KT1202	–	–
		200 A	5 VA	4NC5122-2CE21	4NC5122-0CE21	–	–	–
		250 A	5 VA	4NC5123-2CE21	4NC5123-0CE21	–	–	–
2	720 V	200 A	5 VA	4NC5222-2CE21	4NC5222-0CE21	–	–	–
		250 A	5 VA	4NC5223-2CE21	4NC5223-0CE21	–	–	–
		300 A	5 VA	4NC5224-2CE21	4NC5224-0CE21	–	–	–
		400 A	5 VA	4NC5225-2CE21	4NC5225-0CE21	–	–	–
3	720 V	400 A	5 VA	4NC5325-2CE21	4NC5325-0CE21	–	–	–
		500 A	5 VA	4NC5326-2CE21	4NC5326-0CE21	–	–	–
		600 A	5 VA	4NC5327-2CE21	4NC5327-0CE21	–	–	–
		750 A	5 VA	4NC5330-2CE21	4NC5330-0CE21	–	–	–
4	720 V	800 A	10 VA	4NC5431-2CH21	4NC5431-0CH21	–	–	–
		1000 A	10 VA	4NC5432-2CH21	4NC5432-0CH21	–	–	–
		1250 A	10 VA	4NC5434-2CH21	4NC5434-0CH21	–	–	–
		1500 A	10 VA	4NC5435-2CH21	4NC5435-0CH21	–	–	–
		2000 A	12,5 VA	4NC5438-2CJ21	4NC5438-0CJ21	–	–	–
		2500 A	12,5 VA	4NC5440-2CJ21	4NC5440-0CJ21	–	–	–
		3000 A	30 VA	4NC5441-2CN21	–	–	–	–

Accessories

Standard rail mounting



For transformer size	Article No.	Article No.	Article No.	Artikel-Nr.	Artikel-Nr.
1 and 5	4NC5923-5LT21	4NC5923-5LT21	–	–	–
2	4NC5925-5LT21	4NC5925-5LT21	–	–	–
3	4NC5930-5LT21	4NC5930-5LT21	–	–	–
4	4NC5940-5LT21	4NC5940-5LT21	–	–	–

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Well-monitored – well-protected

Monitoring devices perform numerous functions to protect people and machinery: At dusk, they switch on automatically, control the temperature or signal the location where a fuse has tripped.

They also ensure reliable switchover to emergency power supply, monitor the emergency lighting, ensure overload-free operation of motors and neutral monitoring for breakage and overvoltages.

Monitoring devices can do even more, e.g., underload monitoring of asynchronous motors in no-load operation.

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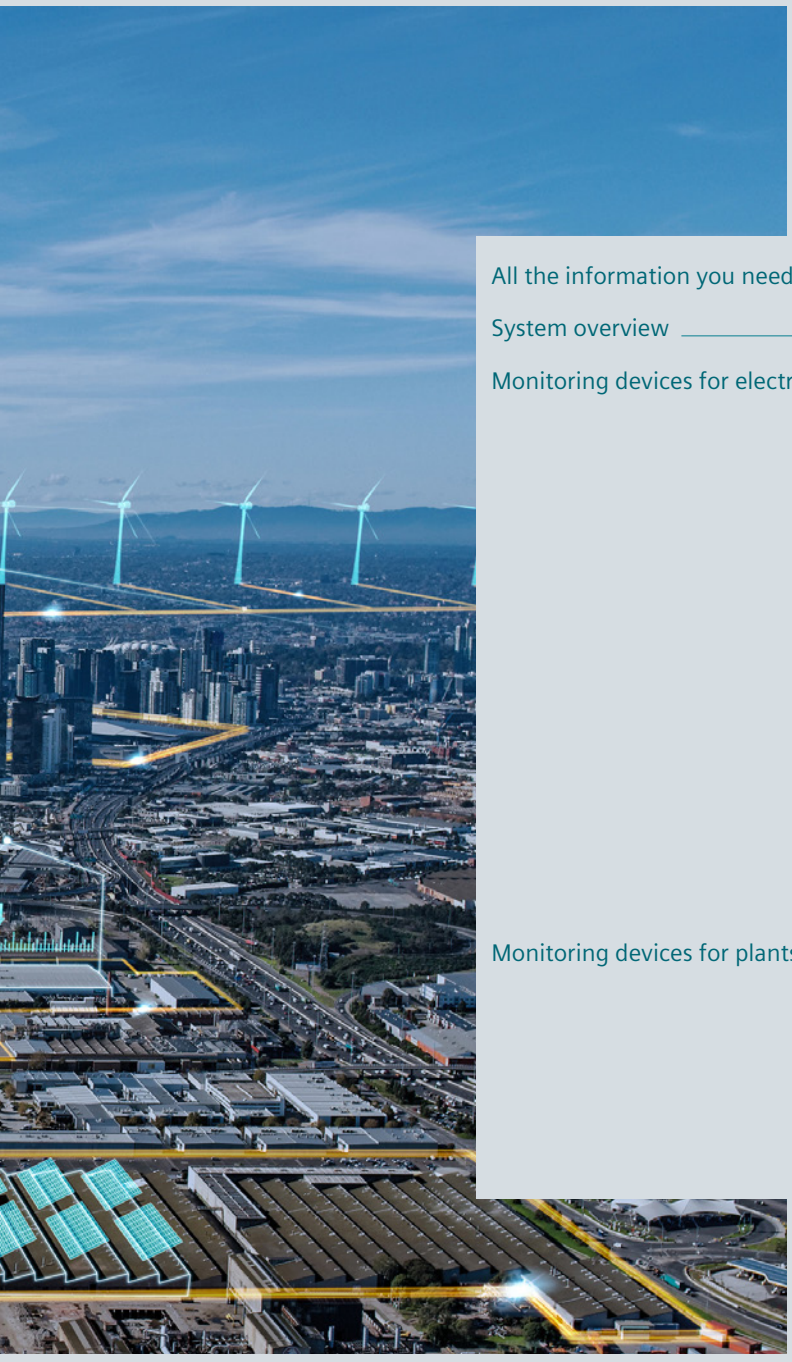
Monitoring Devices



All the information you need 11/2

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Monitoring devices for electrical values 11/6

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- 5SV8 modular RCCB device 11/8
- 5TT3 undervoltage relays 11/12
- 5TT3 short-time voltage relay 11/14
- 5TT3 undervoltage and overvoltage relays 11/15
- 5TT6 current relays 11/16
- 5TT3 fuse monitors 11/17
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- 5TT3 insulation monitors for industrial applications 11/20

Monitoring devices for plants and equipment 11/21

- 5TT5 EMERGENCY STOP modules 11/21
- 5TT3 level relays 11/22
- 5TT3 line circuit relays 11/23
- 7LQ2 dimmer switches 11/24

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System overview

Monitoring devices for electrical values



5SV8 residual current monitor



5SV8 modular RCCB device



5TT3 and 5TT6 relay



5TT3 monitors

Accessories



Summation current transformer



Holders for standard mounting rails



Magnetic field centering sleeves

Monitoring devices for plants and equipment



5TT5 EMERGENCY STOP modules



5TT3 relay



7LQ2 dimmer switches

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Accessories



Immersion electrodes

Note:
You will find a detailed range of accessories with the basic units.

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5SV8 residual current monitors

Type A and type AC

				RCM analog	RCM digital	
			Mounting width	2 MW	3 MW	3 MW
						
Rated operational voltage U_e	**Rated residual current $I_{\Delta n}$**		**Response time Δt**		**1 channel**	**4 channels**
	Type A	**Type AC**				
230 V AC	0.03 ... 5 A	>3 A	0.02 ... 5 s	5SV8000-6KK	–	–
	0.03 ... 3 A	5 ... 30 A	0.02 ... 10 s, INS, SEL [1]	–	5SV8001-6KK	5SV8200-6KK

Further technical specifications		**5SV8000-6KK**	**5SV8001-6KK**	**5SV8200-6KK**
Standards				
Standards		EN 62020, IEC 62020		
Approvals		–	UL	
Supply				
Rated operational voltage U_e		230 V AC		
Frequency		50/60 Hz		
Rated residual current $I_{\Delta n}$	Type A	0.03 ... 3 A		
	Type AC	>3 A	5 ... 30 A	
Response time Δt		0.02 ... 5 s	0.02 ... 10 s, INS, SEL [1]	
Relay contacts				
Relay contacts		1× alarm	1× pre-alarm, 1× alarm	1× pre-alarm, 4× alarm
Rated voltage		230 V AC		
Rated current		6 A		
Summation current transformer				
Diameter		20 ... 210 mm		
Equipment				
Maximum cable length RCM/CT		10 m (shielded cable)		
Conductor cross-section		1.5 mm²		
Test/reset		Yes/Yes		
External tripping operation/external reset		–/Yes	Yes/Yes	
Safety				
Degree of protection	Contacts	IP20		
	Front	IP41		
Ambient conditions				
Operating temperature		–10 ... +50 °C		

[1] INS: Instantaneous,
SEL: Selective

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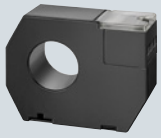
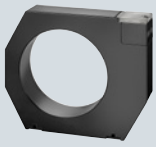
Accessories

Summation current transformers







- Including holder for standard mounting rail or wall mounting
- Standard UL

Mounting options	Lowest measurable residual current $I_{\Delta n\ min}$	Rated current I_n	Maximum current [2] I_{max}	Internal diameter	Article No.
Standard mounting rail	30 mA	≤40 A	240 A	20 mm	5SV8700-0KK
		≤63 A	380 A	30 mm	5SV8701-0KK
Wall mounting, standard mounting rail [1]	30 mA	≤80 A	480 A	35 mm	5SV8702-0KK
		≤200 A	1200 A	70 mm	5SV8703-0KK
Wall mounting	100 mA	≤250 A	1500 A	105 mm	5SV8704-0KK
	300 mA	≤500 A	3000 A	140 mm	5SV8705-0KK
		≤600 A	3600 A	210 mm	5SV8706-0KK

Holders for standard mounting rails



- Suitable for summation current transformers with internal diameter of 20 mm, 30 mm, 35 mm, 70 mm
- Cannot be used together with magnetic field centering sleeves.

Article No.
5SV8900-1KK

Magnetic field centering sleeves



Internal diameter	Article No.
35 mm	5SV8902-1KK
70 mm	5SV8903-1KK
105 mm	5SV8904-1KK
140 mm	5SV8905-1KK
210 mm	5SV8906-1KK

[1] The holder for standard mounting rails is additionally required for mounting onto the standard mounting rail.
[2] Short-time starting current, up to 2 s

System overview, page 11/4

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5SV8 modular RCCB device

Type A

	MRCD
Mounting width	3 MW



Rated operational voltage U_e	Rated residual current $I_{\Delta n}$ Type A	Response time Δt	
230 V AC	0.03 ... 3 A	0.02 ... 10 s, INS, SEL [1]	5SV8101-6KK

Further technical specifications

Standards		
Standards		EN 60947-2 (Annex M), IEC 60947-2 (Annex M)
Approvals		–
Supply		
Rated operational voltage U_e		230 V AC from a 1-phase auxiliary voltage source (also externally)
Frequency		50/60 Hz
Rated residual current $I_{\Delta n}$	Type A	0.03 ... 3 A (default setting: 30 mA)
	Type AC	–
Response time Δt	$I_{\Delta n}$ = 30 mA	INS instantaneous
	$I_{\Delta n}$ > 30 mA	INS – SEL – 0.06 ... 10 s [1] (default setting INS)
Relay contacts		
Relay contacts		1× alarm, 1x tripping operation
Rated voltage		230 V AC
Rated current		6 A
Summation current transformer		
Diameter		35 ... 210 mm
Equipment		
Maximum cable length RCM/CT		10 m (shielded cable)
Conductor cross-section		0.125 ... 2.08 mm²
Test/reset		Yes/Yes
External tripping operation/external reset		Yes/Yes
Safety		
Degree of protection	Contacts	IP20
	Front	IP41
Ambient conditions		
Operating temperature		–10 ... +50 °C

[1] INS: Instantaneous,
SEL: Selective

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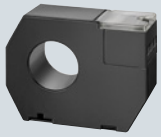
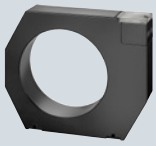
Accessories

Summation current transformers





- Including holder for wall mounting
- Standard UL

Mounting options	Lowest measurable residual current $I_{\Delta n\ min}$	Rated current I_n	Maximum current [2] I_{max}	Internal diameter	Article No.
Wall mounting, standard mounting rail [1]	30 mA	≤80 A	480 A	35 mm	5SV8702-0KK
	30 mA	≤200 A	1200 A	70 mm	5SV8703-0KK
Wall mounting	100 mA	≤250 A	1500 A	105 mm	5SV8704-0KK
	300 mA	≤500 A	3000 A	140 mm	5SV8705-0KK
		≤600 A	3600 A	210 mm	5SV8706-0KK

Holders for standard mounting rails



- Suitable for summation current transformers with internal diameter of 20 mm, 30 mm, 35 mm, 70 mm
- Cannot be used together with magnetic field centering sleeves

Article No.
5SV8900-1KK

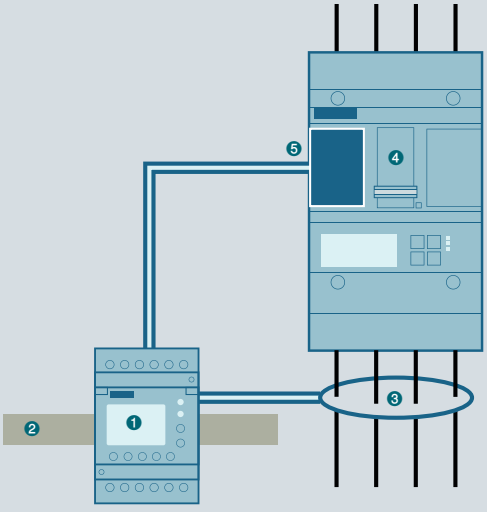
Magnetic field centering sleeves



Internal diameter	Article No.
35 mm	5SV8902-1KK
70 mm	5SV8903-1KK
105 mm	5SV8904-1KK
140 mm	5SV8905-1KK
210 mm	5SV8906-1KK

[1] The holder for standard mounting rails is additionally required for mounting onto the standard mounting rail.
[2] Short-time starting current, up to 2 s

Tested combination options



5SV8101-6KK / - (tested combinations)

❶ Modular RCCB device			
5SV8101-6KK			
❷ Standard mounting rail			
EN 60715 – TH35 – 7.5 35 – 15			
❸ Summation current transformers			Magnetic field centering sleeves
Ø 35 mm	5SV8702-0KK		5SV8902-1KK
Ø 70 mm	5SV8703-0KK		5SV8903-1KK
Ø 105 mm	5SV8704-0KK		5SV8904-1KK
Ø 140 mm	5SV8705-0KK		5SV8905-1KK
Ø 210 mm	5SV8706-0KK		5SV8906-1KK
❹ Molded case circuit breakers		❺ Trip element	❺ Trip element
3VL17...		3VL9400-1ST00	3VL9400-1UP00
3VL27...			
3VL37...			
3VL47...			
3VA10...		3VA9988-0BL30	3VA9908-0BB11
3VA11...		3VA9988-0BL32	3VA9908-0BB20
3VA20...		3VA9988-0BL33	3VA9908-0BB24
3VA21...			3VA9908-0BB25
3VA22...			
3VA12...		3VA9988-0BL30	3VA9908-0BB11
3VA23...		3VA9988-0BL32	3VA9908-0BB20
3VA24...		3VA9988-0BL33	3VA9908-0BB24

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5SV8 modular RCCB device

Type B

	MRCD digital
Mounting width	2 MW



Rated operational voltage U_e	Rated residual current $I_{\Delta n}$	Response time Δt	
230 V AC	0.03 ... 1 A	0 ... 10 s	5SV8101-4KK
24 V DC	0.03 ... 1 A	0 ... 10 s	5SV8111-4KK

Further technical specifications		5SV8101-4KK	5SV8111-4KK
Standards			
Standards		EN 60947-2 (Annex M), IEC 60947-2 (Annex M)	
Supply			
Supply voltage U_s		230 V AC (70 ... 300 V AC)	24 V DC (9.6 ... 94 V DC)
Frequency		50/60 Hz	–
Power consumption		<6.5 VA	
Relay contacts			
Relay contacts		1× alarm, 1× tripping operation	
Rated voltage		250 V AC	
Rated current		5 A	
External summation current transformer			
Internal diameter		35 ... 210 mm (5SV8701-2KK, 5SV8701-2KP, 5SV8702-2KK, 5SV8702-2KP, 5SV8703-2KK, 5SV8704-2KK)	
Rated voltage	(Summation current transformers)	690 V	
Response characteristic	Acc. to IEC 60947-2 (M)	Type B	
Rated frequency		0 ... 2 kHz	
Response residual current	$I_{\Delta n}1$ (AL1 alarm)	50 ... 100% of $I_{\Delta n}2$ (factory setting: 50%)	
	$I_{\Delta n}2$ (TP2 tripping)	30 mA ... 1 A (factory setting: 30 mA)	
Response delay	$t_{on}1$ (alarm)	0 ... 10 s (factory setting: 1 s)	
	$t_{on}2$ (tripping)	0 ... 10 s (factory setting: 0 s)	
Equipment			
Maximum cable length MRCD/converter		10 m (6 × 0.75 mm²)	
Password		Off / 0 ... 999 (factory setting: 0)	
Safety			
Degree of protection	Components (IEC 60529)	IP30	
	Terminals (IEC 60529)	IP20	
EMC		IEC 60947-2 (M)	
Overvoltage category		III	
Pollution degree		3	
Mechanical data			
Width		36 mm (2 MW)	
Depth		64 mm	
Height		85 mm	
Weight		150 g	
Fixing		Standard mounting rail	
Enclosure material		Polycarbonate	
Electrical connection		Screw terminals	
Conductor cross-section	Rigid	0.2 ... 4 mm²	
	Flexible, with end sleeve	0.2 ... 2.5 mm² (AWG 24 ... 12)	
Stripped length		8 ... 9 mm	
Tightening torque		0.5 ... 0.6 Nm	
Ambient conditions			
Operating temperature		–25 ... + 55 °C	

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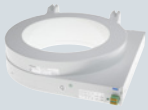
Accessories

Summation current transformers

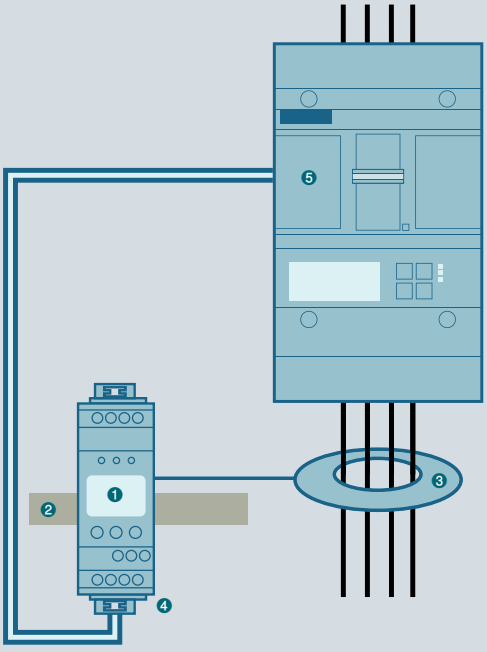
	Lowest measurable residual current $I_{\Delta n\ min}$	Rated current I_n	Maximum current [1] I_{max}	Internal diameter	Version	Article No.
	10 mA	≤80 A	500 A	35 mm	Standard	5SV8701-2KK
					With shield	5SV8701-2KP
		≤160 A	1000 A	60 mm	Standard	5SV8702-2KK
					With shield	5SV8702-2KP
	100 mA	≤330 A	2000 A	120 mm	Standard	5SV8703-2KK
	300 mA	≤630 A	3800 A	210 mm	Standard	5SV8704-2KK

Holders for standard mounting rails

	Suitable for summation current transformers	Article No.
	5SV8701-2KK, 5SV8701-2KP	5SV8900-2KK
	5SV8702-2KK, 5SV8702-2KP	5SV8900-3KK

[1] Short-time starting current, up to 2 s

Tested combination options



5SV8101-4KK / 5SV8111-4KK (tested combinations)

❶ Modular RCCB device

5SV8101-4KK / 5SV8111-4KK

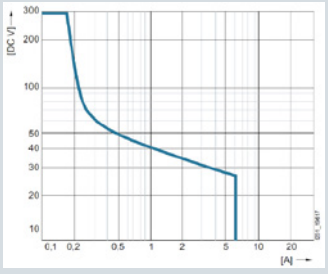
❷ Standard mounting rail

EN 60715 – TH35 – 7,5 35 – 15

❸ Summation current transformers

Ø 35 mm	5SV8701-2KK / 5SV8701-2KP
Ø 60 mm	5SV8702-2KK / 5SV8702-2KP
Ø 120 mm	5SV8703-2KK
Ø 210 mm	5SV8704-2KK

❹ Relay contacts

DC: 

AC: max. 230 V, 5A

❺ Molded case circuit breakers	**Trip element**	
3VA1...	3VA9988-0BL30	3VA9908-0BB11
3VA20...	3VA9988-0BL32	3VA9908-0BB24
3VA21...	3VA9988-0BL33	3VA9908-0BB25
3VA22...		
3VA23...	3VA9988-0BL30	3VA9908-0BB11
3VA24...	3VA9988-0BL32	3VA9908-0BB25
	3VA9988-0BL33	

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5TT3 undervoltage relays

Without response delay

				For the monitoring of 1, 2 or 3 phases against N		3 phases against N
			Contacts	1 CO	2 CO	2 CO
			Mounting width	1 MW	2 MW	2 MW
						
Rated operational voltage U_e	**Rated operational current I_e**	**Switching thresholds**	**Hysteresis**			
Not adjustable						
230 V AC	4 A	0.7 and 0.9 × U_c	–	5TT3400	5TT3402	5TT3404
		0.85 and 0.95 × U_c	–	5TT3401	–	5TT3405
Adjustable						
230 V AC	4 A	0.7 ... 0.95 × U_c	5%	–	–	5TT3406
		0.9 ... 0.95 × U_c	–	–	5TT3403	–

Further technical specifications

		5TT3400 5TT3401 5TT3402 5TT3403	5TT3404 5TT3405	5TT3406
Standards				
Standards		IEC 60255, DIN VDE 0435-110, DIN VDE 0435-303		
Supply				
Rated control circuit voltage U_c		230 / 400 V AC		
Operating range (overload capability)		1.1 × U_c		
Rated frequency		50 / 60 Hz		
Contacts				
µ contact	AC-11	4 A		
Response values	ON-switching	0.9 / 0.95 × U_c		4% hysteresis
	OFF-switching	0.7 / 0.85 × U_c		0.7 ... 0.95 × U_c
Minimum contact load		10 V / 100 mA		
Safety				
Rated insulation voltage U_i	Between coil/contact	4 kV		
Electrical isolation, creepage distances and clearances	Actuator/contact	3 mm	5.5 mm	
Rated impulse withstand voltage U_{imp}	Actuator/contact	>2.5 kV	>4 kV	
Functions				
Phase asymmetry	Setting accuracy	–	Approx. 5 ... 10%	
	Repeat accuracy	–	1	
Phase failure detection	At L1 or L2 or L3	100 ms		
Functions	Monitoring of 1/2 phases against N	Yes	–	
	Monitoring of 3 phases against N	Yes		
	Asymmetry (failure) detection	–	Yes	
	Reverse (failure) detection	–	Yes	
	Phase failure detection	Yes		
	N-conductor monitoring	–	Yes	
Connection				
Terminals	± screw (Pozidriv)	PZ 1		
Conductor cross-sections	Rigid	Max. 2 x 2.5 mm²		
	Flexible, with end sleeve	Max. 1 x 0.5 mm²		
Ambient conditions				
Permissible ambient temperature		–20 ... +60 °C		
Resistance to climate	Acc. to EN 60068-1	20 / 60 / 4		

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5TT3 undervoltage relays

With response delay

	For the monitoring of 1, 2 or 3 phases against N	
Contacts	1 CO	2 CO
Mounting width	1 MW	1 MW
		

Rated operational voltage U_e	Rated operational current I_e	Switching thresholds	Hysteresis	Standard	With TEST pushbutton
Not adjustable					
230 V AC	4 A	0.85 × U_c	5%	5TT3414	5TT3415

Further technical specifications

		5TT3414	5TT3415
Supply			
Rated control circuit voltage U_c		230 / 400 V AC	
Operating range (overload capability)		1.15 × U_c	
Rated frequency		50 / 60 Hz	
Contacts			
Contacts	AC-15	1 CO	2 CO
Response values	ON-switching	5% hysteresis	
	OFF-switching	0.85 × U_c	
Response delay		0.5 s	
Return transfer delay		60 s	
Minimum contact load		10 V / 100 mA	
Electrical service life in switching cycles	AC-15 (1 A, 230 V AC)	1 × 10^5	
Safety			
Rated insulation voltage U_i	Between coil/contact	–	
Rated impulse withstand voltage	Acc. to IEC 60664-1	6 kV	
Pollution degree		2	
Functions			
Phase failure detection	At L1 or L2 or L3	500 ms	
Functions	Monitoring of 1 or 2 phases against N	Yes	
	Monitoring of 3 phases against N	Yes	
	Phase failure detection	Yes	
Connection			
Terminals	– screw (slot)	3.5 mm	
Conductor cross-sections	Rigid	1 × 4 mm^2	
	Flexible, with end sleeve	1 × 2.5 mm^2	
Ambient conditions			
Permissible ambient temperature		–25 ... +60 °C	
Resistance to climate	Acc. to EN 60068-1	20 / 060 / 04	

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5TT3 short-time voltage relay

Without response delay

	For the monitoring of 1, 2 or 3 phases against N
Contacts	2 CO
Mounting width	2 MW



Rated operational voltage U_e	Rated operational current I_e	Switching thresholds	
Not adjustable			
230 V AC	4 A	0.8 ... 0.85 × U_c	5TT3407

Further technical specifications

Standards			
Standards			IEC 60255, DIN VDE 0435-303
Supply			
Rated control circuit voltage U_c			230/400 V AC
Operating range (overload capability)			1.1 × U_c
Rated frequency			50/60 Hz
Rated operational power P_s	AC operation:	230 V and p.f. = 1	2000 VA
		230 V and p.f. = 0.4	1250 VA
	DC operation:	U_e = 24 V and I_e = 6 A	Max. 100 W
		U_e = 60 V and I_e = 1 A	Max. 100 W
		U_e = 110 V and I_e = 0.6 A	Max. 100 W
		U_e = 220 V and I_e = 0.5 A	Max. 100 W
Back-up fuse	Terminals L1/L2/L3		2 A
Contacts			
µ contact	AC-11		3 A
Response values	ON-switching		0.85 × U_c
	OFF-switching		0.8 × U_c
Automatic reclosing delay (return transfer delay)			0.2 ... 2 s
Minimum contact load			10 V / 100 mA
Safety			
Rated insulation voltage U_i	Between coil/contact		4 kV
Electrical isolation, creepage distances and clearances	Actuator/contact		4 mm
Rated impulse withstand voltage U_{imp}	Actuator/contact		>4 kV
Functions			
Phase failure detection	At L1 or L2 or L3		≥20 ms
Phase asymmetry	Setting accuracy		Approx. 5 ... 10%
	Repeat accuracy		1
Functions	Monitoring of 1 or 2 phases against N		Yes
	Monitoring of 3 phases against N		Yes
	Phase failure detection		Yes
	N-conductor monitoring		Yes
Connection			
Terminals	± screw (Pozidriv)		PZ 1
Conductor cross-sections	Rigid		Max. 2 x 2.5 mm²
	Flexible, with end sleeve		Max. 1 x 0.5 mm²
Ambient conditions			
Permissible ambient temperature			–20 ... +60 °C
Humidity class	Acc. to IEC 60068-2-30		F

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5TT3 undervoltage and overvoltage relays

With adjustable response delay

	For the monitoring of 3 phases against N
Contacts	2 CO
Mounting width	2 MW



Rated operational voltage U_e	Rated operational current I_e	Switching thresholds	Hysteresis	
Adjustable				
230 V AC	4 A	0.7 and 1.1 × U_c	4%	5TT3408
		0.9 and 1.3 × U_c	4%	

Further technical specifications

Standards			
Standards			IEC 60255, DIN VDE 0435-303
Supply			
Rated control circuit voltage U_c			230/400 V AC
Operating range (overload capability)			1.35 × U_c
Rated frequency			50/60 Hz
Back-up fuse	Terminals L1/L2/L3		2 A
Contacts			
µ contact	AC-11		1 A
Response values	Overvoltage:	ON-switching	4% hysteresis
		OFF-switching	0.9 ... 1.3 × U_c
	Undervoltage:	ON-switching	4% hysteresis
		OFF-switching	0.7 ... 1.1 × voltage$_c$
On/off-delay (response delay)			0.1 ... 20 s
Automatic reclosing delay (return transfer delay)			–
Minimum contact load			10 V / 100 mA
Safety			
Rated insulation voltage U_i	Between coil/contact		4 kV
Electrical isolation, creepage distances and clearances	Contact/contact		4 mm
	Actuator/contact		4 mm
Rated impulse withstand voltage U_{imp}	Actuator/contact		>4 kV
Functions			
Phase failure detection	At L1 or L2 or L3		100 ms
Phase asymmetry	Setting accuracy		Approx. 5 ... 10%
	Repeat accuracy		1
Functions	Monitoring of 1 or 2 phases against N		–
	Monitoring of 3 phases against N		Yes
	Asymmetry detection		Yes
	Reverse voltage detection		Yes
	Phase failure detection		Yes
	N-conductor monitoring		Yes
Connection			
Terminals	± screw (Pozidriv)		PZ 1
Conductor cross-sections	Rigid		Max. 2 x 2.5 mm²
	Flexible, with end sleeve		Max. 1 x 0.5 mm²
Ambient conditions			
Permissible ambient temperature			–20 ... +60 °C
Humidity class	Acc. to IEC 60068-2-30		F

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5TT6 current relays

For single-phase loads up to 230 V AC

				Auxiliary voltage and load voltage				
				not isolated		galvanically isolated		
			Mounting width	1 MW	1 MW	2 MW	2 MW	2 MW
								
Rated operational voltage U_e	Rated operational current I_e	Contacts	Rated control current I_c	Monitoring Undercurrent	Overcurrent	Monitoring Undercurrent	Overcurrent	Overcurrent/ undercurrent
230 V AC	5 A	1 CO	1 ... 10 A	5TT6111	5TT6112	–	–	–
		2 CO	0.1 ... 1 A, 0.5 ... 5 A, 1 ... 10 A, 1.5 ... 15 A	–	–	5TT6113	5TT6114	5TT6115

Further technical specifications

		5TT6111 5TT6112	5TT6113 5TT6114 5TT6115
Standards			
Standards		IEC 60255	IEC 60255 DIN VDE 0435-303
Supply			
Rated control current I_c		1 ... 10 A	0.1 ... 1 A, 0.5 ... 5 A, 1 ... 10 A, 1.5 ... 15 A
Rated control circuit voltage U_c		230 V AC	
Primary operating range		0.9 ... 1.1 × U_c	
Overload capability	Continuous	15 A	20 A
	At 50 °C ambient temperature max. 3 s	20 A	–
	Independent of measuring range, max. 3 s	–	30 A
Rated frequency		50/60 Hz	
Contacts			
µ contact (AC-15)	NO contacts	3 A	5 A
	NC contacts	1 A	
Response values	ON-switching	Infinitely variable	
	OFF-switching	Permanent, 4% hysteresis	
Switching delay t_v		0.1 ... 20 s, continuously adjustable	
Response time	Non-adjustable	Current corresponds to the rated operational power of the continuous-flow heater	See Siemens Service and Support Portal, search term "Article No.", e.g. 5TT6113
Minimum contact load		10 V / 100 mA	
Safety			
Rated insulation voltage U_i	Between coil/contact	2.5 kV	
Electrical isolation, creepage distances and clearances	Actuator/contact	3 mm	
Rated impulse withstand voltage U_{imp}	Actuator/contact	>4 kV	
Connection			
Terminals	± screw (Pozidriv)	PZ 1	
Conductor cross-sections	Rigid	Max. 2 x 2.5 mm²	
	Flexible, with end sleeve	Max. 1 x 0.5 mm²	
Ambient conditions			
Permissible ambient temperature		–20 ... +60 °C	
Resistance to climate	Acc. to EN 60068-1	20/60/4	

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5TT3 fuse monitors

For all low-voltage fuse systems

Mounting width	2 MW



Rated operational voltage U_e	Rated operational current I_e	Rated control circuit voltage U_c	
Adjustable			
250 V AC	4 A	380 ... 415 V AC	5TT3170

Further technical specifications

Standards		
Standards		IEC 60255, DIN VDE 0435-110
Supply		
Rated operational voltage U_e		250 V AC
Rated operational current I_e	AC-1	4 A
Rated control circuit voltage U_c	3 AC	380 ... 415 V
Primary operating range		0.8 ... 1.1 × U_c
Rated frequency		50 ... 400 Hz
Contacts		
Internal resistance of measuring paths		>1000 Ω/V
Max. permissible rear feed		90%
Response/release time		<50 ms
Electrical endurance AC-11	In switching cycles at 1 A	1.5×10^5
Safety		
Rated impulse withstand voltage U_{imp}	Input/output	>4 kV
Application		
Area of application		Asymmetric, systems afflicted with harmonics, regenerative motors
Message		Also for disconnected loads
Connection		
Terminals	± screw (Pozidriv)	PZ 1
Conductor cross-sections	Rigid	Max. 2 x 2.5 mm²
	Flexible, with end sleeve	Max. 1 x 0.5 mm²
Ambient conditions		
Permissible ambient temperature		–20 ... +45 °C
Resistance to climate	Acc. to EN 60068-1	20/45/4

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5TT3 phase monitors

For monitoring of voltages in a three-phase system

Mounting width	1 MW



Rated operational voltage U_e	Rated operational current I_e	Contacts	Rated control circuit voltage U_c	With 3 green LEDs for 3 phases
250 V AC	4 A	1 CO	230/400 V	5TT3421

Further technical specifications

Standards		
Standards		IEC 60255, DIN VDE 0435
Supply		
Rated operational voltage U_e		250 V AC
Rated operational current I_e		4 A
Rated control circuit voltage U_c		230/400 V AC
Primary operating range		0.8 ... 1.1 × U_c
Rated frequency		50/60 Hz
Rated power dissipation P_v	Electronics	9 VA
	Contacts	0.2 VA
Contacts		
µ contact	AC-11	3 A
Minimum contact load		10 V / 100 mA
Safety		
Rated insulation voltage U_i	Between coil/contact	4 kV
Electrical isolation, creepage distances and clearances	Actuator/contact	4 mm
Rated impulse withstand voltage U_{imp}	Actuator/contact	>2.5 kV
Degree of protection	Acc. to EN 60529	IP20, with connected conductors
Safety class	Acc. to EN 61140/VDE 0140-1	II
Connection		
Terminals	± screw (Pozidriv)	PZ 1
Conductor cross-sections	Rigid	Max. 2 x 2.5 mm²
	Flexible, with end sleeve	–
Ambient conditions		
Permissible ambient temperature		–20 ... +60 °C
Resistance to climate	Acc. to EN 60068-1	20/60/4

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5TT3 phase sequence monitors

For monitoring of phase sequence in a three-phase system

	Phase sequence monitors
Mounting width	1 MW



Rated operational voltage U_e	Rated operational current I_e	Contacts	Rated control circuit voltage U_c	With one green LED, which lights up for right-rotating field
250 V AC	4 A	1 CO	400 V	5TT3423

Further technical specifications

Standards		
Standards		IEC 60255, DIN VDE 0435
Supply		
Rated operational voltage U_e		250 V AC
Rated operational current I_e		4 A
Rated control circuit voltage U_c		400 V AC
Primary operating range		0.8 ... 1.1 × U_c
Rated frequency		50/60 Hz
Rated power dissipation P_v	Electronics	9 VA
	Contacts	0.2 VA
Contacts		
µ contact	AC-11	3 A
Minimum contact load		10 V / 100 mA
Safety		
Rated insulation voltage U_i	Between coil/contact	4 kV
Electrical isolation, creepage distances and clearances	Actuator/contact	4 mm
Rated impulse withstand voltage U_{imp}	Actuator/contact	>2.5 kV
Degree of protection	Acc. to EN 60529	IP20, with connected conductors
Safety class	Acc. to EN 61140/VDE 0140-1	II
Connection		
Terminals	± screw (Pozidriv)	PZ 1
Conductor cross-sections	Rigid	Max. 2 x 2.5 mm^2
	Flexible, with end sleeve	–
Ambient conditions		
Permissible ambient temperature		–20 ... +60 °C
Resistance to climate	Acc. to EN 60068-1	20/60/4

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5TT3 insulation monitors for industrial applications

Are used for protection of persons and against fire in non-grounded systems (IT systems)

Mounting width	2 MW



Measurement voltage range U_{meas}	Measuring range	Contacts	Rated control circuit voltage U_c	
0 ... 500 V AC	5 ... 100 kΩ	2 CO	230 V AC	5TT3470
12 ... 280 V DC	5 ... 200 kΩ	2 CO	–	5TT3471

Further technical specifications

		5TT3470	5TT3471
Supply			
Rated operational voltage U_e		230 V AC	12 ... 280 V DC
Rated operational current I_s	Thermal current I_{th}	4 A	
	DC-13 at 24 V DC	–	2 A
	DC-13 at 250 V DC	–	0.2 A
	AC-15	–	3 A
	AC-15 NO contacts	5 A	–
	AC-15 NC contacts	2 A	–
Supply voltage U_c	For AC supply	220 ... 240 V AC	–
Primary operating range	For AC supply	0.8 ... 1.1 × U_c	–
Frequency range for U_c		45 ... 400 Hz	–
Rated power dissipation P_v	For AC supply	Approx. 2 VA	–
	For DC supply	–	Approx. 1 W
Contacts			
µ contact		2 W	
Switching hysteresis	At R_{meas} 50 kΩ	15%	10 ... 15%
Measuring circuit			
Measuring circuit		For three-phase and AC systems	For direct voltage systems
Measurement voltage range U_{meas}		0 ... 500 V AC	12 ... 280 V DC
Measurement voltage U_{meas}	Internal	Approx. 15 V DC	–
Primary operating range		0 ... 1.1 × U_{meas}	0.9 ... 1.1 × U_{meas}
Frequency range for U_{meas}		10 ... 10000 Hz	–
Alarm values	Measuring shunt R_{AL}	5 ... 100 kΩ	5 ... 200 kΩ
Setting of alarm value	On absolute scale	Infinitely variable	
Alternating current internal resistance	Internal testing resistance	>250 kΩ	–
Direct current internal resistance	Internal testing resistance	>250 kΩ	–
	L+ and L- to PE	–	75 kΩ each
Max. measurement current I_{meas}	Short circuit	<0.1 mA	0.2 ... 4 mA, depending on the voltage
Direct interference voltage	Max. permissible	500 V DC	–
Response delay at R_{AL} 50 kΩ and 1 µF	∞ to 0.9 × R_{meas}	<1.3 s	0.8 s
	R_{meas} from ∞ to 0 Ω	<0.7 s	0.4 s
Safety			
Rated impulse withstand voltage U_{imp}	Terminals A1 to A2	<4 kV	
	Terminals L to PE	<4 kV	
	Terminals A1, A2 to L, PE	<4 kV	<3 kV
	Terminals against contacts	<6 kV	
Degree of protection	Terminals (according to EN 60529)	IP20	
	Enclosure (according to EN 60529)	IP40	
Connection			
Terminals	± screw (Pozidriv)	PZ 2	
Conductor cross-sections	Rigid	Max. 2 x 2.5 mm²	
	Flexible, with end sleeve	Min. 1 × 0.50 mm²	
Ambient conditions			
Permissible ambient temperature		–20 ... +60 °C	
Resistance to climate	Acc. to EN 60068-1	20/060/04	

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5TT5 EMERGENCY STOP modules

Efficient personal and machine protection in small units

Mounting width	4 MW



Rated operational voltage U_e	Rated operational current I_e	Rated control circuit voltage U_c	
400 V AC	5 A	230 V AC	5TT5200

Further technical specifications

Standards		
Standards		ISO 13849-1: 2015; EN 62061: 2005 + AC: 2010 + A1: 2013 + A2: 2015; ISO 13850: 2015; EN 60204-1: 2006 + A1: 2009 + AC: 2010 (in extracts); EN 60947-5: 2004 + A1: 2009; EN 50178: 1997; EN 61508 Parts 1-7: 2010; EN 50156-1: 2005 (in extracts)
Certification		German Technical Inspectorate Rheinland
Supply		
Primary operating range		0.8 ... 1.1 × U_c
Rated frequency f_n		50 Hz
Rated power dissipation P_v	Coil/drive	3.5 VA
	Contact per pole	0.8 VA
Control voltage	Terminal Y1	24 V AC/DC
Control current	Terminal Y1	45 mA
Contacts		
Contacts	NO contacts AC-15	3 A
	NC contacts AC-15	2 A
	NO contact/NC contact AC-1	5 A
Contact gap		>1 mm
Electrical service life	AC-15 (2 A, 230 V AC)	10^5 operating cycles
Reliable switching frequency		600 operating cycles/h
Recovery time		500 ms
Safety		
Rated impulse withstand voltage U_{imp}	Actuator/contact	>4 kV
Electrical isolation, creepage distances and clearances	Actuator/contact	3 mm
Vibration resistance	Amplitude acc. to EN 60068-2-610 (up to 55 Hz)	0.35 mm
Connection		
Terminals	± screw (Pozidriv)	PZ 1
Conductor cross-sections of main current paths	Rigid	Max. 2 x 2.5 mm^2
	Flexible, with end sleeve	Min. 1 × 0.50 mm^2
Ambient conditions		
Permissible ambient temperature		0 ... +50 °C
Resistance to climate	Acc. to EN 60068-1	0/55/04

System overview, page 11/4

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5TT3 level relays

For level monitoring and control

Mounting width	2 MW



Rated operational voltage U_e	Rated operational current I_e	Rated control circuit voltage U_c	
250 V AC	5 A	230 V AC	5TT3435

Further technical specifications

Standards		
Standards		IEC 60255; DIN VDE 0435-110
Supply		
Rated operational voltage U_e		250 V AC
Rated operational current I_e		5 A
Rated control circuit voltage U_c		230 V AC
Primary operating range		0.8 ... 1.1 × U_c
Rated frequency f_n		50/60 Hz
Measuring circuit		
Setting range of the liquid level		2 ... 450 kΩ
Switching point hysteresis of set value	At 450 kΩ	3%
	At 2 kΩ	6%
Electrode voltage		Max. approx. 10 V AC
Electrode current		Max. approx. 1.5 mA AC
Response delay	Adjustable	0.2 ... 20 s
OFF-delay	Adjustable	0.2 ... 20 s
Test voltage	Input/auxiliary circuit	4 kV
	Input/output circuit	4 kV
	Auxiliary/output circuit	4 kV
Voltage temperature influence	From set value	<2%
Max. cable length to the electrodes at 100 µF/km	Set value 450 kΩ	50 m
	Set value 100 kΩ	200 m
	Set value 35 kΩ	500 m
	Set value 10 kΩ	1500 m
	Set value 5 kΩ	3000 m
Connection		
Terminals	± screw (Pozidriv)	PZ 2
Conductor cross-sections	Rigid, max.	Max. 2 x 2.5 mm²
	Flexible, with end sleeve	Min. 1 × 0.50 mm²
Ambient conditions		
Permissible ambient temperature		–20 ... +60 °C
Resistance to climate	Acc. to EN 60068-1	20/60/4

Accessories

Immersion electrodes



- Made of stainless steel, with PG13 sealing cap
- Suitable for pure water in open containers

Temperature range	Connection	Article No.
0 ... 60 °C	Terminal connection	5TG8223

System overview, page 11/4

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5TT3 line circuit relays

To interrupt circuits where there are no active loads

Mounting width	1 MW



Rated operational voltage U_e	Rated operational current I_e	Contacts	Rated control circuit voltage U_c	
250 V AC	16 A	1 NC contact	230 V AC	5TT3171

Further technical specifications

Standards		
Standards		IEC 60255; DIN VDE 0435-110
Supply		
Rated operational voltage U_e		250 V AC
Rated operational current I_e	AC-1	16 A
Rated control circuit voltage U_c		230 V AC
Primary operating range		0.85 ... 1.15 × U_c
Rated frequency		50/60 Hz
Rated power dissipation P_v	Electronics	5 VA
	Contacts	2.6 VA
Contacts		
Response value	Adjustable	2 ... 20 VA
Release value	% of the response value	70%
Electrical service life	In switching cycles at 3 A (AC-11)	5×10^5
Safety		
Rated impulse withstand voltage U_{imp}	Input/output	>4 V
Degree of protection	Acc. to IEC/EN 60529	IP20, with connected conductors
Safety class	Acc. to EN 61140/VDE 0140-1	II
Monitoring voltage		3 V
Connection		
Terminals	± screw (Pozidriv)	PZ 1
Conductor cross-sections	Rigid	Max. 2 x 2.5 mm²
	Flexible, with end sleeve	Min. 1 × 0.50 mm²
Ambient conditions		
Permissible ambient temperature		–20 ... +45 °C
Humidity class	Acc. to IEC 60068-2-30	F

Accessories

Base load resistors for electronic devices	
• With 15 cm connection wires, end sleeves and shrink sleeving	
	Article No.
	5TG8222

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System overview, page 11/4

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7LQ2 dimmer switches

For lighting system monitoring and control

Mounting width	1 MW



Rated operational voltage U_e	Rated operational current I_e	Contacts	Rated control circuit voltage U_c	
230 V AC	16 A	1 NO contact	250 V AC	7LQ2300

Further technical specifications

Standards		
Standards		EN 60669-1
Supply		
Rated operational voltage U_e		230 V AC
Rated frequency f_n		50/60 Hz
Safety		
Degree of protection		IP30
Contacts		
Incandescent lamp/halogen lamp load		2000 W
Energy-saving lamp load		1000 W
Fluorescent lamp load	Series corrected	2000 W
	Parallel corrected (at max. 70 µF)	1000 W
LV halogen lamp load ECG		2000 W
Luminosity setting		1 ... 100 000 Lux
Measuring circuit		
On/off-delay		Approx. 90 s
Connection		
Terminals	± screw (Pozidriv)	PZ1
Conductor cross-sections	Rigid, max.	Max. 2 × 1.5 mm²
Mechanical data		
Width		17.5 mm (1 MW)
Fixing		Standard mounting rail
Ambient conditions		
Permissible ambient temperature		–20 ... +55 °C

Spare part

Light sensor



- Included in the 7LQ2300 package
- IP65 Degree of protection

Temperature range	Mounting	Article No.
–20 ... +70 °C	Surface mounting	7LQ2920

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Simply well supplied

Whether you need socket outlets for installing in VDE, UL, CEI or CEE distribution boards or power supply units – our electrical installation technology offers you a complete program.

Short-circuit-proof transformers und power supply units with different voltage and power ratings fulfill every requirement for safety extra-low voltage systems.

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Transformers, Power Supply Units and Socket Outlets



All the information you need 12/2

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Transformers 12/6

4AC32 bell transformer 12/6

4AC37 safety transformer 12/8

Power supply units 12/10

4AC2 electronic power supply unit 12/10

Socket outlets 12/12

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All the important things at a glance

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- Configuration manual – Transformers, power supply units and socket outlets (45315886)

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System overview

Transformers



4AC32 bell transformers



4AC37 safety transformers

Power supply units



4AC2 electronic power supply units

Socket outlets





5TE6 socket outlet for modular installation devices

Accessories



Hinged lid

Note:
You will find a detailed range of accessories with the basic units.

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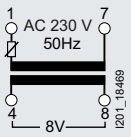
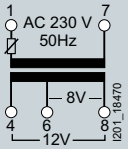
4AC32 bell transformer

U_e 230 V AC





	Bell transformers	
Mounting width	2 MW	2 MW
		
Rated secondary current I_{sec} AC at rated secondary voltage U_{sec} AC		Rated operational power P_s
4 V / 8 V / 12 V / 24 V	8 VA	8 VA
– / 1.0 A / – / –	4AC3208-0	–
– / – / 0.6 A / –	–	4AC3208-1
2.0 A / 2.0 A / 1.5 A / –	–	–
– / 2.0 A / 1.3 A / 0.6 A	–	–

Further technical specifications		4AC3208-0	4AC3208-1	4AC3214-0	4AC3218-0
Standards					
Standards		EN 61558-1, EN 61558-2-8			
Supply					
Rated operational voltage U_e		230 V AC			
Operating range at 50 Hz		1.04 × U_e			
Rated frequency		50 Hz			
Rated power dissipation P_V	In no-load operation	1.2 W		1.3 W	
	At a rated voltage of 4 V	–			5.5 W
	At a rated voltage of 8 V	5.7 W		10.5 W	8.1 W
	At a rated voltage of 12 V	–	3.8 W	7.4 W	8.4 W
	At a rated voltage of 24 V	–		4.2 W	–
Safety					
Safe separation	Creepage distances and clearances	>6 mm			
Insulation class		E			
Test voltage (50 Hz, 1 s)	Primary against secondary winding	4 kV			
Connection					
Conductor cross-section	Rigid	1× 4 mm² or 2× 2.5 mm²			
	Flexible, with end sleeve	1× 2.5 mm² or 2× 1.5 mm²			
Environmental conditions					
Permissible ambient temperature		40 °C	35 °C	40 °C	
Permissible humidity		91%			
Degree of protection	Acc. to EN 60629	IP20			
Safety class	Acc. to EN 61140 (VDE 0140-1)	II			

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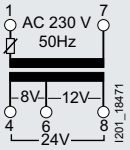
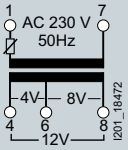
2 MW	2 MW
	
14 VA	**18 VA**
–	–
–	–
–	4AC3218-0
4AC3214-0	–

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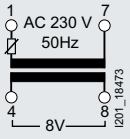
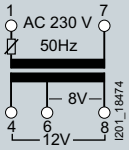
4AC37 safety transformer

U_e 230 V AC





Mounting width	2 MW	3 MW
		

Rated secondary current I_{sec} AC at rated secondary voltage U_{sec} AC					Rated operational power P_s	
8 V	**12 V**	**16 V**	**24 V**	**32 V**	**16 VA**	**24 VA**
2.0 A	–	–	–	–	4AC3716-0	–
	2.0 A	–	–	–	–	4AC3724-0
–	3.3 A	2.5 A	1.6 A	1.2 A	–	–
		–	1.6 A	–	–	–
	5.2 A	–	2.6 A	–	–	–

Further technical specifications

		4AC3716-0	4AC3724-0	4AC3740-0	4AC3740-1	4AC3763-0
Standards						
Standards		EN 61558-1, EN 61558-2-6				
Supply						
Rated operational voltage U_e		230 V AC				
Operating range at 50 Hz		1.04 × U_e				
Rated frequency		50 Hz				
Rated power dissipation P_V	In no-load operation	1.1 W		3.5 W	3.9 W	
	At a rated voltage of 8 V	6.8 W	4.6 W	–		
	At a rated voltage of 12 V	–	7.6 W	7.1 W	7.5 W	13.2 W
	At a rated voltage of 16 V	–			7.7 W	–
	At a rated voltage of 24 V	–		7.7 W	8.1 W	13.5 W
	At a rated voltage of 32 V	–			7.6 W	–
Safety						
Safe separation	Creepage distances and clearances	>6 mm				
Insulation class		E		F		
Test voltage (50 Hz, 1 s)	Primary against secondary winding	4 kV				
Connection						
Conductor cross-section	Rigid	1× 4 mm² or 2× 2.5 mm²				
	Flexible, with end sleeve	1× 2.5 mm² or 2× 1.5 mm²				
Environmental conditions						
Permissible ambient temperature		25 °C				
Permissible humidity		91%				
Degree of protection	Acc. to EN 60629	IP20				
Safety class	Acc. to EN 61140 (VDE 0140-1)	II				

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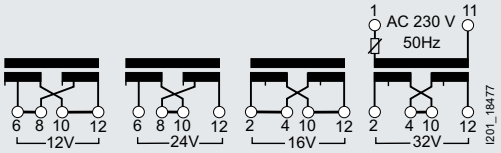
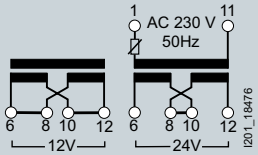
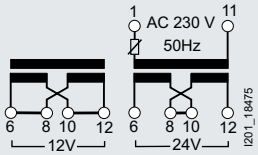
5 MW	5 MW	5 MW
		
40 VA	**40 VA**	**63 VA**
–	–	–
–	–	–
4AC3740-1	–	–
–	4AC3740-0	–
–	–	4AC3763-0

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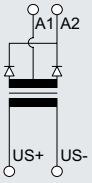
4AC2 electronic power supply unit

SELV, short-circuit-proof



Mounting width 2 MW



Rated operational voltage U_e		Rated secondary voltage U_{sec}	Rated secondary current I_{sec}	Rated operational power P_s	
AC	DC	DC	DC		
85 ... 265 V	85 ... 300 V	24 ±5% V	0.35 A	8.4 W	4AC2402

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System overview, page 12/4

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Further technical specifications

Standards		
Standards		EN 60068-2, EN 61558-1, EN 61000-4
Approvals		–
Supply		
Primary operating range	At 50/60 Hz	–
Rated frequency		50 / 60 Hz
Operating frequency range		–
Rated power dissipation P_v	In no-load operation	–
	At rated load	–
Safety		
Current limitation		Electronic overload protection
Residual ripple		<100 mV
Hum-free	Core molded	–
Safe separation, creepage distances and clearances		>5.5 mm
Insulation class		–
Test voltage (50 Hz, 1 min)	Primary against secondary winding	–
Insulation resistance		4 kV
Rated impulse withstand voltage / degree of pollution	Acc. to IEC 60664-1	6 kV/2
Static discharge	Acc. to IEC/EN 61000-4-2	8 kV
RF irradiation	Acc. to IEC/EN 61000-4-3	10 V/m
Transient overvoltage (burst)	Acc. to IEC/EN 61000-4-4	4 kV
Transient overvoltage (surge)	Acc. to IEC/EN 61000-4-5	
	Supply lines A1, A2	1 kV
	A1/A2 and ground	2 kV
RF, conducted disturbance	Acc. to IEC/EN 61000-4-6	10 V
Interference suppression to lower limit class	Acc. to EN 61000-6-3	Complied with
Connection		
Terminals	Screw (slotted-head)	M2.5
	± screw (Pozidriv)	–
Conductor cross-section	Rigid	0.5 ... 2.5 mm^2
	Flexible, with end sleeve, min.	0.5 ... 1.5 mm^2
Environmental conditions		
Permissible ambient temperature		–20 ... +60 °C
Resistance to climate	Acc. to IEC/EN 60068-1	20 / 045 / 04
Resistance to vibrations, frequency 10 ... 55 Hz	Acc. to IEC/EN 60068-2-6	0.35 mm amplitude
Degree of protection	Acc. to EN 60529	IP20, with connected conductors
Safety class	Acc. to EN 61140	II

System overview, page 12/4

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5TE6 socket outlet for modular installation devices

Version	SCHUKO® socket outlet DIN VDE 0620-1	
		

Rated operational voltage U_e	Rated operational current I_e	Mounting width		
Without hinged lid [1]				
125 V AC	15 A	2.5 MW	–	–
230 V AC	16 A	2.5 MW	5TE6800	–
With hinged lid [2]				
230 V AC	16 A	2.5 MW	–	5TE6801

Accessories

5TE6 hinged lids for socket outlets



	Mounting width	Article No.	Article No.
	2.5 MW	5TE9120	–

[1] The lids can be retrofitted on all devices.
[2] In distribution boards with 55 mm mounting depth, the socket outlet can only be used without the hinged lid.
[3] In system components where equipment is still live even after the main switch has been disconnected, this must be indicated according to EN 50110-1 (VDE 0105-1) and IEC/EN 60204-1/VDE 0113-1.
Yellow socket outlets are used for these applications.

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Further technical specifications		5TE6800 5TE6801 5TE6810	5TE6802	5TE6803	5TE6804
Standards					
Standards		VDE 0620-1	CEI 23-50	CEE 7 standard sheet V	UL 498
Approvals		VDE 0620-1	–		UL File No. E258598/ CSA C22.2 No. 182.3M
Connection					
Terminals	± screw (Pozidriv)	PZ1			
Terminal tightening torque	Max.	0.8 ... 1 Nm			
Stripped length		10 mm			
Conductor cross-section	Rigid	1.5 ... 6 mm² (AWG 10 ... 14)			
	Flexible, with end sleeve	0.5 ... 4 mm² (AWG 14)			
Environmental conditions					
Permissible ambient temperature		–10 ... +55 °C			
Degree of protection	Acc. to EN 60529	IP20, with connected conductors			
Mounting position	Without lid	Any			
	With lid	Horizontally or vertically			

System overview, page 12/4

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	Socket outlets **CEE 7 standard sheet V**	**Socket outlets** **CEI 23-50**	**Socket outlets** **UL 498**
Yellow RAL 1018 [3]	With grounding pin		
			
–	–	–	5TE6804
5TE6810	5TE6803	–	–
–	–	5TE6802	–
Article No.	**Article No.**	**Article No.**	**Article No.**
–	5TE9120	–	5TE9120

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System overview, page 12/4

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Simplified distribution board design and time-saving assembly

Simplified assembly and connection of electrical power distribution systems and devices ensures that customer requirements can be met more quickly and flexibly.

In addition, installation and plant engineers benefit from a simplified configuration and reduced space requirements in distribution systems and control cabinets.

Our busbar systems for electrical installations offer a particularly easy way of fitting distribution systems with electrotechnical components.

The modular design saves space, while quick assembly contacts ensure fast mounting.

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Busbar Systems



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Quick selection guide 13/5

40 mm 8US busbar system 13/6

- Basic assemblies 13/6

60 mm 8US compact busbar system 13/7

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- Infeeds and connection methods 13/8
- Built-in components 13/8
- Device adapters 13/10

60 mm 8US busbar system 13/12

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- Infeeds and connection methods 13/16
- Built-in components 13/22
- Device adapters and device holders 13/26

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System overview

❶ Basic assemblies



Busbar supports



N/PE busbar supports

Accessories



Flat copper profiles



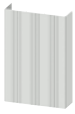
TT special profiles



Connection pieces



Cover profiles



Blanking covers

❷ Infeeds and connection methods



Connection modules



Terminals

Accessories



Covers

❸ Built-in components



Bus-mounting fuse bases



Bus-mounting fuse holders



Bus-mounting switch disconnectors

Accessories



Covers



Auxiliary switches



Lateral modules

❹ Device adapters



Device adapters



Device holders

Accessories



N/PE modules



Lateral modules



Vibration & shock kits

Note:
You will find a detailed range of accessories with the basic units.

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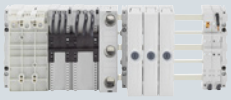
Quick selection guide





		40 mm busbar system	60 mm compact busbar system	60 mm busbar system flat copper profile	60 mm busbar system TT profile
Busbars					
Busbar center-to-center spacing		40 mm	60 mm	60 mm	60 mm
Flat copper profiles	5 mm	12 × 5 mm 15 × 5 mm	12 × 5 mm	12 × 5 mm 15 × 5 mm 20 × 5 mm 25 × 5 mm 30 × 5 mm	–
	10 mm	12 × 10 mm 15 × 10 mm	12 × 10 mm	20 × 10 mm 30 × 10 mm	–
TT special profile		–	–	–	2400 × 30 × 40 mm
Rated values					
Rated current I_e	IEC	200 ... 360 A	200 ... 360 A	200 ... 900 A	1020 ... 1600 A
	UL 508	–	300 A	630 A	1400 A
Rated voltage U_e	IEC	690 V AC	690 V AC	690 V AC	690 V AC
	UL 508	–	600 V AC	600 V AC	600 V AC
Standards					
IEC		■	■	■	■
UL 508		■	■	■	■
Connection modules and terminals for					
Circular conductors	IEC	–	Cu 1.5 ... 150 mm²	Cu 1.5 ... 300 mm² Al 95 ... 300 mm²	Cu 16 ... 300 mm²
	UL 508	–	Cu AWG 2 ... MCM 300	Cu AWG 16 ... MCM 600 Al AWG 3	Cu AWG 4 ... MCM 600
Laminated copper		–	Cu lam. 15 ... 20 × 5 ... 10 mm	Cu lam. 3 × 20 × 1 ...10 × 32 × 1 mm	Cu lam. 2 × 40 × 10 mm
Cable lugs		–	–	Max. 240 mm²	–
Built-in components for					
NEOZED bus-mounting fuse bases		–	■	■	■
DIAZED bus-mounting fuse bases		–	–	■	■
Bus-mounting fuse holders for cylindrical fuses 10 × 38 mm		–	–	■	■
Class CC bus-mounting fuse holders		–	–	■	■
Class J bus-mounting fuse holders		–	–	■	■
NEOZED bus-mounting switch disconnectors				■	■
Device adapters for					
Universal application 3P / 5P		–	■ / ■	■ / ■	■ / ■
Molded case circuit breakers		–	■	■	■
Switch disconnectors		–	–	■	■
Fuse switch disconnectors		–	–	■	■
SIRIUS 3RM1 motor starters		–	■	–	–
SIRIUS load feeders		–	–	■	■
3RM193 fuse module		–	■	–	–
5SY miniature circuit breakers		–	■	–	–
More information					
Catalog LV 10 – 10/2020		See page 13/6	See page 13/7	See page 13/12	See page 13/14

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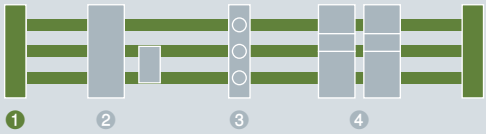
❶ Basic assemblies

For 40 mm 8US busbar system up to 400 A



						Busbar supports	
					No. of poles	3P	5P
							
Flat copper profiles				**Rated voltage U_e**	**Standard**	**Connection**	**Connection**
12 × 5 mm	**15 × 5 mm**	**12 × 10 mm**	**15 × 10 mm**	**IEC**		**L1 – L3**	**L1 – L3 + N + PE/N**
Interior mounting							
■	■	■	■	690 V AC	IEC	8US1903-3AB00 [1]	–
■	–	■	–	690 V AC	IEC	–	8US1903-5AA00

[1] One package contains 2 busbar supports including inlay parts for bar thickness 5 mm and lateral finger-safe covers.

Suitable accessories

				3P	5P
Flat copper profile					
	**Surface**	**Length**	**Size**	**Article No.**	**Article No.**
	Bare	2400 mm	12 × 5 mm	8WC5123	8WC5123
			15 × 5 mm	8WC5121	–
Cover profiles for busbars					
	**Material**	**Length**	**Size**	**Article No.**	**Article No.**
	Plastic profile	1000 mm	12 × 5 mm	8US1922-2CA00	8US1922-2CA00
			15 × 5 mm	8US1922-2AA00	–

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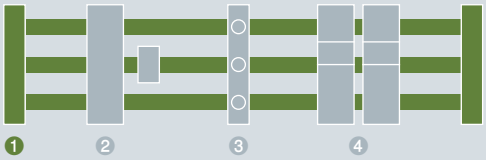
❶ Basic assemblies

For 8US compact busbar system up to 360 A (3P) or 200 A (5P)



								Busbar supports [1]
							No. of poles	3P / 5P
								
Flat copper profiles		Rated voltage U_e		Short-circuit current rating SCCR		Standard	Dimensions	Min. order quantity	Connection
12 × 5 mm	12 × 10 mm	IEC	UL 508	3-pole	5-pole				L1 – L3 + N + PE/N
Interior mounting									
■	■	690 V AC	–	54 kA	32 kA	IEC	12 × 160 × 45 mm	10 units	8US1923-5CA02
		–	600 V AC	18 kA	–	UL 508	12 × 160 × 45 mm	10 units	8US1923-5CA02

[1] Including end cover

Suitable accessories

Flat copper profiles



Surface	Length	Size	Article No.
Bare	2400 mm	12 × 5 mm	8WC5123

UL spacers for busbar supports



Dimensions	Minimum order quantity	Height	Article No.
12 × 160 × 18 mm	10 units	18 mm	8US1922-1CA02

Stabilizing modules

- Only for 12 × 5 mm busbars
- For protecting the N and PE busbars against bending

Dimensions	Minimum order quantity	Article No.
2 × 160 × 47 mm	10 units	8US1928-5CA02

Cover profiles



Dimensions	Minimum order quantity	Article No.
700 × 160 × 63 mm	2 units	8US1922-2CB02

Holders for 8US1922-2CB02 cover profile



Dimensions	Minimum order quantity	Article No.
5 × 156 × 55 mm	10 units	8US1922-2CA02

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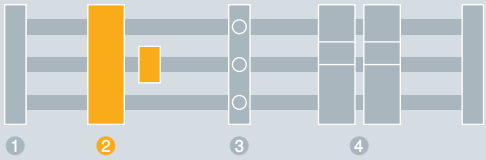
❷ Infeeds and connection methods

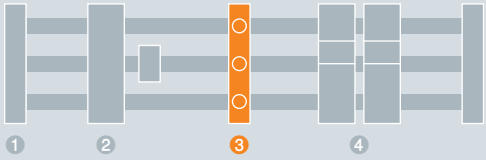
For 8US compact busbar system up to 360 A (3P) or 200 A (5P)



Conductor cross-section	Rated current I_e		Rated voltage U_e		Rated peak with-stand current	Standard	Minimum order quantity	Dimensions
	IEC	UL 508	IEC	UL 508	IEC I_{pk} Max.			
Spring terminal								
1.5 ... 16 mm²	63 A	48 A	690 V AC	600 V AC	10 kA	IEC, UL 508	6 units	20×160×91 mm
Connecting terminal								
6 ... 50 mm²	175 A	175 A	690 V AC	600 V AC	40.5 kA	IEC, UL 508	1 unit	54×160×115 mm
10 ... 120 mm²	250 A	200 A	690 V AC	600 V AC	35.4 kA	IEC, UL 508	1 unit	90×160×80 mm
	–	–	690 V AC	600 V AC	35.1 kA	IEC, UL 508	1 unit	30×160×80 mm
					35.4 kA	IEC, UL 508	1 unit	30×160×80 mm
35 ... 150 mm²	275 A	285 A	690 V AC	600 V AC	45.9 kA	IEC, UL 508	1 unit	90×160×115 mm

❸ Built-in components

For 8US compact busbar systems up to 360 A (3P)



Number of poles
Mounting width

Conductor cross-section	For flat copper profiles		Rated current I_e	Rated voltage U_e	Standard	Minimum order quantity
	12×5 mm	12×10 mm	IEC	IEC		
Box terminals						
Rigid 1.5 ... 10 mm² Flexible 1.5 ... 25 mm²	■	■	63 A	400 V AC	IEC	6 units

See NEOZED screw caps, NEOZED adapter sleeves and NEOZED fuse links, from page 7/1

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For 12 × 5 mm and 12 × 10 mm flat copper profiles			
For 3-pole system (up to 360 A)	For 5-pole system (up to 200 A)		
			
Connection modules	**Connection modules**	**Connection modules**	**Connection modules**
3P	**3P**	**N**	**PE**
8US1921-1BA02	–	–	–
8US1921-1CB02	–	–	–
–	8US1921-1CD02	–	–
–	–	8US1921-1CE02	–
–	–	–	8US1921-1CF02
8US1921-1CC02	–	–	–

NEOZED bus-mounting bases Size D02
3P
2 MW

With touch protection
5SG6208

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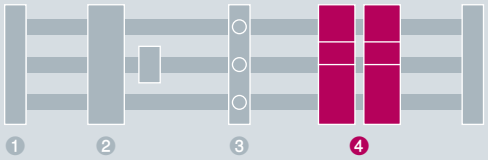
❹ Device adapters

For 8US compact busbar system up to 360 A (3P) or 200 A (5P)



For 3-pole system
For universal applications



Rated current I_e		Rated voltage U_e		Standard	For flat copper profiles		Dimensions	Min. order quantity	
IEC	UL 508	IEC	UL 508		12 × 5 mm	12 × 10 mm			
16 A	–	690 V AC	–	IEC	–	–	160 × 22.5 × 122 mm	4 units	–
							200 × 22.5 × 122 mm	5 units	–
25 A	–	690 V AC	–	IEC	■	–	160 × 22.5 × 41.5 mm	5 units	–
							185 × 22.5 × 23.5 mm	5 units	–
							200 × 22.5 × 41.5 mm	5 units	–
32 A	–	690 V AC	–	IEC	■	–	160 × 18 × 73 mm	12 units	–
	25 A	690 V AC	600 V AC	IEC, UL 508	■	■	160 × 45 × 63 mm	4 units	8US1651-5DK02
63 A	–	690 V AC	–	IEC	■	–	160 × 18 × 73 mm	12 units	–
							160 × 18 × 82 mm	12 units	–
	65 A	690 V AC	600 V AC	IEC, UL 508	■	■	160 × 54 × 63 mm	4 units	8US1661-5FK02
144 A	–	690 V AC	–	IEC	■	■	160 × 77 × 35 mm	1 unit	–

Suitable accessories

N modules



Rated voltage U_e	Connecting terminal	Dimensions	Minimum order quantity	Article No.
690 V AC	1.5 ... 16 mm²	9 × 160 × 114 mm	12 units	–

PE modules



Rated voltage U_e	Connecting terminal	Dimensions	Minimum order quantity	Article No.
690 V AC	1.5 ... 16 mm²	9 × 160 × 114 mm	12 units	–

Support modules



Dimensions	Minimum order quantity	Article No.
18 × 160 × 54 mm	6 units	8US1620-5AK02

Lateral modules



Dimensions	Minimum order quantity	Article No.
9 × 160 × 47	12 units	8US1998-2BH02

Set of module connectors



Purpose	Package	Article No.
For connecting adapters	1 pack = 100 units	–

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For 3-pole system For 3VA10/11 molded case circuit breakers	For 5-pole system For universal applications	For SIRIUS 3RM1 motor starters and for relays	For 3RM193 fuse module		For 5SY miniature circuit breakers
					
With latching function	Adapters, 1-pole	With fuse module and DIN mounting rail		With DIN mounting rail	Adapters, 1-pole
–	–	8US1615-5CK10	–	–	–
–	–	8US1215-5CS10	–	–	–
–	–	–	8US1616-0AK02	–	–
–	–	–	–	8US1716-0RK00	–
–	–	–	8US1216-0AS00	–	–
–	8US1621-2NJ02	–	–	–	–
–	–	–	–	–	–
–	8US1621-2FK02	–	–	–	–
–	–	–	–	–	8US1624-2FK02
–	–	–	–	–	–
8US1613-4AU01	–	–	–	–	–

Article No.	Article No.	Article No.	Article No.	Article No.	Article No.
–	8US1600-0RE02	8US1600-0RE02	8US1600-0RE02	8US1600-0RE02	8US1600-0RE02

Article No.	Article No.	Article No.	Article No.	Article No.	Article No.
–	8US1600-0RF02	8US1600-0RF02	8US1600-0RF02	8US1600-0RF02	8US1600-0RF02

Article No.	Article No.	Article No.	Article No.	Article No.	Article No.
8US1620-5AK02	8US1620-5AK02	8US1620-5AK02	8US1620-5AK02	8US1620-5AK02	8US1620-5AK02

Article No.	Article No.	Article No.	Article No.	Article No.	Article No.
8US1998-2BH02	8US1998-2BH02	8US1998-2BH02	8US1998-2BH02	8US1998-2BH02	8US1998-2BH02

Article No.	Article No.	Article No.	Article No.	Article No.	Article No.
–	8US1998-1AA02	8US1998-1AA02	8US1998-1AA02	8US1998-1AA02	8US1998-1AA02

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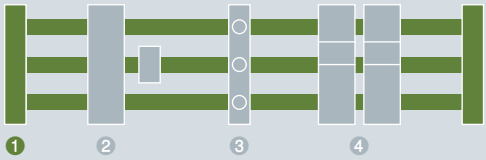
❶ Basic assemblies

Up to 630 A



Flat copper profiles							Standard
12 × 5 mm	15 × 5 mm	20 × 5 mm	25 × 5 mm	30 × 5 mm	20 × 10 mm	30 × 10 mm	
Interior mounting							
■	■	■	■	■	■	■	IEC 61439-1
–	–	■	–	–	■	■	IEC 61439-1, UL 508 [1]
■	■	■	■	■	■	■	IEC 61439-1
■	–	■	–	■	■	■	IEC 61439-1
■	■	■	■	■	■	■	IEC 61439-1, UL 508
Exterior mounting							
■	■	■	■	■	■	■	IEC 61439-1
■	■	■	■	■	■	■	IEC 61439-1

[1] Only with base plate 8US1922-2UA01

Suitable accessories

Flat copper profile



Surface	Length	Size	Rated current	Cross-section	Standard	Article No.
Bare	1100 mm	25 × 5 mm	400 A	125 mm²	EN 12167	8WC5031-1AA00
		30 × 5 mm	447 A	150 mm²	EN 12167	8WC5033-1AA00
	2400 mm	12 × 5 mm	200 A	60 mm²	EN 12167	8WC5123
		15 × 5 mm	250 A	75 mm²	EN 12167	8WC5121
		20 × 5 mm	320 A	100 mm²	EN 12167	8WC5126
		25 × 5 mm	400 A	125 mm²	EN 12167	8WC5131
		30 × 5 mm	447 A	150 mm²	EN 12167	8WC5133
		20 × 10 mm	520 A	200 mm²	EN 12167	8WC5128
		30 × 10 mm	630 A	300 mm²	EN 12167	8WC5134
Tin-plated	2000 mm	12 × 5 mm	200 A	60 mm²	EN 12167	8WC5051
		15 × 5 mm	250 A	75 mm²	EN 12167	8WC5052
		20 × 5 mm	320 A	100 mm²	EN 12167	8WC5053
		25 × 5 mm	400 A	125 mm²	EN 12167	8WC5054
		30 × 5 mm	447 A	150 mm²	EN 12167	8WC5055
		20 × 10 mm	520 A	200 mm²	EN 12167	8WC5063
		30 × 10 mm	630 A	300 mm²	EN 12167	8WC5065

End covers

- For covering free busbar ends

For connection	For busbar support	Standard	Article No.
L1–L3	8US1923-2AA01, 8US1923-3AA01, 8US1923-3UA01	UL 508	8US1922-1AC00

Cover profiles for busbars



Length	Width	Depth	Flat copper profile size	Standard	Article No.
1000 mm	15 mm	10 mm	12 × 5 mm	UL 508	8US1922-2CA00
	40 mm	9 mm	15, 20, 25, 30 × 5 mm	UL 508	8US1922-2AA00
	40 mm	14 mm	12, 15, 20, 25, 30 × 10 mm	UL 508	8US1922-2BA00

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	End and intermediate holders			N/PE busbar supports
No. of poles	3P	2P	4P	1P
				
	Connection L1–L3	**Connection L1–L3 + PE/N**	**Connection L1–L3 + PE/N**	**Connection PE/N**
8US1923-3AA01	–	–	–	–
8US1923-3UA01	–	–	–	–
–	–	8US1923-4AA00	–	–
–	–	–	5SH3540	–
–	–	–	8US1923-1AA01	–
8US1923-2AA01	–	–	–	–
–	8US1923-5AA00	–	–	–

Blanking covers



Length	Height	Depth	Standard	Article No.
700 mm	195 mm	63 mm	UL 508	8US1922-2EB00

Supports for blanking covers



Depth	Standard	Article No.
32 mm	UL 508	8US1922-2EA00
107 mm	UL 508	8US1922-2EA01

Base plates

Version	Length	Width	Standard	Article No.
For 3-pole system	1100 mm	240 mm	UL 508	8US1922-2UA01

Connecting piece for flat copper profiles





Length	For flat copper profiles	Article No.
40 mm	20 × 5 mm, 25 × 5 mm, 30 × 5 mm, 20 × 10 mm, 25 × 10 mm, 30 × 10 mm	8US1921-2BE00
55 mm	12 × 5 mm, 15 × 5 mm, 20 × 5 mm 12 × 10 mm, 15 × 10 mm, 20 × 10 mm	8US1921-2BF00

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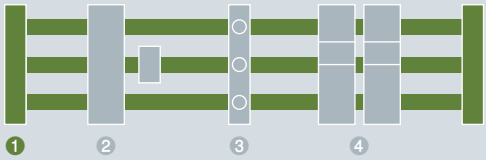
❶ Basic assemblies

Up to 1600 A



No. of poles	Busbar supports 3P
	

Copper profile	Rated current I_e		Rated voltage U_e		Short-circuit current rating SCCR		Standard	Connection
	IEC	UL 508	IEC	UL 508	IEC	UL 508		L1–L3
Interior mounting								
TT special profile	1600 A	1400 A	690 V AC	600 V AC	90 kA	100 kA	IEC, UL 508	8US1943-3AA00

1 pack = 2 busbar supports + finger-safe end covers

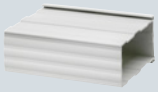
Suitable accessories

TT special copper profile



Surface	Length	Rated current	Rated voltage	Cross-section	Article No.
Tin-plated	2400 mm	1600 A	690 V AC	720 mm²	8US1948-2AA00

Cover profile for TT special copper profile



Length	Article No.
1000 mm	8US1922-2DA00

Blanking covers



Length	Height	Depth	Standard	Article No.
700 mm	195 mm	63 mm	UL 508	8US1922-2EB00

Supports for blanking covers



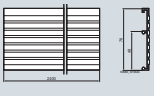
Depth	Standard	Article No.
32 mm	UL 508	8US1922-2EA00
107 mm	UL 508	8US1922-2EA01

Connecting piece for TT special profile



Article No.
8US1941-2BF01

Partitions, closed



- For additional lateral touch protection at the top / bottom

Length	Depth	Article No.
2400 mm	76 mm	8US1922-1JA00

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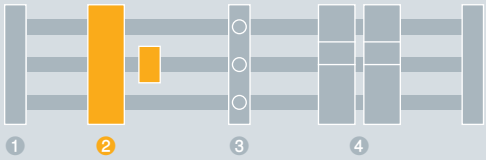
❷ Infeeds and connection methods

Up to 1600 A



Conductor cross-section, circular conductor		Conductor cross-section, laminated copper	Rated current I_e		Rated voltage U_e		Standard	Length
IEC	UL 508		IEC	UL 508	IEC	UL 508		
With cover								
Cu 1.5 ... 16 mm²	Cu AWG 16 ... 4	Cu lam. 8 × 6 × 0.5 mm	63 A	48 A	690 V AC	600 V AC	IEC, UL 508	200 mm
Cu 6 ... 50 mm²	Cu AWG 10 ... 2	–	175 A	175 A	690 V AC	600 V AC	IEC, UL 508	200 mm
Cu 25 ... 120 mm²	Cu AWG 6 ... MCM 250	–	250 A	250 A	690 V AC	600 V AC	IEC, UL 508	200 mm
Cu 95 ... 300 mm² Al 120 ... 240 mm²	AWG 3/0 ... MCM 600	–	500 A	420 A	690 V AC	–	IEC, UL 508	200 mm
Without cover								
Cu 95 ... 300 mm²	AWG 3/0 ... MCM 600	–	500 A	420 A	690 V AC	600 V AC	IEC, UL 508	184 mm
–	–	Cu lam. 3 × 20 × 1 ... 10 × 32 × 1 mm	550 A	420 A	690 V AC	600 V AC	IEC, UL 508	184 mm
For 4th pole (PE/N) [2]								
Cu 1.5 ... 16 mm²	–	–	–	–	690 V AC	600 V AC	IEC, UL 508	242 mm

[1] Shown without cover
[2] For mounting on device adapter or device holder

Suitable accessories

Cover for connection module



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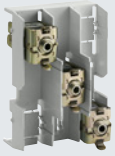
	Connection modules For 5 mm and 10 mm flat copper profiles		For 5 mm and 10 mm flat copper profiles and TT special profile		For laminated copper
					
Width	**Connection modules** **3P**	**Connection modules** **3P**	**Connection modules** **3P**	**Connection modules** **PE/N**	**Connection modules** **3P**
20 mm	5SH3538	–	–	–	–
54 mm	–	–	8US1921-1BA00	–	–
81 mm	–	–	8US1921-1AA00	–	–
135 mm	–	5SH3535 [1]	–	–	–
153 mm	–	–	–	–	8US1941-2AA03
153 mm	–	–	–	–	8US1941-2AA04
18 mm	–	–	–	8US1200-0AA00	–
	Article No.	**Article No.**	**Article No.**	**Article No.**	**Article No.**
	–	–	–	–	8US1922-1GC00

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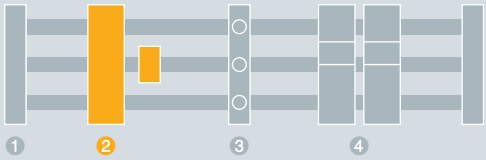
❷ Infeeds and connection methods

Up to 1600 A



Conductor cross-section, circular conductor		Conductor cross-section, laminated copper	Rated current I_e		Rated voltage U_e		Standard	Minimum order quantity
IEC	UL 508		IEC	UL 508	IEC	UL 508		
Cu 1.5 ... 16 mm²	AWG 16 .. 6	Cu lam. 8 × 6 × 0.5 mm	65 A	55 A	690 V AC	600 V AC	IEC, UL 508	15 units
								100 units
Cu 4 ... 35 mm²	AWG 10 ... 2	Cu lam. 3 × 9 × 0.8 mm, Cu lam. 6 × 9 × 0.8 mm	115 A	115 A	690 V AC	600 V AC	IEC, UL 508	15 units
								50 units
Cu 16 ... 70 mm²	AWG 4 ... 2/0	Cu lam. 2 × 9 × 0.8 mm, Cu lam. 6 × 9 × 0.8 mm, Cu lam. 6 × 13 × 0.5 mm	175 A	175 A	690 V AC	600 V AC	IEC, UL 508	15 units
								50 units
Cu 16 ... 120 mm²	AWG 4 ... MCM 250	Cu lam. 4 × 15.5 × 0.8 mm, Cu lam. 6 × 15.5 × 0.8 mm, Cu lam. 10 × 15.5 × 0.5 mm	250 A	255 A	690 V AC	600 V AC	IEC, UL 508	15 units
								50 units

Suitable accessories

Terminal covers for circular conductors



- Fixing to busbar

Length	Width
200 mm	84 mm

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Terminals

For 12 × 5 mm, 15 × 5 mm, 20 × 5 mm, 25 × 5 mm and 30 × 5 mm flat copper profiles				For 12 × 10 mm, 15 × 10 mm, 20 × 10 mm, 25 × 10 mm and 30 × 10 mm flat copper profiles and TT special profile			
							
8US1921-2AA01	–	–	–	8US1921-2BA01	–	–	–
8US1921-2AA00	–	–	–	8US1921-2BA00	–	–	–
–	8US1921-2AB01	–	–	–	8US1921-2BB01	–	–
–	8US1921-2AB00	–	–	–	8US1921-2BB00	–	–
–	–	8US1921-2AD01	–	–	–	8US1921-2BD01	–
–	–	8US1921-2AD00	–	–	–	8US1921-2BD00	–
–	–	–	8US1921-2AC01	–	–	–	8US1921-2BC01
–	–	–	8US1921-2AC00	–	–	–	8US1921-2BC00
Article No.	**Article No.**	**Article No.**	**Article No.**	**Article No.**	**Article No.**	**Article No.**	**Article No.**
8US1922-1GA00	8US1922-1GA00	8US1922-1GA00	8US1922-1GA00	8US1922-1GA00	8US1922-1GA00	8US1922-1GA00	8US1922-1GA00

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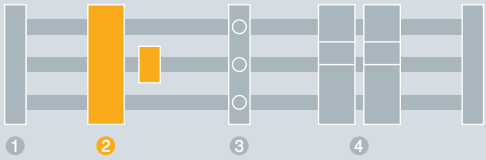
❷ Infeeds and connection methods

Up to 1600 A



Conductor cross-section, circular conductor		Conductor cross-section, laminated copper	Conductor cross-section, cable lugs	Rated current I_e		Rated voltage U_e		Standard
IEC	UL 508			IEC	UL 508	IEC	UL 508	
Cu 95 ... 185 mm² Al 95 ... 185 mm²	AWG 3/0 ... MCM 350	–	–	300 A	310 A	690 V AC	600 V AC	IEC, UL 508
Cu 95 ... 300 mm² Al 120 ... 140 mm²	AWG 3/0 ... MCM 600	–	–	500 A	420 A	690 V AC	600 V AC	IEC, UL 508
–	–	Cu lam. 3 × 20 × 1 ... 10 × 24 × 1 mm	–	500 A	420 A	690 V AC	600 V AC	IEC, UL 508
		Cu lam. 2 × 40 × 10 mm	–	1250 A	–	690 V AC	–	IEC
		–	Max. 240 mm²	630 A	–	690 V AC	–	IEC

Suitable accessories

Terminal covers for circular conductors



- Fixing to busbar

Length	Width
200 mm	270 mm

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	Terminals				
	For 20 × 5 mm, 25 × 5 mm and 30 × 5 mm flat copper profiles		For 20 × 10 mm, 25 × 10 mm and 30 × 10 mm flat copper profiles		For 40 × 25 mm and 30 × 10 mm flat copper profiles and TT special profile
					
Fixing					
–	8US1941-2AA01	–	–	–	–
–	8US1941-2AA02	–	–	–	–
M16 threaded pin, size 8 Allen key	–	8US1941-2BB00	–	8US1941-2BB00	–
M16 threaded pin, size 8 Allen key	–	–	–	–	8US1941-2BA00
M16 threaded pin, size 8 Allen key, M10 hexagon bolt, width across flats 17	–	–	8US1941-2AC00	–	–
	Article No.	**Article No.**	**Article No.**	**Article No.**	**Article No.**
	8US1922-1GA02	–	–	–	–

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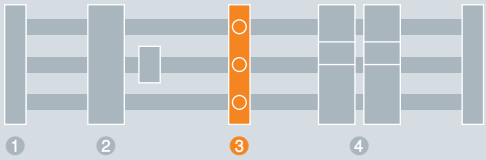
❸ Built-in components

Up to 630 A



						NEOZED bus-mounting fuse bases Size D02		
						Mounting width	1.5 MW	1.5 MW	2 MW
									
For flat copper profiles	Rated current I_e IEC	Rated current I_e UL 508	Rated voltage U_e IEC AC	Rated voltage U_e IEC DC	Rated voltage U_e UL	Standard	Standard	With touch protection	
Box terminals									
5 mm and 10 mm	25 A	–	500 V AC	–	–	IEC	–	–	–
	63 A	–	400 V AC	250 V DC	–	IEC	5SG6202	5SG6206	5SG6207
			690 V AC	–	–	IEC	–	–	–
	–	30 A	690 V AC	–	600 V AC	IEC, cULus, CSA	–	–	–
			–	–	600 V AC	UL, CSA	–	–	–
		100 A	–	–	600 V AC	UL, cULus	–	–	–
		200 A	–	–	600 V AC	UL, cULus	–	–	–
		400 A	–	–	600 V AC	UL, cULus	–	–	–

Suitable accessories

NEOZED SR60 covers for standard version

	Size	Version	Mounting width	Article No.	Article No.	Article No.
	D02	Standard	1.5 MW	5SH5241	–	–
		Extra wide	2 MW	5SH5242	–	–
		With double width	3 MW	5SH5243	–	–

DIAZED SR60 covers for standard version

	Size	Mounting width	Article No.	Article No.	Article No.
	DII	2.3 MW	–	–	–
	DIII	3.2 MW	–	–	–

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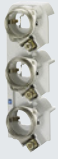
DIAZED bus-mounting fuse bases		Bus-mounting fuse holders				
Size DII	Size DIII	Cylindrical fuses 10 × 38 mm	Class CC	Class J		
2.3 MW	3.2 MW	1.5 MW	1.5 MW	106 mm	184 mm	256 mm
						
Standard	With touch protection			3P	3P	3P
5SF6015	5SF6020	–	–	–	–	–
–	–	–	–	–	–	–
5SF6215	5SF6220	–	–	–	–	–
–	–	3NW7431	–	–	–	–
–	–	–	3NW7431-0HG	–	–	–
–	–	–	–	3NW7431-6HG	–	–
–	–	–	–	–	3NW7431-7HG	–
–	–	–	–	–	–	3NW7431-8HG
Article No.	Article No.	Article No.	Article No.	Article No.	Article No.	Article No.
–	–	–	–	–	–	–
–	–	–	–	–	–	–
–	–	–	–	–	–	–
Article No.	Article No.	Article No.	Article No.	Article No.	Article No.	Article No.
5SH2042	–	–	–	–	–	–
5SH2242	–	–	–	–	–	–

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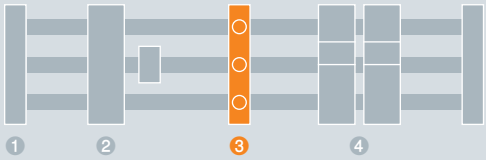
❸ Built-in components

Up to 630 A



							NEOZED bus-mounting switch disconnectors Size D02		
						Mounting width	1.5 MW	1.5 MW	1.5 MW
									
For flat copper profiles	**Rated current I_e**		**Rated voltage U_e**			**Standard**	**Without LED signal detector**		**With LED signal detector**
	IEC	**UL 508**	**IEC AC**	**IEC DC**	**UL 508**				
Box terminals									
5 mm, 10 mm	63 A	–	400 V AC	–	–	IEC	5SG7234-1 [2]	–	5SG7234-2 [2]
				110 V DC	–	IEC	–	5SG7230 [1]	–

[1] From 35 A current load use 5SH5526 lateral module
[2] From 35 A current load use 5SH5533 lateral module

Suitable accessories

Auxiliary switches					
	• For signaling the switching state for bus-mounting switch disconnectors				
	Contacts	**Mounting width**	**Article No.**	**Article No.**	**Article No.**
	1 CO contact	0.5 MW	–	5SH5525	–
Lateral modules					
	• For greater heat dissipation for loads from 35 A				
	Mounting width		**Article No.**	**Article No.**	**Article No.**
	0.5 MW		5SH5533	5SH5526	5SH5533
Reducers					
	• For NEOZED D01 fuse links in SR60 bus-mounting switch disconnectors				
			Article No.	**Article No.**	**Article No.**
			–	5SH5527	–

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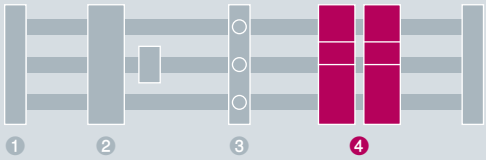
❹ Device adapters and device holders

For universal application up to 1600 A



Rated current I_e		Rated voltage U_e		Standard	For copper profiles	Adapters		Connecting cable		
IEC	UL 508	IEC	UL 508			Width	Length	Cross-section	Max. temperature	Length
25 A	25 A	690 V AC	600 V AC	IEC, UL 508	5 mm, 10 mm, TT profile	45 mm	200 mm	AWG 12	150 °C	99 mm
										167 mm
							260 mm	AWG 12	150 °C	99 mm
										167 mm
32 A	32 A	690 V AC	600 V AC	IEC, UL 508	5 mm, 10 mm, TT profile	45 mm	200 mm	AWG 10	105 °C	118 mm
									150 °C	99 mm
										167 mm
							260 mm	AWG 10	150 °C	99 mm
										167 mm
80 A	80 A	690 V AC	600 V AC	IEC, UL 508	5 mm, 10 mm, TT profile	54 mm	200 mm	AWG 4	150 °C	150 mm
							260 mm	AWG 4	150 °C	150 mm
						119 mm	260 mm	AWG 4	150 °C	150 mm
100 A	100 A	690 V AC	600 V AC	IEC, UL 508	5 mm, 10 mm, TT profile	72 mm	200 mm	AWG 4	105 °C	210 mm
–	–	–	–	–	5 mm, 10 mm, TT profile	45 mm	200 mm	–	–	–
								–	–	–
							260 mm	–	–	–

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Accessories

Lateral modules



- For extending device adapters and device holders of the same length

Length	Width
200 mm	9 mm

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Device adapters with connecting cables For contact with busbars						Device holders No electrical contact	
							
							For lateral mounting on device adapter
8US1251-5DS10	–	–	–	–	–	–	–
8US1251-5DS11	–	–	–	–	–	–	–
8US1251-5DT10	–	–	–	–	–	–	–
8US1251-5DT11	–	–	–	–	–	–	–
–	8US1211-1NS10	–	–	–	–	–	–
–	–	8US1251-5NS10	–	–	–	–	–
–	–	8US1251-5NS11	–	–	–	–	–
–	–	8US1251-5NT10	–	–	–	–	–
–	–	8US1251-5NT11	–	–	–	–	–
–	–	–	8US1261-5MS13	–	–	–	–
–	–	–	8US1261-6MT10	–	–	–	–
–	–	–	–	–	8US1211-6MT10	–	–
–	–	–	–	8US1211-4TR00	–	–	–
–	–	–	–	–	–	–	8US1250-1AA10
–	–	–	–	–	–	8US1250-5AS10	–
–	–	–	–	–	–	8US1250-5AT10	–
Article No.	Article No.	Article No.	Article No.	Article No.	Article No.	Article No.	Article No.
8US1998-2BJ10	8US1998-2BJ10	8US1998-2BJ10	8US1998-2BJ10	–	–	8US1998-2BJ10	–

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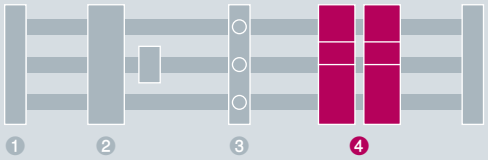
❹ Device adapters and device holders

For molded case circuit breakers and switch disconnectors up to 1600 A



Rated current I_e		Rated voltage U_e		Standard	For copper profile	Adapters		Connecting cable
IEC	UL 508	IEC	UL 508			Length	Width	
Screw terminals								
80 A	80 A	–	600 V AC	UL 508	5 mm, 10 mm, TT profile	200 mm	81 mm	AWG 4
125 A	125 A	690 V AC	600 V AC	IEC, UL 508	5 mm, 10 mm, TT profile	200 mm	90 mm	Cu laminated 6 × 9 × 0.8 mm
Busbar contact								
144 A	–	690 V AC	–	IEC	5 mm, 10 mm, TT profile	200 mm	76 mm	–
160 A	–	690 V AC	–	IEC	5 mm, 10 mm, TT profile	175 mm	108 mm	–
250 A	–	690 V AC	–	IEC	5 mm, 10 mm, TT profile	175 mm	108 mm	–
Tubular contacts								
150 A	150 A	690 V AC	600 V AC	IEC, UL 508	5 mm, 10 mm, TT profile	190 mm	105 mm	–
250 A	250 A	690 V AC	600 V AC	IEC, UL 508	5 mm, 10 mm, TT profile	190 mm	105 mm	–
						240 mm	105 mm	–
	–	690 V AC	–	IEC	5 mm, 10 mm, TT profile	270 mm	140 mm	–
400 A	400 A	690 V AC	600 V AC	IEC, UL 508	5 mm, 10 mm, TT profile	296 mm	140 mm	–
540 A	540 A	690 V AC	600 V AC	IEC, UL 508	5 mm, 10 mm, TT profile	296 mm	140 mm	–
580 A	–	690 V AC	–	IEC	5 mm, 10 mm, TT profile	325 mm	184 mm	–
590 A	600 A	690 V AC	600 V AC	IEC, UL 508	5 mm, 10 mm, TT profile	300 mm	140 mm	–
	–	690 V AC	–	IEC	5 mm, 10 mm, TT profile	300 mm	185 mm	–
M10 pin connector								
400 A	–	690 V AC	–	IEC	5 mm, 10 mm, TT profile	320 mm	184 mm	–
630 A	630 A	690 V AC	600 V AC	IEC, UL 508	5 mm, 10 mm, TT profile	320 mm	250 mm	–
	–	690 V AC	–	IEC	5 mm, 10 mm, TT profile	320 mm	184 mm	–
						320 mm	250 mm	–

[1] Observe the short-circuit strength of the busbar system: Short-circuit strength > 50 kA on request.
[2] Usable only for 3VL circuit breakers with line-side box terminals.
[3] Only for 3VL 250 A circuit breakers, for screw fixing with metric thread, for flat terminals.
[4] Without connecting cables. The connecting cable between adapter and device should be manufactured in accordance with the rated current as a round cable, e.g. H07V-R with cable lug, or as a flat conductor for an M10 pin connector.
[5] Without connecting cables. The connecting cable between adapter and device should be manufactured in accordance with the rated current as a round cable, e.g. H07V-R, bared at both ends for tunnel terminals.

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	Device adapter For molded case circuit breakers			For switch disconnectors	For fuse switch disconnectors
	3VA		3VL [1]	3KA and 3KL	3NP5
					
Device **Size / version**	**3-pole**	**4-pole**	**3-pole**	**3-pole**	**3-pole**
NGG, HGG, LGG	8US1240-5MA00	–	–	–	–
3VA10, 3VA11, 3VA51, NGG, HGG, LGG (connection at top)	8US1211-4SS00	–	–	–	–
3VA10, 3VA11, 3VA51 (connection at bottom)	8US1215-4SS00	–	–	–	–
3VA10 3VA11	8US1213-4AU01	–	–	–	–
3VL1 [2], 3VL2 [2]	–	–	8US1211-4SL01	–	–
3NP5060 (NH00)	–	–	–	–	8US1291-4SB00
3VL3 [3]	–	–	8US1211-4SL00	–	–
VL150X UL CG frame	–	–	8US1213-4AQ01	–	–
VL150 UL DG frame	–	–	8US1213-4AQ03	–	–
VL250 UL FG frame	–	–	8US1213-4AQ03	–	–
3VA12, 3VA20, 3VA21, 3VA22, 3VA52, 3VA61, 3VA62	8US1213-4AP03	–	–	–	–
3VA12, 3VA20, 3VA21, 3VA22	–	8US1313-4AH03	–	–	–
VL400 UL JG frame	–	–	8US1213-4AH00	–	–
VL400X UL LG frame	–	–	8US1213-4AH00	–	–
3VL5	–	–	8US1213-4AF00	–	–
3VA13, 3VA14, 3VA23, 3VA24, 3VA53, 3VA54, 3VA63, 3VA64	8US1213-4AH04	–	–	–	–
3VA13, 3VA14, 3VA23, 3VA24	–	8US1313-4AM04	–	–	–
3VL1 up to 3VL4 (also with RCD module) [2]	–	–	8US1210-4AF00 + 8US1927-4AF01	–	–
3NP52, 3NP53, 3NP54 [5]	–	–	–	–	8US1210-4AG00
3KA52, 3KA53, 3KL52, 3KL53	–	–	–	8US1210-4AF00 [4]	–
3KA55, 3KA57, 3KA58, 3KL55, 3KL57	–	–	–	8US1210-4AG00 [4]	–

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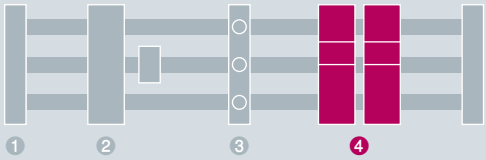
❹ Device adapters and device holders

For load feeders up to 1600 A



Rated current I_e		Rated voltage U_e			Standard	For copper profile	Adapters		Connecting cable		Device
IEC	UL 508	IEC	UL 508	U, s			Length	Width	Cross-section	Max. temperature	Size
Screw terminals											
25 A	25 A	690 V AC	600 V AC	–	IEC, UL 508	5 mm, 10 mm, TT profile	200 mm	45 mm	AWG 12	150 °C	S00
											S0
							260 mm	45 mm	AWG 12	150 °C	S00
32 A	32 A	690 V AC	600 V AC	–	IEC, UL 508	5 mm, 10 mm, TT profile	200 mm	45 mm	AWG 10	150 °C	S0
							260 mm	45 mm	AWG 10	150 °C	S0
		–	–	690 V AC	,	5 mm, 10 mm, TT profile	200 mm	45 mm	AWG 10	105 °C	S00 / S0
65 A	65 A	690 V AC	600 V AC	–	IEC, UL 508	5 mm, 10 mm, TT profile	260 mm	54 mm	AWG 4	150 °C	S2
								119 mm	AWG 4	150 °C	S2
80 A	80 A	690 V AC	600 V AC	–	IEC, UL 508	5 mm, 10 mm, TT profile	200 mm	54 mm	AWG 4	150 °C	S2
							215 mm	72 mm	AWG 4	150 °C	S3
Spring-loaded terminals											
25 A	25 A	690 V AC	600 V AC	–	IEC, UL 508	5 mm, 10 mm, TT profile	200 mm	45 mm	AWG 12	150 °C	S00
							260 mm	45 mm	AWG 12	150 °C	S00
32 A	32 A	690 V AC	600 V AC	–	IEC, UL 508	5 mm, 10 mm, TT profile	200 mm	45 mm	AWG 10	150 °C	S0
							260 mm	45 mm	AWG 10	150 °C	S0

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Suitable accessories

Vibration & shock kit S2



Purpose
For size 2 devices

Lateral modules



- For extending device adapters and device holders of the same length

Length	Width
200 mm	9 mm

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Device adapters for load feeders					
SIRIUS 3RV2/3RT2			SIRIUS 3RV1/3RT1	SIRIUS 3RA6	
Circuit breakers	Direct-on-line starters	Reversing starters	Circuit breakers	Direct-on-line starters	Reversing starters
					
8US1251-5DS10	8US1251-5DS10	8US1251-5DS10 + 8US1250-5AS10	–	–	–
8US1251-5DS10	–	–	–	–	–
–	8US1251-5DT10	–	–	–	–
8US1251-5NS10	–	–	–	–	–
8US1251-5NT10	8US1251-5NT10	8US1251-5NT10 + 8US1250-5AT10	–	–	–
–	–	–	–	8US1211-1NS10	8US1211-1NS10 + 8US1250-1AA10
–	8US1261-6MT10	–	–	–	–
–	–	8US1211-6MT10	–	–	–
8US1261-5MS13	–	–	–	–	–
–	–	–	8US1211-4TR00	–	–
8US1251-5DS11	–	–	–	–	–
8US1251-5DT11	8US1251-5DT11	8US1251-5DT11 + 8US1250-5AT10	–	–	–
8US1251-5NS11	–	–	–	–	–
8US1251-5NT11	8US1251-5NT11	8US1251-5NT11 + 8US1250-5AT10	–	–	–
Article No.	Article No.	Article No.	Article No.	Article No.	Article No.
8US1998-1DA10	8US1998-1DA10	8US1998-1DA10	–	–	–
Article No.	Article No.	Article No.	Article No.	Article No.	Article No.
8US1998-2BJ10	8US1998-2BJ10	8US1998-2BJ10	–	8US1998-2BJ10	8US1998-2BJ10

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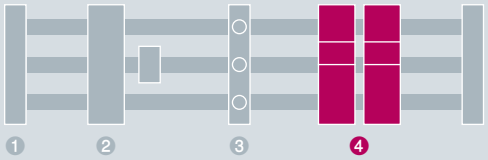
❹ Device adapters and device holders

Accessories for device adapters for SIRIUS 3RV2 / 3RT2 load feeders



Support rails (35 mm) made of plastic with fixing screws

	Length	For adapter width	Article No.
	45 mm	45 mm	8US1998-7CB45
	54 mm	54 mm	8US1998-7CB54
	72 mm	54 mm	8US1998-7CB72

Positioning pieces

- For pushing on
- Secures the adaptable devices on the adapter

	For adapter width	Article No.
	45 mm	8US1998-1DA45
	54 mm	8US1998-1DA54

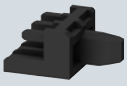
Connecting element



- For connecting busbar adapters and device holders

Article No.
8US1998-1AA10

Spacers



- Fix the feeder to the busbar adapter

Article No.
8US1998-1BA10

Vibration & shock kit

Article No.
8US1998-1CA10

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Quick selection guide, page 13/5

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Quick selection guide, page 13/5

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Always the right connection

Terminal blocks enable incoming and outgoing cables to be connected in switchboards and control systems in a convenient and space-saving manner. They can be used in transport systems and automation technology as well as in building installation technology.

We offer you the complete range of connection technology with screw terminals, spring-loaded terminals and In-Push-out (iPo) terminals, combination plug-in terminals, insulation displacement terminals and a wide variety of accessories. These can be combined with each other. This allows you to benefit from a high level of flexibility as well as simplified configuration.

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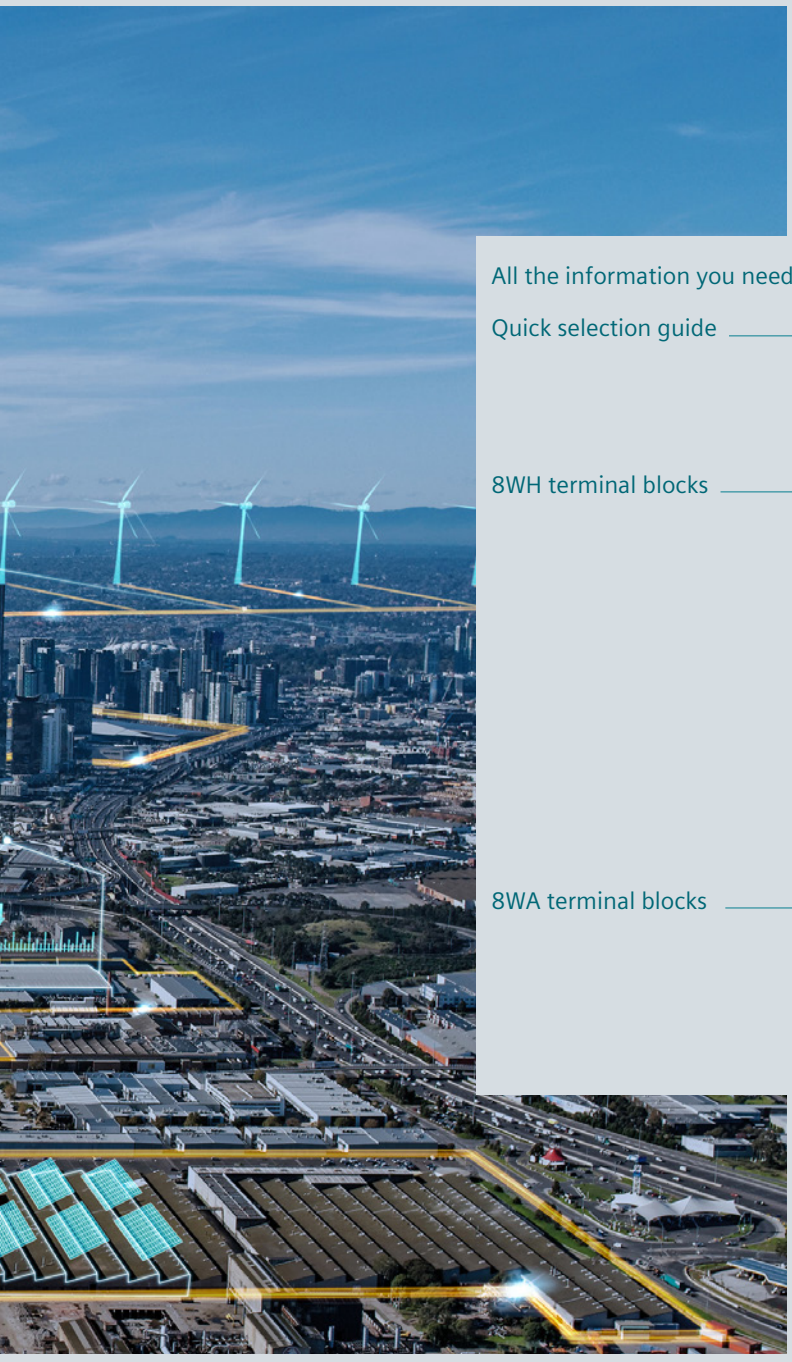
Terminal Blocks



All the information you need 14/2

Quick selection guide 14/4

8WH terminal blocks 14/4

8WA terminal blocks 14/6

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8WH2 spring-loaded terminals 14/24

8WH5 combination plug-in terminals 14/36

8WH3 insulation displacement terminals 14/40

8WH screw terminals 14/44

Accessories for 8WH terminal blocks 14/57

8WA terminal blocks 14/62

8WA1 screw terminals 14/62

8WA2 spring-loaded terminals 14/76

Accessories for 8WA terminal blocks 14/78

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A multitude of additional information ...

Information + ordering

All the important things at a glance

Information to get you started

For information about terminal blocks, please visit our website
www.siemens.com/distribution-components

Contact persons in your region

We are there when you need us

You can find your local contacts at
www.siemens.com/lowvoltage/contact

Your product in detail

The relevant tender specifications can be found at
www.siemens.com/lowvoltage/tenderspecifications

Use our conversion tool for quick and easy conversion to Siemens products www.siemens.com/conversion-tool

Our video range

Siemens YouTube channel

- Siemens ALPHA FIX terminal blocks – 8WH3 insulation displacement terminals (IDC)
  bit.ly/2Y3JCVq
- Siemens ALPHA FIX terminal blocks – 8WH2 terminal with spring-loaded-connection
  bit.ly/2kKVz0D

Everything you need for your order

Refer to the Industry Mall for an overview of your products

- Terminal blocks sie.ag/2kW8ZXo

Direct forwarding to the individual products in the Industry Mall by clicking on the Article No. in the catalog or by entering this web address incl. Article No.
www.siemens.com/product?Article No.

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… can be found in our online services

Commissioning + operation

Your product in detail

The Siemens Industry Online Support portal provides detailed technical information
www.siemens.com/lowvoltage/product-support

- Operating instructions
- Certificates

Engineering data for CAD or CAE systems are available in the CAx Download Manager at
www.siemens.com/lowvoltage/cax

The fast track to the experts

Competent expert advice on technical questions with a wide range of demand-optimized services for all our products and systems.

Assistance with technical queries is provided at
www.siemens.com/lowvoltage/support-request

We offer a comprehensive portfolio of services.
You can find your local contacts at
www.siemens.com/lowvoltage/contact

You can find further information on services at
www.siemens.com/service-catalog

Technical overview – Terminal blocks

The fast way to get you to our online services

This page provides you with comprehensive information and links on terminal blocks
www.siemens.com/lowvoltage/product-support (109769088)

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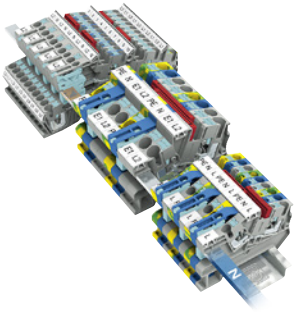
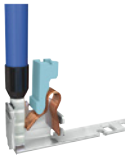
8WH terminal blocks



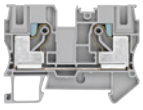
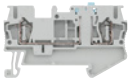
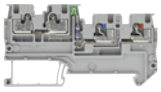
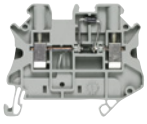


8WH6 iPo plug-in terminals





8WH6 iPo installation terminals

Through-type terminals	Through-type terminals	2.5 ... 150 mm² See page 14/8	2.5 ... 35 mm² See page 14/18
	Two-tier terminals	2.5 ... 4 mm² See page 14/11	–
	Three-tier terminals	–	–
	Four-tier motor terminals	–	–
Isolating terminals	Isolating and isolating blade terminals	2.5 ... 4 mm² See page 14/12	–
	Two-tier isolating terminals	–	–
	N conductor isolating terminals	–	2.5 ... 35 mm² See page 14/20
	Measuring transformer isolating terminals	–	–
Initiator/actuator terminals	Initiator terminals	1.5 mm² See page 14/16	–
	Actuator terminals	1.5 mm² See page 14/16	–
	Feeder terminals	2.5 mm² See page 14/15	–
Function terminals	Fuse terminals	4 mm² See page 14/14	–
	Three-tier terminals	–	2.5 mm² See page 14/22
	Three-tier isolating terminals	–	2.5 mm² See page 14/23
	Diode terminals	–	–
	Two-tier diode terminals	–	–
	Shield terminals	–	–
	Further information	From page 14/8	From page 14/18

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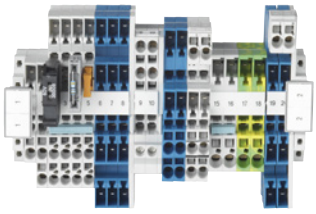
8WH2 spring-loaded terminals





8WH5 combination plug-in terminals





8WH3 insulation displacement terminals





8WH1 screw terminals

1.5 ... 35 mm²	See page 14/24	2.5 mm²	See page 14/36	1.5 ... 2.5 mm²	See page 14/40	2.5 ... 240 mm²	See page 14/44
1.5 ... 4 mm²	See page 14/27	–		1.5 mm²	See page 14/40	2.5 ... 4 mm²	See page 14/47
2.5 mm²	See page 14/28	–		–		–	
2.5 ... 4 mm²	See page 14/29	–		–		–	
2.5 ... 4 mm²	See page 14/30	–		1.5 ... 2.5 mm²	See page 14/40	4 ... 6 mm²	See page 14/48
–		–		–		4 mm²	See page 14/50
–		–		–		–	
–		–		–		6 mm²	See page 14/51
–		–		–		–	
–		–		–		–	
–		–		–		–	
4 mm²	See page 14/32	–		–		4 ... 6 mm²	See page 14/52
–		–		–		–	
–		–		–		–	
2.5 mm²	See page 14/34	–		–		4 mm²	See page 14/54
2.5 mm²	See page 14/34	–		–		2.5 mm²	See page 14/55
–		–		–		Diameter 2 ... 35 mm	See page 14/56
From page 14/24		From page 14/36		From page 14/40		From page 14/44	

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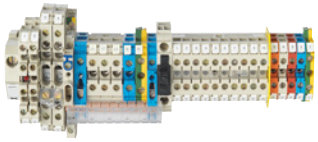
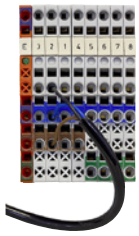
8WA terminal blocks





8WA1 screw terminals



8WA2 spring-loaded terminals

		8WA1 screw terminals	8WA2 spring-loaded terminals
Through-type terminals	Through-type terminals	2.5 ... 95 mm² See page 14/62	
	Two-tier terminals	4 mm² See page 14/67	–
	Three-tier terminals	2.5 mm² See page 14/68	–
	Four-tier motor terminals	–	–
Isolating terminals	Isolating and isolating blade terminals	–	–
	Two-tier isolating terminals	–	–
	N conductor isolating terminals	2.5 ... 16 mm² See page 14/69	–
	Measuring transformer terminals	6 mm² See page 14/71	–
Initiator/actuator terminals	Initiator terminals	–	1.5 mm² See page 14/76
	Actuator terminals	–	1.5 mm² See page 14/76
	Feeder terminals	–	1.5 mm² See page 14/77
Function terminals	Fuse terminals	1.5 mm² See page 14/72	–
	Three-tier terminals	–	–
	Three-tier isolating terminals	–	–
	Diode terminals	2.5 mm² See page 14/73	–
	Two-tier diode terminals	4 mm² See page 14/74	–
	Shield terminals	–	–
	Further information	From page 14/62	From page 14/76

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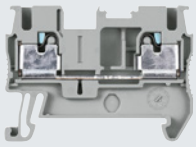
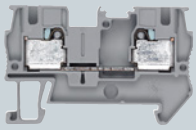
8WH6 iPo plug-in terminals

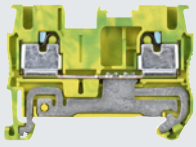
Through-type terminals

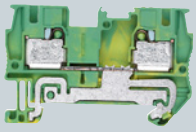


	Terminal size	
	2.5 mm²	**4 mm²**
Terminal width	5.2 mm	6.2 mm
Operational current I_{max}	30 A	38 A
Operational voltage U_{max}	800 V	800 V
AWG	26 ... 12	24 ... 10
Connection capacity, one rigid conductor	0.14 ... 4 mm²	0.2 ... 6 mm²
Connection capacity, one flexible conductor with end sleeve	0.14 ... 2.5 mm²	0.2 ... 4 mm²
Standard	IEC 60947-7-1, IEC 60947-7-2, c UL us	IEC 60947-7-1, IEC 60947-7-2, c UL us









Terminals	Color		
❶ Through-type terminals			
2	Gray	8WH6000-0AF00	8WH6000-0AG00
	Blue	8WH6000-0AF01	8WH6000-0AG01
3	Gray	8WH6003-0AF00	8WH6003-0AG00
	Blue	8WH6003-0AF01	8WH6003-0AG01
4	Gray	8WH6004-0AF00	8WH6004-0AG00
	Blue	8WH6004-0AF01	8WH6004-0AG01
❷ PE through-type terminals			
2	Green-yellow	8WH6000-0CF07	8WH6000-0CG07
3	Green-yellow	8WH6003-0CF07	8WH6003-0CG07
4	Green-yellow	8WH6004-0CF07	8WH6004-0CG07

Special accessories

Covers



Terminals	Color	Width	Article No.	Article No.
2	Gray	2.2 mm	8WH9000-1GA00	8WH9003-1GA00
3	Gray	2.2 mm	8WH9000-2GA00	8WH9003-2SA00
4	Gray	2.2 mm	8WH9000-4GA00	8WH9003-4SA00

Partitions



Terminals	Color	Width	Article No.	Article No.
2	Gray	2.0 mm	8WH9070-0AA00	8WH9070-0AA00
3	Gray	2.0 mm	8WH9070-0GA00	8WH9070-0GA00
4	Gray	2.0 mm	8WH9070-0HA00	8WH9070-0HA00

Cover segments



Color	Article No.	Article No.
Gray	8WH9000-0GA00	–

See general accessories, page 14/57 onwards

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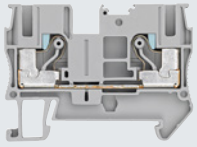
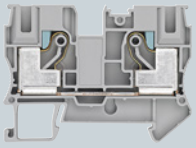
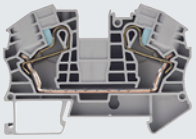
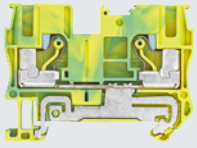
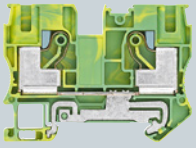
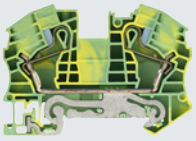
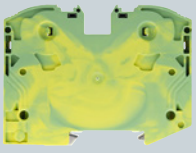
6 mm²	10 mm²	16 mm²	35 mm²
8.2 mm	10.2 mm	12.2 mm	16 mm
41 A	57 A	90 A	125 A
1000 V	1000 V	1000 V	1000 V
20 ... 8	20 ... 6	20 ... 4	10 ... 2
0.5 ... 10 mm²	0.5 ... 16 mm²	0.5 ... 25 mm²	6 ... 35 mm²
0.5 ... 6 mm²	0.5 ... 10 mm²	0.5 ... 16 mm²	6 ... 35 mm²
IEC 60947-7-1, IEC 60947-7-2, cULus	IEC 60947-7-1, IEC 60947-7-2, cULus	IEC 60947-7-1, IEC 60947-7-2, UL, CSA	IEC 60947-7-1, IEC 60947-7-2, UL, CSA
			
			
8WH6000-0AH00	8WH6000-0AJ00	8WH6000-0AK00	8WH6000-0AM00
8WH6000-0AH01	8WH6000-0AJ01	8WH6000-0AK01	8WH6000-0AM01
–	–	–	–
–	–	–	–
–	–	–	–
–	–	–	–
8WH6000-0CH07	8WH6000-0CJ07	8WH6000-0CK07	8WH6000-0CM07
–	–	–	–
–	–	–	–

Article No.	Article No.	Article No.	Article No.
8WH9004-3SA00	8WH9005-1SA00	8WH9006-1SA00	–
–	–	–	–
–	–	–	–

Article No.	Article No.	Article No.	Article No.
–	–	–	–
–	–	–	–
–	–	–	–

Article No.	Article No.	Article No.	Article No.
–	–	–	–

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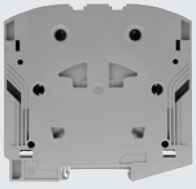
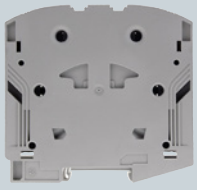
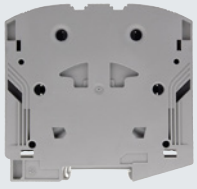
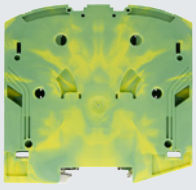
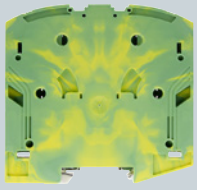
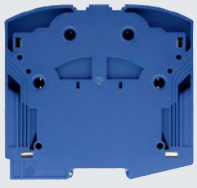
8WH6 iPo plug-in terminals

Through-type terminals for high-current applications



	Terminal size		
	50 mm²	95 mm²	150 mm²
Terminal width	20 mm	25 mm	31 mm
Operational current I_{max}	150 A	232 A	309 A
Operational voltage AC/DC	1000 V/1500 V	1000 V/1500 V	1000 V/1500 V
AWG	8 ... 2/0	4 ... 3/0	1/0 ... 300 kcmil
Connection capacity, rigid	10 ... 70 mm²	25 ... 95 mm²	95 ... 150 mm²
Connection capacity, flexible with end sleeve	10 ... 50 mm²	25 ... 95 mm²	95 ... 150 mm²
Standard	IEC 60947-7-1, IEC 60947-7-2, cULus	IEC 60947-7-1, IEC 60947-7-2, cULus	IEC 60947-7-1, cULus
			
			

Terminals	Color			
❶ Through-type terminals				
2	Gray	8WH6000-0AN00	8WH6000-0AQ00	8WH6000-0AS00
	Blue	8WH6000-0AN01	8WH6000-0AQ01	8WH6000-0AS01
❷ PE through-type terminals				
2	Green-yellow	8WH6000-0CN07	8WH6000-0CQ07	–

Special accessories

Connecting combs				
	Number of poles	Article No.	Article No.	Article No.
	2-pole	8WH9020-3AB00	8WH9020-3AD00	8WH9020-3AF00
	3-pole	8WH9020-3AC00	8WH9020-3AE00	8WH9020-3AG00
Tap-off terminal				
	Number of poles	Article No.	Article No.	Article No.
	1-pole	8WH9120-0DA00	8WH9120-0DA00	8WH9120-0DA00
Test plugs				
	Surface	Article No.	Article No.	Article No.
	Metal	8WH9010-0NB00	8WH9010-0NB00	8WH9010-0NB00
Insulating sleeves for test plugs				
	Color	Article No.	Article No.	Article No.
	Red	8WH9010-0MB02	8WH9010-0MB02	8WH9010-0MB02

See general accessories, page 14/57 onwards

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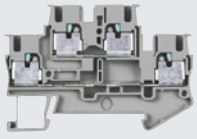
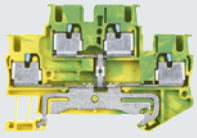
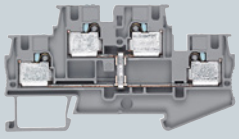
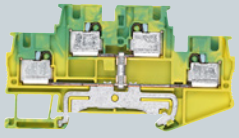
Two-tier terminals

❶ 



❷ 

	Terminal size	
	2.5 mm²	4 mm²
Terminal width	5.2 mm	6.2 mm
Operational current I_{max}	26 A	32 A
Operational voltage U_{max}	500 V	500 V
AWG	26 ... 12	24 ... 10
Connection capacity, one rigid conductor	0.14 ... 4 mm²	0.2 ... 6 mm²
Connection capacity, one flexible conductor with end sleeve	0.14 ... 2.5 mm²	0.2 ... 4 mm²
Standard	IEC 60947-7-1, IEC 60947-7-2, cULus	IEC 60947-7-1, IEC 60947-7-2, cULus
	 	 

Version	Color		
❶ Two-tier terminals			
Without equipotential bonding	Gray	8WH6020-0AF00	8WH6020-0AG00
	Blue	8WH6020-0AF01	8WH6020-0AG01
With equipotential bonding	Gray	8WH6025-0AF00	8WH6025-0AG00
❷ PE two-tier terminals [1]			
	Green-yellow	8WH6020-0CF07	8WH6020-0CG07

[1] Bridging the terminal is only possible in the top tier (in the center).

Special accessories

Covers



Terminals	Color	Width	Article No.	Article No.
4	Gray	2.2 mm	8WH9000-4SE00	–
4	Gray	2.2 mm	–	8WH9003-1VA00

Compartment partitions



Terminals	Color	Thickness	Article No.	Article No.
4	Gray	2 mm	8WH9070-0BA00	8WH9070-0BA00

See general accessories, page 14/57 onwards

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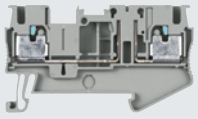
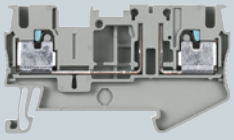
8WH6 iPo plug-in terminals

Isolating terminals

	Terminal size 2.5 mm²	4 mm²
Terminal width	5.2 mm	6.2 mm
Operational current I_{max}	20 A	20 A
Operational voltage U_{max}	400 V	400 V
AWG	26 ... 12	24 ... 10
Connection capacity, one rigid conductor	0.14 ... 4 mm²	0.2 ... 6 mm²
Connection capacity, one flexible conductor with end sleeve	0.14 ... 2.5 mm²	0.2 ... 4 mm²
Standard	IEC 60947-7-1, cULus	IEC 60947-7-1, cULus
		

Terminals	Color		
2	Gray	8WH6000-6CF00	8WH6000-6AG00
3	Gray	8WH6003-6CF00	–
4	Gray	8WH6004-6CF00	–

Special accessories

Covers

	Terminals	Color	Width	Article No.	Article No.
	2	Gray	2.2 mm	8WH9000-3SC00	8WH9003-1GA00
	3	Gray	2.2 mm	8WH9000-3SD00	–
	4	Gray	2.2 mm	8WH9000-5GA00	–

Compartment partitions

	Terminals	Color	Width	Article No.	Article No.
	2	Gray	2.2 mm	8WH9070-0AA00	8WH9070-0AA00
	3	Gray	2.2 mm	8WH9070-0GA00	8WH9070-0GA00

Plug-in zone connectors

	Type	Color	I_{max}	Illuminated display	Article No.	Article No.
	Isolating plugs	Orange	–	–	8WH9040-0DB04	8WH9040-0DB04
	Through-type connectors	Gray	16 A	–	8WH9020-8AB00	8WH9020-8AB00
	Fused connectors [1]	Black	6.3 A	12 ... 30 V, 1 ... 2.5 mA	8WH9040-3AB08	8WH9040-3AB08
				110 ... 250 V, 0.5 ... 2.5 mA	8WH9040-3CB08	8WH9040-3CB08
				Without	8WH9040-3DB08	8WH9040-3DB08
	Component connectors	Gray	6 A	–	8WH9040-0BB00	8WH9040-0BB00

[1] The G fuse holders must be selected according to the maximum power loss (heat dissipation) of the G fuse links.
Depending on the application and method of installation, the heat rise conditions in closed fuse holders must be tested.
Higher ambient temperatures represent an additional load for the fuse links.
A shift in rated current should therefore be taken into account in such applications.

See general accessories, page 14/57 onwards

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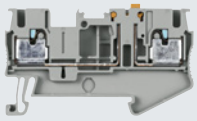
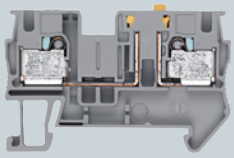
Isolating blade terminals



	Terminal size	
	2.5 mm²	4 mm²
Terminal width	5.2 mm	6.2 mm
Operational current I_{max}	20 A	20 A
Operational voltage U_{max}	400 V	400 V
AWG	26 ... 12	24 ... 10
Connection capacity, one rigid conductor	0.14 ... 4 mm²	0.2 ... 6 mm²
Connection capacity, two rigid conductors	–	0.5 ... 6 mm²
Connection capacity, one flexible conductor	0.14 ... 2.5 mm²	0.2 ... 4 mm²
Standard	IEC 60947-7-1, cULus	IEC 60947-7-1, cULus
		

Terminals	Color			
2	Gray	8WH6000-6AF00	8WH6000-6CG00
3	Gray	8WH6003-6AF00	–
4	Gray	8WH6004-6AF00	–

Special accessories

Covers



Terminals	Color	Width	Article No.	Article No.
2	Gray	2.2 mm	8WH9000-3SC00	8WH9003-1GA00
3	Gray	2.2 mm	8WH9000-3SD00	–
4	Gray	2.2 mm	8WH9000-5GA00	–

Compartment partitions



Terminals	Color	Thickness	Article No.	Article No.
2	Gray	2 mm	8WH9070-0AA00	8WH9070-0AA00

See general accessories, page 14/57 onwards

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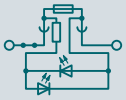
8WH6 iPo plug-in terminals

Fuse terminals

❶ 

❷ 

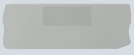
	Terminal size 4 mm²
Terminal width	6.2 mm
Operational current I_{max}	6.3 A
Operational voltage U_{max}	500 V
AWG	24 ... 10
Connection capacity, one rigid conductor	0.2 ... 4 mm²
Connection capacity, one flexible conductor with end sleeve	0.2 ... 4 mm²
Standard	cULus,



LED	Color		
Fuse terminals for 5 × 20 mm G fuse links			
❶ Without	●	Black	8WH6000-1GG08
❷ 10 ... 30 V AC/DC	●	Black	8WH6000-1KG38
❷ 110 ... 250 V AC/DC	●	Black	8WH6000-1MG88

Special accessories

Covers



Terminals	Color		Width	Article No.
2	●	Gray	2.2 mm	8WH9003-1GA00

See general accessories, page 14/57 onwards

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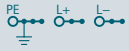
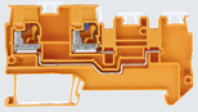
Feeder terminals for initiator/actuator terminals

❶ 

❷ 

	Terminal size 2.5 mm²
Terminal width	7 mm
Operational current I_{max}	20 A
Operational voltage U_{max}	250 V
AWG	24 ... 12
Connection capacity, flexible with end sleeve, with plastic sleeve	0.14 ... 1.0 mm²
Connection capacity, flexible with end sleeve, without plastic sleeve	0.14 ... 1.5 mm²
Standard	IEC 60947-7-1



Conductors [1]	Color	
❶ 3-wire, L+, L–	Orange	8WH6003-0DF04
❷ 4-wire, L+, L–, PE	Orange	8WH6004-0HE04

[1] L+ = red, L– = blue, A (output) = petrol, L = petrol, PE (ground) = green/yellow

See general accessories, page 14/57 onwards

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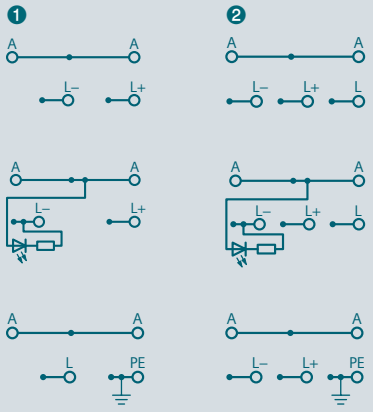
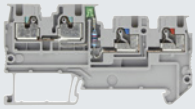
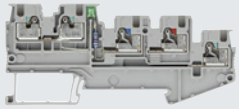
8WH6 iPo plug-in terminals

Initiator/actuator terminals



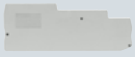
	Terminal size 1.5 mm²	
Terminal width	3.5 mm	3.5 mm
Operational current I_{max}	13.5 A	10 A
Operational voltage U_{max}	250 V	65 V
AWG	26 ... 14	26 ... 14
Connection capacity, flexible with end sleeve, with plastic sleeve	0.14 ... 1.0 mm²	0.14 ... 1.0 mm²
Connection capacity, flexible with end sleeve, without plastic sleeve	0.14 ... 1.5 mm²	0.14 ... 1.5 mm²
Standard	IEC 60947-7-1	IEC 60947-7-1
		

Conductors [1]	LED	Color		
❶ Initiator terminal				
3-wire, L+, L–, A	–	Gray	8WH6003-0DE00	–
3-wire, L+, L–, A	Green, 24 V (15 ... 30 V DC)	Gray	8WH6003-0FE00	–
3-wire, L, A, PE	–	Gray	8WH6003-0HE00	–
❷ Actuator terminal				
4-wire, L+, L–, L, A	–	Gray	–	8WH6004-0DE00
4-wire, L+, L–, L, A	Green, 24 V (15 ... 30 V DC)	Gray	–	8WH6004-0FE00
4-wire, L+, L–, PE, A	–	Gray	–	8WH6004-0HE00

[1] L+ = red, L– = blue, A (output) = petrol, L = petrol, PE (ground) = green/yellow

Special accessories

Covers



Version	Width	Color	Article No.	Article No.
For 3-wire	2.2 mm	Gray	8WH9001-2VD00	–
For 4-wire	2.2 mm	Gray	–	8WH9001-4VE00

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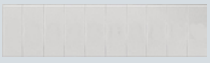
General accessories for 8WH6 initiator/actuator terminals

Connecting combs



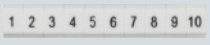
Number of poles	Load current	Color	Article No.
2-pole	17.5 A	Red	8WH9020-6JC02
		Blue	8WH9020-6JC01
		Gray	8WH9020-6JC00
3-pole	17.5 A	Red	8WH9020-6JD02
		Blue	8WH9020-6JD01
		Gray	8WH9020-6JD00
4-pole	17.5 A	Red	8WH9020-6JE02
		Blue	8WH9020-6JE01
		Gray	8WH9020-6JE00
5-pole	17.5 A	Red	8WH9020-6JF02
		Blue	8WH9020-6JF01
		Gray	8WH9020-6JF00
10-pole	17.5 A	Red	8WH9020-6JL02
		Blue	8WH9020-6JL01
		Gray	8WH9020-6JL00
20-pole	17.5 A	Red	8WH9020-6JS02
		Blue	8WH9020-6JS01
		Gray	8WH9020-6JS00

Labels, front, for terminal width 3.5 mm and terminal size 1.5 mm²



Variant		Color	Article No.
Blank		White	8WH8110-0AA05
Custom inscription	Printed vertically	White	8WH8140-0XA05-Z Y01
	Printed horizontally	White	8WH8120-0XA05-Z Y01

Labels, flat, for terminal width 3.5 mm and terminal size 1.5 mm²





Variant		Inscription	Color	Article No.
Blank			White	8WH8111-0AA05
Consecutive numbering	Printed vertically	1 ... 10 (10×)	White	8WH8141-0AB05
		11 ... 20 (10×)	White	8WH8141-0AB15
		21 ... 30 (10×)	White	8WH8141-0AB25
		31 ... 40 (10×)	White	8WH8141-0AB35
		41 ... 50 (10×)	White	8WH8141-0AB45
	Printed horizontally	1 ... 10 (10×)	White	8WH8121-0AB05
		11 ... 20 (10×)	White	8WH8121-0AB15
		21 ... 30 (10×)	White	8WH8121-0AB25
		31 ... 40 (10×)	White	8WH8121-0AB35
		41 ... 50 (10×)	White	8WH8121-0AB45
		51 ... 60 (10×)	White	8WH8121-0AB55
Custom inscription	Printed vertically		White	8WH8141-0XA05-Z Y01
	Printed horizontally		White	8WH8121-0XA05-Z Y01

Labels for 8WH initiator/actuator terminals for labeling system



Variant	Terminal width	Standard	Color	Article No.
Front, blank	3.5 mm	WIN 486	White	8WH8112-0AA05
Flat, blank	3.5 mm	WIN 416	White	8WH8113-0AA05

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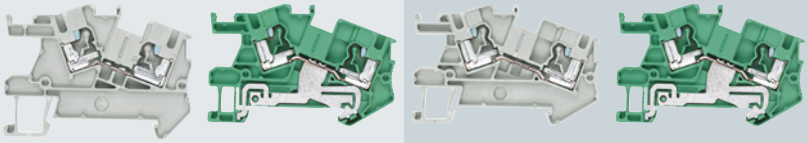
8WH6 iPo installation terminals

Through-type terminals



	Terminal size			
	2.5 mm²		4 mm²	
Terminal width	5.2 mm	5.2 mm	6.2 mm	6.2 mm
Terminal length	59.5 mm	59.5 mm	66 mm	66 mm
Terminal height	43 mm	43 mm	46.3 mm	46.3 mm
Max. load current I_{max}	24 A	–	32 A	–
Rated voltage U_n	800 V	–	800 V	–
Rated impulse withstand voltage	–	–	–	–
AWG	26 ... 12	24 ... 12	24 ... 10	24 ... 10
Connection capacity, one rigid conductor	0.14 ... 4 mm²	0.2 ... 4 mm²	0.2 ... 6 mm²	0.2 ... 6 mm²
Connection capacity, two rigid conductors	–	–	–	–
Connection capacity, flexible with end sleeve	0.25 ... 2.5 mm²	0.25 ... 2.5 mm²	0.25 ... 4 mm²	0.25 ... 4 mm²
Connection capacity, flexible without end sleeve	0.25 ... 2.5 mm²	0.25 ... 2.5 mm²	0.25 ... 4 mm²	0.25 ... 4 mm²
Tightening torque	–	–	–	–
Standard	IEC 60947-7-1	IEC 60947-7-2	IEC 60947-7-1	IEC 60947-7-2



Terminals	Color	iPo plug-in technology		iPo plug-in technology	
❶ Through-type terminals					
2	Gray	8WH6001-0AF00	–	8WH6001-0AG00	–
	Blue	8WH6001-0AF01	–	8WH6001-0AG01	–
❷ PE through-type terminals					
2	Green-yellow	–	8WH6001-0CF07	–	8WH6001-0CG07

Special accessories

Covers



Color	Width	Article No.	Article No.
Gray	2 mm	8WH9000-1WA00	8WH9003-7WA00

Support brackets



- For holding the N busbar

Color	Article No.	Article No.
Blue	8WH9143-0AF01	8WH9143-0AF01

Connecting combs



Number of poles	Article No.	Article No.
2-pole	–	–
3-pole	–	–
10-pole	–	–

Compartment partitions



Color	Article No.	Article No.
Gray	–	–

Insulation plate



Color	Article No.	Article No.
Gray	–	–

See general accessories, page 14/57 onwards

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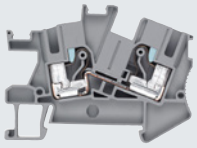
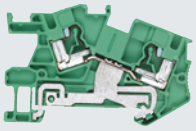
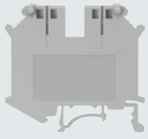
6 mm²		16 mm²		35 mm²	
8.2 mm	8.2 mm	12.2 mm	12.2 mm	16 mm	16 mm
66 mm	66 mm	42.5 mm	42.5 mm	55 mm	55 mm
50 mm	50 mm	47 mm	47 mm	51 mm	51 mm
41 A	–	101 A	101 A	125 A	125 A
800 V	–	400 V	–	800 V	–
–	–	6 kV	6 kV	8 kV	8 kV
20 ... 8	20 ... 8	22 ... 4	22 ... 4	18 ... 2	18 ... 2
0.5 ... 10 mm²	0.5 ... 10 mm²	1.5 ... 16 mm²	1.5 ... 16 mm²	0.75 ... 35 mm²	0.75 ... 35 mm²
–	–	1.5 ... 6 mm²	1.5 ... 6 mm²	0.75 ... 10 mm²	0.75 ... 10 mm²
0.5 ... 6 mm²	0.5 ... 6 mm²	1.5 ... 4 mm²	1.5 ... 4 mm²	0.75 ... 10 mm²	0.75 ... 10 mm²
0.5 ... 6 mm²	0.5 ... 6 mm²	–	–	–	–
–	–	1.5 ... 1.8 Nm	1.5 ... 1.8 Nm	3.2 ... 3.7 Nm	3.2 ... 3.7 Nm
IEC 60947-7-1	IEC 60947-7-2	IEC 60947-7-1, IEC 60947-7-2, cULus	IEC 60947-7-1, IEC 60947-7-2, cULus,	cULus,	cULus,
					
iPo plug-in technology		**Screw terminals**		**Screw terminals**	
8WH6001-0AH00	–	8WH1001-0AK00	–	8WH1001-0AM00	–
8WH6001-0AH01	–	8WH1001-0AK01	–	8WH1001-0AM01	–
–	8WH6001-0CH07	–	8WH1001-0CK07	–	8WH1001-0CM07

Article No.	Article No.	Article No.
8WH9004-1WA00	8WH9005-3PA00	–

Article No.	Article No.	Article No.
8WH9143-0AH01	–	–

Article No.	Article No.	Article No.
–	–	8WH9030-6BC00
–	–	8WH9030-6BD00
–	8WH9030-6AL00	–

Article No.	Article No.	Article No.
–	8WH9070-6HA00	–

Article No.	Article No.	Article No.
–	8WH9070-6GA00	8WH9070-6GA00

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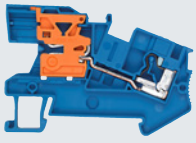
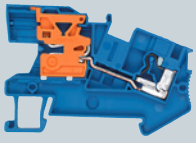
8WH6 iPo installation terminals

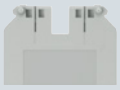
N conductor isolating terminals

	Terminal size	
	2.5 mm²	4 mm²
Terminal width	5.2 mm	6.2 mm
Terminal length	59 mm	66 mm
Terminal height	46.3 mm	46.3 mm
Rated current I_n/cross-section	24 A/2.5 mm²	32 A/4 mm²
Rated voltage U_n	250 V	250 V
Rated impulse withstand voltage	–	–
AWG	26 ... 12	24 ... 10
Connection capacity, one rigid conductor	0.14 ... 4 mm²	0.2 ... 6 mm²
Connection capacity, two rigid conductors	–	–
Connection capacity, one flexible conductor with end sleeve	0.14 ... 2.5 mm²	0.25 ... 4 mm²
Connection capacity, two flexible conductors with end sleeve	–	–
Tightening torque	–	–
Standard	IEC 60947-7-1	IEC 60947-7-1
		
Terminals	**Color**	**iPo plug-in technology**	**iPo plug-in technology**
2	Blue	8WH6001-0BF01	8WH6001-0BG01

Special accessories

Covers





Color	Article No.	Article No.
Blue	8WH9000-1SA00	8WH9003-1SA00
Gray	–	–

Support brackets

- For holding the N busbar 10 × 3 mm
- To be placed every 20 cm





Color	Article No.	Article No.
Blue	8WH9143-0AF01	8WH9143-0AF01
	–	–

Connecting terminals



Color	Width	Article No.	Article No.
Blue	10.3 mm	8WH9126-0BA01	8WH9126-0BA01

N busbars, 10 × 3 mm



Version	Length	Article No.	Article No.
Copper, tinned	1000 mm	8WA2842	8WA2842

See general accessories, page 14/57 onwards

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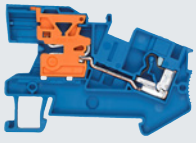
6 mm²	10 mm²	16 mm²	35 mm²
8.2 mm	10 mm	12 mm	16 mm
66.3 mm	43.5 mm	43.5 mm	55 mm
50 mm	47 mm	54 mm	51 mm
41 A / 6 mm²	63 A / 16 mm²	90 A / 25 mm²	110 A / 35 mm²
400 V	–	–	–
–	6 kV	6 kV	6 kV
20 ... 8	–	–	–
0.5 ... 10 mm²	1.5 ... 10 mm²	1.5 ... 16 mm²	0.75 ... 35 mm²
–	1.5 ... 4 mm²	1.5 ... 6 mm²	0.75 ... 10 mm²
0.5 ... 6 mm²	1.5 ... 6 mm²	1.5 ... 16 mm²	0.75 ... 35 mm²
–	1.5 ... 2.5 mm²	1.5 ... 8 mm²	0.75 ... 10 mm²
–	1.5 ... 1.8 Nm	1.5 ... 1.8 Nm	3.2 ... 3.7 Nm
IEC 60947-7-1	IEC 60947-7-1	IEC 60947-7-1	IEC 60947-7-1
			
iPo plug-in technology	**Screw terminals**	**Screw terminals**	**Screw terminals**
8WH6001-0BH01	8WH1001-0BJ01	8WH1001-0BK01	8WH1001-0BM01

Article No.	Article No.	Article No.	Article No.
8WH9004-1SA00	–	–	–
–	8WH9005-3PA00	8WH9005-3PA00	–

Article No.	Article No.	Article No.	Article No.
8WH9143-0AH01	–	–	–
–	8WH9141-0BA01	8WH9141-0BA01	8WH9141-0BA01

Article No.	Article No.	Article No.	Article No.
8WH9126-0BA01	8WH9126-0BA01	8WH9126-0BA01	–

Article No.	Article No.	Article No.	Article No.
8WA2842	8WA2842	8WA2842	8WA2842

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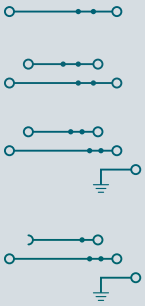
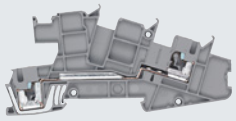
8WH6 iPo installation terminals

Three-tier terminals



	Terminal size 2.5 mm²
Terminal width	5.2 mm
Terminal length	101 mm
Terminal height	50.5 mm
Rated current I_n / cross-section	24 A / 4 mm²
Rated voltage U_n (L–L)	400 V
Rated voltage U_n (L–N, L–PE)	250 V
AWG	26 ... 12
Connection capacity, rigid	0.14 ... 4 mm²
Connection capacity, flexible with end sleeve	0.14 ... 2.5 mm²



Versions	Color	
L	Gray	8WH6001-4QF00
L/L	Gray	8WH6001-4DF00
L/N	Gray	8WH6001-4CF00
PE/L/L	Gray	8WH6001-4HF00
PE/L/N	Gray	8WH6001-4EF00
PE/L/NT	Gray	8WH6001-4FF00

Special accessories

Covers



Color	Article No.
Gray	8WH9000-3SA00

Support brackets



- For holding the N busbar
- To be placed every 20 cm

Color	Width	Article No.
Blue	2 mm	8WH9142-0AF01

N busbars, 10 × 3 mm



Version	Length	Article No.
Copper, tinned [1]	1000 mm	8WA2842

[1] Only copper busbars may be installed.

See general accessories, page 14/57 onwards

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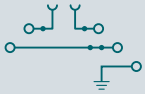
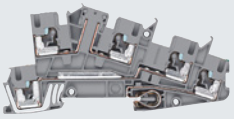
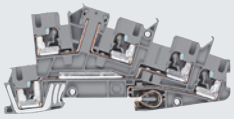
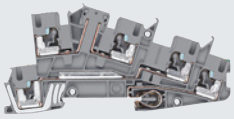
Three-tier isolating terminals

❶ 

❷ 

❸ 

	Terminal size 2.5 mm²		
Terminal width	5.2 mm	5.2 mm	5.2 mm
Terminal length	101 mm	101 mm	101 mm
Terminal height	50.5 mm	50.5 mm	50.5 mm
Rated current I_n / cross-section	24 A / 4 mm²	24 A / 4 mm²	24 A / 4 mm²
Rated voltage U_n (L–L)	400 V	400 V	400 V
Rated voltage U_n (L–N, L–PE)	250 V	250 V	250 V
AWG	22 ... 12	22 ... 12	22 ... 12
Connection capacity, rigid	0.25 ... 4 mm²	0.25 ... 4 mm²	0.25 ... 4 mm²
Connection capacity, flexible with end sleeve	0.25 ... 2.5 mm²	0.25 ... 2.5 mm²	0.25 ... 2.5 mm²
			

Versions	Color			
❶ Through-type terminals with identical contour				
PE/L/L	Gray	–	–	8WH6001-4PF00
❷ Isolating terminals				
PE/L/L isolation	Gray	8WH6001-4MF00	–	–
❸ Isolating blade terminals				
PE/L/L isolating blade	Gray	–	8WH6001-4NF00	–
PE/L/N isolating blade	Gray	–	8WH6001-4GF00	–

Special accessories

Covers for isolating terminal in the contour



Color	Article No.	Article No.	Article No.
Gray	–	8WH9000-6SA00	8WH9000-6SA00

See general accessories, page 14/57 onwards

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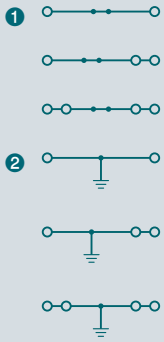
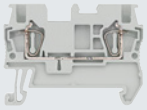
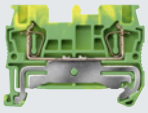
8WH2 spring-loaded terminals

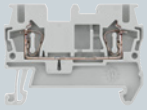
Through-type terminals

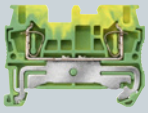


	Terminal size	
	1.5 mm²	2.5 mm²
Terminal width	4.2 mm	5.2 mm
Load current I	17.5 A	28 A
Operational voltage U	500 V	800 V
AWG	28 ... 16	28 ... 12
Connection capacity, rigid	0.08 ... 1.5 mm²	0.08 ... 4 mm²
Connection capacity, flexible with end sleeve	0.08 ... 1.5 mm²	0.08 ... 2.5 mm²
Standard	IEC 60947-7-1, IEC 60947-7-2, cULus, CB	IEC 60947-7-1, IEC 60947-7-2, cULus









Terminals	Color		
❶ Through-type terminals			
2	Gray	8WH2000-0AE00	8WH2000-0AF00
	Blue	8WH2000-0AE01	8WH2000-0AF01
	Orange	8WH2000-0AE04	8WH2000-0AF04
	Red	8WH2000-0AE02	8WH2000-0AF02
	Black	8WH2000-0AE08	8WH2000-0AF08
	Green	8WH2000-0AE03	8WH2000-0AF03
	White	8WH2000-0AE05	8WH2000-0AF05
	Yellow	8WH2000-0AE06	8WH2000-0AF06
3	Gray	8WH2003-0AE00	8WH2003-0AF00
	Blue	8WH2003-0AE01	8WH2003-0AF01
	Orange	8WH2003-0AF04	8WH2003-0AF04
4	Gray	8WH2004-0AE00	8WH2004-0AF00
	Blue	8WH2004-0AE01	8WH2004-0AF01
	Orange	8WH2004-0AF04	8WH2004-0AF04
❷ PE through-type terminals			
2	Green-yellow	8WH2000-0CE07	8WH2000-0CF07
3	Green-yellow	8WH2003-0CE07	8WH2003-0CF07
4	Green-yellow	8WH2004-0CE07	8WH2004-0CF07

Special accessories

Covers



Color	Terminals	Article No.	Article No.
Gray	2	8WH9000-1GA00	8WH9000-1GA00
	3	8WH9000-2GA00	8WH9000-2GA00
	4	8WH9000-4GA00	8WH9000-4GA00

Compartment partitions



Color	Terminals	Article No.	Article No.
Gray	2	8WH9070-0AA00	8WH9070-0AA00
	3	8WH9070-0GA00	8WH9070-0GA00
	4	8WH9070-0HA00	8WH9070-0HA00

Cover segments



- For covering multi-wire terminals when mounting two-wire terminals side-by-side

Color	Article No.	Article No.
Gray	8WH9000-0GA00	8WH9000-0GA00

Warning covers for the operating shafts of 8WH2 through-type terminals



	Article No.	Article No.
	8WH9061-5AA06	8WH9060-5AA06

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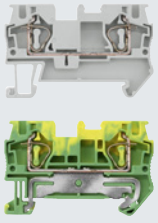
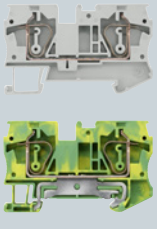
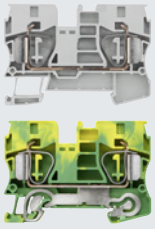
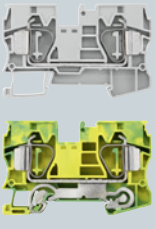
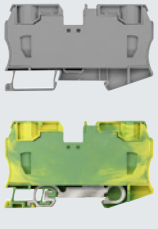
4 mm²	6 mm²	10 mm²	16 mm²	35 mm²
6.2 mm	8.2 mm	10.2 mm	12 mm	16 mm
40 A	52 A	65 A	90 A	125 A
800 V	1000 V	1000 V	1000 V	1000 V
28 ... 10	24 ... 8	24 ... 6	24 ... 4	14 ... 2
0.08 ... 6 mm²	0.2 ... 10 mm²	1.5 ... 16 mm²	1.5 ... 25 mm²	2.5 ... 35 mm²
0.08 ... 4 mm²	0.2 ... 6 mm²	1.5 ... 10 mm²	1.5 ... 16 mm²	2.5 ... 35 mm²
IEC 60947-7-1, IEC 60947-7-2, cULus	IEC 60947-7-1, IEC 60947-7-2, cULus	IEC 60947-7-1, IEC 60947-7-2, cULus	IEC 60947-7-1, IEC 60947-7-2, cULus	IEC 60947-7-1, IEC 60947-7-2, cULus
				
8WH2000-0AG00	8WH2000-0AH00	8WH2000-0AJ00	8WH2000-0AK00	8WH2000-0AM00
8WH2000-0AG01	8WH2000-0AH01	8WH2000-0AJ01	8WH2000-0AK01	8WH2000-0AM01
8WH2000-0AG04	–	–	–	–
8WH2000-0AG02	–	–	–	–
8WH2000-0AG08	–	–	–	–
8WH2000-0AG03	–	–	–	–
8WH2000-0AG05	–	–	–	–
8WH2000-0AG06	–	–	–	–
8WH2003-0AG00	8WH2003-0AH00	–	–	–
8WH2003-0AG01	8WH2003-0AH01	–	–	–
–	–	–	–	–
8WH2004-0AG00	–	–	–	–
8WH2004-0AG01	–	–	–	–
–	–	–	–	–
8WH2000-0CG07	8WH2000-0CH07	8WH2000-0CJ07	8WH2000-0CK07	8WH2000-0CM07
8WH2003-0CG07	8WH2003-0CH07	–	–	–
8WH2004-0CG07	–	–	–	–

Article No.	Article No.	Article No.	Article No.	Article No.
8WH9003-1GA00	8WH9004-1GA00	8WH9005-1GA00	8WH9006-1GA00	–
8WH9003-2GA00	8WH9004-2GA00	–	–	–
8WH9003-4GA00	–	–	–	–

Article No.	Article No.	Article No.	Article No.	Article No.
8WH9070-0AA00	8WH9070-0DA00	–	–	–
8WH9070-0GA00	8WH9070-0DA00	–	–	–
8WH9070-0HA00	–	–	–	–

Article No.	Article No.	Article No.	Article No.	Article No.
8WH9003-0GA00	–	–	–	–

Article No.	Article No.	Article No.	Article No.	Article No.
8WH9063-5AA06	8WH9064-5AA06	8WH9065-5AA06	8WH9066-5AA06	8WH9067-5AA06

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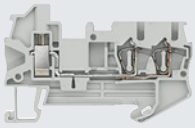
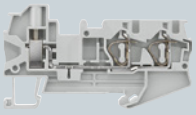
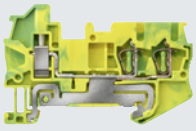
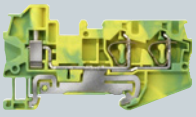
8WH2 spring-loaded terminals

Hybrid through-type terminals

❶

❷ 

	Terminal size	
	2.5 mm²	4 mm²
Terminal width	5.2 mm	6.2 mm
Load current I	28 A	32 A
Operational voltage U	800 V	800 V
AWG Spring	28 ... 12	28 ... 10/26 ... 10
Connection capacity, rigid, spring-loaded	0.08 ... 4 mm²	0.08 ... 6 mm²
Connection capacity, flexible, spring-loaded	0.08 ... 2.5 mm²	0.08 ... 4 mm²
AWG screw	26 ... 14	28 ... 10/26 ... 10
Connection capacity, rigid, screw-type	0.14 ... 4 mm²	0.14 ... 6 mm²
Connection capacity, flexible, screw-type	0.14 ... 2.5 mm²	0.14 ... 4 mm²
Standard	IEC 60947-7-1, IEC 60947-7-2	IEC 60947-7-1, IEC 60947-7-2
		
		

Terminals	Color	Screw-type connection and spring-loaded connection	Screw-type connection and spring-loaded connection
❶ Hybrid through-type terminals			
3	Gray	8WH2103-2BF00	8WH2103-2BG00
	Blue	8WH2103-2BF01	8WH2103-2BG01
❷ PE hybrid through-type terminals			
3	Green-yellow	8WH2103-3BF07	8WH2103-3BG07

Special accessories

Covers



Color	Terminals	Article No.	Article No.
Gray	3	8WH9000-2HA00	8WH9003-2HA00

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See general accessories, page 14/57 onwards

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Two-tier terminals



	Terminal size		
	1.5 mm²	2.5 mm²	4 mm²
Terminal width	4.2 mm	5.2 mm	6.2 mm
Load current I	17.5 A	26 A	32 A
Operational voltage U	500 V	500 V	500 V
AWG	28 ... 16	28 ... 12	28 ... 10
Connection capacity, rigid	0.08 ... 1.5 mm²	0.08 ... 4 mm²	0.08 ... 6 mm²
Connection capacity, flexible with end sleeve	0.08 ... 1.5 mm²	0.08 ... 2.5 mm²	0.08 ... 4 mm²
Standard	IEC 60947-7-1, IEC 60947-7-2, c UL us, CB	IEC 60947-7-1, IEC 60947-7-2, c UL us	IEC 60947-7-1, IEC 60947-7-2, c UL us

Version	Number of poles	Terminals	Color			
❶ Two-tier terminals						
Without equipotential bonding	2-pole	4	Gray	8WH2020-0AE00	8WH2020-0AF00	8WH2020-0AG00
			Blue	8WH2020-0AE01	8WH2020-0AF01	8WH2020-0AG01
		6	Gray	–	8WH2023-0AF00	–
			Blue	–	8WH2023-0AF01	–
With equipotential bonding	1-pole	4	Gray	8WH2025-0AE00	8WH2025-0AF00	8WH2025-0AG00
			Blue	–	8WH2025-0AF01	–
		6	Gray	–	8WH2022-0AF00	–
❷ Two-tier terminals, N at top and L at bottom						
Without equipotential bonding	2-pole	4	Gray	–	8WH2020-4CF00	–
❸ PE two-tier terminals [1]						
		4	Green-yellow	8WH2020-0CE07	8WH2020-0CF07	8WH2020-0CG07
		6	Green-yellow	–	8WH2023-0CF07	–

[1] Only top tier can be fitted with connecting combs.

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Special accessories

Covers



Terminals	Color	Article No.	Article No.	Article No.
4	Gray	8WH9000-1VA00	8WH9000-1VA00	8WH9003-1VA00
6	Gray	–	8WH9000-2VA00	–

Compartment partitions



	Color	Article No.	Article No.	Article No.
	Gray	8WH9070-0BA00	8WH9070-0BA00	8WH9070-0BA00

See general accessories, page 14/57 onwards

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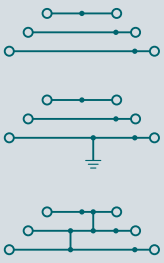
8WH2 spring-loaded terminals

Three-tier terminals

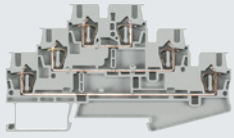
❶

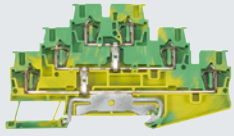


❷



	Terminal size 2.5 mm²
Terminal width	5.2 mm
Load current I	28 A [1]
Operational voltage U	500 V
AWG	28 ... 12
Connection capacity, rigid	0.08 ... 4 mm²
Connection capacity, flexible with end sleeve	0.08 ... 2.5 mm²
Standard	IEC 60947-7-1, IEC 60947-7-2, c UL us





Version	Versions	Color	
❶ Three-tier terminals			
Without equipotential bonding	–	Gray	8WH2030-0AF00
		Blue	8WH2030-0AF01
	PE/L/N	Gray	8WH2030-4EF00
	PE/L/L	Gray	8WH2030-4HF00
With equipotential bonding		Gray	8WH2035-0AF00
		Blue	8WH2035-0AF01
❷ PE three-tier terminals			
		Green-yellow	8WH2035-0CF07

[1] The total current through all connected conductors must not exceed the maximum load current.

Special accessories

Covers



Color	Article No.
Gray	8WH9000-1GD00

Label holder



Color	Article No.
Gray	8WH9060-4BA00

See general accessories, page 14/57 onwards

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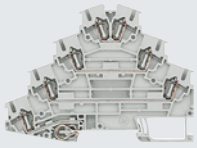
Four-tier motor terminals



	Terminal size	
	2.5 mm²	4 mm²
Terminal width	5.2 mm	6.2 mm
Load current I	26 A	32 A
Operational voltage U	800 V	800 V
AWG	28 ... 12	28 ... 10
Connection capacity, rigid	0.08 ... 4 mm²	0.08 ... 6 mm²
Connection capacity, flexible with end sleeve	0.08 ... 2.5 mm²	0.08 ... 4 mm²
Standard	IEC 60947-7-1, IEC 60947-7-2, cULus	IEC 60947-7-1, IEC 60947-7-2, cULus, CB
		
Variant / **Color**		
L/L/L/PE — Gray	8WH2040-4LF00	8WH2040-4LG00

Special accessories

Covers



Color	Article No.	Article No.
Gray	8WH9000-1GE00	–

See general accessories, page 14/57 onwards

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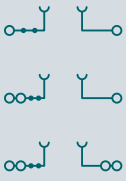
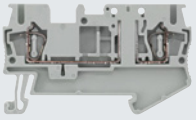
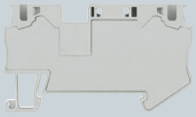
8WH2 spring-loaded terminals

Isolating terminals



	Terminal size	
	2.5 mm²	**4 mm²**
Terminal width	5.2 mm	6.2 mm
Load current I	16 A	16 A
Operational voltage U	400 V	400 V
AWG	28 ... 12	28 ... 10
Connection capacity, rigid	0.08 ... 4 mm²	0.08 ... 6 mm²
Connection capacity, flexible with end sleeve	0.08 ... 2.5 mm²	0.08 ... 4 mm²
Standard	IEC 60947-7-1, cULus	IEC 60947-7-1, cULus
		

Terminals	Color		
2	Gray	8WH2000-6AF00	8WH2000-6AG00
3	Gray	8WH2003-6AF00	–
4	Gray	8WH2004-6AF00	–

Special accessories

Covers



Color	Terminals	Article No.	Article No.
Gray	2	8WH9000-2GA00	–
	3	8WH9000-4GA00	–
	4	8WH9000-5GA00	–

Compartment partitions



Color	Terminals	Article No.	Article No.
Gray	2	8WH9070-0AA00	8WH9070-0AA00
	3	8WH9070-0GA00	–
	4	8WH9070-0HA00	–

Cover segments



- For covering multi-wire terminals when mounting two-wire terminals side-by-side

Color	Terminals	Article No.	Article No.
Gray	3/4	8WH9000-0GA00	–

Plug-in zone connectors

Type	Color	I_{max}	Illuminated display	Article No.	Article No.
 Isolating plugs	Orange	20 A	–	8WH9040-0DB04	8WH9040-0DB04
 Through-type connectors	Gray	16 A	–	8WH9020-8AB00	8WH9020-8AB00
 Fused connectors [1]	Black	6.3 A	12 ... 30 V, 1 ... 2.5 mA	8WH9040-3AB08	8WH9040-3AB08
			110 ... 250 V, 0.5 ... 2.5 mA	8WH9040-3CB08	8WH9040-3CB08
			Without	8WH9040-3DB08	8WH9040-3DB08
 Component connectors	Gray	6 A	–	8WH9040-0BB00	8WH9040-0BB00

[1] The G fuse holders must be selected according to the maximum power loss (heat dissipation) of the G fuse links.
Depending on the application and method of installation, the heat rise conditions in closed fuse holders must be tested.
Higher ambient temperatures represent an additional load for the fuse links.
A shift in rated current should therefore be taken into account in such applications.

See general accessories, page 14/57 onwards

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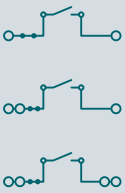
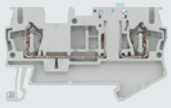
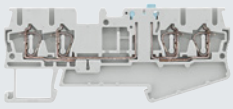
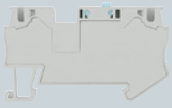
Isolating blade terminals



	Terminal size		
	2.5 mm²		4 mm²
Terminal width	5.2 mm	5.2 mm	6.2 mm
Load current I	16 A	16 A [1]	16 A
Operational voltage U	400 V	400 V	400 V
AWG	28 ... 12	26 ... 14	28 ... 10
Connection capacity, rigid	0.08 ... 4 mm²	0.14 ... 4 mm²	0.08 ... 6 mm²
Connection capacity, flexible with end sleeve	0.08 ... 2.5 mm²	0.14 ... 2.5 mm²	0.08 ... 4 mm²
Standard	IEC 60947-7-1, cULus	IEC 60947-7-1, cULus	IEC 60947-7-1, cULus
			

Terminals	Color			
2	Gray	8WH2000-6CF00	–	8WH2000-6CG00
3	Gray	–	8WH2003-6CF00	–
4	Gray	–	8WH2004-6CF00	–

[1] On terminals with three and four clamping points, the total current through all connected conductors must not exceed the max. load current.

Special accessories

Covers



Color	Terminals	Article No.	Article No.	Article No.
Gray	2	8WH9000-2GA00	8WH9000-2GA00	–
	3	8WH9000-4GA00	8WH9000-4GA00	–
	4	8WH9000-5GA00	8WH9000-5GA00	–

Compartment partitions



Color	Terminals	Article No.	Article No.	Article No.
Gray	2	8WH9070-0AA00	8WH9070-0AA00	8WH9070-0AA00
	3	8WH9070-0GA00	8WH9070-0GA00	–
	4	8WH9070-0HA00	8WH9070-0HA00	–

Cover segments



Color	Terminals	Article No.	Article No.	Article No.
Gray	3 / 4	8WH9000-0GA00	8WH9000-0GA00	–

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See general accessories, page 14/57 onwards

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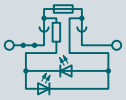
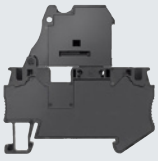
8WH2 spring-loaded terminals

Fuse terminals

❶ 

❷ 

	Terminal size 4 mm²		
Terminal width	6.2 mm	8.2 mm	8.2 mm
Load current I	6.3 A	10 A	30 A
Operational voltage U	250 V	400 V	400 V
Max. individual power loss as overload protection	1.6 W	–	–
Max. power loss as a group as overload protection	1.6 W	–	–
Max. individual power loss as short-circuit protection	4 W	–	–
Max. power loss as a group as short-circuit protection	2.5 W	–	–
AWG	28 ... 10	28 ... 10	28 ... 10
Connection capacity, rigid	0.08 ... 6 mm²	0.08 ... 6 mm²	0.08 ... 6 mm²
Connection capacity, flexible with end sleeve	0.08 ... 4 mm²	0.08 ... 4 mm²	0.08 ... 4 mm²
Standard	IEC 60947-7-3, cULus	IEC 60947-7-3, cULus	IEC 60947-7-3, cULus
			

Illuminated display	Color			
For 5 × 20 mm G fuse links				
❶ Without	● Black	8WH2000-1GG08	–	–
❷ 15 ... 30 V	● Black	8WH2000-1JG38	–	–
❷ 30 ... 60 V	● Black	8WH2000-1JG68	–	–
❷ 110 ... 250 V	● Black	8WH2000-1MG08	–	–
For 6.3 × 32 mm G fuse links				
❶ Without	● Black	–	8WH2000-1HG08	–
❷ 100 ... 250 V	● Black	–	8WH2000-1RG08	–
For blade-type fuses according to ISO/DIS 8820 and DIN 72581-3 [1]				
❶ Without	● Black	–	–	8WH2000-1AG08
❷ 12 V	● Black	–	–	8WH2000-1BG28
❷ 24 V	● Black	–	–	8WH2000-1BG38

[1] Blade-type fuses must be ordered separately.

Special accessories

Compartment partitions



Color	Terminals	Article No.	Article No.	Article No.
● Gray	2	8WH9070-0AA00	8WH9070-0AA00	8WH9070-0AA00

See general accessories, page 14/57 onwards

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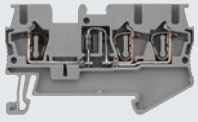
8WH2 spring-loaded terminals

Diode terminals



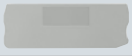
	Terminal size 2.5 mm²
Terminal width	5.2 mm
Load current	Determined by the diode
Uninterrupted limiting current	0.5 A
Operational voltage U	500 V
Blocking voltage	1300 V
AWG	28 ... 12
Connection capacity, rigid	0.08 ... 4 mm²
Connection capacity, flexible with end sleeve	0.08 ... 2.5 mm²
Diode	1N 4007, integrated
Standard	cULus



Terminals	Color	Let-through	
3	Gray	❶ From left to right	8WH2003-5DF00
	Gray	❷ From right to left	8WH2003-5CF00

Special accessories

Covers



Color	Terminals	Article No.
Gray	3	8WH9000-4GA00

Compartment partitions



Color	Terminals	Article No.
Gray	3	8WH9070-0GA00

Cover segments



- For covering multi-wire terminals when mounting two-wire terminals side-by-side

Color	Terminals	Article No.
Gray	3	8WH9000-0GA00

14

See general accessories, page 14/57 onwards

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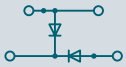
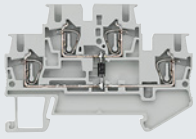
Two-tier diode terminals

❶ 

❷ 

❸ 

	Terminal size 2.5 mm²
Terminal width	5.2 mm
Load current	26 A
Uninterrupted limiting current	0.5 A
Operational voltage U	500 V
Blocking voltage	1300 V
AWG	28 ... 12
Connection capacity, rigid	0.08 ... 4 mm²
Connection capacity, flexible with end sleeve	0.08 ... 2.5 mm²
Diode	1N 4007, integrated
Standard	cULus



Versions	Color	
❶ With one diode		
Let-through from top to bottom	Gray	8WH2020-5AF00
Let-through from bottom left to bottom right	Gray	8WH2020-5DF00
❷ With two diodes		
Let-through from top to bottom left and from bottom right to bottom left	Gray	8WH2020-5KF00
❸ With illuminated display		
15 ... 30 V DC / 2.5 ... 7.5 A	Gray	8WH2020-5JF30

Special accessories

Covers



Color	Article No.
Gray	8WH9000-1VA00

Compartment partitions



Color	Article No.
Gray	8WH9070-0BA00

See general accessories, page 14/57 onwards

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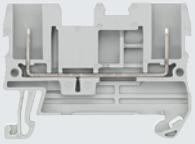
8WH5 combination plug-in terminals

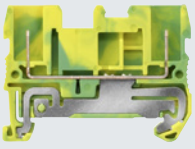
Through-type terminals

❶

❷

	Terminal size 2.5 mm²
Terminal width	5.2 mm
Load current	24 A
Operational voltage U	500 V
Standard	IEC 61984, c UL us





Terminals	Color	Combination plug-in connection
❶ Through-type terminals		
2	Gray	8WH5000-0AF00
	Blue	8WH5000-0AF01
❷ PE through-type terminals		
2	Green-yellow	8WH5000-0CF07

Special accessories

Covers



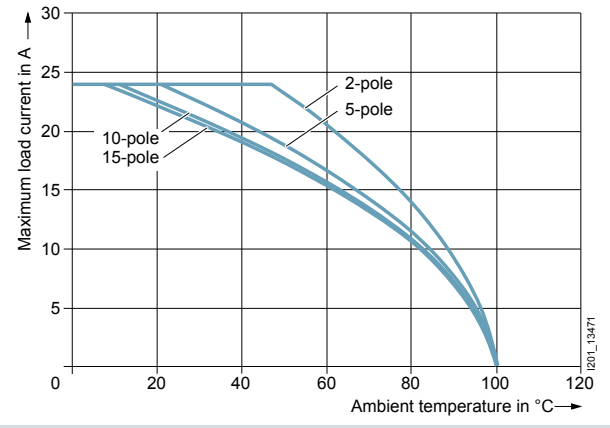
Terminals	Color	Article No.
2	Gray	8WH9000-1VA00

Compartment partitions



Terminals	Color	Article No.
2	Gray	8WH9070-0BA00

See general accessories, page 14/57 onwards



Derating curve for 8WH5000-0AF00

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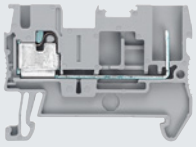
Hybrid through-type terminals

❶ 

❷ 

	Terminal size 2.5 mm²
Terminal width	5.2 mm
Rated current I_n / cross-section	24 A / 2.5 mm²
Rated voltage U_n	500 V
AWG	26 ... 12
Connection capacity, rigid	0.14 ... 4 mm²
Connection capacity, flexible with end sleeve	0.14 ... 2.5 mm²
Standard	cULus





Terminals	Color	iPo plug-in connection and combination plug-in connection
❶ Hybrid through-type terminals		
2	Gray	8WH5100-2PF00
❷ PE hybrid through-type terminals		
2	Green-yellow	8WH5100-3PF07

Special accessories

Covers



Terminals	Color	Article No.
2	Gray	8WH9000-1GA00

Compartment partitions



Terminals	Color	Article No.
4	Gray	8WH9070-0HA00

See general accessories, page 14/57 onwards

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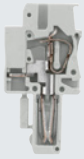
8WH5 combination plug-in terminals

8WH9 plugs

	Terminal size 2.5 mm²	
Terminal width	5.2 mm	5.2 mm
Load current	24 A	24 A
Operational voltage U	500 V	500 V
AWG	28 ... 12	28 ... 12
Connection capacity, rigid	0.08 ... 4 mm²	0.08 ... 4 mm²
Connection capacity, flexible with end sleeve	0.08 ... 2.5 mm²	0.08 ... 2.5 mm²
Number of poles	1P	1P
Standard	cULus	cULus
		
		

Version	Color	With slot for comb	Without slot for comb
Plug			
Left element	Gray	8WH9040-1DB00	8WH9040-1AB00
	Blue	8WH9040-1DB01	8WH9040-1AB01
Central element	Gray	8WH9040-1EB00	8WH9040-1BB00
	Blue	8WH9040-1EB01	8WH9040-1BB01
Right element	Gray	8WH9040-1FB00	8WH9040-1CB00
	Blue	8WH9040-1FB01	8WH9040-1CB01
PE plugs			
Left element	Green-yellow	8WH9040-1DB07	8WH9040-1AB07
Central element	Green-yellow	8WH9040-1EB07	–
Right element	Green-yellow	8WH9040-1FB07	8WH9040-1CB07

14

Special accessories

Latches



Version	Color	Article No.	Article No.
With strain relief	Orange	8WH9050-2BA04	8WH9050-2BA04
Without strain relief	Orange	8WH9050-2AA04	8WH9050-2AA04

Shielding



- For connection of shielded cables

Cable diameter	Color	Article No.	Article No.
5 ... 10 mm	Black	8WH9120-0DB08	8WH9120-0DB08

See general accessories, page 14/57 onwards

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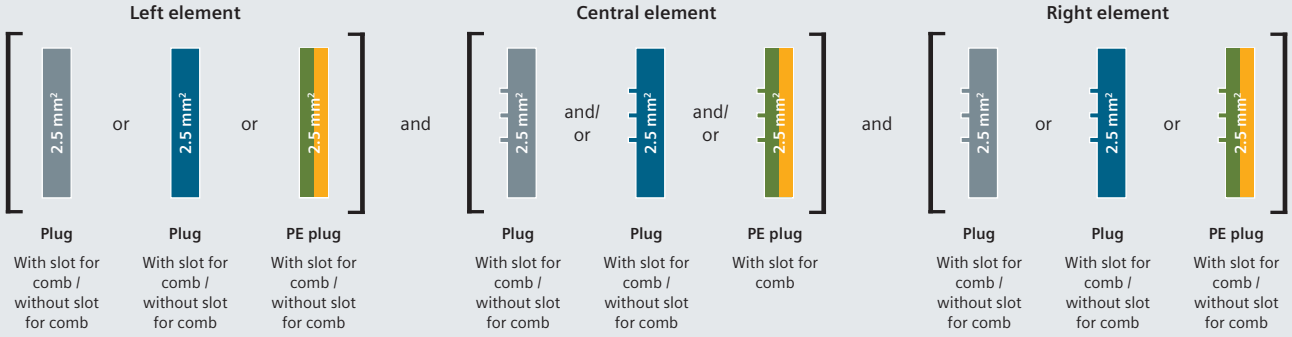
Configuration of combination plug



Note:
The configuration concept shown is just one example of how combination plugs can be configured.

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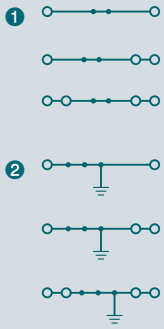
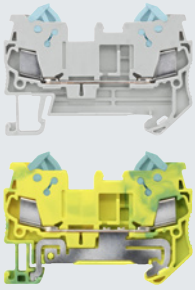
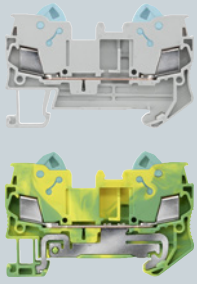
8WH3 insulation displacement terminals

Through-type terminals



	Terminal size	
	1.5 mm²	2.5 mm²
Terminal width	5.2 mm	6.2 mm
Load current I	17.5 A [1]	24 A [1]
Operational voltage U	800 V	800 V
AWG	24 ... 16	20 ... 14
Connection capacity, rigid	0.25 ... 1.5 mm²	0.5 ... 2.5 mm²
Connection capacity, flexible with end sleeve	0.25 ... 1.5 mm²	0.5 ... 2.5 mm²





Terminals	Color		
❶ Through-type terminals			
2	Gray	8WH3000-0AE00	8WH3000-0AF00
	Blue	8WH3000-0AE01	8WH3000-0AF01
3	Gray	8WH3003-0AE00	8WH3003-0AF00
	Blue	8WH3003-0AE01	8WH3003-0AF01
4	Gray	8WH3004-0AE00	–
	Blue	8WH3004-0AE01	–
❷ PE through-type terminals			
2	Green-yellow	8WH3000-0CE07	8WH3000-0CF07
3	Green-yellow	8WH3003-0CE07	8WH3003-0CF07
4	Green-yellow	8WH3004-0CE07	–

[1] On terminals with three and four clamping points, the total current through all connected conductors must not exceed the maximum load current.

Special accessories

Covers



Terminals	Color	Article No.	Article No.
2	Gray	8WH9001-1AA00	8WH9000-1AA00
3	Gray	8WH9001-2AA00	8WH9000-2AA00
4	Gray	8WH9001-4AA00	–

Compartment partitions



Terminals	Color	Thickness	Article No.	Article No.
2	Gray	2 mm	8WH9070-0JA00	8WH9070-0JA00
3	Gray	2 mm	8WH9070-0KA00	8WH9070-0KA00
4	Gray	2 mm	8WH9070-0LA00	–

Cover segments



- For covering multi-wire terminals when mounting two-wire terminals side-by-side

Terminals	Color	Article No.	Article No.
3	Gray	–	8WH9000-0AA00

See general accessories, page 14/57 onwards

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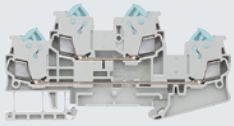
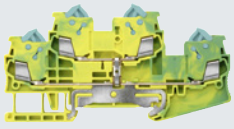
Two-tier terminals

❶ 

❷ 

	Terminal size 1.5 mm²
Terminal width	5.2 mm
Load current	17.5 A
Operational voltage U	500 V
AWG	24 ... 16
Connection capacity, rigid	0.25 ... 1.5 mm²
Connection capacity, flexible with end sleeve	0.25 ... 1.5 mm²
Standard	cULus





Version	Color	
❶ Two-tier terminals		
Without equipotential bonding	Gray	8WH3020-0AE00
	Blue	8WH3020-0AE01
❷ PE two-tier terminals		
	Green-yellow	8WH3020-0CE07

Special accessories

Covers



Color	Article No.
Gray	8WH9001-1BA00

Compartment partitions



Color	Article No.
Gray	8WH9070-0MA00

See general accessories, page 14/57 onwards

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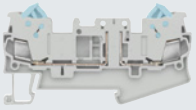
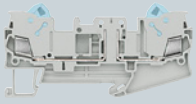
8WH3 insulation displacement terminals

Isolating terminals



	Terminal size	
	1.5 mm²	2.5 mm²
Terminal width	5.2 mm	6.2 mm
Load current	16 A	16 A
Operational voltage U	400 V	400 V
AWG	24 ... 16	20 ... 14
Connection capacity, rigid	0.25 ... 1.5 mm²	0.5 ... 2.5 mm²
Connection capacity, flexible with end sleeve	0.25 ... 1.5 mm²	0.5 ... 2.5 mm²
Standard	cULus	cULus
		
Terminals	**Color**		
2	Gray	8WH3000-6AE00	8WH3000-6AF00

Special accessories

Covers



Color	Article No.	Article No.
Gray	8WH9001-2AA00	8WH9000-2AA00

Compartment partitions



Color	Article No.	Article No.
Gray	8WH9070-0KA00	8WH9070-0KA00

Plug-in zone connectors

Type	Color	I_{max}	Illuminated display	Article No.	Article No.
 Isolating plugs	Orange	–	–	8WH9040-0DB04	8WH9040-0DB04
 Through-type connectors	Gray	16 A	–	8WH9020-8AB00	8WH9020-8AB00
 Fused connectors [1]	Black	6.3 A	12 ... 30 V, 1 ... 2.5 mA	8WH9040-3AB08	8WH9040-3AB08
			110 ... 250 V, 0.5 ... 2.5 mA	8WH9040-3CB08	8WH9040-3CB08
			Without	8WH9040-3DB08	8WH9040-3DB08
 Component connectors	Gray	6 A	–	8WH9040-0BB00	8WH9040-0BB00

[1] The G fuse holders must be selected according to the maximum power loss (heat dissipation) of the G fuse links.
Depending on the application and method of installation, the heat rise conditions in closed fuse holders must be tested.
Higher ambient temperatures represent an additional load for the fuse links.
A shift in rated current should therefore be taken into account in such applications.

See general accessories, page 14/57 onwards

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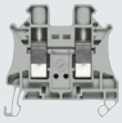
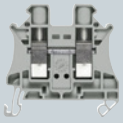
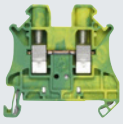
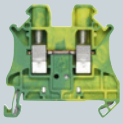
8WH screw terminals

8WH1 through-type terminals



	Terminal size	
	2.5 mm²	4 mm²
Terminal width	5.2 mm	6.2 mm
Max. load current I_{max}	32 A	41 A
Rated voltage U_n	1000 V	1000 V
AWG	26 ... 12	26 ... 10
Connection capacity, one rigid conductor	0.14 ... 4 mm²	0.14 ... 6 mm²
Connection capacity, two rigid conductors	0.14 ... 1.5 mm²	0.14 ... 1.5 mm²
Connection capacity, one flexible conductor with end sleeve	0.14 ... 4 mm²	0.14 ... 6 mm²
Connection capacity, two flexible conductors with end sleeve	0.14 ... 1.5 mm²	0.14 ... 1.5 mm²
Tightening torque	0.6 ... 0.8 Nm	0.6 ... 0.8 Nm
Standard	IEC 60947-7-1, IEC 60947-7-2, cULus,	IEC 60947-7-1, IEC 60947-7-2, cULus,
		
		

Terminals	Color		
1 Through-type terminals			
2	Gray	8WH1000-0AF00	8WH1000-0AG00
	Blue	8WH1000-0AF01	8WH1000-0AG01
	Orange	8WH1000-0AF04	8WH1000-0AG04
	Red	8WH1000-0AF02	8WH1000-0AG02
	Black	8WH1000-0AF08	8WH1000-0AG08
	Green	8WH1000-0AF03	–
	Yellow	8WH1000-0AF06	–
2 PE through-type terminals			
2	Green-yellow	8WH1000-0CF07	8WH1000-0CG07

Special accessories

Covers



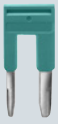
Width	Color	Article No.	Article No.
2.2 mm	Gray	8WH9000-1PA00	8WH9000-1PA00

Compartment partitions



Thickness	Color	Article No.	Article No.
2 mm	Gray	8WH9070-6BA00	8WH9070-6BA00

Reducing combs



Version	Color	Article No.	Article No.
From screw to screw	Turquoise	–	–
From screw to spring	Turquoise	–	–

Warning covers for 8WH1



Image	Color	Article No.	Article No.
Lightning symbol	Yellow	8WH9060-5BA06	8WH9063-5BA06

See general accessories, page 14/57 onwards

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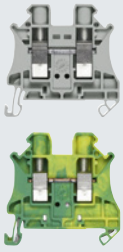
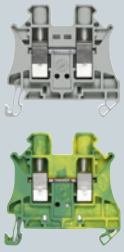
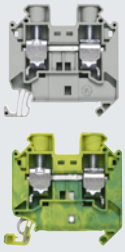
6 mm²	10 mm²	16 mm²	35 mm²	
8.2 mm	10.2 mm	12.2 mm	16 mm	16 mm
57 A	76 A	101 A	150 A	–
1000 V	1000 V	1000 V	1000 V	–
24 ... 8	20 ... 6	16 ... 4	16 ... 1/0	16 ... 2
0.2 ... 10 mm²	0.5 ... 16 mm²	1.5 ... 25 mm²	1.5 ... 50 mm²	1.5 ... 35 mm²
0.2 ... 2.5 mm²	0.5 ... 4 mm²	1 ... 6 mm²	1.5 ... 16 mm²	1.5 ... 16 mm²
0.2 ... 10 mm²	0.5 ... 16 mm²	1.5 ... 25 mm²	1.5 ... 50 mm²	1.5 ... 35 mm²
0.2 ... 2.5 mm²	0.5 ... 4 mm²	1... 6 mm²	1.5 ... 10 mm²	1.5 ... 10 mm²
1.5 ... 1.8 Nm	1.6 ... 1.8 Nm	2.5 ... 3.0 Nm	3.2 ... 3.7 Nm	3.2 ... 3.7 Nm
IEC 60947-7-1, IEC 60947-7-2, cULus,	IEC 60947-7-1, IEC 60947-7-2, cULus,	IEC 60947-7-1, IEC 60947-7-2, cULus,	IEC 60947-7-1, IEC 60947-7-2, cULus,	IEC 60947-7-1, IEC 60947-7-2, cULus,
				
8WH1000-0AH00	8WH1000-0AJ00	8WH1000-0AK00	8WH1000-0AM00	–
8WH1000-0AH01	8WH1000-0AJ01	8WH1000-0AK01	8WH1000-0AM01	–
–	–	–	–	–
8WH1000-0AH02	–	–	–	–
8WH1000-0AH08	–	–	–	–
–	–	–	–	–
–	–	–	–	–
8WH1000-0CH07	8WH1000-0CJ07	8WH1000-0CK07	–	8WH1000-0CM07
Article No.	**Article No.**	**Article No.**	**Article No.**	**Article No.**
8WH9000-1PA00	8WH9000-1PA00	8WH9076-1PA00	–	–
Article No.	**Article No.**	**Article No.**	**Article No.**	**Article No.**
8WH9070-6BA00	8WH9070-6BA00	–	–	–
Article No.	**Article No.**	**Article No.**	**Article No.**	**Article No.**
8WH9002-8AC10	8WH9002-8CC10	8WH9002-8EC10	8WH9002-8GC10	8WH9002-8GC10
8WH9002-8BC10	8WH9002-8DC10	8WH9002-8FC10	8WH9002-8HC10	8WH9002-8HC10
Article No.	**Article No.**	**Article No.**	**Article No.**	**Article No.**
8WH9064-5BA06	8WH9065-5BA06	8WH9066-5BA06	8WH9067-5BA06	8WH9067-5BA06

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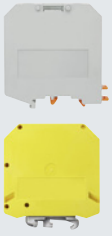
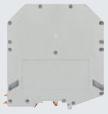
8WH screw terminals

8WH1 through-type terminals for high-current applications

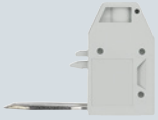


	Terminal size			
	50 mm²	95 mm²	150 mm²	240 mm²
Terminal width	20 mm	25 mm	31 mm	36 mm
Rated current I	150 A	232 A	309 A	415 A
Rated voltage U	1000 V	1000 V	1000 V	1000 V
AWG	6 ... 0	4 ... 000	2 ... 300 kcmil	00 ... 500 kcmil
Connection capacity, rigid	16 ... 50 mm²	25 ... 95 mm²	35 ... 150 mm²	70 ... 240 mm²
Connection capacity, flexible with end sleeve	25 ... 50 mm²	35 ... 95 mm²	50 ... 150 mm²	70 ... 240 mm²
Tightening torque	6 ... 8 Nm	15 ... 20 Nm	25 ... 30 Nm	25 ... 30 Nm
Standard	IEC 60947-7-1, IEC 60947-7-2, cULus	IEC 60947-7-1, IEC 60947-7-2, cULus	IEC 60947-7-1, cULus	IEC 60947-7-1, cULus
				

Terminals	Color				
❶ Through-type terminals					
2	Gray	8WH1000-0AN00	8WH1000-0AQ00	8WH1000-0AS00	8WH1000-0AU00
	Blue	8WH1000-0AN01	8WH1000-0AQ01	8WH1000-0AS01	8WH1000-0AU01
❷ PE through-type terminals					
2	Green-yellow	8WH1000-0CN07	8WH1000-0CQ07	–	–

Special accessories

Tap-off terminal



- When wiring a tap-off with a smaller cross-section, observe the overload and short-circuit strength specified in VDE 0100 Part 430

I_{max}	Cross-section	Article No.	Article No.	Article No.	Article No.
57 A	10 mm²	8WH9120-0AA00	8WH9120-0BA00	8WH9120-0CA00	8WH9120-0CA00

Insertion profiles



- Evens out the prismatic sleeve base when using flat conductors

Article No.	Article No.	Article No.	Article No.
8WH9020-3MA00	8WH9020-3NA00	8WH9020-3PA00	8WH9020-3PA00

Combs



- Fully insulated, fitted in the clamping sleeve and latched with the terminal enclosure

I_{max}	Number of poles	Article No.	Article No.	Article No.	Article No.
232 A	2-pole	–	8WH9020-3AA00	8WH9020-3CA00	–
	3-pole	–	8WH9020-3BA00	8WH9020-3DA00	–
320 A	2-pole	–	–	–	8WH9020-3EA00
	3-pole	–	–	–	8WH9020-3FA00

Permanent links



- For cross links
- Screw heads with insulating collar
- Remove partition first

I_{max}	Number of poles	Article No.	Article No.	Article No.	Article No.
150 A	2-pole	8WH9020-6HC00	–	–	–
	3-pole	8WH9020-6HD00	–	–	–

See general accessories, page 14/57 onwards

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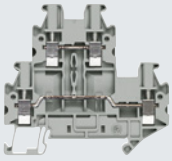
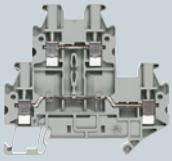
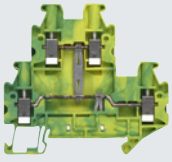
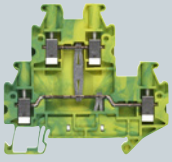
8WH1 two-tier terminals

❶



❷



	Terminal size	
	2.5 mm²	4 mm²
Terminal width	5.2 mm	6.2 mm
Max. load current I_{max}	28 A	36 A
Rated voltage U_{max}	500 V	800 V
AWG	26 ... 12	26 ... 10
Connection capacity, one rigid conductor	0.14 ... 4 mm²	0.14 ... 6 mm²
Connection capacity, two rigid conductors	0.14 ... 1.5 mm²	0.14 ... 1.5 mm²
Connection capacity, one flexible conductor with end sleeve	0.14 ... 4 mm²	0.14 ... 6 mm²
Connection capacity, two flexible conductors with end sleeve	0.14 ... 1.5 mm²	0.14 ... 1.5 mm²
Tightening torque	0.5 ... 0.6 Nm	0.6 ... 0.8 Nm
Standard	cULus,	cULus,
		
		

Version	Color		
❶ Two-tier terminals			
Without equipotential bonding	Gray	8WH1020-0AF00	8WH1020-0AG00
	Blue	8WH1020-0AF01	8WH1020-0AG01
With equipotential bonding	Gray	8WH1025-0AF00	8WH1025-0AG00
❷ PE two-tier terminals			
	Green-yellow	8WH1020-0CF07	8WH1020-0CG07

Special accessories

Covers



Width	Color	Article No.	Article No.
2.2 mm	Gray	8WH9000-1QA00	8WH9000-1QA00

Compartment partitions



Thickness	Color	Article No.	Article No.
2 mm	Gray	8WH9070-6FA00	8WH9070-6FA00

Spacer plates



- Compensates for tier offset if other terminals are mounted side by side

Thickness	Color	Article No.	Article No.
2.5 mm	Gray	8WH9160-0AA00	8WH9160-0AA00

See general accessories, page 14/57 onwards

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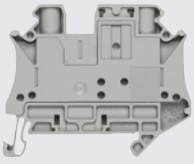
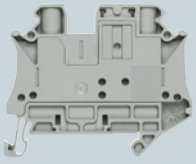
8WH screw terminals

8WH1 isolating terminals



	Terminal size	
	4 mm²	6 mm²
Terminal width	6.2 mm	8.2 mm
Max. load current I_{max}	20 A	20 A
Rated voltage U_n	400 V	500 V
AWG	26 ... 10	24 ... 8
Connection capacity, one rigid conductor	0.14 ... 6 mm²	0.2 ... 10 mm²
Connection capacity, two rigid conductors	0.14 ... 1.5 mm²	0.2 ... 2.5 mm²
Connection capacity, one flexible conductor with end sleeve	0.14 ... 6 mm²	0.2 ... 10 mm²
Connection capacity, two flexible conductors with end sleeve	0.14 ... 1.5 mm²	0.2 ... 2.5 mm²
Tightening torque	0.6 ... 0.8 Nm	1.5 ... 1.8 Nm
Standard	cULus, CSA	cULus
		
Terminals	**Color**	
2	Gray	8WH1000-6AG00	8WH1000-6AH00

Special accessories

Plug-in zone connectors

	Type	Color	I_{max}	Illuminated display	Article No.	Article No.
	Isolating plugs	Orange	–	–	8WH9040-0DB04	8WH9040-0DB04
	Through-type connectors	Gray	16 A	–	8WH9020-8AB00	8WH9020-8AB00
	Fused connectors [1]	Black	6.3 A	12 ... 30 V, 1 ... 2.5 mA	8WH9040-3AB08	8WH9040-3AB08
				110 ... 250 V, 0.5 ... 2.5 mA	8WH9040-3CB08	8WH9040-3CB08
				Without	8WH9040-3DB08	8WH9040-3DB08
	Component connectors	Gray	6 A	–	8WH9040-0BB00	8WH9040-0BB00

[1] The G fuse holders must be selected according to the maximum power loss (heat dissipation) of the G fuse links.
Depending on the application and method of installation, the heat rise conditions in closed fuse holders must be tested.
Higher ambient temperatures represent an additional load for the fuse links.
A shift in rated current should therefore be taken into account in such applications.

See general accessories, page 14/57 onwards

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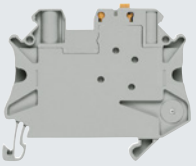
8WH1 isolating blade terminals



	Terminal size 4 mm²
Terminal width	6.2 mm
Max. load current I_{max}	20 A
Rated voltage U_n	500 V
AWG	26 ... 12
Connection capacity, one rigid conductor	0.14 ... 4 mm²
Connection capacity, two rigid conductors	0.14 ... 1.5 mm²
Connection capacity, one flexible conductor with end sleeve	0.14 ... 4 mm²
Connection capacity, two flexible conductors with end sleeve	0.14 ... 1.5 mm²
Tightening torque	0.6 ... 0.8 Nm
Standard	cULus,



Terminals	Color	
2	Gray	8WH1000-6CG00

Special accessories

Warning covers for 8WH1



Image	Color	Article No.
Lightning symbol	Yellow	8WH9063-5BA06

See general accessories, page 14/57 onwards

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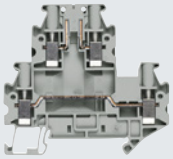
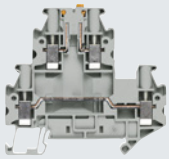
8WH screw terminals

8WH1 two-tier terminals with isolating function

❶ 

❷ 

	Terminal size 4 mm²	
Terminal width	6.2 mm	6.2 mm
Max. load current I_{max}	38 A	38 A
Rated voltage U_{max}	500 V	500 V
AWG	26 ... 10	26 ... 10
Connection capacity, one rigid conductor	0.14 ... 6 mm²	0.14 ... 6 mm²
Connection capacity, two rigid conductors	0.14 ... 1.5 mm²	0.14 ... 1.5 mm²
Connection capacity, one flexible conductor with end sleeve	0.14 ... 6 mm²	0.14 ... 6 mm²
Connection capacity, two flexible conductors with end sleeve	0.14 ... 1.5 mm²	0.14 ... 1.5 mm²
Tightening torque	0.6 ... 0.8 Nm	0.6 ... 0.8 Nm
Standard	cULus, CE	cULus, CE
		

Version	Color		
❶ Isolating terminal			
Isolating terminal in the upper tier	Gray	8WH1020-6AG00	–
❷ Isolating blade			
Isolating blade in the upper tier	Gray	–	8WH1020-6AC00

Special accessories

Covers



Width	Color	Article No.	Article No.
2.2 mm	Gray	8WH9000-1QA00	8WH9000-1QA00

Compartment partitions



Thickness	Color	Article No.	Article No.
2 mm	Gray	8WH9070-6FA00	8WH9070-6FA00

Spacer plates



- Compensates for tier offset if other terminals are mounted side by side

Thickness	Color	Article No.	Article No.
2.5 mm	Gray	8WH9160-0AA00	8WH9160-0AA00

See general accessories, page 14/57 onwards

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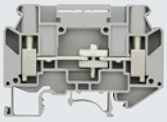
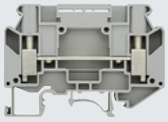
8WH1 measuring transformer isolating terminals

❶ 

❷

	Terminal size 6 mm²	
Terminal width	8.2 mm	8.2 mm
Rated uninterrupted current I_u	41 A	41 A
Rated insulation voltage U_i	500 V	800 V
AWG	24	8
Connection capacity, rigid	0.5 ... 10 mm²	0.5 ... 10 mm²
Connection capacity, flexible with end sleeve	0.5 ... 6 mm²	0.5 ... 6 mm²
Disconnect slide tightening torque	0.6 ... 0.8 Nm	–
Tightening torque	1.5 ... 1.6 Nm	1.5 ... 1.6 Nm
Standard	cULus, CE	cULus, CE
		

Terminals	Color		
❶ Isolating terminals			
2 recesses for screwing in the test sockets	Gray	8WH1000-7AH00	–
❷ Through-type terminals with identical contour			
2 recesses for screwing in the test sockets	Gray	–	8WH1000-7BH00

Special accessories

Covers



Width	Color	Article No.	Article No.
2.2 mm	Gray	8WH9000-3UA00	8WH9000-3UA00

Disconnecting links



- For bridging two adjacent terminals
- Cannot be used with the bare 8WH9010-0MB12 test socket

Tightening torque	Number of poles	Color	Article No.	Article No.
0.6 ... 0.8 Nm	2-pole	Gray	8WH9021-0AC00	8WH9021-0AC00

Connecting combs, separable



- Consisting of connection wire, spacer sleeves and screws
- For bridging terminals, the connection wire is adjustable
- Cannot be used with the bare 8WH9010-0MB12 test socket

Tightening torque	Number of poles	Color	Article No.	Article No.
0.6 ... 0.8 Nm	10-pole	Gray	8WH9021-0AL00	8WH9021-0AL00

Short-circuiting plugs, fully insulated



- For short-circuiting adjacent terminals
- For simple transformer measurements
- Required when the bare 8WH9010-0MB12 test adapter is used in the measuring transformer terminal

I_{max}	Number of poles	Color	Article No.	Article No.
20 A	2-pole	Black	8WH9010-0BC08	8WH9010-0BC08

Test sockets, insulated



- For screwing into the measuring transformer terminals
- The 8WH9021-0AC00 disconnecting link shall be used for short-circuiting adjacent terminals

Tightening torque	Color	Article No.	Article No.
0.6 ... 0.8 Nm	Green	8WH9010-0MB03	8WH9010-0MB03
	Violet	8WH9010-0MB11	8WH9010-0MB11
	Yellow	8WH9010-0MB06	8WH9010-0MB06

Test sockets, bare



- For screwing into the measuring transformer terminals
- For simple transformer measurements
- For tapping with test plug
- The 8WH9010-0BC08 short-circuiting plug shall be used for short-circuiting adjacent terminals

Tightening torque	Article No.	Article No.
0.6 ... 0.8 Nm	8WH9010-0MB12	8WH9010-0MB12

See general accessories, page 14/57 onwards

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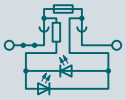
8WH screw terminals

8WH1 fuse terminals

❶ 

❷ 

	Terminal size	
	4 mm²	6 mm²
Terminal width	6.2 mm	8.2 mm
Max. load current I_{max}	6.3 A	10 A
Rated voltage U_n	500 V	630 V
AWG	26 ... 10	24 ... 8
Connection capacity, one rigid conductor	0.14 ... 6 mm²	0.2 ... 10 mm²
Connection capacity, two rigid conductors	0.14 ... 1.5 mm²	0.2 ... 2.5 mm²
Connection capacity, one flexible conductor with end sleeve	0.14 ... 6 mm²	0.2 ... 10 mm²
Connection capacity, two flexible conductors with end sleeve	0.14 ... 1.5 mm²	0.2 ... 2.5 mm²
Tightening torque	0.6 ... 0.8 Nm	1.5 ... 1.8 Nm
Standard	IEC 60947-7-3, cULus,	IEC 60947-7-3, cULus,
		

LED	Color			
For 5 × 20 mm G fuse links				
❶ Without	●	Black	8WH1000-1GG08	–
❷ AC/DC with LED 10 ... 30 V	●	Black	8WH1000-1KG38	–
❷ AC/DC with LED 110 ... 250 V	●	Black	8WH1000-1MG88	–
For 6.3 × 32 mm G fuse links (inch fuses)				
❶ Without	●	Black	–	8WH1000-1HH08
❷ AC/DC with LED 12 ... 30 V	●	Black	–	8WH1000-1PH38

Special accessories

Reducing combs



- For connecting terminals from terminal size 6 mm² to 2.5 mm² or 4 mm²

Version	Color		Article No.	Article No.
From screw to screw	●	Turquoise	–	8WH9002-8AC10

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See general accessories, page 14/57 onwards

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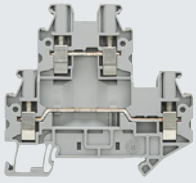
8WH1 two-tier terminals for soldering of components [1)]



	Terminal size 2.5 mm²
Terminal width	5.2 mm
Max. load current I_{max}	28 A
Rated voltage U_{max}	500 V
AWG	26 ... 10
Connection capacity, one rigid conductor	0.14 ... 4 mm²
Connection capacity, two rigid conductors	0.14 ... 1.5 mm²
Connection capacity, one flexible conductor with end sleeve	0.14 ... 4 mm²
Connection capacity, two flexible conductors with end sleeve	0.14 ... 1.5 mm²
Tightening torque	0.5 ... 0.6 Nm
Standard	cULus,



Terminals	Color	
4	Gray	8WH1020-5LF00

[1)] Supplied without components; the appropriate components (resistors, diodes, capacitors, ...) are to be soldered in by user

Special accessories

Covers



Width	Color	Article No.
2.2 mm	Gray	8WH9000-1QA00

Compartment partitions



Thickness	Color	Article No.
2 mm	Gray	8WH9070-6FA00

Spacer plates



- Compensates for tier offset if other terminals are mounted side by side

Thickness	Color	Article No.
2.5 mm	Gray	8WH9160-0AA00

See general accessories, page 14/57 onwards

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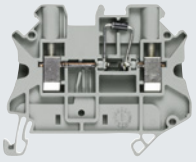
8WH screw terminals

8WH1 diode terminals

❶

❷ 

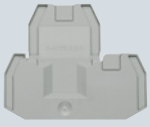
	Terminal size 4 mm²
Terminal width	6.2 mm
Uninterrupted limiting current	0.5 A
Rated insulation voltage U_i	800 V
Blocking voltage	1300 V
AWG	26 ... 10
Connection capacity, one rigid conductor	0.14 ... 6 mm²
Connection capacity, two rigid conductors	0.14 ... 1.5 mm²
Connection capacity, one flexible conductor with end sleeve	0.14 ... 6 mm²
Connection capacity, two flexible conductors with end sleeve	0.14 ... 1.5 mm²
Tightening torque	0.6 ... 0.8 Nm
Diode	1N 4007, integrated
Standard	cULus,



Let-through	Color	
❶ From left to right	Gray	8WH1000-6LG00
❷ From right to left	Gray	8WH1000-6KG00

Special accessories

Covers



Width	Color	Article No.
2.2 mm	Gray	8WH9000-2PA00

Warning covers



Image	Color	Article No.
Lightning symbol	Yellow	8WH9063-5BA06

See general accessories, page 14/57 onwards

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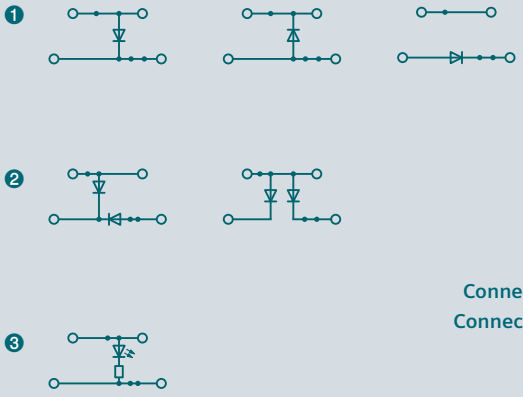
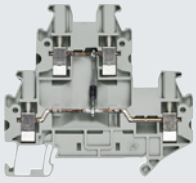
8WH1 two-tier diode terminals



	Terminal size 2.5 mm²
Terminal width	5.2 mm
Max. load current I_{max}	28 A
Uninterrupted limiting current	0.5 A
Rated insulation voltage U_i	500 V
AWG	26 ... 10
Connection capacity, one rigid conductor	0.14 ... 4 mm²
Connection capacity, two rigid conductors	0.14 ... 1.5 mm²
Connection capacity, one flexible conductor with end sleeve	0.14 ... 4 mm²
Connection capacity, two flexible conductors with end sleeve	0.14 ... 1.5 mm²
Tightening torque	0.5 ... 0.6 Nm
Diode	1N 4007, integrated
Standard	cULus,



Versions	LED	Color	
❶ With one diode			
Let-through from top to bottom		Gray	8WH1020-5AF00
Let-through from bottom to top		Gray	8WH1020-5BF00
Let-through from bottom left to bottom right		Gray	8WH1020-5DF00
❷ With two diodes			
Let-through from top to bottom left and from bottom right to bottom left		Gray	8WH1020-5FF00
Let-through from top to bottom left and from top to bottom right		Gray	8WH1020-5HF00
❸ With illuminated display			
Let-through from top to bottom	24 V DC	Gray	8WH1020-5JF30

Special accessories

Covers



Width	Color	Article No.
2.2 mm	Gray	8WH9000-1QA00

Compartment partitions



Thickness	Color	Article No.
2 mm	Gray	8WH9070-6FA00

Spacer plates



- Compensates for tier offset if other terminals are mounted side by side

Thickness	Color	Article No.
2.5 mm	Gray	8WH9160-0AA00

See general accessories, page 14/57 onwards

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8WH screw terminals

8WH9 shield terminals

	Terminal diameter			
	3 ... 8 mm	3 ... 14 mm	3 ... 20 mm	20 ... 35 mm
Tightening torque	0.6 Nm	0.8 Nm	0.8 Nm	1.5 ... 1.8 Nm
Sheet thickness, mounting plate	1 ... 2 mm	1 ... 2 mm	1 ... 2 mm	1 ... 2 mm
				
Version				
For direct shield attachment on conductive mounting plate				
For connecting cable shield and enclosure ground	8WH9130-0AA00	8WH9130-0BA00	8WH9130-0CA00	8WH9130-0DA00
For 10 × 3 mm busbars				
For connecting cable shield and enclosure ground	8WH9130-0LA00	8WH9130-0MA00	8WH9130-0NA00	8WH9130-0PA00

Special accessories

Support brackets

	Version	Article No.	Article No.	Article No.	Article No.
	Made of molded plastic and conductive connection with retaining screw	8WH9140-0DA00	8WH9140-0DA00	8WH9140-0DA00	8WH9140-0DA00
	For mounting rail with clearance of approx. 30 mm to the busbar	8WH9140-0BA00	8WH9140-0BA00	8WH9140-0BA00	–
	For mounting rail with clearance of approx. 65 mm to the busbar	8WH9140-0CA00	8WH9140-0CA00	8WH9140-0CA00	–

N busbars, 10 × 3 mm

	Version	Length	Article No.	Article No.	Article No.	Article No.
	Copper, tinned	1000 mm	8WA2842	8WA2842	8WA2842	8WA2842

See general accessories, page 14/57 onwards

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Accessories for 8WH terminal blocks

Individual labeling system

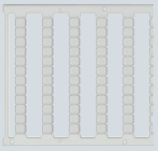
Labeling systems for
- Terminal blocks
- Modular installation devices
- Circuit breakers
- Switch disconnectors

The inscription labels can be inscribed with Murrplastik labeling systems or by hand.

The WIN designation facilitates assignment in the inscription software.

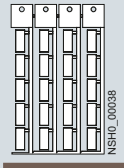
Labeling systems available from:
Murrplastik Systemtechnik GmbH
Postfach 1143
D-71570 Oppenweiler
Telephone: 07191-482-0
email: info@murrplastik.de

Blank labels



Version	Terminal width	Designation	Color	Article No.
Front	3.5 mm	WIN 97	White	8WH8112-0AA05
	4.2 mm	WIN 97	White	8WH8112-1AA05
	5.2 and 6.2 mm	WIN 88	White	8WH8112-2AA05
	8.2, 10, 12 and 16 mm	WIN 40	White	8WH8112-4AA05
Flat	3.5 mm	WIN 97	White	8WH8113-0AA05
	4.2 mm	WIN 180	White	8WH8113-1AA05
	5.2 mm	WIN 182	White	8WH8113-1AA05
	6.2 mm	WIN 184	White	8WH8113-1AA05
	8.2 mm	WIN 186	White	8WH8113-1AA05
	10 mm	WIN 188	White	8WH8113-1AA05
	12 and 16 mm	WIN 46Z	White	8WH8113-6AA05

Snap-on device labels



- For identification of, e.g. circuit breakers, contactors and control systems

Version	Designation	Color	Article No.
20 × 7 mm, snap-on hooks at side	WIN 95	White	8WH8210-0AA55
20 × 7 mm, snap-on hooks at side	WIN 95	Turquoise	8WH8210-0AA56

Adhesive device labels

- For identification of, e.g. modular installation devices and switch disconnectors

Versions	Designation	Color	Article No.
15 × 6 mm	WIN 098	White	8WH8210-0AA35
	WIN 099	Yellow	8WH8210-0AA36
19 × 8 mm	WIN 088	White	8WH8210-0AA45
	WIN 082	Yellow	8WH8210-0AA46

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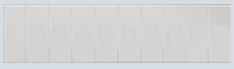
Accessories for 8WH terminal blocks

Standard labeling system

			Terminal size	1.5 mm²	2.5 mm²
			Terminal width	4.2 mm / 5.2 mm (8WH3)	5.2 mm / 6.2 mm (8WH3)
Front					
	Text alignment	**Inscription**	**Inscription**	**Article No.**	**Article No.**
	Vertical	Consecutive numbering	1 ... 10 (10×)	8WH8120-1AB05	8WH8120-2AB05
			11 ... 20 (10×)	8WH8120-1AB15	8WH8120-2AB15
			21 ... 30 (10×)	8WH8120-1AB25	8WH8120-2AB25
			31 ... 40 (10×)	8WH8120-1AB35	8WH8120-2AB35
			41 ... 50 (10×)	8WH8120-1AB45	8WH8120-2AB45
			51 ... 60 (10×)	8WH8120-1AB55	8WH8120-2AB55
			61 ... 70 (10×)	8WH8120-1AB65	8WH8120-2AB65
			71 ... 80 (10×)	8WH8120-1AB75	8WH8120-2AB75
			81 ... 90 (10×)	8WH8120-1AB85	8WH8120-2AB85
			91 ... 100 (10×)	8WH8120-1AC05	8WH8120-2AC05
		L1, L2, L3, N, PE	–	–	8WH8120-2AA15
		U, V, W, N, grounding	–	–	–
		Custom inscription	–	8WH8120-1XA05-Z Y01	8WH8120-2XA05-Z Y01
	Horizontal	Consecutive numbering	1 ... 10 (10×)	8WH8140-1AB05	8WH8140-2AB05
			11 ... 20 (10×)	8WH8140-1AB15	8WH8140-2AB15
			21 ... 30 (10×)	8WH8140-1AB25	8WH8140-2AB25
			31 ... 40 (10×)	8WH8140-1AB35	8WH8140-2AB35
			41 ... 50 (10×)	–	8WH8140-2AB45
			51 ... 60 (10×)	–	8WH8140-2AB55
			61 ... 70 (10×)	–	8WH8140-2AB65
			71 ... 80 (10×)	–	8WH8140-2AB75
			81 ... 90 (10×)	–	8WH8140-2AB85
			91 ... 100 (10×)	–	8WH8140-2AC05
		Custom inscription	–	8WH8140-1XA05-Z Y01	8WH8140-2XA05-Z Y01
	Blank	–	–	8WH8110-1AA05	8WH8110-2AA05
Flat					
	Text alignment	**Inscription**	**Inscription**	**Article No.**	**Article No.**
	Vertical	Consecutive numbering	1 ... 10 (10×)	8WH8121-1AB05	8WH8121-2AB05
			11 ... 20 (10×)	8WH8121-1AB15	8WH8121-2AB15
			21 ... 30 (10×)	8WH8121-1AB25	8WH8121-2AB25
			31 ... 40 (10×)	8WH8121-1AB35	8WH8121-2AB35
			41 ... 50 (10×)	8WH8121-1AB45	8WH8121-2AB45
			51 ... 60 (10×)	8WH8121-1AB55	8WH8121-2AB55
			61 ... 70 (10×)	–	8WH8121-2AB65
			71 ... 80 (10×)	–	8WH8121-2AB75
			81 ... 90 (10×)	–	8WH8121-2AB85
			91 ... 100 (10×)	–	8WH8121-2AC05
		Custom inscription	–	8WH8121-1XA05-Z Y01	8WH8121-2XA05-Z Y01
	Horizontal	Consecutive numbering	1 ... 10 (10×)	8WH8141-1AB05	8WH8141-2AB05
			11 ... 20 (10×)	8WH8141-1AB15	8WH8141-2AB15
			21 ... 30 (10×)	8WH8141-1AB25	8WH8141-2AB25
			31 ... 40 (10×)	8WH8141-1AB35	8WH8141-2AB35
			41 ... 50 (10×)	8WH8141-1AB45	8WH8141-2AB45
			51 ... 60 (10×)	–	8WH8141-2AB55
			61 ... 70 (10×)	–	8WH8141-2AB65
			71 ... 80 (10×)	–	8WH8141-2AB75
			81 ... 90 (10×)	–	8WH8141-2AB85
			91 ... 100 (10×)	–	8WH8141-2AC05
		Custom inscription	–	8WH8141-1XA05-Z Y01	8WH8141-2XA05-Z Y01
	Blank	–	–	8WH8111-1AA05	8WH8111-2AA05

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4 mm²	6 mm²	10 and 16 mm²	35 mm²
6.2 mm	8.2 mm	10 and 12 mm	16 mm
Article No.	**Article No.**	**Article No.**	**Article No.**
8WH8120-3AB05	8WH8120-4AB05	8WH8120-5AB05	–
8WH8120-3AB15	8WH8120-4AB15	8WH8120-5AB15	–
8WH8120-3AB25	8WH8120-4AB25	8WH8120-5AB25	–
8WH8120-3AB35	8WH8120-4AB35	8WH8120-5AB35	–
8WH8120-3AB45	8WH8120-4AB45	–	–
8WH8120-3AB55	8WH8120-4AB55	–	–
8WH8120-3AB65	8WH8120-4AB65	–	–
8WH8120-3AB75	8WH8120-4AB75	–	–
8WH8120-3AB85	8WH8120-4AB85	–	–
8WH8120-3AC05	8WH8120-4AC05	–	–
8WH8120-3AA15	8WH8120-4AA15	8WH8120-5AA15	8WH8120-7AA15
–	–	8WH8120-5AA25	–
8WH8120-3XA05-Z Y01	8WH8120-4XA05-Z Y01	8WH8120-5XA05-Z Y01	8WH8120-7XA05-Z Y01
8WH8140-3AB05	8WH8140-4AB05	8WH8140-5AB05	–
8WH8140-3AB15	8WH8140-4AB15	8WH8140-5AB15	–
8WH8140-3AB25	8WH8140-4AB25	8WH8140-5AB25	–
8WH8140-3AB35	–	8WH8140-5AB35	–
8WH8140-3AB45	–	–	–
8WH8140-3AB55	–	–	–
8WH8140-3AB65	–	–	–
8WH8140-3AB75	–	–	–
8WH8140-3AB85	–	–	–
8WH8140-3AC05	–	–	–
8WH8140-3XA05-Z Y01	8WH8140-4XA05-Z Y01	8WH8140-5XA05-Z Y01	8WH8140-7XA05-Z Y01
8WH8110-3AA05	8WH8110-4AA05	8WH8110-5AA05	8WH8110-7AA05

Article No.	**Article No.**	**Article No.**	**Article No.**
8WH8121-3AB05	8WH8121-4AB05	8WH8121-5AB05	–
8WH8121-3AB15	8WH8121-4AB15	8WH8121-5AB15	–
8WH8121-3AB25	8WH8121-4AB25	8WH8121-5AB25	–
8WH8121-3AB35	–	–	–
8WH8121-3AB45	–	–	–
8WH8121-3AB55	–	–	–
8WH8121-3AB65	–	–	–
8WH8121-3AB75	–	–	–
8WH8121-3AB85	–	–	–
8WH8121-3AC05	–	–	–
8WH8121-3XA05-Z Y01	8WH8121-4XA05-Z Y01	8WH8121-5XA05-Z Y01	–
8WH8141-3AB05	8WH8141-4AB05	8WH8141-5AB05	–
–	8WH8141-4AB15	–	–
–	8WH8141-4AB25	–	–
–	–	–	–
–	–	–	–
–	–	–	–
–	–	–	–
–	–	–	–
–	–	–	–
–	–	–	–
8WH8141-3XA05-Z Y01	8WH8141-4XA05-Z Y01	8WH8141-5XA05-Z Y01	–
8WH8111-3AA05	8WH8111-4AA05	8WH8111-5AA05	8WH8111-7AA05

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Accessories for 8WH terminal blocks

Mounting accessories

Lateral mounting test plugs



- For individual assembly of test plug connectors
- Cannot be used for 8WH3 insulation displacement terminals.

Terminal size	Terminal width	Color	Article No.
2.5 mm²	5.2 mm	Red	8WH9010-0EB02

Spacer plates



- For skipping single terminals for individual test adapter assembly
- Not suitable for 8WH3 insulation displacement terminals

Terminal size	Terminal width	Color	Article No.
2.5 mm²	5.2 mm	Red	8WH9010-2BA02

Terminal strip markers, for end retainers



- Height-adjustable
- For quick-fit end retainers
- For inscription with two front labels, for terminal width 10.2 mm and terminal strip markers

Labeling field size	Color	Article No.
20 × 8 mm	Gray	8WH9150-1CA00

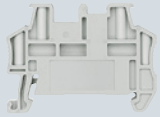
Test adapters



- For 4 mm Ø test plugs and 4 mm Ø safety test plugs
- Makes contact in the bridge slot

Color	Article No.
Gray	8WH9010-0JB00

Quick-fit end retainers



- For inscription with front labels, for terminal width 5.2 mm and terminal strip markers

Color	Article No.
Gray	8WH9150-0CA00

Reducing combs



- For connecting two through-type terminals
- Cannot be used for 8WH1 through-type terminals and 8WH3 insulation displacement terminals

From terminal size	To terminal size	Color	Article No.
2.5 mm² or 4 mm²	1.5 mm²	Turquoise	8WH9020-0CC10
	6 mm²	Turquoise	8WH9020-0FC10
	10 mm²	Turquoise	8WH9020-0AC10
	16 mm²	Turquoise	8WH9020-0BC10
	35 mm²	Turquoise	8WH9020-0EC10
16 mm²	35 mm²	Turquoise	8WH9020-0DC10

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Connecting combs



Terminal size	Terminal width	Max. load current I_{max}	Used for 8WH3	Number of poles	Article No.
1.5 mm²	4.2 mm	17.5 A	Cannot be used	2-pole	8WH9020-6AC10
				3-pole	8WH9020-6AD10
				4-pole	8WH9020-6AE10
				5-pole	8WH9020-6AF10
				10-pole	8WH9020-6AL10
				20-pole	8WH9020-6AS10
2.5 mm²	5.2 mm	24 A	Can be used for terminal size 1.5 mm²	2-pole	8WH9020-6BC10
				3-pole	8WH9020-6BD10
				4-pole	8WH9020-6BE10
				5-pole	8WH9020-6BF10
				10-pole	8WH9020-6BL10
				20-pole	8WH9020-6BS10
				50-pole	8WH9020-6BT10
4 mm²	6.2 mm	32 A	Can be used for terminal size 2.5 mm²	2-pole	8WH9020-6CC10
				3-pole	8WH9020-6CD10
				4-pole	8WH9020-6CE10
				5-pole	8WH9020-6CF10
				10-pole	8WH9020-6CL10
				20-pole	8WH9020-6CS10
				50-pole	8WH9020-6CT10
6 mm²	8.2 mm	41 A	Cannot be used	2-pole	8WH9020-6DC10
				3-pole	8WH9020-6DD10
				4-pole	8WH9020-6DE10
				5-pole	8WH9020-6DF10
				10-pole	8WH9020-6DL10
10 mm²	10 mm	57 A	Cannot be used	2-pole	8WH9020-6EC10
16 mm²	12 mm	76 A	Cannot be used	2-pole	8WH9020-6FC10
35 mm²	16 mm	101 A	Cannot be used	2-pole	8WH9020-6GC10

Screwdrivers



Variant	Article No.
0.4 × 2.5 mm	8WH9200-0AA00
0.6 × 3.5 mm	8WH9200-0AB00
0.8 × 4.0 mm	8WH9200-0AC00
1.0 × 5.5 mm	8WH9200-0AD00

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8WA1 screw terminals

Through-type terminals

❶ ❷

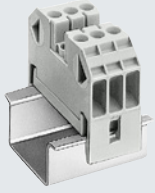
	Terminal size 2.5 mm²	4 mm²
Terminal width, through-type terminal	6 mm	6.5 mm
Terminal width, PE/PEN through-type terminal	6 mm	7.2 mm
3-pole terminal block width	18 mm	19.5 mm
10-pole terminal block width	61 mm	65.5 mm
Rated uninterrupted current I_u	24 A	32 A
Rated voltage U_e (cULus, CSA)	600 V	600 V
Rated insulation voltage U_i	800 V	800 V
AWG cULus	22 ... 12	18 ... 10
AWG CSA	18 ... 12	18 ... 10
Connection capacity, rigid	0.5 ... 4 mm²	0.5 ... 6 mm²
Connection capacity, flexible with end sleeve	0.5 ... 2.5 mm²	0.5 ... 4 mm²
Tightening torque	0.5 Nm	0.5 Nm
Standard	IEC 60947-7-1, IEC 60947-7-2, cULus, CSA	IEC 60947-7-1, IEC 60947-7-2, cULus, CSA

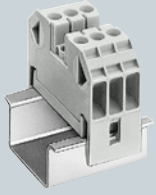












Terminals	Number of poles	Inscription	Color		
❶ Through-type terminal – single terminal					
2	1-pole	Blank	Beige	8WA1011-1DF11	8WA1011-1DG11
			Blue	8WA1011-1BF23	8WA1011-1BG11
			Red	8WA1011-1BF21	8WA1011-1BG21
			Orange	8WA1011-1BF22	8WA1011-1BG22
			Yellow	8WA1011-1BF26	–
			Black	8WA1011-1BF24	8WA1011-1BG24
			Green	8WA1011-1BF25	–
❷ PE/PEN through-type terminal – single terminal					
1	1-pole	Blank	Green-yellow	8WA1011-1PF01	8WA1011-1PG01
2	1-pole	Blank	Green-yellow	8WA1011-1PF00	8WA1011-1PG00
❶ Through-type terminal block					
6	3-pole	Blank	Beige	8WA1011-3DF21	8WA1011-3DG21
20	10-pole	Blank	Beige	8WA1011-0DF21	8WA1011-0DG21
		1 ... 10	Beige	8WA1011-0DF22	8WA1011-0DG22

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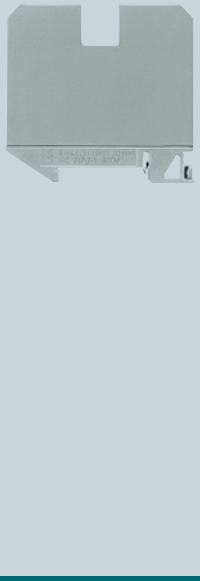
6 mm²	16 mm²	35 mm²	70 mm²
8 mm	10 mm	16 mm	25 mm
8 mm	12 mm	16 mm	–
24.5 mm	30 mm	48 mm	–
–	–	–	–
41 A	76 A	125 A	192 A
600 V	600 V	600 V	600 V
800 V	800 V	800 V	800 V
14 ... 8	12 ... 4	10 ... 1	8 ... 3/0
16 ... 8	14 ... 6	12 ... 2	8 ... 1/0
0.7 ... 10 mm²	1.5 ... 16 mm²	4 ... 16 mm²	10 ... 95 mm²
1.5 ... 6 mm²	2.5 ... 16 mm²	4 ... 35 mm²	16 ... 70 mm²
0.8 Nm	1.2 Nm	2.5 ... 3 Nm	6 Nm
IEC 60947-7-1, IEC 60947-7-2,	IEC 60947-7-1, IEC 60947-7-2,	IEC 60947-7-1, IEC 60947-7-2,	IEC 60947-7-1,
			
8WA1011-1DH11	8WA1204	8WA1205	8WA1206
8WA1011-1BH23	8WA1011-1BK11	8WA1011-1BM11	8WA1011-1BP11
–	–	–	–
–	–	–	–
–	–	–	–
8WA1011-1BH24	–	–	–
–	–	–	–
–	–	–	–
8WA1011-1PH00	8WA1011-1PK00	8WA1011-1PM00	–
8WA1011-3DH21	8WA1304	8WA1305	–
–	–	–	–
–	–	–	–

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8WA1 screw terminals

Through-type terminals

Special accessories

Terminal size	2.5 mm²	4 mm²

Covers

Version	Article No.	Article No.
 With lightning symbol	8WA1810	8WA1811
 White, facility for labeling	8WA1860	8WA1862
 For connection bars, transparent	8WA1822-7AX01	8WA1822-7AX01
For connection bars, white, inscription possible	8WA1822-7AX03	8WA1822-7AX03

Jumpers

Version	Article No.	Article No.
 For connection bars	8WA1822-7VF01	8WA1822-7VG00

Disconnecting links



- The terminals must be fitted with end plates and must be mounted with the end plates facing each other

I_n	Article No.	Article No.
Up to 32 A	8WA1865	8WA1865

End retainers, thermoplastic



Width	Article No.	Article No.
10 mm	8WA1808	8WA1808

Insulation plate



Article No.	Article No.
8WA1825	8WA1825

Barriers



- Between terminals with terminal sizes 2.5 and 6 mm² two 8WH1820 barriers are required

Thickness	Article No.	Article No.
2 mm	8WA1820	8WA1820

Connection bars



Version	Article No.	Article No.
For two terminals	8WA1895	8WA1850
For three terminals	8WA1896	8WA1851
For four terminals	8WA1897	8WA1852
For ten terminals	8WA1898	8WA1853

See general accessories, page 14/78 onwards

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6 mm²	16 mm²	35 mm²	70 mm²
Article No.	**Article No.**	**Article No.**	**Article No.**
8WA1811	8WA1812	8WA1813	8WA1814
8WA1862	8WA1892	8WA1893	–
8WA1822-7AX01	8WA1822-7AX02	8WA1822-7AX02	–
8WA1822-7AX03	–	–	–
Article No.	**Article No.**	**Article No.**	**Article No.**
8WA1822-7VH00	–	–	–
Article No.	**Article No.**	**Article No.**	**Article No.**
8WA1865	–	–	–
Article No.	**Article No.**	**Article No.**	**Article No.**
8WA1808	8WA1808	8WA1808	8WA1808
Article No.	**Article No.**	**Article No.**	**Article No.**
8WA1825	8WA1822-7TK00	8WA1822-7TK00	–
Article No.	**Article No.**	**Article No.**	**Article No.**
8WA1821	8WA1821	8WA1823	8WA1824
Article No.	**Article No.**	**Article No.**	**Article No.**
8WA1885	8WA1842	8WA1828	8WA1216
8WA1886	8WA1845	8WA1803	–
8WA1887	8WA1848	–	–
8WA1888	8WA1802	8WA1804	–

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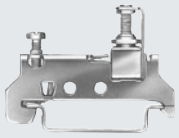
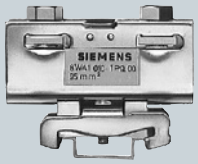
8WA1 screw terminals

PE through-type terminals, bare



	Terminal size	
	6 mm²	95 mm²
Terminal width	6 mm	16 mm
Terminal length	44 mm	75 mm
Terminal height	25 mm	63 mm
Tightening torque	0.8 Nm	15 ... 20 Nm
Connection capacity, rigid	0.5 ... 10 mm²	–
Connection capacity, flexible with end sleeve	1.5 ... 6 mm²	50 ... 95 mm²
Standard		





Terminals	Surface		
PE through-type terminals			
2	Bare	8WA1010-1PH01	8WA1010-1PQ00

Special accessories

Barriers



	Article No.	Article No.
	8WA1821	–

See general accessories, page 14/78 onwards

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Two-tier terminals

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	Terminal size 4 mm²
Terminal width	6.5 mm
Rated uninterrupted current I_u	32 A
Rated insulation voltage U_i	690 V
AWG	18 ... 10
AWG	18 ... 10
Connection capacity, rigid	0.5 ... 6 mm²
Connection capacity, flexible with end sleeve	0.75 ... 4 mm²
Standard	,



Version	Color	
❶ Two-tier terminals without equipotential bonding		
2-pole with two isolated connections	Beige	8WA1011-2DG11
	Blue	8WA1011-2BG11
❷ Two-tier terminals with equipotential bonding		
1-pole	Beige	8WA1011-6DG11
	Blue	8WA1011-6BG11

Special accessories

Covers

	Version	Article No.
	With lightning symbol	8WA1811
	White, facility for labeling	8WA1862
	For connection bars, transparent	8WA1822-7AX01

Jumpers

	Version	Article No.
	For upper tier of 2-pole terminals	8WA1822-7VG00
	For lower tier of 1 and 2-pole terminals	8WA1822-7VG01

Disconnecting links

	Article No.
	8WA1865

End plates

	Article No.
	8WA1817

Insulation plate

	Version	Article No.
	For upper and lower tier	8WA1825

Connection bars

	Version	Versions	Article No.
	For upper tier of 2-pole terminals	For two terminals	8WA1850
		For three terminals	8WA1851
		For four terminals	8WA1852
		For ten terminals	8WA1853
	For lower tier of 1 and 2-pole terminals	For two terminals	8WA1835
		For ten terminals	8WA1838

Barriers

	Color	Article No.
	Gray	8WA1823

See general accessories, page 14/78 onwards

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8WA1 screw terminals

Insta or three-tier terminals

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	Terminal size 2.5 mm²
Terminal width	6 mm
Rated uninterrupted current I_u	24 A
Rated insulation voltage U_i between phase conductors	400 V
Rated insulation voltage U_i between phase and protective conductors and for neutral isolating distance	250 V
AWG	22 ... 12
Connection capacity, rigid	0.5 ... 4 mm²
Connection capacity, flexible with end sleeve	0.5 ... 4 mm²
Tightening torque	0.5 Nm
Standard	



Type	Color	
❶ L, L	Beige	8WA1011-3JF18
❷ PE, L, L	Beige	8WA1011-3JF16
❷ PE, L, N	Beige	8WA1011-3JF17
❸ PE, L, NT	Beige	8WA1011-3JF20

Special accessories

Covers



Version	Article No.
For connection bars, transparent	8WA1822-7AX01
For connection bars, white	8WA1822-7AX03

Bare feeder terminals, for N busbars



Size	Conductor cross-section	Rated uninterrupted current	Article No.
6 × 6 mm and 10 × 3 mm	Up to 4 mm²	32 A	8WA2867
	Up to 25 mm²	76 A	8WA2868
	Up to 35 mm²	125 A	8WA2870

N busbars, 6 × 6 mm



Version	Length	Rated uninterrupted current	Article No.
For four-field	1109 mm	125 A	8GF9324-2

End retainers, thermoplastic



Width	Article No.
10 mm	8WA1808

Terminal strip labels for end retainers

Version	Article No.
Blank (WIN 67)	8WA8212-0AA65

Insulation carriers



Use	Article No.
For mounting insulated support rails	8WA1857

Labels, blank

Label size	Version	Article No.
5 × 7 mm (WIN 68)	Suitable for plotting	8WA8348-2AY

Connection bars



Version	Versions	Article No.
For Insta terminals	For two terminals	8WA1822-7VF02
	For three terminals	8WA1822-7VF03
	For ten terminals	8WA1822-7VF10

Barriers

Version	Color	Article No.
For Insta terminals	Gray	8WA1822-7TH00

See general accessories, page 14/78 onwards

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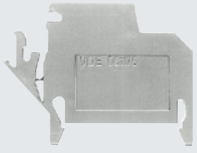
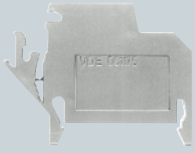
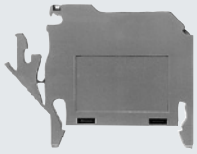
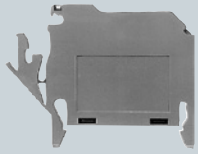
N conductor isolating and branch terminals

	Terminal size			
	2.5 mm²	4 mm²	6 mm²	16 mm²
Terminal width	6 mm	6.5 mm	8 mm	10 mm
Rated uninterrupted current I_u	24 A	32 A	41 A	76 A
Rated insulation voltage U_i	500 V	500 V	500 V	500 V
AWG	22 ... 12	18 ... 10	14 ... 8	12 ... 4
AWG	22 ... 12	18 ... 10	14 ... 8	–
Connection capacity, rigid	2.5 ... 4 mm²	0.5 ... 6 mm²	0.75 ... 10 mm²	1.5 ... 16 mm²
Connection capacity, flexible with end sleeve	0.5 ... 2.5 mm²	0.75 ... 4 mm²	0.5 ... 6 mm²	1.5 ... 16 mm²
Tightening torque	0.5 Nm	0.5 Nm	0.8 Nm	1.2 Nm
Standard	,	,	,	
				
Terminals	**Color**			
2	Blue	8WA1011-1NF01	8WA1011-1NG31	8WA1011-1NH01	8WA1604

Special accessories

Feeder terminals, for N busbars



Size	Rated uninterrupted current	Article No.	Article No.	Article No.	Article No.
6 × 6 mm and 10 × 3 mm	32 A	8WA2867	8WA2867	–	–
	76 A	8WA2868	8WA2868	8WA2868	8WA2868
	125 A	8WA2870	8WA2870	8WA2870	8WA2870

N busbars, 6 × 6 mm, for four-field



Length	Rated uninterrupted current	Article No.	Article No.	Article No.	Article No.
1109 mm	125 A	8GF9324-2	8GF9324-2	8GF9324-2	8GF9324-2

Label holder



Article No.	Article No.	Article No.	Article No.
3TX4210-0J	3TX4210-0J	3TX4210-0J	3TX4210-0J

See general accessories, page 14/78 onwards

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8WA1 screw terminals

Through-type terminals with sectionalizing feature



	Terminal size 2.5 mm²
Terminal width	6 mm
Rated uninterrupted current I_u	10 A
Rated insulation voltage U_i for open isolating distance	380 V AC, 450 V DC
Rated insulation voltage U_i when using barriers	750 V AC, 900 V DC
Connection capacity, rigid	0.25 ... 4 mm²
Connection capacity, flexible without end sleeve	0.5 ... 2.5 mm²
Connection capacity, flexible with end sleeve	0.5 ... 1.5 mm²
Tightening torque	0.5 Nm
Standard	,



Terminals	Version	Color	
2	With 2 holes for Ø 2.3 mm test plug	Gray	8WA1501

Special accessories

Barriers



Color	Article No.
Gray	8WA1820

See general accessories, page 14/78 onwards

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Measuring transformer terminals

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	Terminal size 6 mm²		
Terminal width	8 mm	8 mm	8 mm
Rated uninterrupted current I_u	41 A	41 A	41 A
Rated insulation voltage U_i	500 V	500 V	500 V
AWG	14 ... 8	14 ... 8	14 ... 8
AWG	16 ... 10	16 ... 10	16 ... 10
Connection capacity, rigid	0.75 ... 10 mm²	0.75 ... 10 mm²	0.75 ... 10 mm²
Connection capacity, flexible with end sleeve	0.75 ... 10 mm²	0.75 ... 10 mm²	0.75 ... 10 mm²
Tightening torque	0.8 Nm	0.8 Nm	0.8 Nm
Standard	,	,	,
			

Test sockets	Color	❶ Isolating terminal	❷ Isolating blade terminal	❸ Through-type terminals with identical contour
Without test socket	Beige	8WA1011-1MH11	–	8WA1011-1MH10
With test socket	Beige	–	8WA1011-1MH15	–

Special accessories

Covers, for connection bars



Versions	Article No.
Transparent	8WA1822-7AX01
White, facility for labeling	8WA1822-7AX03

Test sockets



Diameter	Article No.
4 mm	8WA1822-7PH00

Disconnecting links



- Rated insulation voltage with disconnecting link open according to DIN VDE 0110: 125 V, size C or 250 V size B

Article No.
8WA1822-7VH01

Insulation plate



Article No.
8WA1825

Connecting comb



Number of poles	Article No.
2-pole	8WA1822-7VH22
10-pole, can be shortened as required	8WA7163

Connection bars



Versions	Article No.
Two terminals	8WA1885
Three terminals	8WA1886
Four terminals	8WA1887
Ten terminals	8WA1888
Unmounted for ten terminals	8WA1822-7VH10

Barriers



Color	Article No.
Gray	8WA1822-7TH00

See general accessories, page 14/78 onwards

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8WA1 screw terminals

Fuse terminals

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	Terminal size 1.5 mm²
Terminal width	10 mm
Rated uninterrupted current I_u when using fuses	6.3 A
Rated uninterrupted current I_u when using the isolating link	16 A
Rated insulation voltage U_i when using fuses	250 V
Rated insulation voltage U_i when using the isolating link	800 V
AWG	18 ... 14
AWG	18 ... 14
Connection capacity, rigid	1 ... 2.5 mm²
Connection capacity, flexible with end sleeve	0.75 ... 1.5 mm²
Tightening torque	0.8 Nm
Standard	,



Version	Color	
For 5 × 25 mm G fuse links		
❶ Without LED	Beige	8WA1011-1SF12
❷ With LED 24 V AC/DC	Beige	8WA1011-1SF13
❷ With LED 230 V AC/DC	Beige	8WA1011-1SF15
For 6.3 × 32 mm G fuse links (inch fuses)		
❶ Without LED	Beige	8WA1011-1SF30
❷ With LED 24 V AC/DC	Beige	8WA1011-1SF31
❷ With LED 120 V AC/110 V DC	Beige	8WA1011-1SF32

Special accessories

5 × 25 mm G fuse links



Versions	Breaking capacity	Rated uninterrupted current	Article No.
Quick	Large	1 A	8WA1822-7EF16
		1.6 A	8WA1822-7EF18
		2.5 A	8WA1822-7EF21
		4 A	8WA1822-7EF23
		6.3 A	8WA1822-7EF25
Slow	Small	1 A	8WA1822-7EF76
		1.6 A	8WA1822-7EF78
		2.5 A	8WA1822-7EF81
		4 A	8WA1822-7EF83
		6.3 A	8WA1822-7EF85

Isolating links, 5 × 25 mm



Size	Article No.
5 × 25 mm	8WA1891

See general accessories, page 14/78 onwards

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Terminals for self-fitting with components



	Terminal size 1.5 mm²
Terminal width	10 mm
Rated uninterrupted current I_u	6.3 A
Rated insulation voltage U_i	500 V
Connection capacity, rigid	1 ... 2.5 mm²
Connection capacity, flexible with end sleeve	0.75 ... 1.5 mm²
Tightening torque	0.8 Nm



Terminals	Color	
Screw terminal at both ends for 2 conductors each	Gray	8WA1011-1EE00

Special accessories

Plugs for components



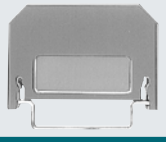
Version	Article No.
With PCB and inscription label (20 × 9 mm)	8WA1822-7EE00

See general accessories, page 14/78 onwards

Diode terminals



	Terminal size 2.5 mm²
Terminal width	6 mm
Rated uninterrupted current I_u	1 A
Rated insulation voltage U_{RRM}	250 V
Peak blocking voltage	1000 V
Connection capacity, rigid	0.5 ... 4 mm²
Connection capacity, flexible without end sleeve	0.5 ... 2.5 mm²
Connection capacity, flexible with end sleeve	0.5 ... 1.5 mm²
Tightening torque	0.5 Nm



Terminals	Version	Color	
2	With 2 holes for Ø 2.3 mm test plug	Gray	8WA1011-1EF20

Special accessories

Barriers



Color	Article No.
Gray	8WA1820

See general accessories, page 14/78 onwards

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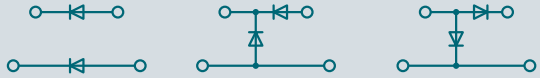
8WA1 screw terminals

Two-tier diode terminals

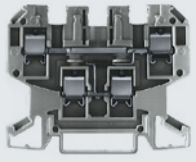
❶ 

❷ 

❸ 

❹ 

	Terminal size 4 mm²
Terminal width	6.5 mm
Rated uninterrupted current I_u	1 A
Rated insulation voltage U_i	250 V
Let-through current	–
Avalanche voltage U_Z	–
AWG	18 ... 10
Connection capacity, rigid	0.5 ... 6 mm²
Connection capacity, flexible without end sleeve	0.5 ... 4 mm²
Connection capacity, flexible with end sleeve	0.5 ... 4 mm²
Tightening torque	0.5 Nm
Standard	



Versions	Bridging	Color	
❶ With one diode			
Let-through from top to bottom	Not possible	Gray	–
❷ With two diodes			
Let-through from top right to top left and from bottom right to bottom left	Not possible	Gray	8WA1011-6EG22
Let-through from top right to top left and from bottom to top	Not possible	Gray	–
Let-through from top left to top right and from top to bottom	Not possible	Gray	–
❸ With red LED			
Without diode for voltage limitation		Gray	–
❹ With Zener diode			
Let-through from bottom to top		Gray	–

Special accessories

End plates

Color	Article No.
Gray	8WA1817

See general accessories, page 14/78 onwards

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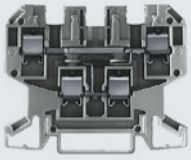
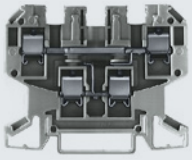
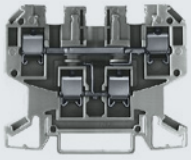
6.5 mm	6.5 mm	6.5 mm
32/1 A	32 A	–
250 V	24 V DC	–
–	–	0.25 A
–	–	2.4 V, ±5%
18 ... 10	18 ... 10	18 ... 10
0.5 ... 6 mm^2	0.5 ... 6 mm^2	0.5 ... 6 mm^2
0.5 ... 4 mm^2	0.5 ... 4 mm^2	0.5 ... 4 mm^2
0.5 ... 4 mm^2	0.5 ... 4 mm^2	0.5 ... 4 mm^2
0.5 Nm	0.5 Nm	0.5 Nm
		
8WA1011-6EG20	–	–
	–	–
8WA1011-6EG23	–	–
8WA1011-6EG24	–	–
–	8WA1011-6EG25	–
–	–	8WA1011-6EG44

Article No.	Article No.	Article No.
8WA1817	8WA1817	8WA1817

14

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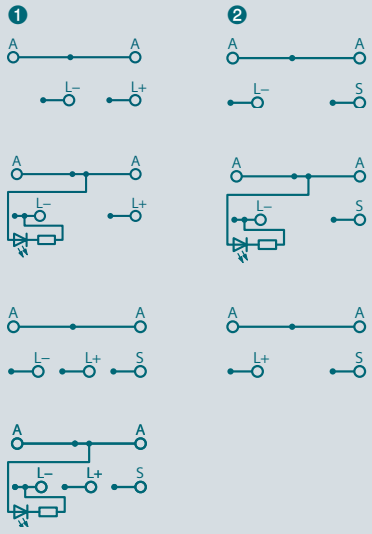
8WA2 spring-loaded terminals

Initiator/actuator terminals



	Terminal size 1.5 mm²
Terminal width	5 mm
Rated current I_n	10 A
Rated voltage U_e	65 V
Current consumption with LED	4.8 mA
AWG	22 ... 16
AWG	28 ... 16
Connection capacity, rigid	0.08 ... 1.5 mm²
Connection capacity, flexible with end sleeve	0.2 ... 1.5 mm²
Standard	,



Version	Conductors [1]	LED	Color		
❶ Initiator terminal					
PNP	L+, L–, A	–		Light gray	8WA2011-3KE10
		Yellow, 15 ... 30 V DC		Light gray	8WA2011-3KE12
	L+, L–, S, A	–		Light gray	8WA2011-3KE11
		Yellow, 15 ... 30 V DC		Light gray	8WA2011-3KE13
❷ Actuator terminal					
PNP	L–, S, A	–		Light gray	8WA2011-3KE31
		Yellow, 15 ... 30 V DC		Light gray	8WA2011-3KE33
NPN	L+, S, A	–		Light gray	8WA2011-3KE30

[1] L+ = brown, L– = blue, S (shield) = green, A (output) not colored

Special accessories

Connection module



Version	Width	Height	Color	Article No.
For 8 initiator/actuator terminals and one feeder terminal	47 mm	65 mm	Black	8WA2011-3KE50
For 16 initiator/actuator terminals, one feeder terminal and space for one terminal for further bridging for subsequent module	93 mm	65 mm	Black	8WA2011-3KE51

See general accessories, page 14/78 onwards

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Feeder terminals for initiator/actuator terminals

❶ L+ L–

❷ S L+ L–

	Terminal size 1.5 mm²
Terminal width	5 mm
Rated current I_n	10 A
Rated voltage U_e	65 V
Current consumption with LED	4.8 mA
AWG	22 ... 16
AWG	28 ... 16
Connection capacity, rigid	0.08 ... 1.5 mm²
Connection capacity, flexible with end sleeve	0.2 ... 1.5 mm²
Standard	,



Version	Conductors [1]	LED	Color	
Feeder terminal				
PNP	❶ L+, L–	–	Orange	8WA2011-3KE01
	❷ L+, L–, S	–	Orange	8WA2011-3KE00
		Green, 15 ... 30 V DC	Orange	8WA2011-3KE02
NPN	❷ L+, L–, S	–	Orange	8WA2011-3KE00
	❶ L+, L–, without ground connection	–	Orange	8WA2011-3KE01

[1] L+ = brown, L– = blue, S (shield) = green, A (output) connection not colored

Special accessories

Connection module



Version	Width	Height	Color	Article No.
For 8 initiator/actuator terminals and one feeder terminal	47 mm	65 mm	Black	8WA2011-3KE50
For 16 initiator/actuator terminals, one feeder terminal and space for one terminal for further bridging for subsequent module	93 mm	65 mm	Black	8WA2011-3KE51

See general accessories, page 14/78 onwards

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Accessories for 8WA terminal blocks

Individual labeling system

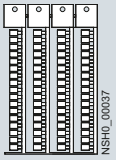
Labeling systems for
- Terminal blocks
- Modular installation devices
- Circuit breakers
- Switch disconnectors

The inscription labels can be inscribed with Murrplastik labeling systems or by hand.

The WIN designation facilitates assignment in the inscription software.

Labeling systems available from:
Murrplastik Systemtechnik GmbH
Postfach 1143
D-71570 Oppenweiler
Telephone: 07191-482-0
email: info@murrplastik.de

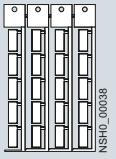
Blank labels



- For 8WA1 and 8WA2, individually removable
- Cannot be used for two-tier terminals (lower tier), 8WA1010-1PQ00 flat terminals and 8WA1808 end retainers

Version	Designation	Color	Article No.
5 × 7 mm	WIN 68	White	8WA8850-2AY
5 × 10 mm	WIN 68	White	8WA8851-2AY

Snap-on device labels



- For identification of, e.g. circuit breakers, contactors and control systems

Version	Designation	Color	Article No.
20 × 7 mm, snap-on hooks at side	WIN 95	White	8WH8210-0AA55
		Turquoise	8WH8210-0AA56

Adhesive device labels

- For identification of, e.g. modular installation devices and switch disconnectors

Versions	Designation	Color	Article No.
15 × 6 mm	WIN 098	White	8WH8210-0AA35
	WIN 099	Yellow	8WH8210-0AA36
19 × 8 mm	WIN 088	White	8WH8210-0AA45
	WIN 082	Yellow	8WH8210-0AA46

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Standard labeling system

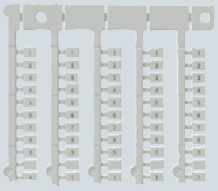
Labels, blank (WIN 68)

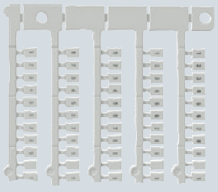


Text alignment	Label size	Article No.
Vertical	5 × 7 mm	8WA8348-2AY
Horizontal and vertical	5 × 10 mm	8WA8310-2AY

Labels, with inscription

- Label size 5 × 7 mm, font height 2 mm





Text alignment	Inscription	Scope of supply	Article No.
Horizontal	1 ... 5	3 cards each with 13× (1 ... 5) + 1× (1 ... 3)	8WA8360-0BA
	6 ... 10	3 cards each with 13× (6 ... 10) + 1× (6 ... 8)	8WA8360-0BB
	11 ... 15	3 cards each with 13× (11 ... 15) + 1× (11 ... 13)	8WA8360-0BC
	16 ... 20	3 cards each with 13× (16 ... 20) + 1× (16 ... 18)	8WA8360-0BD
	21 ... 25	3 cards each with 13× (21 ... 25) + 1× (21 ... 23)	8WA8360-0BE
	26 ... 30	3 cards each with 13× (26 ... 30) + 1× (26 ... 28)	8WA8360-0BF
	31 ... 35	3 cards each with 13× (31 ... 35) + 1× (31 ... 33)	8WA8360-0BG
	36 ... 40	3 cards each with 13× (36 ... 40) + 1× (36 ... 38)	8WA8360-0BH
	41 ... 45	3 cards each with 13× (41 ... 45) + 1× (41 ... 43)	8WA8360-0BJ
	46 ... 50	3 cards each with 13× (46 ... 50) + 1× (46 ... 48)	8WA8360-0BK
	56 ... 60	3 cards each with 13× (56 ... 60) + 1× (56 ... 58)	8WA8360-0BM
	61 ... 65	3 cards each with 13× (61 ... 65) + 1× (61 ... 63)	8WA8360-0BN
	71 ... 75	3 cards each with 13× (71 ... 75) + 1× (71 ... 73)	8WA8360-0BQ
	76 ... 80	3 cards each with 13× (76 ... 80) + 1× (76 ... 78)	8WA8360-0BR
	81 ... 85	3 cards each with 13× (81 ... 85) + 1× (81 ... 83)	8WA8360-0BS
	91 ... 95	3 cards each with 13× (91 ... 95) + 1× (91 ... 93)	8WA8360-0BU
	96 ... 100	3 cards each with 13× (96 ... 100) + 1× (96 ... 98)	8WA8360-0BV
	1 ... 20	3 cards each with 3× (1 ... 20) + 1× (1 ... 8)	8WA8360-0AB
	1 ... 40	3 cards each with 1× (1 ... 40) + 1× (1 ... 28)	8WA8360-0AC
	41 ... 100	3 cards each with 1× (41 ... 100) + 1× (41 ... 48)	8WA8360-0AD
	1 ... 100	3 cards each with 2× (1 ... 100) + 1× (1 ... 4)	8WA8360-0AE
	101 ... 200	3 cards each with 2× (101 ... 200) + 1× (101 ... 104)	8WA8360-0AF
	201 ... 300	3 cards each with 2× (201 ... 300) + 1× (201 ... 204)	8WA8360-0AG
	A ... T	3 cards each with 3× (A ... T) + 1× (A ... H)	8WA8360-1AA
	U, V, W, X, Y, Z, +, –	3 cards each with 8× (U ... –) + 1× (U ... X)	8WA8360-1AB
	L1, L2, L3, N, PE	3 cards each with 9× (L1 ... PE) + 1× (L1 ... L3)	8WA8360-1AC
	U1, V1, W1, U2, V2, W2	3 cards each with 11× (U1 ... W2) + 1× (U1, V1)	8WA8360-1AD
Vertical	1 ... 5	3 cards each with 13× (1 ... 5) + 1× (1 ... 3)	8WA8361-0BA
	6 ... 10	3 cards each with 13× (6 ... 10) + 1× (6 ... 8)	8WA8361-0BB
	11 ... 15	3 cards each with 13× (11 ... 15) + 1× (11 ... 13)	8WA8361-0BC
	16 ... 20	3 cards each with 13× (16 ... 20) + 1× (16 ... 18)	8WA8361-0BD
	21 ... 25	3 cards each with 13× (21 ... 25) + 1× (21 ... 23)	8WA8361-0BE
	26 ... 30	3 cards each with 13× (26 ... 30) + 1× (26 ... 28)	8WA8361-0BF
	31 ... 35	3 cards each with 13× (31 ... 35) + 1× (31 ... 33)	8WA8361-0BG
	36 ... 40	3 cards each with 13× (36 ... 40) + 1× (36 ... 38)	8WA8361-0BH
	41 ... 45	3 cards each with 13× (41 ... 45) + 1× (41 ... 43)	8WA8361-0BJ
	46 ... 50	3 cards each with 13× (46 ... 50) + 1× (46 ... 48)	8WA8361-0BK
	51 ... 55	3 cards each with 13× (51 ... 55) + 1× (51 ... 53)	8WA8361-0BL
	56 ... 60	3 cards each with 13× (56 ... 60) + 1× (56 ... 58)	8WA8361-0BM
	61 ... 65	3 cards each with 13× (61 ... 65) + 1× (61 ... 63)	8WA8361-0BN
	66 ... 70	3 cards each with 13× (66 ... 70) + 1× (66 ... 68)	8WA8361-0BP
	71 ... 75	3 cards each with 13× (71 ... 75) + 1× (71 ... 73)	8WA8361-0BQ
	76 ... 80	3 cards each with 13× (76 ... 80) + 1× (76 ... 78)	8WA8361-0BR
	81 ... 85	3 cards each with 13× (81 ... 85) + 1× (81 ... 83)	8WA8361-0BS
	86 ... 90	3 cards each with 13× (86 ... 90) + 1× (86 ... 88)	8WA8361-0BT
	91 ... 95	3 cards each with 13× (91 ... 95) + 1× (91 ... 93)	8WA8361-0BU
	96 ... 100	3 cards each with 13× (96 ... 100) + 1× (96 ... 98)	8WA8361-0BV

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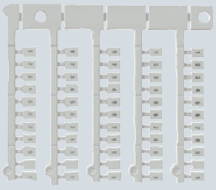
Accessories for 8WA terminal blocks

Standard labeling system

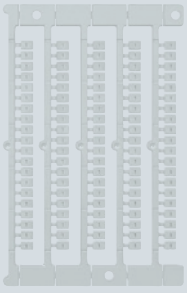
Labels, with inscription (continued)

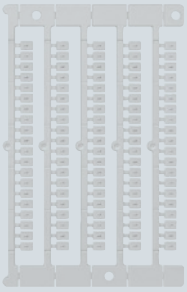


- Label size 5 × 7 mm, font height 2 mm

Text alignment	Inscription	Scope of supply	Article No.
Vertical	1 ... 20	3 cards each with 3× (1 ... 20) + 1× (1 ... 8)	8WA8361-0AB
	1 ... 40	3 cards each with 1× (1 ... 40) + 1× (1 ... 28)	8WA8361-0AC
	41 ... 100	3 cards each with 1× (41 ... 100) + 1× (41 ... 48)	8WA8361-0AD
	1 ... 100	3 cards each with 2× (1 ... 100) + 1× (1 ... 4)	8WA8361-0AE
	101 ... 200	3 cards each with 2× (101 ... 200) + 1× (101 ... 104)	8WA8361-0AF
	201 ... 300	3 cards each with 2× (201 ... 300) + 1× (201 ... 204)	8WA8361-0AG
	A ... T	3 cards each with 3× (A ... T) + 1× (A ... H)	8WA8361-1AA
	U, V, W, X, Y, Z, +, –	3 cards each with 8× (U ... –) + 1× (U ... X)	8WA8361-1AB
	L1, L2, L3, N, PE	3 cards each with 9× (L1 ... PE) + 1× (L1 ... L3)	8WA8361-1AC
	U1, V1, W1, U2, V2, W2	3 cards each with 11× (U1 ... W2) + 1× (U1, V1)	8WA8361-1AD

Labels, type 347/348, with inscription





- Label size 5 × 7 mm, font height 2 mm

Text alignment	Inscription	Article No.
Horizontal	L1	8WA8347-2AC
	L2	8WA8347-2AD
	L3	8WA8347-2AE
	N	8WA8347-1AR
	PE	8WA8347-2AH
	L+	8WA8347-2AF
	L–	8WA8347-2AG
Vertical	L1	8WA8348-2AC
	L2	8WA8348-2AD
	L3	8WA8348-2AE
	N	8WA8348-1AR
	MP	8WA8348-2AB
	PE	8WA8348-2AH
	L+	8WA8348-2AF
	L–	8WA8348-2AG
	X	8WA8348-1AG
	Y	8WA8348-1AH

Labels, custom inscriptions

- Label size 5 × 7 mm, font height 2 mm
- Specify required inscription in plain text
- Can only be ordered with the order code -Z Y01

Text alignment	Article No.
Horizontal	8WA8347-0XA-Z Y01
Vertical	8WA8348-0XA-Z Y01

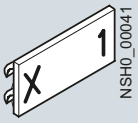
End labeling plates



- Paper label, inscription possible, with transparent cover
- Suitable for 8WA1805, 8WA1808 and 8WA2808 end retainers

Text alignment	Label size	Article No.
Horizontal and vertical	21 × 42 mm	8WA1806

Terminal strip labels



- Paper label, inscription possible, with transparent cover
- Suitable for 8WA1808 end retainers

Text alignment	Versions	Article No.
Horizontal	With inscription	8WA8826-0AA
		8WA8826-0AB
		8WA8826-0AC
	Blank (WIN 67)	8WA8212-0AA65

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Mounting accessories

End retainers, with screw fixing



- Suitable for 8WA1806 end labeling plate or 8WA8826-0A. terminal strip identification label or 3TX4 210-0H device label or four 8WA88 labels

Mounting width	Article No.
10 mm	8WA1808

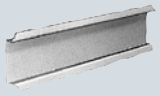
End retainers, steel



- Suitable for 8WA1806 end label
- An 8WA1820 barrier must be inserted if using end retainers against an 8WA189 connection bar (size 2.5)

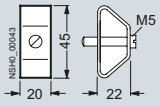
Mounting width	Article No.
10.3 mm	8WA1805

Standard mounting rail



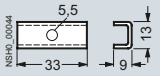
Version	Material	Standard	Length	Thickness	Article No.
Perforated	Steel, sendzimir-galvanized	EN 50022-35 × 7.5	2 m	1 mm	5ST1145
Non-perforated	Steel, sendzimir-galvanized	EN 50022-35 × 7.5	2 m	1 mm	5ST1141
	Copper	EN 50022-35 × 15	2 m	2.3 mm	8WA7551
	Steel, galvanized, chromated	Similar to EN 50022-35 × 15	2 m	1.5 mm	5ST1142

Spacer brackets



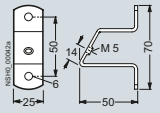
Version	Article No.
For raised mounting of terminal strips	8WA753

Spacers



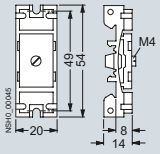
Version	Drill hole	Article No.
For raised mounting of terminal strips	5.5 mm	8WA752

Mounting brackets



Version	Article No.
For support rails	8WA746

Insulation carriers



Version	Article No.
For insulated mounting of support rails onto plates, frame profiles and standard mounting rails EN 50022-35	8WA1857

14

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Reliable and efficient power supply in infrastructure and industrial applications

The electrical power distribution in buildings, infrastructure and industry is undergoing a transformation. A growing number of electrical loads, fluctuating load conditions and an increasing level of automation pose new challenges for switchboard manufacturers and electrical planners. Availability, safety and efficiency of the power distribution system are becoming more important. This is reflected in detailed standards and regulations and in requirements for company power management.

The planning and operation of electrical power distribution systems are becoming more complex, and the technical demands placed on the underlying systems and products are rising – in particular with respect to flexibility, communication capability and integrability. A data-based engineering process, hardware and software systems, an intelligent data management must all interact smoothly to provide optimum support to dynamic industrial and infrastructure processes.

The basis for a reliable and efficient power supply is provided by our portfolio of power distribution boards and distribution boards with innovative products and systems. A data-based engineering process with SIMARIS software tools, high availability of product-related data support the value chain of the switchboard manufacturer – from planning to documentation of the installation.

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Power Distribution Boards, Motor Control Centers and Distribution Boards



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A multitude of additional information ...

Information + ordering

All the important things at a glance

Information to get you started

You will find information about power distribution boards, motor control centers and distribution boards on our websites
www.siemens.com/sivacon-S8
www.siemens.com/distributionsystems

Contact persons in your region

We are there when you need us

You can find your local contacts at
www.siemens.com/lowvoltage/contact

Your product in detail

The Siemens Industry Online Support portal provides comprehensive information
www.siemens.com/lowvoltage/product-support

- Technical basic information – SIVACON S4 power distribution boards and ALPHA UNIVERSAL distribution boards (109767882)
- Technical basic information – ALPHA distribution systems (109778911)
- Brochure – The plus for your business: Intelligent. Flexible. Safe. Low-voltage switchboard SIVACON S8^{plus} (109747937)

The relevant tender specifications can be found at
www.siemens.com/lowvoltage/tenderspecifications

Use our conversion tool for quick and easy conversion to Siemens products www.siemens.com/conversion-tool

Our video range

Siemens YouTube channel

- Power Distribution – SIVACON (general)
  bit.ly/2m4oSLI
- Siemens SIVACON S4 power distribution boards up to 4000 A
  bit.ly/2krni6h

Everything you need for your order

Refer to the Industry Mall for an overview of your products

- SIVACON S4 power distribution boards
  sie.ag/2JUQwE4
- ALPHA distribution boards sie.ag/2kURLd8
- SIMARIS planning tools sie.ag/2m3oFbS

Direct forwarding to the individual products in the Industry Mall by clicking on the Article No. in the catalog or by entering this web address incl. Article No.
www.siemens.com/product?Article No.

How you can get your SIVACON S8

Use the competence and experience of our experts at one of the production locations near to your
www.siemens.com/lowvoltage/contact

Our certified SIVACON Technology Partners are also available to you for questions relating to the high quality of our low-voltage switchboards
www.siemens.com/sivacon-partnerfinder

... can be found in our online services

Commissioning + operation

Planning tools

BIM-compliant SIMARIS planning tools

The SIMARIS planning tools effectively assist you in your planning process. Project-specific BIM (Building Information Modeling) data for cross-package planning is also possible.
www.siemens.com/simaris

Configuration software

SIMARIS configuration

SIMARIS configuration supports the engineering process of the SIVACON and ALPHA distribution systems from planning to documentation of the installation.
www.siemens.com/simarisconfig

Your product in detail

The Siemens Industry Online Support portal provides detailed technical information
www.siemens.com/lowvoltage/product-support

- Operating instructions
- Characteristic curves
- Certificates

Engineering data for CAD or CAE systems are available in the CAx Download Manager at
www.siemens.com/lowvoltage/cax

Manuals

Manuals are available for downloading in Siemens Industry Online Support at
www.siemens.com/lowvoltage/manuals

- Planning manual – SIVACON S8 – Technical planning information (107113936)
- Manual – SIVACON S4 (25909512)

The fast track to the experts

Competent expert advice on technical questions with a wide range of demand-optimized services for all our products and systems.

Assistance with technical queries is provided at
www.siemens.com/lowvoltage/support-request

We offer a comprehensive portfolio of services. You can find your local contacts at
www.siemens.com/lowvoltage/contact

You can find further information on services at
www.siemens.com/service-catalog

Training and tutorials

Our training courses can be found at
www.siemens.com/sitrain-lowvoltage

- SIMARIS configuration (WT-LVASIMC)

Technical overview – Power distribution boards, motor control centers and distribution boards

The fast way to get you to our online services

This page provides you with comprehensive information and links on power distribution boards, motor control centers and distribution boards

www.siemens.com/lowvoltage/product-support (109769089)

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SIVACON and ALPHA distribution systems

Power distribution boards



SIVACON S4

Basic data			
Rated current		A	4000
Overvoltage category			III / IV
Rated impulse withstand voltage U_{imp}		kV	12
Rated insulation voltage U_i		V	1000
Rated operational voltage U_e		V AC	690
Rated short-circuit current I_{pk}		kA	220
Rated short-time current I_{cw} (1 s)		kA	100
Degree of protection according to IEC 60529/EN 60529			IP40 + IPX1 / IP55
Safety class			I
Color			RAL 7035 (light gray)
Dimensions			
Height		mm	2000 Base 100 / 200
Width		mm	350 ... 1200
Depth		mm	400 / 600 / 800
Standards and specifications			
DIN			DIN EN 61439-1/-2
IEC			IEC 61439-1/2
VDE			VDE 0660-600-1/-2
Operating personnel	Ordinary person		–
	Electrically skilled person		■
Approvals			VDE, EAC
Equipment			
Busbar position			Top, bottom, rear
Form of internal separation			4b
Tested for resistance to internal arcing acc. to EN 61439-2 Supplement 1			–
Active protection against internal arcs			–
Section for reactive power compensation			–
Other			
Type of installation			Wall / back to back
Type of delivery	Flat pack / individual parts		■
	Pre-assembled without copper		■
	Pre-assembled with copper		■
More information			
Catalog LV 10 – 10/2020			see page 15/18

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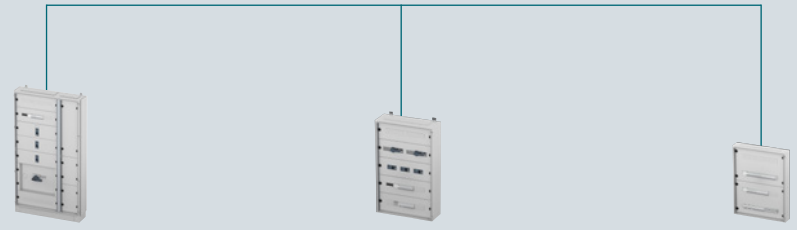
ALPHA UNIVERSAL distribution boards (NF technology)



ALPHA 800 UNIVERSAL	ALPHA 630 UNIVERSAL	ALPHA 125 UNIVERSAL
800	630	125
III	III	III
6	6	6
690	690	400
690	690	400
74	53	10
35	25	17
IP30 / IP43 / IP55	IP30 / IP43 / IP55	IP30 / IP31D / IP43
I	I	I
RAL 7035 (light gray)	RAL 7035 (light gray)	RAL 7035 (light gray)
1800 / 2000	400 / 600 / 800 / 1000 / 1200 / 1600 / 1800 / 2000	400 / 600 / 800 / 1000 / 1200
300 / 600 / 900	600 + 250 / 900	600
400	250	140
DIN EN 61439-1/-2	DIN EN 61439-1/-2	DIN EN 61439-1/-3
IEC 61439-1/2	IEC 61439-1/2	IEC 61439-1/3
VDE 0660-600-1/-2	VDE 0660-600-1/-2	VDE 0660-600-1/-3
–	–	–
■	■	■
VDE	VDE	VDE
–	–	–
1	1	1
–	–	–
–	–	–
–	–	–
–	–	–
–	■	–
–	–	–
–	–	–
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SIVACON and ALPHA distribution systems

Power distribution boards and motor control centers

Power distribution boards







			SIVACON S8	ALPHA 3200	ALPHA 3200 Eco new
Basic data					
Rated current		A	7010	3200	3200
Overvoltage category			IV	III / IV	III / IV
Rated impulse withstand voltage U_{imp}		kV	12 [1]	8	8
Rated insulation voltage U_i		V	1000	1000	1000
Rated operational voltage U_e		V AC	690	690	400
Rated short-circuit current I_{pk}		kA	330	165	165
Rated short-time current I_{cw} (1 s)		kA	150	75	75
Degree of protection according to IEC 60529/EN 60529			IP30 ... IP54	IP40 + IPX1/IP54	IP31/IP54
Safety class			I	I	I
Color			RAL 7035 (light gray)	RAL 7035 (light gray)	RAL 7035 (light gray)
Dimensions					
Height		mm	2000 / 2200 Base 100 / 200	2000 Base 100 / 200	2000 Base 100 / 200
Width		mm	200 ... 1400	350 ... 1400	600 ... 1100
Depth		mm	500 ... 1200	600	400
Standards and specifications					
DIN			DIN EN 61439-2	DIN EN 61439-1/-2	DIN EN 61439-1/-2
IEC			IEC 61439-2	IEC 61439-1/2	IEC 61439-1/2
VDE			VDE 0660-600-2	VDE 0660-600-2	VDE 0660-600-2
Operating personnel	Ordinary person		–	–	–
	Electrically skilled person		■	■	■
Approvals			DNV GL, ABS, LR, ASTA, EAC, CCC, DEKRA	–	–
Equipment					
Busbar position			Top, rear	Rear	Center
Form of internal separation			4b	2b	1
Tested for resistance to internal arcing acc. to EN 61439-2 Supplement 1			■	1 personal protection	–
Active protection against internal arcs			■	–	–
Section for reactive power compensation			■	■	–
Other					
Type of installation			Wall / back to back / double-fronted	Wall / back to back	Wall / back to back
Type of delivery	Flat pack / individual parts		■	–	–
	Pre-assembled without copper		■	■	■
	Pre-assembled with copper		■	■	■
More information					
Catalog LV 10 – 10/2020			see page 15/14	see page 15/16	see page 15/16

[1] Depending on the devices used

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ALPHA distribution boards (DIN technology)

Small distribution boards



ALPHA 1250	ALPHA 630	ALPHA 400	ALPHA 160	ALPHA SIMBOX XL	ALPHA SIMBOX WP
1250	630	400	160	63	63
III	III	III	II	II	II
8	6	6	6	–	–
690	690	690	690	–	1000
690	690	690	690	400	400
110	76	76	–	–	–
35	34	34	–	–	–
IP55	IP43 / IP55	IP31 / IP43 / IP55	IP31 / IP43 / IP44	IP30	IP65
I	I / II	I / II	II	II	II
RAL 7035 (light gray)	RAL 7035 (light gray)	RAL 9016 (traffic white) / RAL 7035 (light gray)	RAL 9016 (traffic white) / RAL 7035 (light gray)	RAL 9010 (pure white)	RAL 7035 (light gray)
1950 Base 100	1950 Base 100	650 / 800 / 950 / 1100 / 1250 / 1400	500 / 650 / 800 / 950 / 1100	1- ... 4-tier	1- ... 4-tier
300 / 550 / 800 / 1050 / 1300	300 / 550 / 800 / 1050 / 1300	300 / 550 / 800 / 1050 / 1300	300 / 550	305	4 ... 18 MW
400	210 / 250 / 320	210	140	88 / 99	100 / 140 / 160
DIN EN 61439-1/-2	DIN EN 61439-1/-2	DIN EN 61439-1/-2/-3	DIN EN 61439-1/-3	DIN 43871	DIN EN 61439-1/-3, DIN 43871
IEC 61439-1/-2	IEC 61439-1/-2	IEC 61439-1/-2/-3	IEC 61439-1/-3	IEC 61439-1/-3	IEC 61439-1/-3
VDE 0660-600-1/-2	VDE 0660-600-1/-2	VDE 0660-600-1/-2/-3	VDE 0660-600-1/-3	DIN VDE 0603	DIN VDE 0603-1, VDE 0660-500/-504
–	–	■	■	■	■
■	■	■	■	■	■
VDE	VDE	VDE	VDE	VDE	VDE
–	–	–	–	–	–
–	–	–	–	–	–
–	–	–	–	–	–
–	–	–	–	–	–
–	–	–	–	–	–
Surface mounting	Surface mounting	Surface mounting / flush mounting	Surface mounting / flush mounting	Surface mounting / hollow wall / flush mounting	Surface mounting
■	■	■	■	■	■
■	■	■	■	–	–
–	–	–	–	–	–
see page 15/138	see page 15/142	see page 15/146	see page 15/149	see page 15/180	see page 15/183

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SIVACON and ALPHA distribution systems

Additional options

To specify the options, add „-Z" to the complete Article No. and indicate the appropriate order code(s).

8GK.....-.....-.... -Z

Special colors for ALPHA

				Order code		
	RAL 1003, signal yellow	Semi-gloss	Smooth	C	2	7
	RAL 2000, yellow orange	Semi-gloss	Smooth	C	2	5
	RAL 3000, flame red	Silky gloss	Surface structure	C	3	1
	RAL 5005, signal blue	Semi-gloss	Smooth	C	2	3
	RAL 5010, gentian blue	Semi-gloss	Smooth	C	2	4
	RAL 5017, traffic blue	Silky gloss	Surface structure	C	2	2
	RAL 6018, yellow green	Semi-gloss	Smooth	C	2	6
	RAL 7032, pebble gray	Semi-gloss	Surface structure	C	1	3
	RAL 7033, cement gray	Semi-gloss	Surface structure	C	2	8
	RAL 7035, light gray	Semi-gloss	Smooth	C	1	1
			Surface structure	C	1	2
	RAL 7038, agate gray	Semi-gloss	Surface structure	C	1	4
	RAL 9001, cream	Semi-gloss	Smooth	C	2	1
	RAL 9002, gray white	Semi-gloss	Smooth	C	1	8
			Surface structure	C	1	9
		Silky gloss	Smooth	C	2	9
	RAL 9003, signal white	Semi-gloss	Surface structure	C	2	0
	RAL 9005, jet black	Semi-gloss	Smooth	C	1	6
			Surface structure	C	1	7
	RAL 9010, pure white	Semi-gloss	Smooth	C	1	5
			Surface structure	C	3	0
	RAL 9016, traffic white	Semi-gloss	Smooth	C	1	0

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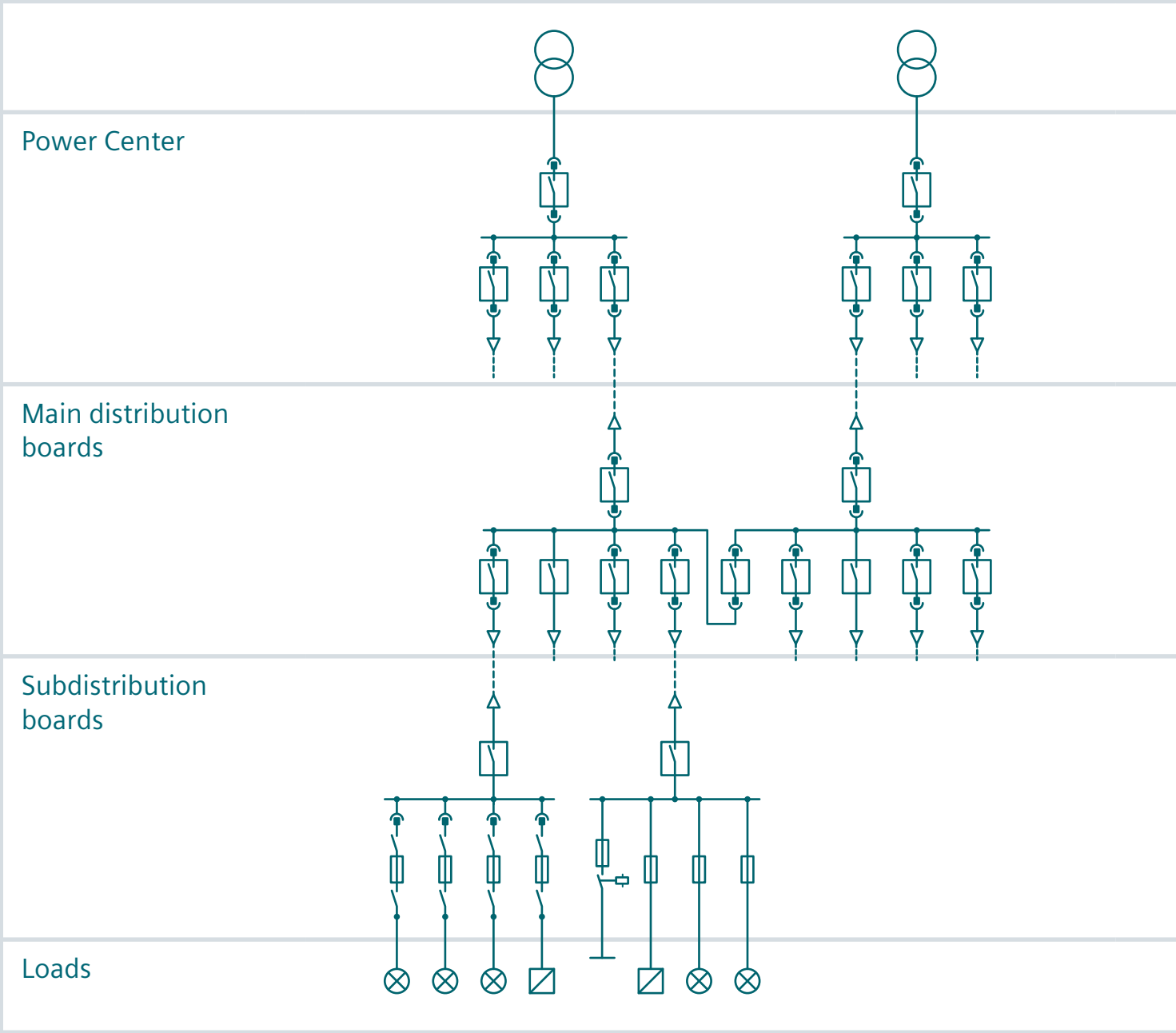
SIVACON and ALPHA distribution systems

Applications



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SIVACON S8



SIVACON S8



SIVACON S4



ALPHA 3200



ALPHA 3200 Eco



ALPHA UNIVERSAL (NF technology)



ALPHA (DIN technology)



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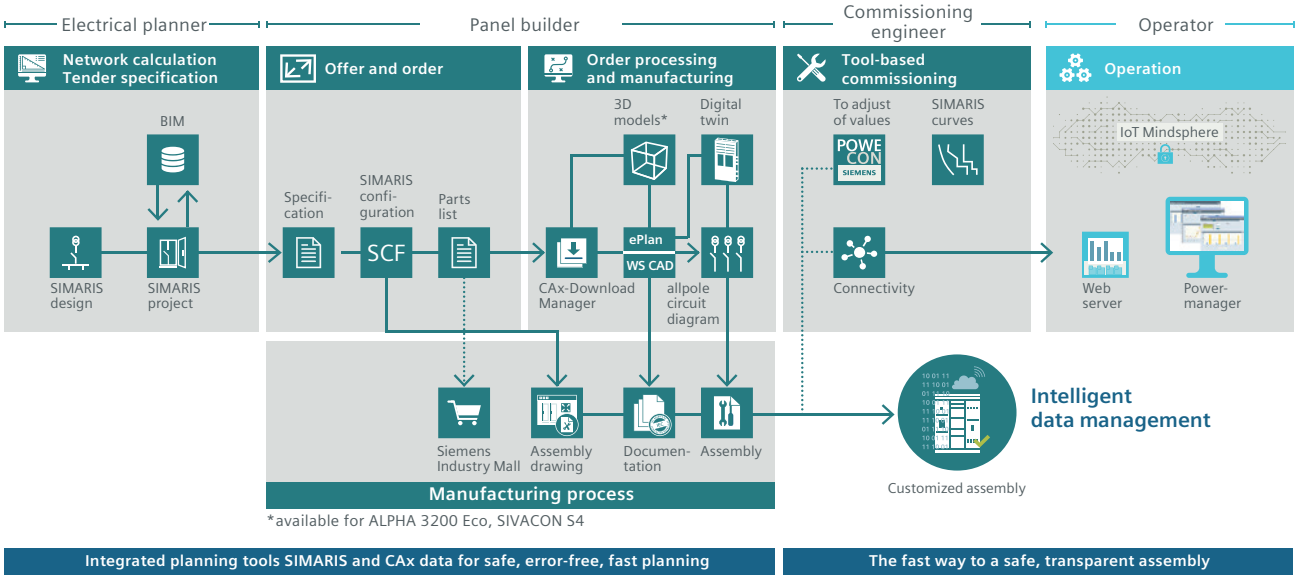
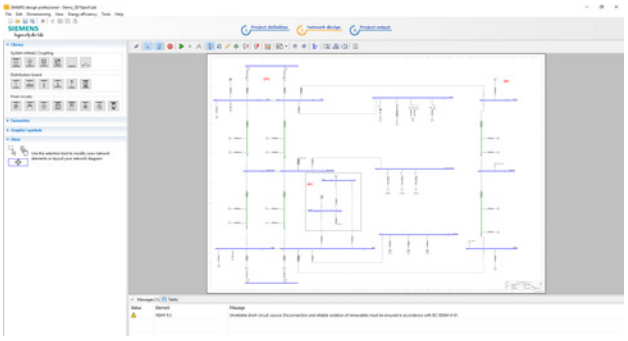
SIMARIS planning tools

For planning and visualizing the power distribution system

From planning to operation



SIMARIS design

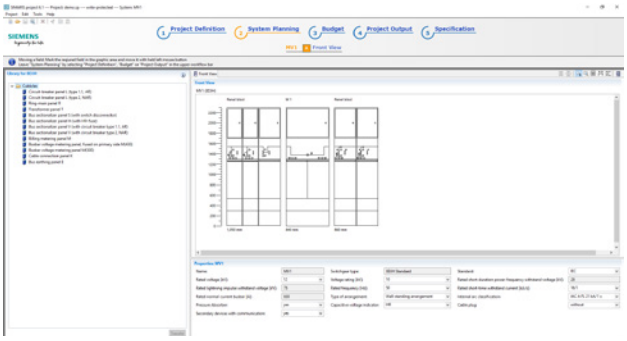


SIMARIS design is a planning tool for quick, effective network calculations and dimensioning of electrical power distribution systems for non-residential and industrial buildings.

- Dimensioning of electrical networks on the basis of real products according to acknowledged rules of technology and the applicable standards (VDE, IEC)
- Automatic selection of the appropriate components from the integrated product database

Free download of the SIMARIS Suite and further information at:
www.siemens.com/simarisdesign

SIMARIS project

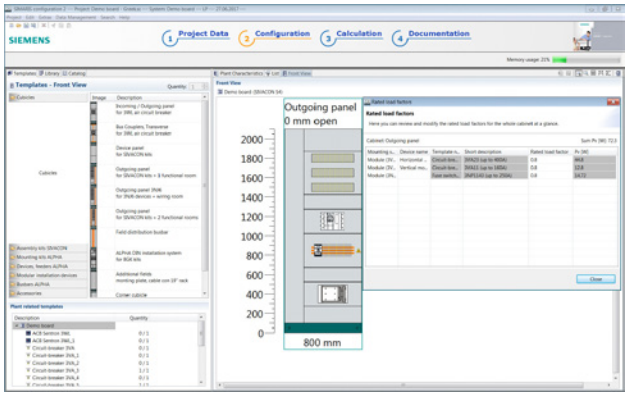


SIMARIS project is a planning tool for fast calculation of space requirements and electrical power distribution system budgets for non-residential and industrial buildings, and for generating specifications automatically.

- Import of projects created in SIMARIS design
- Export of 3D data in IFC 4.x format for BIM (Building Information Modeling)

Free download of the SIMARIS Suite and further information at:
www.siemens.com/simarisproject

SIMARIS configuration

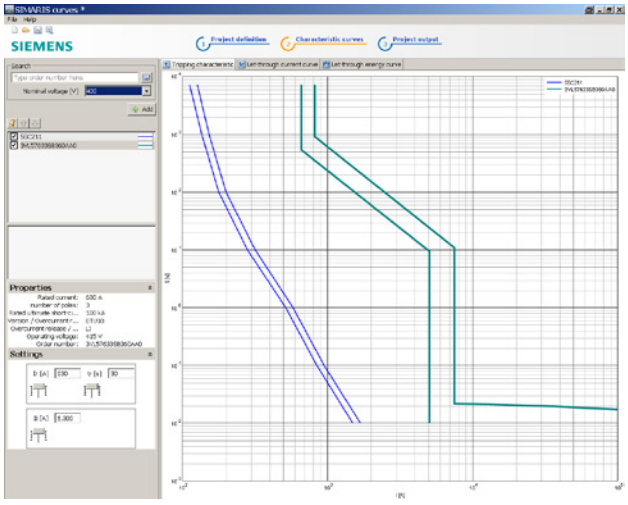


With the configuration software SIMARIS configuration, the SIVACON S8, ALPHA 3200, SIVACON S4 and ALPHA UNIVERSAL power distribution boards as well as the ALPHA distribution boards can be quickly and reliably configured.

- Comprehensive documentation of the installation with design verification acc. to IEC 61439
- Configuration of the devices from the SENTRON portfolio with the exact article numbers and integrated price calculation feature

Free download and further information at:
www.siemens.com/simarisconfig

SIMARIS curves



SIMARIS curves is a planning tool for visualizing and evaluating characteristic curves of Siemens low-voltage protection equipment and fuses (IEC) quickly and easily, including the possibility of simulating instrument settings.

- Is available both as a PC version and also as an app for use on a tablet PC or a smartphone

Free download of the SIMARIS Suite and further information at: **www.siemens.com/simariscurves**

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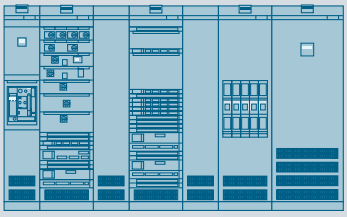
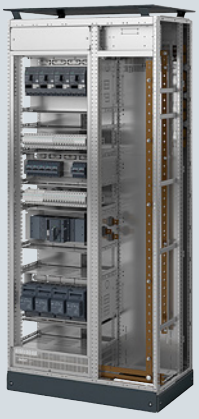
SIVACON S8 / SIVACON S4 / ALPHA 3200 / ALPHA 3200 Eco system overview

Section design and installable devices

SIVACON S8



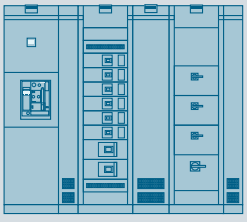






	Circuit breaker design	Fixed-mounted design	In-line design, plugged in
Devices	**3WL and 3VA**	**3VA, 3RV, 3NP, 3K... and 5S...**	**3NJ6**
Installation system	Fixed-mounted Withdrawable	Fixed-mounted with front covers	Plug-in
Functions	Infeed, Outgoing feeder, Coupling	Outgoing cable feeders	Outgoing cable feeders
Rated values	6300 A	630 A	630 A
Connection type	Front or rear	Front	Front

SIVACON S4









	Circuit breaker design	Fixed-mounted design	In-line design, plugged in
Devices	**3WL**	**3WL, 3VA, 3NP1, Modular installation devices**	**3NJ6**
Installation system	Fixed-mounted Withdrawable	Fixed-mounted with front covers	Plug-in
Functions	Infeed, Outgoing feeder, Coupling (up to 3200 A)	Infeed Outgoing cable feeders	Outgoing cable feeders
Rated values	4000 A	2950 A	630 A
Connection type	Front or rear	Front or rear	Front

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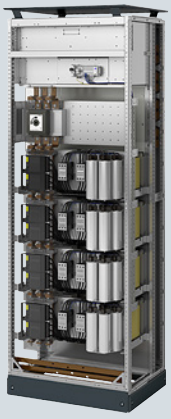


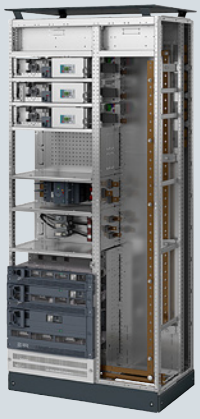


In-line design, fixed-mounted	Reactive power compensation	Active protection against internal arcs	Universal mounting design / motor control center	Frequency converter technology
3NJ4	**Capacitor units, controllers**	**Internal arc protection system**	**3VA, 3RV, 3NP, 3K..., 3R..., 3UF, 3NJ6 and 3LD**	SINAMICS G120 (6SL)
Fixed-mounted	Fixed-mounted	Fixed-mounted	Withdrawable Fixed-mounted with modular doors Plug-in	Fixed-mounted (modules)
Outgoing cable feeders	Central compensation of reactive power	Active protection against internal arcs	Outgoing cable feeders Motor feeders (MCC)	Motor feeders (MCC)
630 A	Without inductor up to 600 kvar With inductor up to 500 kvar	Short-circuit-proof up to 100 kA at 690 V	630 A, 250 kW	132 kW
Front	Front	–	Front or rear	Front




In-line design, fixed-mounted	Section for free configuration
3NJ4	Mounting panel structures
Fixed-mounted	Fixed-mounted
Outgoing cable feeders	Control equipment
2900 A	–
Front	Front

15

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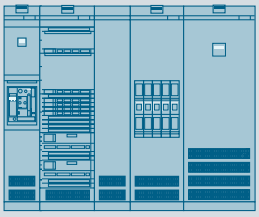
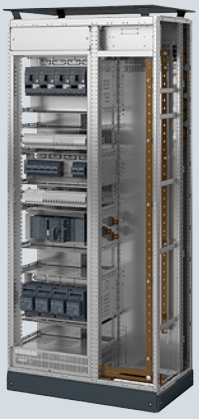
SIVACON S8 / SIVACON S4 / ALPHA 3200 / ALPHA 3200 Eco system overview

Section design and installable devices

ALPHA 3200



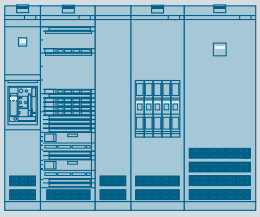






	Circuit breaker design	Fixed-mounted design	In-line design, plugged in
Devices	**3WL and 3VA**	**3VA, 3RV, 3NP, 3K..**	**3NJ6**
Installation system	Fixed-mounted Withdrawable	Fixed-mounted with front covers	Plug-in
Functions	Infeed, Outgoing feeder, Coupling	Outgoing cable feeders	Outgoing cable feeders
Rated values	Up to 3200 A	Up to 630 A	Up to 630 A
Connection type	Front or rear	Front	Front

ALPHA 3200 Eco new









	Circuit breaker design	In-line design, fixed-mounted	ALPHA DIN modular installation system
Devices	**3WL10**	**3NJ4**	**ALPHA 8GK**
Installation system	Fixed-mounted Withdrawable	Fixed-mounted	Fixed-mounted
Functions	Infeed, Outgoing feeder,	Outgoing cable feeders	Branch circuits
Rated values	1250 A	1250 A	1250 A
Connection type	Front	Front	Front

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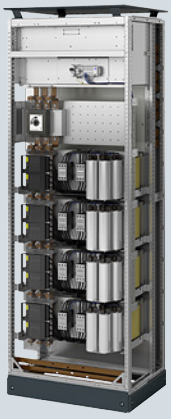

In-line design, fixed-mounted	Reactive power compensation
3NJ4	**Capacitor units, controllers**
Fixed-mounted	Fixed-mounted
Outgoing cable feeders	Central compensation of reactive power
Up to 630 A	Without inductor up to 600 kvar With inductor up to 500 kvar
Front	Front



Section for free configuration
Mounting panel structures
Fixed-mounted
Control equipment
1250 A
Front

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System overview

SIVACON S4 power distribution boards

Frame and enclosure



Accessories for frame and enclosure



Hinges for covers

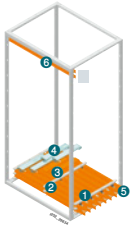


Locks

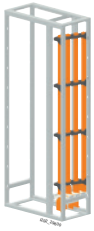


Mech. mounting parts

Busbar systems



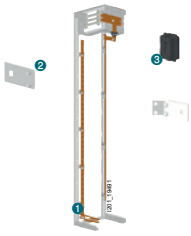
Main busbars



Vertical distribution busbars, cascaded



Vertical distribution busbars, non-cascaded



N/PE bar

Note:
You will find a detailed range of accessories with the basic units.

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Section expansion



3WL
incoming feeder panels



3VA
outgoing feeder panels
3NP1
modular installation devices



3NJ4
outgoing feeder panels



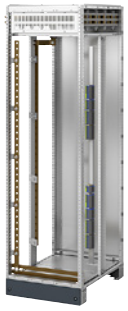
3NJ6
outgoing feeder panels



3WL
coupling panels



Mounting plates



Cable section

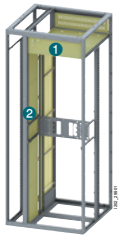


Corner sections

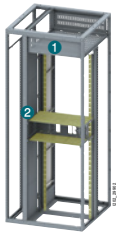
Internal separation



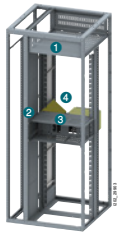
Form 1
Without separation



Form 2
Separation
+ busbar systems



Form 3
Separation
+ busbar systems
+ device compartments



Form 4
Separation
+ busbar systems
+ device compartments
+ connections

Note:
You will find a detailed range of accessories with the basic units.

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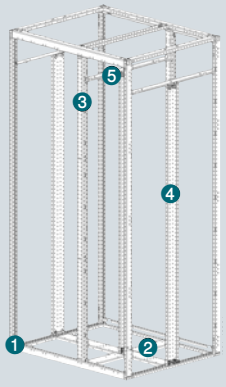
Frame

Main busbar at top



❶ Frame
❷ Bottom plate partition crossbar
❸ Exterior intermediate upright
❹ Interior side upright
❺ Section division

Main busbar at top
Main busbar at bottom
Main busbar at rear
Frame without main busbar



Width	Depth	❶ Frame	❷ Bottom plate partition crossbar	❸ Exterior intermediate upright	❹ Interior side upright	❺ Section division
400 mm	400 mm	8PQ1204-4BA01	8PQ3000-1BA38	8PQ3000-1BA43	8PQ3000-0BA65	8PQ3000-1BA31
	600 mm	8PQ1204-6BA01	8PQ3000-1BA40	8PQ3000-1BA43	8PQ3000-0BA01	8PQ3000-1BA32
	800 mm	8PQ1204-8BA01	2× 8PQ3000-1BA38	8PQ3000-1BA43	8PQ3000-0BA02	8PQ3000-1BA34
600 mm	400 mm	8PQ1206-4BA01	8PQ3000-1BA38	8PQ3000-1BA43	8PQ3000-0BA65	8PQ3000-1BA31
	600 mm	8PQ1206-6BA01	8PQ3000-1BA40	8PQ3000-1BA43	8PQ3000-0BA01	8PQ3000-1BA32
	800 mm	8PQ1206-8BA01	2× 8PQ3000-1BA38	8PQ3000-1BA43	8PQ3000-0BA02	8PQ3000-1BA34
800 mm	400 mm	8PQ1208-4BA01	8PQ3000-1BA38	8PQ3000-1BA43	8PQ3000-0BA65	8PQ3000-1BA31
	600 mm	8PQ1208-6BA01	8PQ3000-1BA40	8PQ3000-1BA43	8PQ3000-0BA01	8PQ3000-1BA32
	800 mm	8PQ1208-8BA01	2× 8PQ3000-1BA38	8PQ3000-1BA43	8PQ3000-0BA02	8PQ3000-1BA34
1000 mm	400 mm	8PQ1201-4BA02	8PQ3000-1BA38	8PQ3000-1BA43	8PQ3000-0BA65	8PQ3000-1BA31
	600 mm	8PQ1201-6BA02	8PQ3000-1BA40	8PQ3000-1BA43	8PQ3000-0BA01	8PQ3000-1BA32
	800 mm	8PQ1201-8BA03	2× 8PQ3000-1BA38	8PQ3000-1BA43	8PQ3000-0BA02	8PQ3000-1BA34
1200 mm	400 mm	8PQ1202-4BA02	8PQ3000-1BA38	8PQ3000-1BA43	8PQ3000-0BA65	8PQ3000-1BA31
	600 mm	8PQ1202-6BA02	8PQ3000-1BA40	8PQ3000-1BA43	8PQ3000-0BA01	8PQ3000-1BA32
	800 mm	8PQ1202-8BA02	2× 8PQ3000-1BA38	8PQ3000-1BA43	8PQ3000-0BA02	8PQ3000-1BA34

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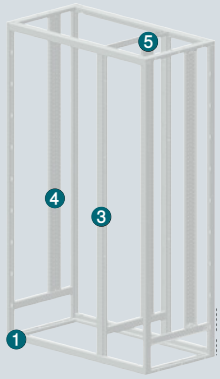
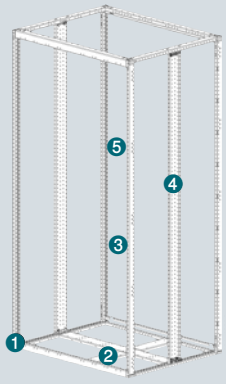
Main busbar at bottom



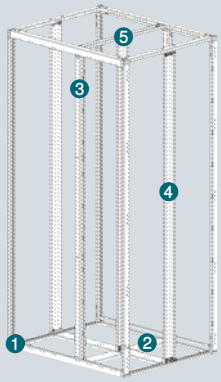
❶ Frame
–
❸ Exterior intermediate upright
❹ Interior side upright
❺ Section division

Main busbar at rear

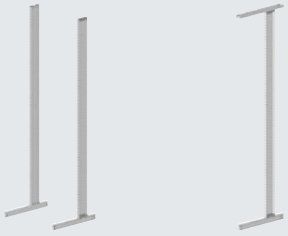


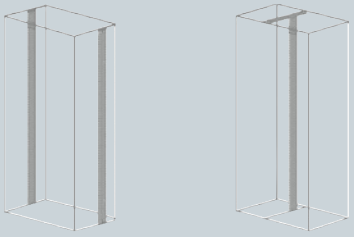
❶ Frame
❷ Bottom plate partition crossbar
❸ Exterior intermediate upright
❹ Interior side upright
❺ Section division

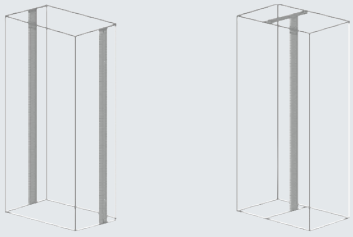
Frame without main busbar



❶ Frame
❷ Bottom plate partition crossbar
❸ Exterior intermediate upright
❹ Interior side upright
❺ Section division







❹ Interior side upright	❺ Section division	❹ Interior side upright	❺ Section division	❹ Interior side upright	❺ Section division
8PQ3000-0BA10	8PQ3000-0BA10	–	–	–	–
8PQ3000-3BA10	8PQ3000-3BA47	–	–	8PQ3000-0BA03	8PQ3000-1BA36
8PQ3000-3BA11	8PQ3000-3BA48	8PQ3000-0BA03	8PQ3000-1BA37	8PQ3000-0BA03	8PQ3000-1BA37
8PQ3000-0BA10	8PQ3000-0BA10	–	–	–	–
8PQ3000-3BA10	8PQ3000-3BA47	–	–	8PQ3000-0BA03	8PQ3000-1BA36
8PQ3000-3BA11	8PQ3000-3BA48	8PQ3000-0BA03	8PQ3000-1BA37	8PQ3000-0BA03	8PQ3000-1BA37
8PQ3000-0BA10	8PQ3000-0BA10	–	–	–	–
8PQ3000-3BA10	8PQ3000-3BA47	–	–	8PQ3000-0BA03	8PQ3000-1BA36
8PQ3000-3BA11	8PQ3000-3BA48	8PQ3000-0BA03	8PQ3000-1BA37	8PQ3000-0BA03	8PQ3000-1BA37
8PQ3000-0BA10	8PQ3000-0BA10	–	–	–	–
8PQ3000-3BA10	8PQ3000-3BA47	–	–	8PQ3000-0BA03	8PQ3000-1BA36
8PQ3000-3BA11	8PQ3000-3BA48	8PQ3000-0BA03	8PQ3000-1BA37	8PQ3000-0BA03	8PQ3000-1BA37
8PQ3000-0BA10	8PQ3000-0BA10	–	–	–	–
8PQ3000-3BA10	8PQ3000-3BA47	–	–	8PQ3000-0BA03	8PQ3000-1BA36
8PQ3000-3BA11	8PQ3000-3BA48	8PQ3000-0BA03	8PQ3000-1BA37	8PQ3000-0BA03	8PQ3000-1BA37

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Frame

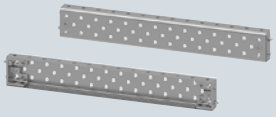
Accessories

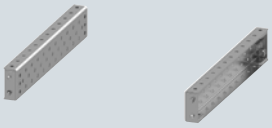
Frame reinforcement



Use	Scope of supply	Article No.
For frame widths from 1000 mm	2 units	8PQ9400-0BA35

Crossbars

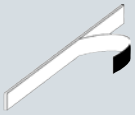




Version	Width	Crossbar length	Scope of supply	Article No.
–	400 mm	350 mm	2 units	8PQ3000-0BA12
	600 mm	550 mm	2 units	8PQ3000-0BA71
	800 mm	750 mm	2 units	8PQ3000-0BA72
	1000 mm	950 mm	2 units	8PQ3000-0BA84
	1200 mm	1150 mm	2 units	8PQ3000-0BA85
Without uprights	400 mm	300 mm	2 units	8PQ3000-0BA10
	600 mm	500 mm	2 units	8PQ3000-1BA24
	800 mm	700 mm	2 units	8PQ3000-1BA25
With uprights	600 mm	300 mm	2 units	8PQ3000-0BA10
	800 mm	300 mm	2 units	8PQ3000-0BA10

Forming rows of frames



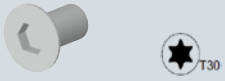


Version	Scope of supply	Article No.
Frame connection	6 units	8PQ1204-4BA05
Set of IP55 seals	5.5 m	8PQ1204-4BA04

Self-tapping screws







Version	Version	Scope of supply	Article No.
Cylinder-head screws	M6 × 10 mm	100 units	8PQ9500-0BA34
	M6 × 16 mm	100 units	8PQ9500-0BA32
	M6 × 20 mm	100 units	8PQ9500-0BA31
Covering caps	M6, RAL 7035	100 units	8PQ9400-0BA14
Countersunk screws	M6 × 12 mm	100 units	8PQ9500-1BA07

Transport aids





Version	Width	Scope of supply	Article No.
Lifting eyebolts	–	4 units	8PQ9400-0BA11
Lifting brackets	800 mm	2 units	8PQ3000-1BA01
	850 mm	2 units	8PQ3000-2BA38
	1000 mm	2 units	8PQ3000-1BA02
	1200 mm	2 units	8PQ3000-1BA03

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System overview, page 15/18

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Enclosure

Paneling sections



		Main busbar at top				Main busbar at bottom
		❶ Bases			❷ Bottom plates	
		Corners with front cover		Side covers		
						 
Width	Depth	Height 100 mm	200 mm	Height 100 mm	IP40 cable entry	IP55	IP20
200 mm	400 mm	–	–	–	–	8PQ2302-4BA04	–
	600 mm	–	–	–	–	8PQ2302-6BA04	–
	800 mm	–	–	–	–	2× 8PQ2302-4BA04	–
400 mm	400 mm	8PQ1014-0BA01	8PQ1024-0BA01	8PQ1010-4BA01	8PQ2304-4BA06	8PQ2304-4BA05	8PQ2304-4BA14
	600 mm	8PQ1014-0BA01	8PQ1024-0BA01	8PQ1010-6BA01	8PQ2306-4BA06	8PQ2306-4BA05	8PQ2304-6BA11
	800 mm	8PQ1014-0BA01	8PQ1024-0BA01	8PQ1010-8BA01	2× 8PQ2304-4BA06	2× 8PQ2304-4BA05	8PQ2304-8BA05
600 mm	400 mm	8PQ1016-0BA01	8PQ1026-0BA01	8PQ1010-4BA01	8PQ2306-4BA06	8PQ2306-4BA05	8PQ2306-4BA10
	600 mm	8PQ1016-0BA01	8PQ1026-0BA01	8PQ1010-6BA01	8PQ2306-6BA06	8PQ2306-6BA05	8PQ2306-6BA16
	800 mm	8PQ1016-0BA01	8PQ1026-0BA01	8PQ1010-8BA01	2× 8PQ2306-4BA06	2× 8PQ2306-4BA05	8PQ2306-8BA05
800 mm	400 mm	8PQ1018-0BA01	8PQ1028-0BA01	8PQ1010-4BA01	8PQ2308-4BA06	8PQ2308-4BA05	8PQ2308-4BA13
	600 mm	8PQ1018-0BA01	8PQ1028-0BA01	8PQ1010-6BA01	8PQ2308-6BA06	8PQ2308-6BA05	8PQ2308-6BA13
	800 mm	8PQ1018-0BA01	8PQ1028-0BA01	8PQ1010-8BA01	2× 8PQ2308-4BA06	2× 8PQ2308-4BA05	8PQ2308-8BA10
1000 mm	400 mm	8PQ1011-0BA01	8PQ1021-0BA01	8PQ1010-4BA01	–	8PQ2301-4BA04	8PQ2301-4BA06
	600 mm	8PQ1011-0BA01	8PQ1021-0BA01	8PQ1010-6BA01	–	–	8PQ2301-6BA05
	800 mm	8PQ1011-0BA01	8PQ1021-0BA01	8PQ1010-8BA01	–	2× 8PQ2301-4BA04	8PQ2301-8BA04
1200 mm	400 mm	8PQ1012-0BA01	8PQ1022-0BA01	8PQ1010-4BA01	–	–	8PQ2302-4BA05
	600 mm	8PQ1012-0BA01	8PQ1022-0BA01	8PQ1010-6BA01	–	–	8PQ2302-6BA05
	800 mm	8PQ1012-0BA01	8PQ1022-0BA01	8PQ1010-8BA01	–	–	8PQ2302-8BA04

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❸ Rear panels		❹ Side panels (1 set = 2 units)		❺ Top plates			
							
IP40	IP55	IP55	IP55 with design strip	IP40	IP40 cable entry	IPX1 upgrade	IP55
–	–	–	–	–	–	–	–
–	–	–	–	–	–	–	–
–	–	–	–	–	–	–	–
8PQ2420-4BA02	8PQ2420-4BA01	8PQ2520-4BA02	8PQ2520-4BA01	8PQ2304-4BA02	8PQ2304-4BA03	8PQ2304-4BA04	8PQ2304-4BA01
8PQ2420-4BA02	8PQ2420-4BA01	8PQ2520-6BA02	8PQ2520-6BA01	8PQ2304-6BA02	8PQ2304-6BA03	8PQ2304-6BA04	8PQ2304-6BA01
8PQ2420-4BA02	8PQ2420-4BA01	8PQ2520-8BA02	8PQ2520-8BA01	8PQ2304-8BA02	8PQ2304-8BA03	8PQ2304-8BA04	8PQ2304-8BA01
8PQ2420-6BA02	8PQ2420-6BA01	8PQ2520-4BA02	8PQ2520-4BA01	8PQ2306-4BA02	8PQ2306-4BA03	8PQ2306-4BA04	8PQ2306-4BA01
8PQ2420-6BA02	8PQ2420-6BA01	8PQ2520-6BA02	8PQ2520-6BA01	8PQ2306-6BA02	8PQ2306-6BA03	8PQ2306-6BA04	8PQ2306-6BA01
8PQ2420-6BA02	8PQ2420-6BA01	8PQ2520-8BA02	8PQ2520-8BA01	8PQ2306-8BA02	8PQ2306-8BA03	8PQ2306-8BA04	8PQ2306-8BA01
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8PQ2420-8BA02	8PQ2420-8BA01	8PQ2520-6BA02	8PQ2520-6BA01	8PQ2308-6BA02	8PQ2308-6BA03	8PQ2308-6BA04	8PQ2308-6BA01
8PQ2420-8BA02	8PQ2420-8BA01	8PQ2520-8BA02	8PQ2520-8BA01	8PQ2308-8BA02	8PQ2308-8BA03	8PQ2308-8BA04	8PQ2308-8BA01
8PQ2420-1BA02	8PQ2420-1BA01	8PQ2520-4BA02	8PQ2520-4BA01	8PQ2301-4BA02	–	8PQ2301-4BA03	8PQ2301-4BA01
8PQ2420-1BA02	8PQ2420-1BA01	8PQ2520-6BA02	8PQ2520-6BA01	8PQ2301-6BA02	–	8PQ2301-6BA03	8PQ2301-6BA01
8PQ2420-1BA02	8PQ2420-1BA01	8PQ2520-8BA02	8PQ2520-8BA01	8PQ2301-8BA02	–	8PQ2301-8BA03	8PQ2301-8BA01
8PQ2420-2BA02	8PQ2420-2BA01	8PQ2520-4BA02	8PQ2520-4BA01	8PQ2302-4BA02	–	8PQ2302-4BA03	8PQ2302-4BA01
8PQ2420-2BA02	8PQ2420-2BA01	8PQ2520-6BA02	8PQ2520-6BA01	8PQ2302-6BA02	–	8PQ2302-6BA03	8PQ2302-6BA01
8PQ2420-2BA02	8PQ2420-2BA01	8PQ2520-8BA02	8PQ2520-8BA01	8PQ2302-8BA02	–	8PQ2302-8BA03	8PQ2302-8BA01

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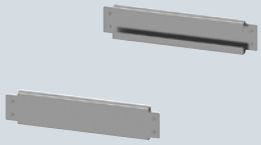
Enclosure

Paneling sections

Accessories

Reinforcements for transport



Height	Width / depth	Article No.
100 mm	400 mm	8PQ1014-0BA02
	600 mm	8PQ1016-0BA02
	800 mm	8PQ1018-0BA02
	1000 mm	8PQ1011-1BA01
	1200 mm	8PQ1012-2BA01

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Enclosure

Paneling sections



		⑥ Doors			Outer cover		Frame paneling
							
Hinge position	**Width**	**IP40**	**IP55**	**IP55 glass doors**	**IP40**	**IP55**	**IP30**
With double-bit lock							
Left	200 mm	–	–	–	8PQ2197-2BA15	8PQ2197-2BA14	–
	400 mm	8PQ2197-4BA08	8PQ2197-4BA05	–	8PQ2197-4BA02	8PQ2197-4BA01	–
	600 mm	8PQ2197-6BA06	8PQ2197-6BA03	8PQ2197-6BA10	–	–	8PQ2197-6BA11
	800 mm	8PQ2197-8BA06	8PQ2197-8BA03	8PQ2197-8BA10	–	–	8PQ2197-8BA11
	1000 mm	8PQ2197-1BA06	8PQ2197-1BA03	8PQ2197-1BA10	–	–	–
Right	200 mm	–	–	–	8PQ2197-2BA15	8PQ2197-2BA14	–
	400 mm	8PQ2197-4BA11	8PQ2197-4BA10	–	8PQ2197-4BA02	8PQ2197-4BA01	–
	600 mm	8PQ2197-6BA13	8PQ2197-6BA12	8PQ2197-6BA14	–	–	8PQ2197-6BA11
	800 mm	8PQ2197-8BA13	8PQ2197-8BA12	8PQ2197-8BA14	–	–	8PQ2197-8BA11
	1000 mm	8PQ2197-1BA18	8PQ2197-1BA17	8PQ2197-1BA20	–	–	–
For profile semicylinder							
Left	200 mm	–	–	–	8PQ2197-2BA15	8PQ2197-2BA14	–
	400 mm	8PQ2197-4BA06	8PQ2197-4BA03	–	8PQ2197-4BA02	8PQ2197-4BA01	–
	600 mm	8PQ2197-6BA04	8PQ2197-6BA01	8PQ2197-6BA07	–	–	8PQ2197-6BA11
	800 mm	8PQ2197-8BA04	8PQ2197-8BA01	8PQ2197-8BA07	–	–	8PQ2197-8BA11
	1000 mm	8PQ2197-1BA07	8PQ2197-1BA04	8PQ2197-1BA11	–	–	
Right	200 mm	–	–	–	8PQ2197-2BA15	8PQ2197-2BA14	–
	400 mm	8PQ2197-4BA07	8PQ2197-4BA04	–	8PQ2197-4BA02	8PQ2197-4BA01	–
	600 mm	8PQ2197-6BA05	8PQ2197-6BA02	8PQ2197-6BA08	–	–	8PQ2197-6BA11
	800 mm	8PQ2197-8BA05	8PQ2197-8BA02	8PQ2197-8BA08	–	–	8PQ2197-8BA11
	1000 mm	8PQ2197-1BA08	8PQ2197-1BA05	8PQ2197-1BA12	–	–	

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Accessories

Cubicle keys

	Version	Scope of supply	Article No.
	3 mm double bit	10 units	8PQ9400-0BA12

Inner door struts

	Height	Article No.
	1975 mm	8PQ2197-0BA10

Cubicle ID plate

	Version	Article No.
	SIVACON designed by Siemens	8PQ9400-0BA06

Flat cylinders/two-way interlocking mechanism

	Version	Article No.
	Rotary handles with flat cylinder • With key • Identical key type	8PQ9400-0BA07
	Rotary handles with two-way interlocking mechanism	8PQ9400-0BA08
	Coupling bars	8PQ9400-0BA27
	Locking rods	8PQ9400-0BA37
	Bar guides	8PQ9400-0BA36

Profile semicylinders

	Version	Article No.
	Rotary handles for profile semicylinders	8PQ9400-0BA41
	Coupling bars	8PQ9400-0BA28
	Locking rods	8PQ9400-0BA38
	Bar guides	8PQ9400-0BA36
	Profile semicylinders Acc. to DIN 18252/18254, 8 × 45° adjustable, with identical keys (key number 333), including key	8PQ9400-0BA26

Door hinges

	Version	Scope of supply	Article No.
	Suitable for modular or section doors	2 units	8PQ9400-0BA55

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Enclosure

Internal covers



	Main busbar at top		Frame without main busbar	
	❸ Masking frames			
				
Width	**Fixed**	**Swivel**	**Fixed**	**Swivel**
600 mm	8PQ2000-6BA03	8PQ2000-6BA02	8PQ2000-6BA04	8PQ2000-6BA01
800 mm	8PQ2000-8BA03	8PQ2000-8BA02	8PQ2000-8BA04	8PQ2000-8BA01

❺ Blanking covers




Height	Width 600 mm	Width 800 mm
50 mm	8PQ2005-6BA01	8PQ2005-8BA01
100 mm	8PQ2010-6BA01	8PQ2010-8BA01
150 mm	8PQ2015-6BA02	8PQ2015-8BA02
200 mm	8PQ2020-6BA01	8PQ2020-8BA01
250 mm	8PQ2025-6BA01	8PQ2025-8BA01
300 mm	8PQ2030-6BA01	8PQ2030-8BA01
350 mm	8PQ2035-6BA01	8PQ2035-8BA01
400 mm	8PQ2040-6BA01	8PQ2040-8BA01
500 mm	8PQ2050-6BA01	8PQ2050-8BA01
550 mm	8PQ2055-6BA01	8PQ2055-8BA01
600 mm	8PQ2060-6BA01	8PQ2060-8BA01
650 mm	8PQ2065-6BA01	8PQ2065-8BA01
800 mm	8PQ2080-6BA01	8PQ2080-8BA01

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Accessories

❹ Covers, ventilated



Height	Width	Article No.
100 mm	600 mm	8PQ2010-6BA02
	800 mm	8PQ2010-8BA02

Quick-release lock



Version	Scope of supply	Article No.
SIVACON - Blue green basic	20 units	8PQ9400-0BA54

Hinges for covers



Version	Scope of supply	Article No.
Hinges, incl. fixing accessories, from a masking frame height of 150 mm	1 set	8PQ2000-0BA08

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Enclosure

Compartment doors



Device compartments

		❷ Compartment doors		Covers	
					
Width	**Height**	**IP4X**	**IP55 upgrade**	**IP4X**	**IP55 upgrade**
400 mm	50 mm	–	–	8PQ2005-4BA03	8PQ2005-4BA01
	100 mm	–	–	8PQ2010-4BA02	8PQ2010-4BA01
	150 mm	8PQ2015-4BA04	8PQ2015-4BA05	–	–
	200 mm	8PQ2020-4BA01	8PQ2020-4BA03	–	–
	250 mm	8PQ2025-4BA01	8PQ2025-4BA02	–	–
	300 mm	8PQ2030-4BA01	8PQ2030-4BA02	–	–
	350 mm	8PQ2035-4BA01	8PQ2035-4BA02	–	–
	400 mm	8PQ2040-4BA01	8PQ2040-4BA03	–	–
	450 mm	8PQ2045-4BA01	8PQ2045-4BA02	–	–
	500 mm	8PQ2050-4BA01	8PQ2050-4BA02	–	–
	550 mm	8PQ2055-4BA11	8PQ2055-4BA07	–	–
	600 mm	8PQ2060-4BA01	8PQ2060-4BA03	–	–
	650 mm	8PQ2065-4BA01	8PQ2065-4BA02	–	–
	700 mm	8PQ2070-4BA07	8PQ2070-4BA08	–	–
	750 mm	8PQ2072-4BA01	8PQ2075-4BA01	–	–
	800 mm	8PQ2080-4BA01	8PQ2080-4BA04	–	–
600 mm	50 mm	–	–	8PQ2005-6BA04	8PQ2005-6BA03
	100 mm	–	–	8PQ2010-6BA04	8PQ2010-6BA03
	150 mm	8PQ2015-6BA10	8PQ2015-6BA12	–	–
	200 mm	8PQ2020-6BA14	8PQ2020-6BA15	–	–
	250 mm	8PQ2025-6BA07	8PQ2025-6BA08	–	–
	300 mm	8PQ2030-6BA10	8PQ2030-6BA12	–	–
	350 mm	8PQ2035-6BA12	8PQ2035-6BA13	–	–
	400 mm	8PQ2040-6BA12	8PQ2040-6BA13	–	–
	450 mm	8PQ2045-6BA05	8PQ2045-6BA06	–	–
	500 mm	8PQ2050-6BA03	8PQ2050-6BA04	–	–
	550 mm	8PQ2055-6BA04	8PQ2055-6BA06	–	–
	600 mm	8PQ2060-6BA06	8PQ2060-6BA07	–	–
	650 mm	8PQ2065-6BA03	8PQ2065-6BA04	–	–
	700 mm	8PQ2070-6BA03	8PQ2070-6BA04	–	–
	750 mm	8PQ2075-6BA01	8PQ2075-6BA02	–	–
	800 mm	8PQ2080-6BA03	8PQ2080-6BA04	–	–
800 mm	50 mm	–	–	8PQ2005-8BA04	8PQ2005-8BA03
	100 mm	–	–	8PQ2010-8BA04	8PQ2010-8BA03
	150 mm	8PQ2015-8BA05	8PQ2015-8BA07	–	–
	200 mm	8PQ2020-8BA07	8PQ2020-8BA08	–	–
	250 mm	8PQ2025-8BA04	8PQ2025-8BA05	–	–
	300 mm	8PQ2030-8BA05	8PQ2030-8BA06	–	–
	350 mm	8PQ2035-8BA06	8PQ2035-8BA07	–	–
	400 mm	8PQ2040-8BA12	8PQ2040-8BA13	–	–
	450 mm	8PQ2045-8BA03	8PQ2045-8BA04	–	–
	500 mm	8PQ2050-8BA03	8PQ2050-8BA04	–	–
	550 mm	8PQ2055-8BA03	8PQ2055-8BA06	–	–
	600 mm	8PQ2060-8BA04	8PQ2060-8BA05	–	–
	650 mm	8PQ2065-8BA03	8PQ2065-8BA04	–	–
	700 mm	8PQ2070-8BA01	8PQ2070-8BA02	–	–
	750 mm	8PQ2075-8BA01	8PQ2075-8BA02	–	–
	800 mm	8PQ2080-8BA03	8PQ2080-8BA04	–	–

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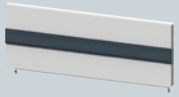
Head compartments

		❶ Doors		Covers
				
Width	**Height**	**IP4X**	**IP55 upgrade**	**IP4X**
Main busbar at top				
400 mm	225 mm	8PQ2022-4BA04	8PQ2022-4BA03	8PQ2022-4BA01
600 mm	225 mm	8PQ2022-6BA04	8PQ2022-6BA02	8PQ2022-6BA01
800 mm	225 mm	8PQ2022-8BA03	8PQ2022-8BA02	8PQ2022-8BA01
Main busbar at bottom				
400 mm	175 mm	–	8PQ2022-4BA03	8PQ2000-4BA02
600 mm	175 mm	–	8PQ2022-6BA02	8PQ2000-6BA08
800 mm	175 mm	–	8PQ2022-8BA02	8PQ2000-8BA08
400 mm	725 mm	8PQ2072-4BA02	8PQ2070-4BA06	–
600 mm	725 mm	8PQ2072-6BA01	8PQ2070-6BA11	–

Base compartments

		❸ Doors		Covers
				
Width	**Height**	**IP4X**	**IP55 upgrade**	**IP4X**
400 mm	150 + 25 mm	–	8PQ2015-4BA03	8PQ2015-4BA01
600 mm	150 + 25 mm	–	8PQ2015-6BA13	8PQ2000-6BA07
800 mm	150 + 25 mm	–	8PQ2015-8BA08	8PQ2000-8BA07
400 mm	700 + 25 mm	8PQ2070-4BA01	–	–
600 mm	700 + 25 mm	8PQ2070-6BA05	–	–

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Enclosure

Compartment doors

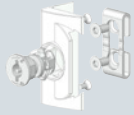
Accessories

Door hinges



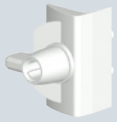
Version	Scope of supply	Article No.
Suitable for modular or section doors	2 units	8PQ9400-0BA55

Locks



Version	Article No.
Two-way interlocking mechanisms	8PQ9400-0BA40

Handles for compartment doors



Version	Article No.
Without lock	8PQ9400-0BA73
With flat cylinder, identical key type	8PQ9400-0BA72

ID strips



Width	Scope of supply	Article No.
400 mm	6 units	8PQ5000-3BA42
600 mm	6 units	8PQ5000-3BA43
800 mm	6 units	8PQ5000-3BA46

Inner door struts



Height	Article No.
400 mm	8PQ2040-0BA06
550 mm	8PQ2055-0BA05
600 mm	8PQ2060-0BA14
625 mm	8PQ2060-0BA14
700 mm	8PQ2070-0BA02
725 mm	8PQ2070-0BA02
800 mm	8PQ2080-0BA07

Cubicle keys



Version	Scope of supply	Article No.
3 mm double bit	10 units	8PQ9400-0BA12

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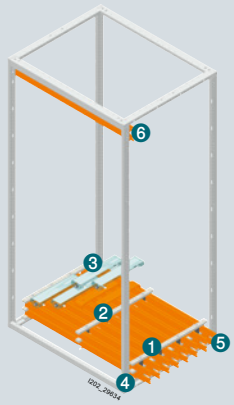
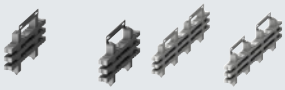
Busbar systems

Main busbars



	❶ Busbar supports		❷ Reinforcement		❸ Equipo-tential bonding	Covers	❹ PEN grounding	Arcing fault barriers
							(1 set = 10 units) 	
Position	**Up to 3200 A**	**Up to 4000 A**	**Up to 3200 A**	**Up to 4000 A**				
Top	8PQ4000-0BA04	8PQ4000-0BA60	8PQ4000-0BA37	2× 8PQ4000-0BA37	8PQ4000-0BA62	–	8PQ4000-0BA12	8PQ9400-0BA21
Bottom	8PQ4000-0BA04	8PQ4000-0BA60	8PQ4000-0BA37	2× 8PQ4000-0BA37	8PQ4000-0BA62	4× 8PQ4000-1BA25	8PQ4000-0BA12	8PQ9400-0BA21
Rear	8PQ4000-0BA04 + 8PQ3000-0BA10	–	8PQ4000-0BA37	–	–	–	8PQ4000-2BA24	8PQ9400-0BA21

Accessories

❺ Connecting lugs

	Version	Cross-section	Article No.
	❺ Main busbars	20 × 10 mm	8PQ4000-0BA53
		30 × 10 mm	8PQ4000-0BA54
		40 × 10 mm	8PQ4000-0BA56
		50 × 10 mm	8PQ4000-0BA57
	❻ PE bar	20 × 5 mm	8PQ4000-0BA52
		30 × 5 mm	
		30 × 10 mm	
		40 × 5 mm	8PQ4000-0BA67
		40 × 10 mm	
		50 × 10 mm	

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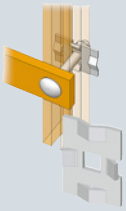
Busbar systems

Vertical distribution busbars, cascaded, up to I_{cw} = 65 kA



	❶ Busbar supports		❷ Supports
			
Position of main busbar	**30 × 10 mm**	**40 × 10 mm**	
Top	8PQ4000-0BA32	8PQ4000-0BA63	–
Bottom	8PQ4000-0BA32	8PQ4000-0BA63	8PQ4000-1BA23



Accessories

Connection

	Composants	Version	Scope of supply	Article No.
	Busbar clamps	M10	20 units	8PQ9400-0BA02
	Saucer-head bolts	M10 × 35 mm	50 units	8PQ9500-0BA14
		M10 × 45 mm	50 units	8PQ9500-0BA16
		M10 × 55 mm	50 units	8PQ9500-1BA36
		M10 × 65 mm	50 units	8PQ9500-1BA25
	Spring washers	For M10	50 units	8PQ9500-0BA60
	Hexagonal nuts	M10	50 units	8PQ9500-0BA05

Connecting lugs

	Position of vertical distribution busbar	Position of main busbar	Depth	Article No.
	Right	Front	400 mm	8PQ4000-0BA45
			600 mm	8PQ4000-0BA46
			800 mm	8PQ4000-0BA46
		Rear	800 mm	8PQ4000-0BA50
	Left	Front	400 mm	8PQ4000-0BA73
			600 mm	8PQ4000-0BA72
			800 mm	8PQ4000-0BA72
		Rear	800 mm	8PQ4000-0BA70
	Right	Front	400 mm	8PQ4000-0BA47
			600 mm	8PQ4000-0BA48
			800 mm	8PQ4000-0BA48
		Rear	800 mm	8PQ4000-0BA51
	Left	Front	400 mm	8PQ4000-0BA75
			600 mm	8PQ4000-0BA48
			800 mm	8PQ4000-0BA48
		Rear	800 mm	8PQ4000-0BA71

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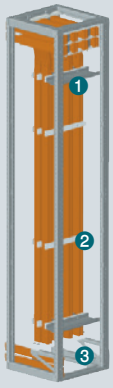
Vertical distribution busbars, non- cascaded, up to I_{cw} = 100 kA



		❶ Busbar supports	❷ Reinforcement	❸ Supports
				
Position of main busbar	**Width**			
Top	200 mm	8PQ4000-2BA25	8PQ4000-0BA37	8PQ4000-0BA78
	400 mm	8PQ4000-2BA26	8PQ4000-0BA37	8PQ4000-0BA61
Bottom	200 mm	8PQ4000-2BA25	8PQ4000-0BA37	–
	400 mm	8PQ4000-2BA26	8PQ4000-0BA37	–

Accessories

Connecting lugs



Position of main busbar	Depth	Article No.
Front	400 mm	8PQ4000-0BA38
	600 mm	8PQ4000-0BA40
	800 mm	8PQ4000-0BA40
Rear	800 mm	8PQ4000-0BA43
Front	400 mm	8PQ4000-0BA41
	600 mm	8PQ4000-0BA42
	800 mm	8PQ4000-0BA42
Rear	800 mm	8PQ4000-0BA44

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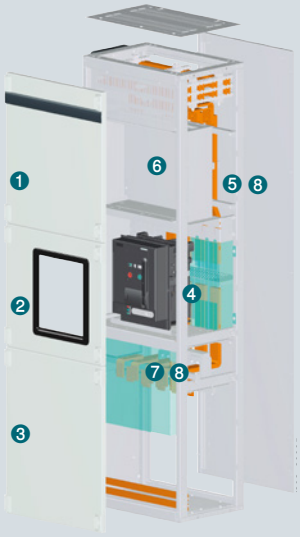
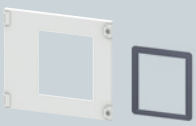
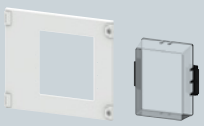
Section expansion

Air circuit breakers 3WL, infeed main busbar at top



3 and 4-pole




Installation type	Size	Width	Depth	❶ Head compartment doors IP40	❶ Head compartment doors IP55 upgrade	❷ Compartment doors IP40	❷ Compartment doors IP55	❷ Compartment doors IP55 upgrade
Fixed-mounted	I	600 mm	400 mm	8PQ2067-6BA01	8PQ2067-6BA02	8PQ2055-6BA16 + 3WL9111-0AP01-0AA0	8PQ2055-6BA17 + 3WL9111-0AP02-0AA0	8PQ2055-6BA06
			600 mm	8PQ2067-6BA01	8PQ2067-6BA02	8PQ2055-6BA16 + 3WL9111-0AP01-0AA0	8PQ2055-6BA17 + 3WL9111-0AP02-0AA0	8PQ2055-6BA06
			800 mm	8PQ2067-6BA01	8PQ2067-6BA02	8PQ2055-6BA16 + 3WL9111-0AP01-0AA0	8PQ2055-6BA17 + 3WL9111-0AP02-0AA0	8PQ2055-6BA06
	II	800 mm	600 mm	8PQ2067-8BA01	8PQ2067-8BA02	8PQ2055-8BA08 + 3WL9111-0AP01-0AA0	8PQ2055-8BA10 + 3WL9111-0AP02-0AA0	8PQ2055-8BA06
			800 mm	8PQ2067-8BA01	8PQ2067-8BA02	8PQ2055-8BA08 + 3WL9111-0AP01-0AA0	8PQ2055-8BA10 + 3WL9111-0AP02-0AA0	8PQ2055-8BA06
	III	1000 mm	800 mm	8PQ2067-1BA01	8PQ2067-1BA02	8PQ2055-1BA03 + 3WL9111-0AP01-0AA0	8PQ2055-1BA04 + 3WL9111-0AP02-0AA0	8PQ2055-1BA06
Withdraw-able	I	600 mm	400 mm	8PQ2067-6BA01	8PQ2067-6BA02	8PQ2055-6BA16 + 3WL9111-0AP01-0AA0	8PQ2055-6BA17 + 3WL9111-0AP02-0AA0	8PQ2055-6BA06
			600 mm	8PQ2067-6BA01	8PQ2067-6BA02	8PQ2055-6BA16 + 3WL9111-0AP01-0AA0	8PQ2055-6BA17 + 3WL9111-0AP02-0AA0	8PQ2055-6BA06
			800 mm	8PQ2067-6BA01	8PQ2067-6BA02	8PQ2055-6BA16 + 3WL9111-0AP01-0AA0	8PQ2055-6BA17 + 3WL9111-0AP02-0AA0	8PQ2055-6BA06
	II	800 mm	600 mm	8PQ2067-8BA01	8PQ2067-8BA02	8PQ2055-8BA08 + 3WL9111-0AP01-0AA0	8PQ2055-8BA10 + 3WL9111-0AP02-0AA0	8PQ2055-8BA06
			800 mm	8PQ2067-8BA01	8PQ2067-8BA02	8PQ2055-8BA08 + 3WL9111-0AP01-0AA0	8PQ2055-8BA10 + 3WL9111-0AP02-0AA0	8PQ2055-8BA06
	III	1000 mm	800 mm	8PQ2067-1BA01	8PQ2067-1BA02	8PQ2055-1BA03 + 3WL9111-0AP01-0AA0	8PQ2055-1BA04 + 3WL9111-0AP02-0AA0	8PQ2055-1BA06

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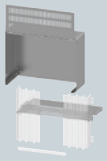
Technical specifications

		Rated operational current I_{ec} Ventilated IP40							Non-ventilated IP55						
Size	I_n	20 °C	25 °C	30 °C	**35 °C**	40 °C	45 °C	50 °C	20 °C	25 °C	30 °C	**35 °C**	40 °C	45 °C	50 °C
I	1600 A	1600 A	1600 A	1590 A	**1550 A**	1510 A	1460 A	1420 A	1370 A	1340 A	1310 A	**1270 A**	1240 A	1200 A	1170 A
	2000 A	2000 A	2000 A	1990 A	**1940 A**	1890 A	1830 A	1780 A	1720 A	1680 A	1640 A	**1590 A**	1550 A	1510 A	1460 A
II	2000 A	2000 A	2000 A	2000 A	**2000 A**	2000 A	2000 A	2000 A	1960 A	1920 A	1870 A	**1820 A**	1780 A	1730 A	1670 A
	3200 A	2850 A	2790 A	2720 A	**2650 A**	2580 A	2510 A	2430 A	2260 A	2210 A	2160 A	**2100 A**	2050 A	1990 A	1930 A
III	4000 A	4000 A	4000 A	4000 A	**4000 A**	3950 A	3870 A	3780 A	3230 A	3150 A	3080 A	**3000 A**	2920 A	2840 A	2750 A

❸ Base compartment doors		❹ Mounting plates	❺ Main busbar connection		❻ Separation 4b	❼ Cable connection	❽ Insulation
							
IP40	**IP55 upgrade**		**Front**	**Rear**			
8PQ2075-6BA01	8PQ2075-6BA03	8PQ6000-5BA26	8PQ6000-6BA75	–	8PQ5000-4BA28	8PQ6000-5BA81	–
8PQ2075-6BA01	8PQ2075-6BA03	8PQ6000-5BA26	8PQ6000-6BA75	–	8PQ5000-4BA30	8PQ6000-5BA81	–
8PQ2075-6BA01	8PQ2075-6BA03	8PQ6000-5BA26	8PQ6000-6BA75	8PQ6001-1BA00 new	8PQ5000-4BA31	8PQ6000-5BA81	–
8PQ2075-8BA01	8PQ2075-8BA03	8PQ6000-5BA24	8PQ6000-6BA76	–	8PQ5000-4BA32	8PQ6000-5BA83	–
8PQ2075-8BA01	8PQ2075-8BA03	8PQ6000-5BA24	8PQ6000-6BA76	8PQ6001-1BA01 new	8PQ5000-4BA33	8PQ6000-5BA83	–
8PQ2075-1BA01	8PQ2075-1BA02	8PQ6000-5BA23	8PQ6000-5BA33	–	8PQ5000-5BA11	8PQ6000-5BA84	–
8PQ2075-6BA01	8PQ2075-6BA03	8PQ6000-5BA26	8PQ6000-6BA75	–	8PQ5000-4BA28	8PQ6000-5BA82	8PQ6000-7BA28
8PQ2075-6BA01	8PQ2075-6BA03	8PQ6000-5BA26	8PQ6000-6BA75	–	8PQ5000-4BA30	8PQ6000-5BA82	8PQ6000-7BA28
8PQ2075-6BA01	8PQ2075-6BA03	8PQ6000-5BA26	8PQ6000-6BA75	8PQ6001-1BA00 new	8PQ5000-4BA31	8PQ6000-5BA82	8PQ6000-7BA28
8PQ2075-8BA01	8PQ2075-8BA03	8PQ6000-5BA24	8PQ6000-6BA76	–	8PQ5000-4BA32	8PQ6000-5BA83	–
8PQ2075-8BA01	8PQ2075-8BA03	8PQ6000-5BA24	8PQ6000-6BA76	8PQ6001-1BA01 new	8PQ5000-4BA33	8PQ6000-5BA83	–
8PQ2075-1BA01	8PQ2075-1BA02	8PQ6000-5BA23	8PQ6000-5BA33	–	8PQ5000-5BA11	8PQ6000-5BA84	–

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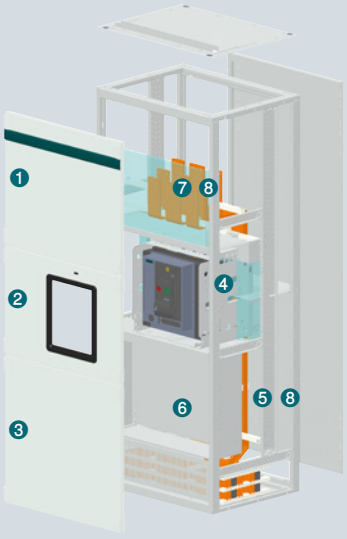
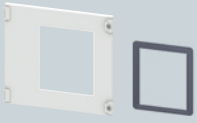
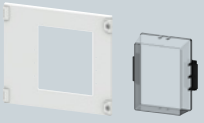
Section expansion

3WL air circuit breakers, infeed main busbar at bottom



3 and 4-pole

	❶ Head compartment doors		❷ Compartment doors			
						

Installation type	Size	Width	Depth	IP40	IP55 upgrade	IP40	IP55	IP55 upgrade
Fixed-mounted	I	600 mm	400 mm	8PQ2067-6BA01	8PQ2067-6BA02	8PQ2055-6BA16 + 3WL9111-0AP01-0AA0	8PQ2055-6BA17 + 3WL9111-0AP02-0AA0	8PQ2055-6BA06
			600 mm	8PQ2067-6BA01	8PQ2067-6BA02	8PQ2055-6BA16 + 3WL9111-0AP01-0AA0	8PQ2055-6BA17 + 3WL9111-0AP02-0AA0	8PQ2055-6BA06
			800 mm	8PQ2067-6BA01	8PQ2067-6BA02	8PQ2055-6BA16 + 3WL9111-0AP01-0AA0	8PQ2055-6BA17 + 3WL9111-0AP02-0AA0	8PQ2055-6BA06
	II	800 mm	600 mm	8PQ2067-8BA01	8PQ2067-8BA02	8PQ2055-8BA08 + 3WL9111-0AP01-0AA0	8PQ2055-8BA10 + 3WL9111-0AP02-0AA0	8PQ2055-8BA06
			800 mm	8PQ2067-8BA01	8PQ2067-8BA02	8PQ2055-8BA08 + 3WL9111-0AP01-0AA0	8PQ2055-8BA10 + 3WL9111-0AP02-0AA0	8PQ2055-8BA06
Withdraw-able	I	600 mm	400 mm	8PQ2067-6BA01	8PQ2067-6BA02	8PQ2055-6BA16 + 3WL9111-0AP01-0AA0	8PQ2055-6BA17 + 3WL9111-0AP02-0AA0	8PQ2055-6BA06
			600 mm	8PQ2067-6BA01	8PQ2067-6BA02	8PQ2055-6BA16 + 3WL9111-0AP01-0AA0	8PQ2055-6BA17 + 3WL9111-0AP02-0AA0	8PQ2055-6BA06
			800 mm	8PQ2067-6BA01	8PQ2067-6BA02	8PQ2055-6BA16 + 3WL9111-0AP01-0AA0	8PQ2055-6BA17 + 3WL9111-0AP02-0AA0	8PQ2055-6BA06
	II	800 mm	600 mm	8PQ2067-8BA01	8PQ2067-8BA02	8PQ2055-8BA08 + 3WL9111-0AP01-0AA0	8PQ2055-8BA10 + 3WL9111-0AP02-0AA0	8PQ2055-8BA06
			800 mm	8PQ2067-8BA01	8PQ2067-8BA02	8PQ2055-8BA08 + 3WL9111-0AP01-0AA0	8PQ2055-8BA10 + 3WL9111-0AP02-0AA0	8PQ2055-8BA06

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Technical specifications

		Rated operational current I_{ec} Ventilated IP40							Non-ventilated IP55						
Size	I_n	20 °C	25 °C	30 °C	**35 °C**	40 °C	45 °C	50 °C	20 °C	25 °C	30 °C	**35 °C**	40 °C	45 °C	50 °C
I	1600 A	1540 A	1500 A	1470 A	**1430 A**	1390 A	1350 A	1310 A	1390 A	1350 A	1320 A	**1290 A**	1240 A	1190 A	1140 A
	2000 A	1930 A	1880 A	1840 A	**1790 A**	1740 A	1690 A	1640 A	1710 A	1670 A	1630 A	**1590 A**	1530 A	1470 A	1410 A
II	2000 A	2000 A	2000 A	2000 A	**2000 A**	1990 A	1920 A	1830 A	2000 A	1950 A	1880 A	**1820 A**	1750 A	1680 A	1610 A
	3200 A	2710 A	2640 A	2570 A	**2490 A**	2400 A	2300 A	2200 A	2320 A	2250 A	2180 A	**2100 A**	2030 A	1950 A	1860 A

❸ Base compartment doors		❹ Mounting plates	❺ Main busbar connection		❻ Separation 4b	❼ Cable connection	❽ Insulation
							
IP40	**IP55 upgrade**		**Front**	**Rear**			
8PQ2075-6BA01	8PQ2075-6BA03	8PQ6000-5BA26	8PQ6000-6BA75	–	8PQ5000-4BA34	8PQ6000-5BA81	–
8PQ2075-6BA01	8PQ2075-6BA03	8PQ6000-5BA26	8PQ6000-6BA75	–	8PQ5000-4BA35	8PQ6000-5BA81	–
8PQ2075-6BA01	8PQ2075-6BA03	8PQ6000-5BA26	8PQ6000-6BA75	8PQ6001-1BA00 new	8PQ5000-4BA36	8PQ6000-5BA81	–
8PQ2075-8BA01	8PQ2075-8BA03	8PQ6000-5BA24	8PQ6000-6BA76	–	8PQ5000-4BA37	8PQ6000-5BA83	–
8PQ2075-8BA01	8PQ2075-8BA03	8PQ6000-5BA24	8PQ6000-6BA76	8PQ6001-1BA01 new	8PQ5000-4BA38	8PQ6000-5BA83	–
8PQ2075-6BA01	8PQ2075-6BA03	8PQ6000-5BA26	8PQ6000-6BA75	–	8PQ5000-4BA34	8PQ6000-5BA82	8PQ6000-7BA28
8PQ2075-6BA01	8PQ2075-6BA03	8PQ6000-5BA26	8PQ6000-6BA75	–	8PQ5000-4BA35	8PQ6000-5BA82	8PQ6000-7BA28
8PQ2075-6BA01	8PQ2075-6BA03	8PQ6000-5BA26	8PQ6000-6BA75	8PQ6001-1BA00 new	8PQ5000-4BA36	8PQ6000-5BA82	8PQ6000-7BA28
8PQ2075-8BA01	8PQ2075-8BA03	8PQ6000-5BA24	8PQ6000-6BA76	–	8PQ5000-4BA37	8PQ6000-5BA83	–
8PQ2075-8BA01	8PQ2075-8BA03	8PQ6000-5BA24	8PQ6000-6BA76	8PQ6001-1BA01 new	8PQ5000-4BA38	8PQ6000-5BA83	–

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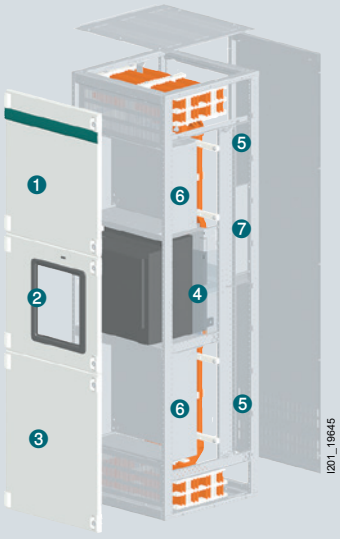
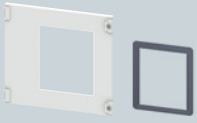
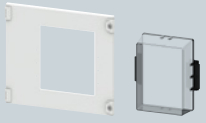
Section expansion

3WL air circuit breakers, coupling



3 and 4-pole

❶ Head compartment doors		❷ Compartment doors				
						

Installation type	Size	Width	Depth	IP40	IP55 upgrade	IP4X	IP55	IP55 upgrade
Fixed-mounted	I	600 mm	400 mm	8PQ2067-6BA01	8PQ2067-6BA02	8PQ2055-6BA16 + 3WL9111-0AP01-0AA0	8PQ2055-6BA17 + 3WL9111-0AP02-0AA0	8PQ2055-6BA06
			600 mm	8PQ2067-6BA01	8PQ2067-6BA02	8PQ2055-6BA16 + 3WL9111-0AP01-0AA0	8PQ2055-6BA17 + 3WL9111-0AP02-0AA0	8PQ2055-6BA06
			800 mm	8PQ2067-6BA01	8PQ2067-6BA02	8PQ2055-6BA16 + 3WL9111-0AP01-0AA0	8PQ2055-6BA17 + 3WL9111-0AP02-0AA0	8PQ2055-6BA06
	II	800 mm	600 mm	8PQ2067-8BA01	8PQ2067-8BA02	8PQ2055-8BA08 + 3WL9111-0AP01-0AA0	8PQ2055-8BA10 + 3WL9111-0AP02-0AA0	8PQ2055-8BA06
			800 mm	8PQ2067-8BA01	8PQ2067-8BA02	8PQ2055-8BA08 + 3WL9111-0AP01-0AA0	8PQ2055-8BA10 + 3WL9111-0AP02-0AA0	8PQ2055-8BA06
Withdrawable	I	600 mm	400 mm	8PQ2067-6BA01	8PQ2067-6BA02	8PQ2055-6BA16 + 3WL9111-0AP01-0AA0	8PQ2055-6BA17 + 3WL9111-0AP02-0AA0	8PQ2055-6BA06
			600 mm	8PQ2067-6BA01	8PQ2067-6BA02	8PQ2055-6BA16 + 3WL9111-0AP01-0AA0	8PQ2055-6BA17 + 3WL9111-0AP02-0AA0	8PQ2055-6BA06
			800 mm	8PQ2067-6BA01	8PQ2067-6BA02	8PQ2055-6BA16 + 3WL9111-0AP01-0AA0	8PQ2055-6BA17 + 3WL9111-0AP02-0AA0	8PQ2055-6BA06
	II	800 mm	600 mm	8PQ2067-8BA01	8PQ2067-8BA02	8PQ2055-8BA08 + 3WL9111-0AP01-0AA0	8PQ2055-8BA10 + 3WL9111-0AP02-0AA0	8PQ2055-8BA06
			800 mm	8PQ2067-8BA01	8PQ2067-8BA02	8PQ2055-8BA08 + 3WL9111-0AP01-0AA0	8PQ2055-8BA10 + 3WL9111-0AP02-0AA0	8PQ2055-8BA06

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Technical specifications

		Rated operational current I_{ec} Ventilated IP40							Non-ventilated IP55						
Size	I_n	20 °C	25 °C	30 °C	**35 °C**	40 °C	45 °C	50 °C	20 °C	25 °C	30 °C	**35 °C**	40 °C	45 °C	50 °C
I	1600 A	1540 A	1500 A	1470 A	**1430 A**	1390 A	1350 A	1310 A	1390 A	1350 A	1320 A	**1290 A**	1240 A	1190 A	1140 A
	2000 A	1930 A	1880 A	1840 A	**1790 A**	1740 A	1690 A	1640 A	1710 A	1670 A	1630 A	**1590 A**	1530 A	1470 A	1410 A
II	2000 A	2000 A	2000 A	2000 A	**2000 A**	1990 A	1920 A	1830 A	2000 A	1950 A	1880 A	**1820 A**	1750 A	1680 A	1610 A
	3200 A	2710 A	2640 A	2570 A	**2490 A**	2400 A	2300 A	2200 A	2320 A	2250 A	2180 A	**2100 A**	2030 A	1950 A	1860 A

❸ Base compartment doors		❹ Mounting plates	❺ Main busbar connection	❻ Separation 4b	❼ Uprights
					
IP40	**IP55 upgrade**				
8PQ2075-6BA01	8PQ2075-6BA03	8PQ6000-5BA26	2× 8PQ6000-6BA75	8PQ5000-5BA12	–
8PQ2075-6BA01	8PQ2075-6BA03	8PQ6000-5BA26	2× 8PQ6000-6BA75	8PQ5000-5BA13	2× 8PQ3000-3BA50
8PQ2075-6BA01	8PQ2075-6BA03	8PQ6000-5BA26	2× 8PQ6000-6BA75	8PQ5000-5BA14	2× 8PQ3000-3BA51
8PQ2075-8BA01	8PQ2075-8BA03	8PQ6000-5BA24	2× 8PQ6000-6BA76	8PQ5000-5BA15	2× 8PQ3000-3BA50
8PQ2075-8BA01	8PQ2075-8BA03	8PQ6000-5BA24	2× 8PQ6000-6BA76	8PQ5000-5BA16	2× 8PQ3000-3BA51
8PQ2075-6BA01	8PQ2075-6BA03	8PQ6000-5BA26	2× 8PQ6000-6BA75	8PQ5000-5BA12	–
8PQ2075-6BA01	8PQ2075-6BA03	8PQ6000-5BA26	2× 8PQ6000-6BA75	8PQ5000-5BA13	2× 8PQ3000-3BA50
8PQ2075-6BA01	8PQ2075-6BA03	8PQ6000-5BA26	2× 8PQ6000-6BA75	8PQ5000-5BA14	2× 8PQ3000-3BA51
8PQ2075-8BA01	8PQ2075-8BA03	8PQ6000-5BA24	2× 8PQ6000-6BA76	8PQ5000-5BA15	2× 8PQ3000-3BA50
8PQ2075-8BA01	8PQ2075-8BA03	8PQ6000-5BA24	2× 8PQ6000-6BA76	8PQ5000-5BA16	2× 8PQ3000-3BA51

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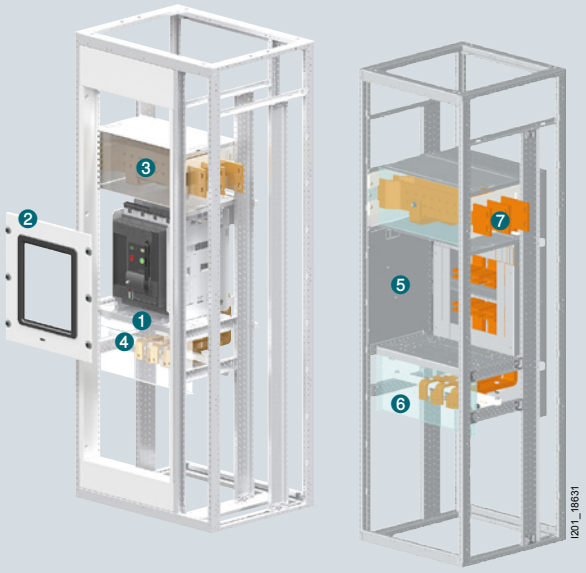
Section expansion

3WL air circuit breakers, connection of section busbar systems



Compartment doors

❶ Mounting plates	❷ Compartment doors
	

Installation type	Size	Width	Number of poles	Rated current	❶ Mounting plates	❷ Compartment doors IP4X
Fixed-mounted	I	400 mm	3-pole	1600 A	8PQ6000-5BA25	8PQ2055-4BA12 + 3WL9111-0AP01-0AA0
				2000 A	8PQ6000-5BA25	8PQ2055-4BA12 + 3WL9111-0AP01-0AA0
		600 mm	4-pole	1600 A	8PQ6000-5BA26	8PQ2055-6BA16 + 3WL9111-0AP01-0AA0
				2000 A	8PQ6000-5BA26	8PQ2055-6BA16 + 3WL9111-0AP01-0AA0
Withdrawablet	I	400 mm	3-pole	1600 A	8PQ6000-5BA25	8PQ2055-4BA12 + 3WL9111-0AP01-0AA0
				2000 A	8PQ6000-5BA25	8PQ2055-4BA12 + 3WL9111-0AP01-0AA0
		600 mm	4-pole	1600 A	8PQ6000-5BA26	8PQ2055-6BA16 + 3WL9111-0AP01-0AA0
				2000 A	8PQ6000-5BA26	8PQ2055-6BA16 + 3WL9111-0AP01-0AA0

Covers

❶ Mounting plates	❷ Covers
	

Installation type	Size	Width	Number of poles	Rated current	❶ Mounting plates	❷ Covers IP4X
Fixed-mounted	I	600 mm	3-pole	1600 A	8PQ6000-3BA31	8PQ2055-6BA05 + 3WL9111-0AP01-0AA0
				2000 A	8PQ6000-3BA31	8PQ2055-6BA05 + 3WL9111-0AP01-0AA0
			4-pole	1600 A	8PQ6000-3BA31	8PQ2055-6BA07 + 3WL9111-0AP01-0AA0
				2000 A	8PQ6000-3BA31	8PQ2055-6BA07 + 3WL9111-0AP01-0AA0
		800 mm	3/4-pole	1600 A	8PQ6000-3BA32	8PQ2055-8BA04 + 3WL9111-0AP01-0AA0
				2000 A	8PQ6000-3BA32	8PQ2055-8BA04 + 3WL9111-0AP01-0AA0
Withdrawable	I	600 mm	3-pole	1600 A	8PQ6000-3BA31	8PQ2055-6BA05 + 3WL9111-0AP01-0AA0
				2000 A	8PQ6000-3BA31	8PQ2055-6BA05 + 3WL9111-0AP01-0AA0
			4-pole	1600 A	8PQ6000-3BA31	8PQ2055-6BA07 + 3WL9111-0AP01-0AA0
				2000 A	8PQ6000-3BA31	8PQ2055-6BA07 + 3WL9111-0AP01-0AA0
		800 mm	3/4-pole	1600 A	8PQ6000-3BA32	8PQ2055-8BA04 + 3WL9111-0AP01-0AA0
				2000 A	8PQ6000-3BA32	8PQ2055-8BA04 + 3WL9111-0AP01-0AA0

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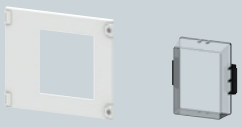
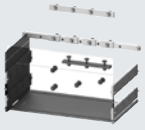
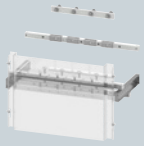
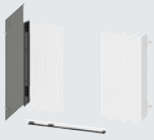
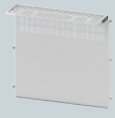
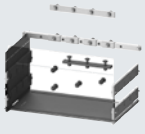
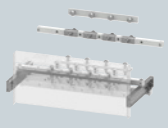
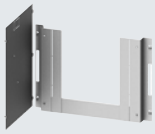
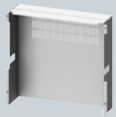
	❸ Section busbars	❹ Cable connection	❺ Device compartment	❻ Cable connection	❼ Section busbars
			Separation, form 3	Separation, form 4	Separation, form 4
					
IP55					
–	8PQ6000-5BA48	8PQ6000-5BA78	8PQ5000-3BA82	8PQ5000-3BA84	8PQ5000-3BA84
–	8PQ6000-7BA05	8PQ6000-5BA78	8PQ5000-3BA82	8PQ5000-4BA00	8PQ5000-3BA85
8PQ2055-6BA17 + 3WL9111-0AP02-0AA0	8PQ6000-5BA51	8PQ6000-5BA81	8PQ5000-3BA82	8PQ5000-3BA86	8PQ5000-3BA86
8PQ2055-6BA17 + 3WL9111-0AP02-0AA0	8PQ6000-7BA07	8PQ6000-5BA81	8PQ5000-3BA82	8PQ5000-4BA01	8PQ5000-3BA87
–	8PQ6000-5BA50	8PQ6000-5BA80	8PQ5000-3BA82	8PQ5000-3BA84	8PQ5000-3BA84
–	8PQ6000-7BA06	8PQ6000-5BA80	8PQ5000-3BA82	8PQ5000-4BA00	8PQ5000-3BA85
8PQ2055-6BA17 + 3WL9111-0AP02-0AA0	8PQ6000-5BA52	8PQ6000-5BA82	8PQ5000-3BA82	8PQ5000-3BA86	8PQ5000-3BA86
8PQ2055-6BA17 + 3WL9111-0AP02-0AA0	8PQ6000-7BA08	8PQ6000-5BA82	8PQ5000-3BA82	8PQ5000-4BA01	8PQ5000-3BA87

	❸ Section busbars	❹ Cable connection	❺ Device compartment	❻ Cable connection	❼ Section busbars
			Separation, form 3	Separation, form 4	Separation, form 4
					
	8PQ6000-5BA45	8PQ6000-5BA75	8PQ5000-0BA08	8PQ5000-0BA30	8PQ5000-0BA14
	8PQ6000-7BA03	8PQ6000-5BA75	8PQ5000-0BA08	8PQ5000-0BA30	8PQ5000-0BA14
	8PQ6000-5BA45	8PQ6000-5BA75	8PQ5000-0BA08	8PQ5000-0BA30	8PQ5000-0BA14
	8PQ6000-7BA03	8PQ6000-5BA75	8PQ5000-0BA08	8PQ5000-0BA30	8PQ5000-0BA14
	8PQ6000-5BA46	8PQ6000-5BA76	8PQ5000-1BA65	8PQ5000-1BA68	8PQ5000-1BA67
	8PQ6000-7BA04	8PQ6000-5BA76	8PQ5000-1BA65	8PQ5000-1BA68	8PQ5000-1BA67
	8PQ6000-5BA45	8PQ6000-5BA75	8PQ5000-0BA07	8PQ5000-0BA30	8PQ5000-0BA14
	8PQ6000-7BA03	8PQ6000-5BA75	8PQ5000-0BA07	8PQ5000-0BA30	8PQ5000-0BA14
	8PQ6000-5BA45	8PQ6000-5BA75	8PQ5000-0BA07	8PQ5000-0BA30	8PQ5000-0BA14
	8PQ6000-7BA03	8PQ6000-5BA75	8PQ5000-0BA07	8PQ5000-0BA30	8PQ5000-0BA14
	8PQ6000-5BA46	8PQ6000-5BA76	8PQ5000-1BA66	8PQ5000-1BA68	8PQ5000-1BA67
	8PQ6000-7BA04	8PQ6000-5BA76	8PQ5000-1BA66	8PQ5000-1BA68	8PQ5000-1BA67

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Section expansion

3WL air circuit breakers, accessories

			Busbar holders	Busbar connections
			1 set = 4 holders	For use with SIVACON 8PS
				
Size	**Width**	**Number of poles**		
I	600 mm	3/4-pole	8PQ6000-4BA35	8PQ3000-1BA70
	800 mm	3/4-pole	8PQ6000-4BA37	8PQ3000-1BA71
II	600 mm	3-pole	8PQ6000-4BA36	8PQ3000-1BA70
	800 mm	3/4-pole	8PQ6000-4BA38	8PQ3000-1BA71
III	1000 mm	3/4-pole	8PQ6000-4BA40	8PQ3000-1BA72

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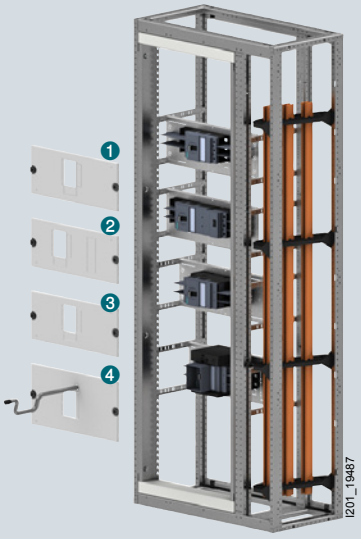
Section expansion

3VA molded case circuit breakers, internal cover, horizontal, 3-pole



❶ Fixed-mounted version



Type	I_n	Width	Height	Operating mechanism			Device holders
				Direct	Rotary	Motorized	
3VA10	100 A	600 mm	150 mm	■	■	–	8PQ6000-8BA01
		800 mm	150 mm	■	■	–	8PQ6000-8BA02
3VA11	160 A	600 mm	150 mm	■	■	■	8PQ6000-8BA01
		800 mm	150 mm	■	■	■	8PQ6000-8BA02
3VA12	250 A	600 mm	150 mm	■	■	■	8PQ6000-8BA03
				■	–	■	–
		800 mm	200 mm	■	■	■	8PQ6000-8BA07
				■	–	■	–
3VA13 new	400 A	600 mm	200 mm	■	■	■	8PQ6000-8BA23
		800 mm	250 mm	■	■	■	8PQ6000-8BA27
				■	–	–	–
			300 mm	■	–	–	–
3VA14 new	630 A	600 mm	200 mm	■	■	■	8PQ6000-8BA23
		800 mm	250 mm	■	■	■	8PQ6000-8BA27
				■	–	–	–
			300 mm	■	–	–	–
3VA20	100 A	600 mm	200 mm	■	■	■	8PQ6000-8BA08
				■	–	–	–
		800 mm	200 mm	■	■	■	8PQ6000-8BA10
				■	–	–	–
3VA21	160 A	600 mm	200 mm	■	■	■	8PQ6000-8BA08
				■	–	–	–
		800 mm	200 mm	■	■	■	8PQ6000-8BA10
				■	–	–	–
3VA22	250 A	600 mm	200 mm	■	■	■	8PQ6000-8BA08
				■	–	–	–
		800 mm	200 mm	■	■	■	8PQ6000-8BA10
				■	–	–	–
3VA23	400 A	600 mm	200 mm	■	■	■	8PQ6000-8BA23
		800 mm	250 mm	■	–	–	8PQ6000-8BA27
				■	–	–	–
3VA24	630 A	600 mm	200 mm	■	■	■	8PQ6000-8BA23
		800 mm	250 mm	■	–	–	8PQ6000-8BA27
				■	–	–	–

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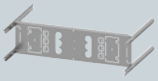
	❷ Fixed-mounted version with RCD		❸ Plug-in version		❹ Withdrawable version	
						
Covers	**Device holders**	**Covers**	**Device holders**	**Covers**	**Device holders**	**Covers**
8PQ2015-6BA26	–	–	–	–	–	–
8PQ2015-8BA11	–	–	–	–	–	–
8PQ2015-6BA26	8PQ6000-8BA01	8PQ2015-6BA27	8PQ6000-8BA01	8PQ2015-6BA26	–	–
8PQ2015-8BA11	8PQ6000-8BA02	8PQ2015-8BA11	8PQ6000-8BA02	8PQ2015-8BA11	–	–
8PQ2015-6BA28	8PQ6000-8BA03 [1]	8PQ2015-6BA30	8PQ6000-8BA04	8PQ2015-6BA28	–	–
–	–	–	–	–	8PQ6000-8BA04	8PQ2025-6BA21
8PQ2020-8BA20	8PQ6000-8BA07	8PQ2020-8BA20	8PQ6000-8BA07	8PQ2020-8BA20	–	–
–	–	–	–	–	8PQ6000-8BA07	8PQ2025-8BA12
8PQ2020-6BA41	–	–	–	–	–	–
8PQ2025-8BA14	–	–	–	–	–	–
–	–	–	8PQ6001-1BA02	8PQ2025-8BA18	–	–
–	–	–	–	–	8PQ6001-1BA02	8PQ2030-8BA15
8PQ2020-6BA41	–	–	–	–	–	–
8PQ2025-8BA14	–	–	–	–	–	–
–	–	–	8PQ6001-1BA02	8PQ2025-8BA14	–	–
–	–	–	–	–	8PQ6001-1BA02	8PQ2030-8BA15
8PQ2020-6BA38	8PQ6000-8BA11	8PQ2020-6BA40	8PQ6000-8BA08	8PQ2020-6BA38	–	–
–	–	–	–	–	8PQ6000-8BA08	8PQ2025-6BA22
8PQ2020-8BA21	8PQ6000-8BA10	8PQ2020-8BA21	8PQ6000-8BA10	8PQ2020-8BA21	–	–
–	–	–	–	–	8PQ6000-8BA10	8PQ2025-8BA13
8PQ2020-6BA38	8PQ6000-8BA11	8PQ2020-6BA40	8PQ6000-8BA08	8PQ2020-6BA38	–	–
–	–	–	–	–	8PQ6000-8BA08	8PQ2025-6BA22
8PQ2020-8BA21	8PQ6000-8BA10	8PQ2020-8BA21	8PQ6000-8BA10	8PQ2020-8BA21	–	–
–	–	–	–	–	8PQ6000-8BA10	8PQ2025-8BA13
8PQ2020-6BA38	8PQ6000-8BA11	8PQ2020-6BA40	8PQ6000-8BA08	8PQ2020-6BA38	–	–
–	–	–	–	–	8PQ6000-8BA08	8PQ2025-6BA22
8PQ2020-8BA21	8PQ6000-8BA10	8PQ2020-8BA21	8PQ6000-8BA10	8PQ2020-8BA21	–	–
–	–	–	–	–	8PQ6000-8BA10	8PQ2025-8BA13
8PQ2020-6BA41	–	–	–	–	–	–
8PQ2025-8BA14	8PQ6000-8BA27	8PQ2025-8BA14	8PQ6000-8BA28	8PQ2025-8BA14	–	–
–	–	–	–	–	8PQ6000-8BA28	8PQ2030-8BA14
8PQ2020-6BA41	–	–	–	–	–	–
8PQ2025-8BA14	8PQ6000-8BA27	8PQ2025-8BA14	8PQ6000-8BA28	8PQ2025-8BA14	–	–
–	–	–	–	–	8PQ6000-8BA28	8PQ2030-8BA14

[1] For applications >415 V, front mounted rotary operating mechanism or motorized operating mechanism required for compliance with safety clearances.

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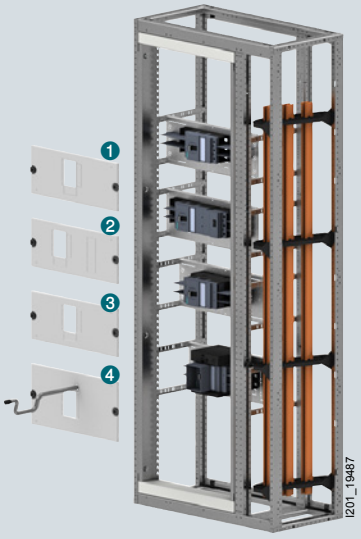
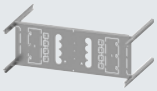
Section expansion

3VA molded case circuit breakers, internal cover, horizontal, 4-pole



❶ Fixed-mounted version



Type	I_n	Width	Height	Operating mechanism			Device holders
				Direct	Rotary	Motorized	
3VA10	100 A	600 mm	150 mm	■	■	–	8PQ6000-8BA01
		800 mm	150 mm	■	■	–	8PQ6000-8BA02
3VA11	160 A	600 mm	150 mm	■	■	■	8PQ6000-8BA01
		800 mm	150 mm	■	■	■	8PQ6000-8BA02
3VA12	250 A	600 mm	200 mm	■	■	■	8PQ6000-8BA05
				■	–	–	–
		800 mm	200 mm	■	■	■	8PQ6000-8BA07
				■	–	–	–
3VA13 new	400 A	600 mm	250 mm	■	■	■	8PQ6000-8BA25
		800 mm	250 mm	■	■	■	8PQ6000-8BA27
				■	–	–	–
			300 mm	■	–	–	–
3VA14 new	630 A	600 mm	250 mm	■	■	■	8PQ6000-8BA25
		800 mm	250 mm	■	■	■	8PQ6000-8BA27
				■	–	–	–
			300 mm	■	–	–	–
3VA20	100 A	600 mm	200 mm	■	■	■	8PQ6000-8BA08
				■	–	–	–
		800 mm	200 mm	■	■	■	8PQ6000-8BA10
				■	–	–	–
3VA21	160 A	600 mm	200 mm	■	■	■	8PQ6000-8BA08
				■	–	–	–
		800 mm	200 mm	■	■	■	8PQ6000-8BA10
				■	–	–	–
3VA22	250 A	600 mm	200 mm	■	■	■	8PQ6000-8BA08
				■	–	–	–
		800 mm	200 mm	■	■	■	8PQ6000-8BA10
				■	–	–	–
3VA23	400 A	600 mm	200 mm	■	■	■	8PQ6000-8BA25
		800 mm	250 mm	■	■	■	8PQ6000-8BA27
				■	–	–	–
3VA24	630 A	600 mm	200 mm	■	■	■	8PQ6000-8BA25
		800 mm	250 mm	■	■	■	8PQ6000-8BA27
				■	–	–	–

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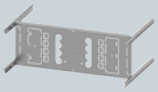
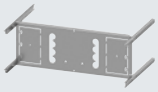
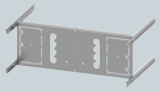
	❷ Fixed-mounted version with RCD		❸ Plug-in version		❹ Withdrawable version	
						
Covers	**Device holders**	**Covers**	**Device holders**	**Covers**	**Device holders**	**Covers**
8PQ2015-6BA26	–	–	–	–	–	–
8PQ2015-8BA11	–	–	–	–	–	–
8PQ2015-6BA26	8PQ6000-8BA01	8PQ2015-6BA27	8PQ6000-8BA01	8PQ2015-6BA26	–	–
8PQ2015-8BA11	8PQ6000-8BA02	8PQ2015-8BA11	8PQ6000-8BA02	8PQ2015-8BA11	–	–
8PQ2020-6BA36	8PQ6000-8BA05 [1]	8PQ2020-6BA37	8PQ6000-8BA06	8PQ2020-6BA36	–	–
–	–	–	–	–	8PQ6000-8BA06	8PQ2030-6BA25
8PQ2020-8BA20	8PQ6000-8BA07	8PQ2020-8BA20	8PQ6000-8BA07	8PQ2020-8BA20	–	–
–	–	–	–	–	8PQ6000-8BA07	8PQ2030-8BA12
8PQ2025-6BA23	–	–	–	–	–	–
8PQ2025-8BA14	–	–	–	–	–	–
–	–	–	8PQ6001-1BA02	8PQ2025-8BA18	–	–
–	–	–	–	–	8PQ6001-1BA02	8PQ2030-8BA15
8PQ2025-6BA23	–	–	–	–	–	–
8PQ2025-8BA14	–	–	–	–	–	–
–	–	–	8PQ6001-1BA02	8PQ2025-8BA18	–	–
–	–	–	–	–	8PQ6001-1BA02	8PQ2030-8BA15
8PQ2020-6BA38	8PQ6000-8BA11	8PQ2020-6BA40	8PQ6000-8BA08	8PQ2020-6BA38	–	–
–	–	–	–	–	8PQ6000-8BA08	8PQ2030-6BA26
8PQ2020-8BA21	8PQ6000-8BA10	8PQ2020-8BA21	8PQ6000-8BA10	8PQ2020-8BA21	–	–
–	–	–	–	–	8PQ6000-8BA10	8PQ2030-8BA13
8PQ2020-6BA38	8PQ6000-8BA11	8PQ2020-6BA40	8PQ6000-8BA08	8PQ2020-6BA38	–	–
–	–	–	–	–	8PQ6000-8BA08	8PQ2030-6BA26
8PQ2020-8BA21	8PQ6000-8BA10	8PQ2020-8BA21	8PQ6000-8BA10	8PQ2020-8BA21	–	–
–	–	–	–	–	8PQ6000-8BA10	8PQ2030-8BA13
8PQ2020-6BA38	8PQ6000-8BA11	8PQ2020-6BA40	8PQ6000-8BA08	8PQ2020-6BA38	–	–
–	–	–	–	–	8PQ6000-8BA08	8PQ2030-6BA26
8PQ2020-8BA21	8PQ6000-8BA10	8PQ2020-8BA21	8PQ6000-8BA10	8PQ2020-8BA21	–	–
–	–	–	–	–	8PQ6000-8BA10	8PQ2030-8BA13
8PQ2025-6BA23	–	–	8PQ6000-8BA26	8PQ2025-6BA23	–	–
8PQ2025-8BA14	8PQ6000-8BA27	8PQ2025-8BA14	8PQ6000-8BA28	8PQ2025-8BA14	–	–
–	–	–	–	–	8PQ6000-8BA28	8PQ2035-8BA15
8PQ2025-6BA23	–	–	8PQ6000-8BA26	8PQ2025-6BA23	–	–
8PQ2025-8BA14	8PQ6000-8BA27	8PQ2025-8BA14	8PQ6000-8BA28	8PQ2025-8BA14	–	–
–	–	–	–	–	8PQ6000-8BA28	8PQ2035-8BA15

[1] For applications >415 V, front mounted rotary operating mechanism or motorized operating mechanism required for compliance with safety clearances.

Accessories

N-Link



Version	Article No.
3VA10 (up to 100 A); 3VA11 (up to 160 A), 3VA12 (up to 250 A)	8PQ6000-8BA31
3VA23 (up to 400 A); 3VA24 (up to 630 A)	8PQ6000-8BA32

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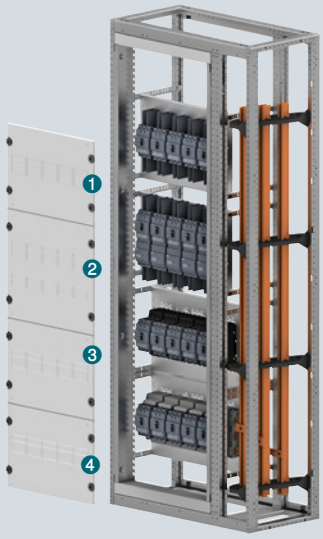
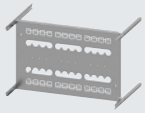
Section expansion

3VA molded case circuit breakers, internal cover, vertical, 3-pole



❶ Fixed-mounted version



Type	I_n	No. of switching devices	Width	Height	Operating mechanism			Device holders
					Direct	Rotary	Motorized	
3VA10	100 A	5	600 mm	350 mm	■	■	–	8PQ6000-8BA33
		7	800 mm	350 mm	■	■	–	8PQ6000-8BA47
3VA11	160 A	5	600 mm	350 mm	■	■	■	8PQ6000-8BA33
				450 mm	■	■	■	–
		7	800 mm	350 mm	■	■	■	8PQ6000-8BA47
				450 mm	■	■	■	–
3VA12	250 A	3	600 mm	400 mm	■	■	■	8PQ6000-8BA35
				500 mm	■	■	■	–
		5	800 mm	400 mm	■	■	■	8PQ6000-8BA43
				500 mm	■	■	■	–
3VA13 new	400 A	3	600 mm	500 mm	■	■	■	8PQ6000-8BA54
				550 mm	■	■	■	–
		4	800 mm	500 mm	■	■	■	8PQ6000-8BA57
				550 mm	■	■	■	–
3VA14 new	630 A	3	600 mm	500 mm	■	■	■	8PQ6000-8BA54
				550 mm	■	■	■	–
		4	800 mm	500 mm	■	■	■	8PQ6000-8BA57
				550 mm	■	■	■	–
3VA20	100 A	3	600 mm	450 mm	■	■	–	8PQ6000-8BA37
					–	–	■	8PQ6000-8BA37
				550 mm	■	■	–	–
					–	–	■	–
		5	800 mm	450 mm	■	■	–	8PQ6000-8BA50
					–	–	■	8PQ6000-8BA50
				550 mm	■	■	–	–
					–	–	■	–
3VA21	160 A	3	600 mm	450 mm	■	■	–	8PQ6000-8BA37
					–	–	■	–
				550 mm	■	■	–	–
		5	800 mm	450 mm	■	■	–	–
					–	–	■	8PQ6000-8BA50
				550 mm	■	■	–	–
3VA22	250 A	3	600 mm	450 mm	■	■	–	8PQ6000-8BA37
					–	–	■	–
				550 mm	■	■	–	–
		5	800 mm	450 mm	■	■	–	8PQ6000-8BA50
					–	–	■	–
				550 mm	■	■	–	–
3VA23	400 A	3	600 mm	450 mm	■	■	■	8PQ6000-8BA54
				600 mm	■	■	■	–
		4	800 mm	450 mm	■	■	■	8PQ6000-8BA57
				600 mm	■	■	■	–
3VA24	630 A	3	600 mm	450 mm	■	■	■	8PQ6000-8BA54
				600 mm	■	■	■	–
		4	800 mm	450 mm	■	■	■	8PQ6000-8BA57
				600 mm	■	■	■	–

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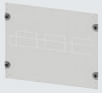
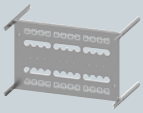
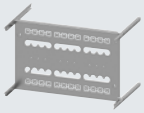
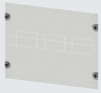
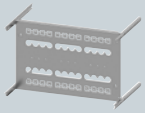
	❷ Fixed-mounted version with RCD		❸ Plug-in version		❹ 8US design	
						
Covers	**Device holders**	**Covers**	**Device holders**	**Covers**	**Device holders**	**Covers**
8PQ2035-6BA26	–	–	–	–	8PQ6000-8BA33	8PQ2035-6BA26
8PQ2035-8BA16	–	–	–	–	8PQ6000-8BA40	8PQ2035-8BA20
8PQ2035-6BA26	–	–	8PQ6000-8BA33	8PQ2035-6BA26	8PQ6000-8BA33	8PQ2035-6BA26
–	8PQ6000-8BA33	8PQ2045-6BA08	–	–	–	–
8PQ2035-8BA16	–	–	8PQ6000-8BA47	8PQ2035-8BA16	8PQ6000-8BA40	8PQ2035-8BA20
–	8PQ6000-8BA47	8PQ2045-8BA08	–	–	–	–
8PQ2040-6BA26	–	–	8PQ6000-8BA36	8PQ2040-6BA26	8PQ6000-8BA36	8PQ2040-6BA26
–	8PQ6000-8BA35	8PQ2050-6BA10	–	–	–	–
8PQ2040-8BA23	–	–	8PQ6000-8BA44	8PQ2040-8BA23	8PQ6000-8BA41	8PQ2040-8BA23
–	8PQ6000-8BA43	8PQ2050-8BA12	–	–	–	–
8PQ2050-6BA11	–	–	–	–	–	–
–	–	–	8PQ6000-8BA56	8PQ2055-6BA22	–	–
8PQ2050-8BA14	–	–	–	–	–	–
–	–	–	8PQ6000-8BA60	8PQ2055-6BA15	–	–
8PQ2050-6BA11	–	–	–	–	–	–
–	–	–	8PQ6000-8BA56	8PQ2055-6BA22	–	–
8PQ2050-8BA14	–	–	–	–	–	–
–	–	–	8PQ6000-8BA60	8PQ2055-6BA15	–	–
8PQ2045-6BA11	–	–	8PQ6000-8BA38	8PQ2045-6BA11	8PQ6000-8BA38	8PQ2045-6BA11
8PQ2045-6BA13	–	–	8PQ6000-8BA38	8PQ2045-6BA13	8PQ6000-8BA38	8PQ2045-6BA13
–	8PQ6000-8BA37	8PQ2055-6BA20	–	–	–	–
–	8PQ6000-8BA37	8PQ2055-6BA21	–	–	–	–
8PQ2045-8BA11	–	–	8PQ6000-8BA51	8PQ2045-8BA11	8PQ6000-8BA42	8PQ2045-8BA11
8PQ2045-8BA15	–	–	8PQ6000-8BA51	8PQ2045-8BA15	8PQ6000-8BA42	8PQ2045-8BA15
–	8PQ6000-8BA50	8PQ2055-8BA11	–	–	–	–
–	8PQ6000-8BA50	8PQ2055-8BA13	–	–	–	–
8PQ2045-6BA11	–	–	8PQ6000-8BA38	8PQ2045-6BA11	8PQ6000-8BA38	8PQ2045-6BA11
–	–	–	8PQ6000-8BA38	8PQ2045-6BA13	–	–
–	8PQ6000-8BA37	8PQ2055-6BA20	–	–	–	–
–	–	–	8PQ6000-8BA51	8PQ2045-8BA11	8PQ6000-8BA42	8PQ2045-8BA11
8PQ2045-8BA15	–	–	8PQ6000-8BA51	8PQ2045-8BA15	–	–
–	8PQ6000-8BA50	8PQ2055-8BA11	–	–	–	–
8PQ2045-6BA11	–	–	8PQ6000-8BA38	8PQ2045-6BA11	8PQ6000-8BA38	8PQ2045-6BA11
–	–	–	8PQ6000-8BA38	8PQ2045-6BA13	–	–
–	8PQ6000-8BA37	8PQ2055-6BA20	–	–	–	–
8PQ2045-8BA11	–	–	8PQ6000-8BA51	8PQ2045-8BA11	8PQ6000-8BA42	8PQ2045-8BA11
–	–	–	8PQ6000-8BA51	8PQ2045-8BA15	–	–
–	8PQ6000-8BA50	8PQ2055-8BA11	–	–	–	–
8PQ2045-6BA12	–	–	8PQ6000-8BA56	8PQ2045-6BA12	–	–
–	8PQ6000-8BA55	8PQ2060-6BA25	–	–	–	–
8PQ2045-8BA13	–	–	8PQ6000-8BA60	8PQ2045-8BA13	–	–
–	8PQ6000-8BA58	8PQ2060-8BA07	–	–	–	–
8PQ2045-6BA12	–	–	8PQ6000-8BA56	8PQ2045-6BA12	–	–
–	8PQ6000-8BA55	8PQ2060-6BA25	–	–	–	–
8PQ2045-8BA13	–	–	8PQ6000-8BA60	8PQ2045-8BA13	–	–
–	8PQ6000-8BA58	8PQ2060-8BA07	–	–	–	–

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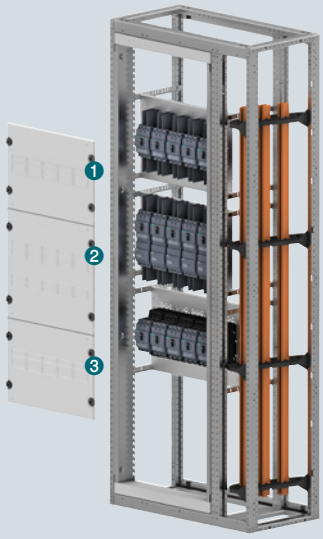
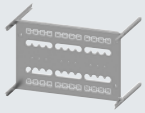
Section expansion

3VA molded case circuit breakers, internal cover, vertical, 4-pole



❶ Fixed-mounted version



Type	I_n	No. of switching devices	Width	Height	Operating mechanism			Device holders
					Direct	Rotary	Motorized	
3VA10	100 A	4	600 mm	350 mm	■	■	–	8PQ6000-8BA34
		5	800 mm	350 mm	■	■	–	8PQ6000-8BA48
3VA11	160 A	4	600 mm	350 mm	■	■	■	8PQ6000-8BA34
				450 mm	■	■	■	–
		5	800 mm	350 mm	■	■	■	8PQ6000-8BA48
				450 mm	■	■	■	–
3VA12	250 A	3	600 mm	400 mm	■	■	■	8PQ6000-8BA35
				500 mm	■	■	■	–
		4	800 mm	400 mm	■	■	■	8PQ6000-8BA45
				500 mm	■	■	■	–
3VA13 new	400 A	2	600 mm	500 mm	■	■	■	8PQ6000-8BA64
				550 mm	■	■	■	–
			800 mm	500 mm	■	■	■	8PQ6000-8BA61
				550 mm	■	■	■	–
3VA14 new	630 A	2	600 mm	500 mm	■	■	■	8PQ6000-8BA64
				550 mm	■	■	■	–
			800 mm	500 mm	■	■	■	8PQ6000-8BA61
				550 mm	■	■	■	–
3VA20	100 A	3	600 mm	450 mm	■	■	–	8PQ6000-8BA37
					–	–	■	8PQ6000-8BA37
				550 mm	■	■	–	–
					–	–	■	–
		4	800 mm	450 mm	■	■		8PQ6000-8BA52
					–	–	■	8PQ6000-8BA52
				550 mm	■	■	–	–
					–	–	■	–
3VA21	160 A	3	600 mm	450 mm	■	■	–	8PQ6000-8BA37
					–	–	■	8PQ6000-8BA37
				550 mm	■	■	–	–
					–	–	■	–
		4	800 mm	450 mm	■	■	–	8PQ6000-8BA52
					–	–	■	–
				550 mm	■	■	–	–
					–	–	■	–
3VA22	250 A	3	600 mm	450 mm	■	■	–	8PQ6000-8BA37
					–	–	■	8PQ6000-8BA37
				550 mm	■	■	–	–
		4	800 mm	450 mm	■	■	–	8PQ6000-8BA52
					–	–	■	8PQ6000-8BA52
				550 mm	■	■	–	–
3VA23	400 A	2	600 mm	450 mm	■	■	■	8PQ6000-8BA64
				600 mm	■	■	■	–
		3	800 mm	450 mm	■	■	■	8PQ6000-8BA61
				600 mm	■	■	■	–
3VA24	630 A	2	600 mm	450 mm	■	■	■	8PQ6000-8BA64
				600 mm	■	■	■	–
		3	800 mm	450 mm	■	■	■	8PQ6000-8BA61
				600 mm	■	■	■	–

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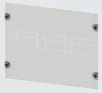
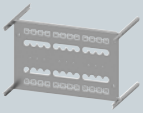
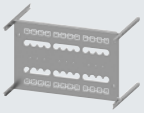
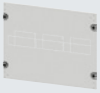
	❷ Fixed-mounted version with RCD		❸ Plug-in version	
				
Covers	**Device holders**	**Covers**	**Device holders**	**Covers**
8PQ2035-6BA27	–	–	–	–
8PQ2035-8BA17	–	–	–	–
8PQ2035-6BA27	–	–	8PQ6000-8BA34	8PQ2035-6BA27
–	8PQ6000-8BA34	8PQ2045-6BA10	–	–
8PQ2035-8BA17	–	–	8PQ6000-8BA48	8PQ2035-8BA17
–	8PQ6000-8BA48	8PQ2045-8BA10	–	–
8PQ2040-6BA26	–	–	8PQ6000-8BA36	8PQ2040-6BA26
–	8PQ6000-8BA35	8PQ2050-6BA10	–	–
8PQ2040-8BA24	–	–	8PQ6000-8BA46	8PQ2040-8BA24
–	8PQ6000-8BA45	8PQ2050-8BA13	–	–
8PQ2050-6BA12	–	–	–	–
–	–	–	8PQ6000-8BA66	8PQ2055-6BA23
8PQ2050-8BA15	–	–	–	–
–	–	–	8PQ6000-8BA63	8PQ2055-8BA16
8PQ2050-6BA12	–	–	–	–
–	–	–	8PQ6000-8BA66	8PQ2055-6BA23
8PQ2050-8BA15	–	–	–	–
–	–	–	8PQ6000-8BA63	8PQ2055-8BA15
8PQ2045-6BA11	–	–	8PQ6000-8BA38	8PQ2045-6BA11
8PQ2045-6BA13	–	–	8PQ6000-8BA38	8PQ2045-6BA13
–	8PQ6000-8BA37	8PQ2055-6BA20	–	–
–	8PQ6000-8BA37	8PQ2055-6BA21	–	–
8PQ2045-8BA12	–	–	8PQ6000-8BA53	8PQ2045-8BA12
8PQ2045-8BA16	–	–	8PQ6000-8BA53	8PQ2045-8BA16
–	8PQ6000-8BA52	8PQ2055-8BA12	–	–
–	8PQ6000-8BA52	8PQ2055-8BA14	–	–
8PQ2045-6BA11	–	–	8PQ6000-8BA38	8PQ2045-6BA11
8PQ2045-6BA13	–	–	8PQ6000-8BA38	8PQ2045-6BA13
–	8PQ6000-8BA37	8PQ2055-6BA20	–	–
–	8PQ6000-8BA37	8PQ2055-6BA21	–	–
8PQ2045-8BA12	–	–	8PQ6000-8BA53	8PQ2045-8BA12
–	–	–	8PQ6000-8BA53	8PQ2045-8BA16
–	8PQ6000-8BA52	8PQ2055-8BA12	–	–
–	8PQ6000-8BA52	8PQ2055-8BA14	–	–
8PQ2045-6BA11	–	–	8PQ6000-8BA38	8PQ2045-6BA11
8PQ2045-6BA13	–	–	8PQ6000-8BA38	8PQ2045-6BA13
–	8PQ6000-8BA37	8PQ2055-6BA20	–	–
8PQ2045-8BA12	–	–	8PQ6000-8BA53	8PQ2045-8BA12
8PQ2045-8BA16	–	–	8PQ6000-8BA53	8PQ2045-8BA16
–	8PQ6000-8BA52	8PQ2055-8BA12	–	–
8PQ2045-6BA14	–	–	8PQ6000-8BA66	8PQ2045-6BA14
–	8PQ6000-8BA65	8PQ2060-6BA26	–	–
8PQ2045-8BA14	–	–	8PQ6000-8BA63	8PQ2045-8BA14
–	8PQ6000-8BA62	8PQ2060-8BA08	–	–
8PQ2045-6BA14	–	–	8PQ6000-8BA66	8PQ2045-6BA14
–	8PQ6000-8BA65	8PQ2060-6BA26	–	–
8PQ2045-8BA14	–	–	8PQ6000-8BA63	8PQ2045-8BA14
–	8PQ6000-8BA62	8PQ2060-8BA08	–	–

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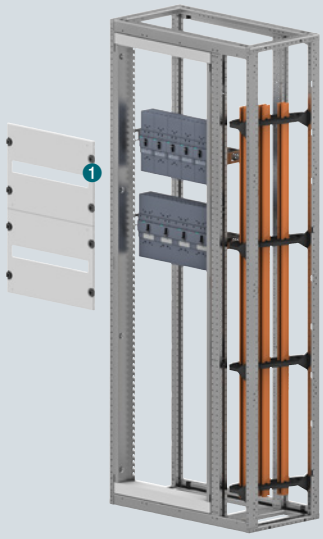
Section expansion

3VA molded case circuit breakers, internal cover, vertical



3-pole

Type	I_n	No. of switching devices	Width	Height	Operating mechanism		
					Direct	Rotary	Motorized
3VA10	100 A	5	600 mm	350 mm	■	–	–
		8	800 mm	350 mm	■	–	–
3VA11	160 A	4	600 mm	350 mm	■	–	–
		5	800 mm	350 mm	■	–	–

4-pole

Type	I_n	No. of switching devices	Width	Height	Operating mechanism		
					Direct	Rotary	Motorized
3VA10	100 A	4	600 mm	350 mm	■	–	–
		6	800 mm	350 mm	■	–	–
3VA11	160 A	3	600 mm	350 mm	■	–	–
		4	800 mm	350 mm	■	–	–

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❶ Standard rail mounting





Device holders	Covers
8PQ6000-3BA36	8PQ2035-6BA28
8PQ6000-3BA37	8PQ2035-8BA18
8PQ6000-3BA36	8PQ2035-6BA28
8PQ6000-3BA37	8PQ2035-8BA18

❶ Standard rail mounting





Device holders	Covers
8PQ6000-3BA36	8PQ2035-6BA28
8PQ6000-3BA37	8PQ2035-8BA18
8PQ6000-3BA36	8PQ2035-6BA28
8PQ6000-3BA37	8PQ2035-8BA18

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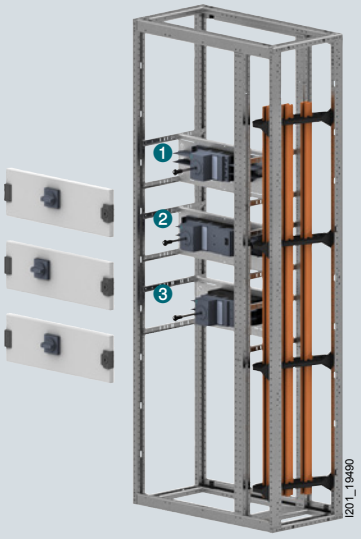
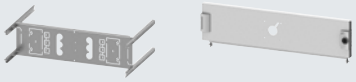
Section expansion

3VA molded case circuit breakers, compartment door, horizontal



3-pole

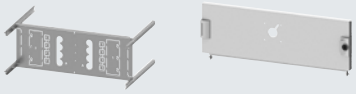
❶ Fixed-mounted version



Type	I_n	Width	Height	Device holders	Compartment doors
3VA10	100 A	600 mm	150 mm	8PQ6000-8BA01	8PQ2015-6BA31
		800 mm	150 mm	8PQ6000-8BA02	8PQ2015-8BA12
3VA11	160 A	600 mm	150 mm	8PQ6000-8BA01	8PQ2015-6BA31
		800 mm	150 mm	8PQ6000-8BA02	8PQ2015-8BA12
3VA12	250 A	600 mm	150 mm	8PQ6000-8BA03	8PQ2015-6BA34
3VA13 new	400 A	600 mm	200 mm	8PQ6000-8BA23	8PQ2020-6BA46
		800 mm	250 mm	8PQ6000-8BA27	8PQ2025-8BA15
3VA14 new	630 A	600 mm	200 mm	8PQ6000-8BA23	8PQ2020-6BA46
		800 mm	250 mm	8PQ6000-8BA27	8PQ2025-8BA15
3VA20	100 A	600 mm	200 mm	8PQ6000-8BA08	8PQ2020-6BA44
		800 mm	200 mm	8PQ6000-8BA10	8PQ2020-8BA23
3VA21	160 A	600 mm	200 mm	8PQ6000-8BA08	8PQ2020-6BA44
		800 mm	200 mm	8PQ6000-8BA10	8PQ2020-8BA23
3VA22	250 A	600 mm	200 mm	8PQ6000-8BA08	8PQ2020-6BA44
		800 mm	200 mm	8PQ6000-8BA10	8PQ2020-8BA23
3VA23	400 A	600 mm	200 mm	8PQ6000-8BA23	8PQ2020-6BA46
3VA24	630 A	600 mm	200 mm	8PQ6000-8BA23	8PQ2020-6BA46

4-pole

❶ Fixed-mounted version



Type	I_n	Width	Height	Device holders	Compartment doors
3VA10	100 A	600 mm	150 mm	8PQ6000-8BA01	8PQ2015-6BA31
		800 mm	150 mm	8PQ6000-8BA02	8PQ2015-8BA12
3VA11	160 A	600 mm	150 mm	8PQ6000-8BA01	8PQ2015-6BA31
		800 mm	150 mm	8PQ6000-8BA02	8PQ2015-8BA12
3VA12	250 A	600 mm	200 mm	8PQ6000-8BA05	8PQ2020-6BA42
		800 mm	200 mm	8PQ6000-8BA07	8PQ2020-8BA22
3VA13 new	400 A	600 mm	250 mm	8PQ6000-8BA25	8PQ2025-6BA24
		800 mm	250 mm	8PQ6000-8BA27	8PQ2025-8BA15
3VA14 new	630 A	600 mm	250 mm	8PQ6000-8BA25	8PQ2025-6BA24
		800 mm	250 mm	8PQ6000-8BA27	8PQ2025-8BA15
3VA20	100 A	600 mm	200 mm	8PQ6000-8BA08	8PQ2020-6BA44
		800 mm	200 mm	8PQ6000-8BA10	8PQ2020-8BA23
3VA21	160 A	600 mm	200 mm	8PQ6000-8BA08	8PQ2020-6BA44
		800 mm	200 mm	8PQ6000-8BA10	8PQ2020-8BA23
3VA22	250 A	600 mm	200 mm	8PQ6000-8BA08	8PQ2020-6BA44
		800 mm	200 mm	8PQ6000-8BA10	8PQ2020-8BA23
3VA23	400 A	600 mm	250 mm	8PQ6000-8BA25	8PQ2025-6BA24
		800 mm	250 mm	8PQ6000-8BA27	8PQ2025-8BA15
3VA24	630 A	600 mm	250 mm	8PQ6000-8BA25	8PQ2025-6BA24
		800 mm	250 mm	8PQ6000-8BA27	8PQ2025-8BA15

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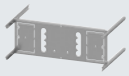
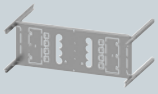
❷ Fixed-mounted version with RCD		❸ Plug-in version	
			
Device holders	**Compartment doors**	**Device holders**	**Compartment doors**
–	–	–	–
–	–	–	–
8PQ6000-8BA01	8PQ2015-6BA33	8PQ6000-8BA01	8PQ2015-6BA31
8PQ6000-8BA02	8PQ2015-8BA12	8PQ6000-8BA02	8PQ2015-8BA12
8PQ6000-8BA03	8PQ2015-6BA35	8PQ6000-8BA04	8PQ2015-6BA34
–	–	–	–
–	–	8PQ6001-1BA02	8PQ2025-8BA15
–	–	–	–
–	–	8PQ6001-1BA02	8PQ2025-8BA15
8PQ6000-8BA11	8PQ2020-6BA45	8PQ6000-8BA08	8PQ2020-6BA44
8PQ6000-8BA10	8PQ2020-8BA23	8PQ6000-8BA10	8PQ2020-8BA23
8PQ6000-8BA11	8PQ2020-6BA45	8PQ6000-8BA08	8PQ2020-6BA44
8PQ6000-8BA10	8PQ2020-8BA23	8PQ6000-8BA10	8PQ2020-8BA23
8PQ6000-8BA11	8PQ2020-6BA45	8PQ6000-8BA08	8PQ2020-6BA44
8PQ6000-8BA10	8PQ2020-8BA23	8PQ6000-8BA10	8PQ2020-8BA23
–	–	8PQ6000-8BA24	8PQ2020-6BA46
–	–	8PQ6000-8BA24	8PQ2020-6BA46

❷ Fixed-mounted version with RCD		❸ Plug-in version	
			
Device holders	**Compartment doors**	**Device holders**	**Compartment doors**
–	–	–	–
–	–	–	–
8PQ6000-8BA01	8PQ2015-6BA33	8PQ6000-8BA01	8PQ2015-6BA31
8PQ6000-8BA02	8PQ2015-8BA12	8PQ6000-8BA02	8PQ2015-8BA12
8PQ6000-8BA05	8PQ2020-6BA43	8PQ6000-8BA06	8PQ2020-6BA42
8PQ6000-8BA07	8PQ2020-8BA22	8PQ6000-8BA07	8PQ2020-8BA22
–	–	–	–
–	–	8PQ6001-1BA02	8PQ2025-8BA15
–	–	–	–
–	–	8PQ6001-1BA02	8PQ2025-8BA15
8PQ6000-8BA11	8PQ2020-6BA45	8PQ6000-8BA08	8PQ2020-6BA44
8PQ6000-8BA10	8PQ2020-8BA23	8PQ6000-8BA10	8PQ2020-8BA23
8PQ6000-8BA11	8PQ2020-6BA45	8PQ6000-8BA08	8PQ2020-6BA44
8PQ6000-8BA10	8PQ2020-8BA23	8PQ6000-8BA10	8PQ2020-8BA23
8PQ6000-8BA11	8PQ2020-6BA45	8PQ6000-8BA08	8PQ2020-6BA44
8PQ6000-8BA10	8PQ2020-8BA23	8PQ6000-8BA10	8PQ2020-8BA23
–	–	8PQ6000-8BA26	8PQ2025-6BA24
8PQ6000-8BA27	8PQ2025-8BA15	8PQ6000-8BA28	8PQ2025-8BA15
–	–	8PQ6000-8BA26	8PQ2025-6BA24
8PQ6000-8BA27	8PQ2025-8BA15	8PQ6000-8BA28	8PQ2025-8BA15

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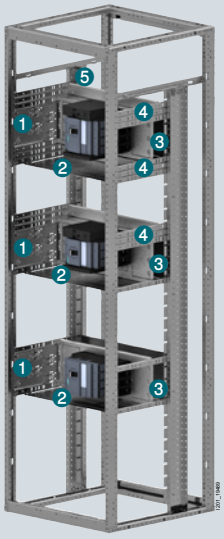
Section expansion

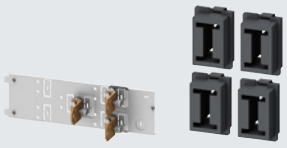
3VA molded case circuit breakers, internal separation – front connection



3-pole, width 600 mm

Cable connection

4 units



Type	I_n	Height		Operating mechanism			
				Direct	Rotary	Motorized	
3VA10	100 A	150 mm	Fixed-mounted	■	■	–	8PQ5000-2BA28 + 8PQ5000-0BA05
3VA11	160 A	150 mm	Fixed-mounted	■	■	■	8PQ5000-2BA28 + 8PQ5000-0BA05
			Plug-in	■	■	■	8PQ5000-2BA28 + 8PQ5000-0BA05
3VA12	250 A	150 mm	Fixed-mounted	■	■		8PQ6000-8BA12
				–	–	■	8PQ6000-8BA13
			Plug-in	■	■	–	8PQ6000-8BA13
				–	–	■	8PQ6000-8BA12
		250 mm	Withdrawable	■	–	■	8PQ6000-8BA12
3VA13 new	400 A	200 mm	Fixed-mounted	■	■	■	8PQ6000-8BA20
3VA14 new	630 A	200 mm	Fixed-mounted	■	■	■	8PQ6000-8BA20
3VA20	100 A	200 mm	Fixed-mounted	■	■	■	8PQ5000-2BA30 + 8PQ5000-0BA05
			Plug-in	■	■	■	8PQ5000-2BA30 + 8PQ5000-0BA05
		250 mm	Withdrawable	■	–	■	8PQ5000-2BA30
3VA21	100 A	200 mm	Fixed-mounted	■	■	■	8PQ5000-2BA30 + 8PQ5000-0BA05
			Plug-in	■	■	■	8PQ5000-2BA30 + 8PQ5000-0BA05
		250 mm	Withdrawable	■	–	■	8PQ5000-2BA30 + 8PQ5000-0BA05
3VA22	250 A	200 mm	Fixed-mounted	■	■	–	8PQ6000-8BA16
				–	–	■	8PQ6000-8BA17
			Plug-in	■	■	–	8PQ6000-8BA17
				–	–	■	8PQ6000-8BA16
		250 mm	Withdrawable	■	–	■	8PQ6000-8BA16
3VA23	400 A	200 mm	Fixed-mounted	■	■	–	8PQ6000-8BA20
				–	–	■	8PQ6000-8BA18
3VA24	630 A	200 mm	Fixed-mounted	■	■	■	8PQ6000-8BA20
				–	–	–	8PQ6000-8BA18

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	❷ Separation, horizontal	❸ Separation, rear	❹ Increase in module height	Horizontal separation with increase in module height
				
	8PQ5000-2BA61	8PQ5000-4BA40	–	–
	8PQ5000-2BA61	8PQ5000-4BA40	–	–
	8PQ5000-2BA61	8PQ5000-4BA40	–	–
	8PQ5000-2BA61	8PQ5000-4BA40	–	–
	8PQ5000-2BA61	8PQ5000-4BA40	–	–
	8PQ5000-2BA61	8PQ5000-4BA40	–	–
	8PQ5000-2BA61	8PQ5000-4BA40	–	–
	8PQ5000-2BA61	8PQ5000-4BA40	2× 8PQ5000-4BA60	2× 8PQ5000-4BA68
	8PQ5000-2BA61	8PQ5000-4BA41	–	–
	8PQ5000-2BA61	8PQ5000-4BA41	–	–
	8PQ5000-2BA61	8PQ5000-4BA41	–	–
	8PQ5000-2BA61	8PQ5000-4BA41	–	–
	8PQ5000-2BA61	8PQ5000-4BA41	8PQ5000-4BA62	8PQ5000-4BA70
	8PQ5000-2BA61	8PQ5000-4BA41	–	–
	8PQ5000-2BA61	8PQ5000-4BA41	–	–
	8PQ5000-2BA61	8PQ5000-4BA41	8PQ5000-4BA62	8PQ5000-4BA70
	8PQ5000-2BA61	8PQ5000-4BA41	–	–
	8PQ5000-2BA61	8PQ5000-4BA41	–	–
	8PQ5000-2BA61	8PQ5000-4BA41	–	–
	8PQ5000-2BA61	8PQ5000-4BA41	–	–
	8PQ5000-2BA61	8PQ5000-4BA41	8PQ5000-4BA62	8PQ5000-4BA70
	8PQ5000-2BA61	8PQ5000-4BA41	–	–
	8PQ5000-2BA61	8PQ5000-4BA41	–	–
	8PQ5000-2BA61	8PQ5000-4BA41	–	–
	8PQ5000-2BA61	8PQ5000-4BA41	–	–

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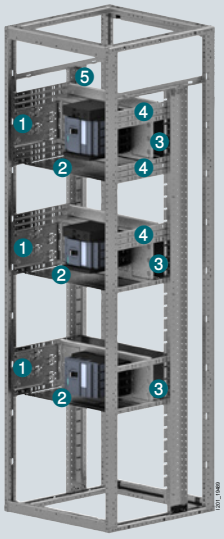
Section expansion

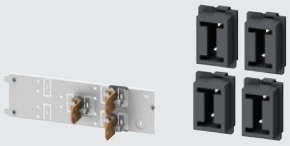
3VA molded case circuit breakers, internal separation – front connection



3-pole, width 800 mm

Cable connection

4 units



Type	I_n	Height		Operating mechanism				
				Direct	Rotary	Motorized		
3VA10	100 A	150 mm	Fixed-mounted	■	■	–	8PQ5000-2BA28 +	8PQ5000-0BA05
3VA11	160 A	150 mm	Fixed-mounted	■	■	■	8PQ5000-2BA28 +	8PQ5000-0BA05
			Plug-in	■	■	■	8PQ5000-2BA28 +	8PQ5000-0BA05
3VA12	250 A	200 mm	Fixed-mounted	■	■	■	8PQ5000-2BA30 +	8PQ5000-0BA05
			Plug-in	■	■	■	8PQ5000-2BA30 +	8PQ5000-0BA05
		250 mm	Withdrawable	■	–	■	8PQ6000-8BA14	
3VA13 new	400 A	250 mm	Fixed-mounted	■	■	–	8PQ6000-8BA22	
				–	–	■	8PQ6000-8BA21	
			Plug-in	■	■	■	8PQ6000-8BA21	
		300 mm	Withdrawable	■	–	–	8PQ6000-8BA22	
3VA14 new	630 A	250 mm	Fixed-mounted	■	■	–	8PQ6000-8BA22	
				–	–	■	8PQ6000-8BA21	
			Plug-in	■	■	■	8PQ6000-8BA21	
		300 mm	Withdrawable	■	–	–	8PQ6000-8BA22	
3VA20	250 A	200 mm	Fixed-mounted	■	■	■	8PQ5000-2BA30 +	8PQ5000-0BA05
			Plug-in	■	■	■	8PQ5000-2BA30 +	8PQ5000-0BA05
		250 mm	Withdrawable	■	–	■	8PQ5000-2BA30 +	8PQ5000-0BA05
3VA21	250 A	200 mm	Fixed-mounted	■	■	■	8PQ5000-2BA30 +	8PQ5000-0BA05
			Plug-in	■	■	■	8PQ5000-2BA30 +	8PQ5000-0BA05
		250 mm	Withdrawable	■	–	■	8PQ5000-2BA30 +	8PQ5000-0BA05
3VA22	250 A	200 mm	Fixed-mounted	■	■	–	8PQ6000-8BA16	
				–	–	■	8PQ6000-8BA17	
			Plug-in	■	■	■	8PQ6000-8BA17	
		250 mm	Withdrawable	■	–	■	8PQ6000-8BA16	
3VA23	400 A	250 mm	Fixed-mounted	■	■	–	8PQ6000-8BA22	
				–	–	■	8PQ6000-8BA21	
			Plug-in	■	■	■	8PQ6000-8BA21	
		300 mm	Withdrawable	■	–	–	8PQ6000-8BA22	
3VA24	630 A	250 mm	Fixed-mounted	■	■	–	8PQ6000-8BA22	
				–	–	■	8PQ6000-8BA21	
			Plug-in	■	■	■	8PQ6000-8BA21	
		300 mm	Withdrawable	■	–	–	8PQ6000-8BA22	

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	❷ Separation, horizontal	❸ Separation, rear	❹ Increase in module height
			
8PQ5000-2BA62	–	–	
8PQ5000-2BA62	–	–	
8PQ5000-2BA62	–	–	
8PQ5000-2BA62	8PQ5000-4BA48	–	
8PQ5000-2BA62	8PQ5000-4BA48	–	
8PQ5000-2BA62	8PQ5000-4BA48	8PQ5000-4BA61 + 8PQ5000-4BA71	
8PQ5000-2BA62	8PQ5000-4BA50	–	
8PQ5000-2BA62	8PQ5000-4BA50	–	
8PQ5000-2BA62	8PQ5000-4BA50	–	
8PQ5000-2BA62	8PQ5000-4BA50	8PQ5000-4BA63 + 8PQ5000-4BA72	
8PQ5000-2BA62	8PQ5000-4BA50	–	
8PQ5000-2BA62	8PQ5000-4BA50	–	
8PQ5000-2BA62	8PQ5000-4BA50	–	
8PQ5000-2BA62	8PQ5000-4BA50	8PQ5000-4BA63 + 8PQ5000-4BA72	
8PQ5000-2BA62	8PQ5000-4BA48	–	
8PQ5000-2BA62	8PQ5000-4BA48	–	
8PQ5000-2BA62	8PQ5000-4BA48	8PQ5000-4BA63 + 8PQ5000-4BA72	
8PQ5000-2BA62	8PQ5000-4BA48	–	
8PQ5000-2BA62	8PQ5000-4BA48	–	
8PQ5000-2BA62	8PQ5000-4BA48	8PQ5000-4BA63 + 8PQ5000-4BA72	
8PQ5000-2BA62	8PQ5000-4BA48	–	
8PQ5000-2BA62	8PQ5000-4BA48	–	
8PQ5000-2BA62	8PQ5000-4BA48	–	
8PQ5000-2BA62	8PQ5000-4BA48	8PQ5000-4BA63 + 8PQ5000-4BA72	
8PQ5000-2BA62	8PQ5000-4BA50	–	
8PQ5000-2BA62	8PQ5000-4BA50	–	
8PQ5000-2BA62	8PQ5000-4BA50	–	
8PQ5000-2BA62	8PQ5000-4BA50	8PQ5000-4BA63 + 8PQ5000-4BA72	
8PQ5000-2BA62	8PQ5000-4BA50	–	
8PQ5000-2BA62	8PQ5000-4BA50	–	
8PQ5000-2BA62	8PQ5000-4BA50	–	
8PQ5000-2BA62	8PQ5000-4BA50	8PQ5000-4BA63 + 8PQ5000-4BA72	

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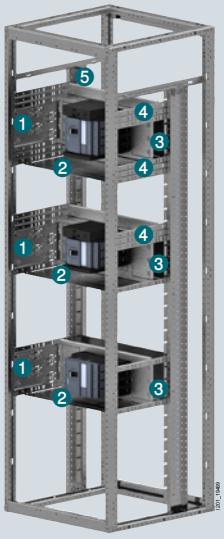
Section expansion

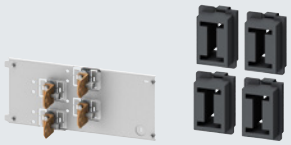
3VA molded case circuit breakers, internal separation – front connection



4-pole, width 600 mm

❶ Cable connection

4 units



Type	I_n	Height		Operating mechanism			Terminals		
				Direct	Rotary	Motorized			
3VA10	100 A	150 mm	Fixed-mounted	■	■	–	8PQ5000-2BA28	+	8PQ5000-0BA05
3VA11	160 A	150 mm	Fixed-mounted	■	■	■	8PQ5000-2BA28	+	8PQ5000-0BA05
			Plug-in	■	■	■	8PQ5000-2BA28	+	8PQ5000-0BA05
3VA12	250 A	200 mm	Fixed-mounted	■	■	–	8PQ6000-8BA14		
				–	–	■	8PQ6000-8BA15		
			Plug-in	■	■	–	8PQ6000-8BA15		
				–	–	■	8PQ6000-8BA14		
		300 mm	Withdrawable	■	–	■	8PQ6000-8BA14		
3VA13 new	400 A	250 mm	Fixed-mounted	■	■	–	8PQ6000-8BA22		
				–	–	■	8PQ6000-8BA21		
3VA14 new	630 A	250 mm	Fixed-mounted	■	■	–	8PQ6000-8BA22		
				–	–	■	8PQ6000-8BA21		
3VA20	250 A	200 mm	Fixed-mounted	■	■	■	8PQ5000-2BA30	+	8PQ5000-0BA05
			Plug-in	■	■	–	8PQ5000-2BA30	+	8PQ5000-0BA05
				–	–	■	8PQ5000-2BA30	+	8PQ5000-0BA05
		300 mm	Withdrawable	■	–	■	8PQ5000-2BA30	+	8PQ5000-0BA05
3VA21	250 A	200 mm	Fixed-mounted	■	■	■	8PQ5000-2BA30	+	8PQ5000-0BA05
			Plug-in	■	■	–	8PQ5000-2BA30	+	8PQ5000-0BA05
				–	–	■	8PQ5000-2BA30	+	8PQ5000-0BA05
		300 mm	Withdrawable	■	–	■	8PQ5000-2BA30	+	8PQ5000-0BA05
3VA22	250 A	200 mm	Fixed-mounted	■	■	–	8PQ6000-8BA16		
				–	–	■	8PQ6000-8BA17		
			Plug-in	■	■	–	8PQ6000-8BA17		
				–	–	■	8PQ6000-8BA17		
		200 mm	Withdrawable	■	–	■	8PQ6000-8BA17		
3VA23	400 A	250 mm	Fixed-mounted	■	■	–	8PQ6000-8BA22		
				–	–	■	8PQ6000-8BA21		
			Plug-in	■	■	■	8PQ6000-8BA21		
3VA24	630 A	250 mm	Fixed-mounted	■	■	–	8PQ6000-8BA22		
				–	–	■	8PQ6000-8BA21		

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	❷ Separation, horizontal	❸ Separation, rear	❹ Increase in module height
			 
4th pole			
	8PQ5000-2BA61	8PQ5000-4BA40	–
	8PQ5000-2BA61	8PQ5000-4BA40	–
	8PQ5000-2BA61	8PQ5000-4BA40	–
	8PQ5000-2BA61	8PQ5000-4BA41	–
	8PQ5000-2BA61	8PQ5000-4BA41	–
	8PQ5000-2BA61	8PQ5000-4BA41	–
	8PQ5000-2BA61	8PQ5000-4BA41	–
	8PQ5000-2BA61	8PQ5000-4BA41	2× 8PQ5000-4BA60 + 2× 8PQ5000-4BA68
	8PQ6000-2BA61	8PQ5000-4BA42	–
	8PQ6000-2BA61	8PQ5000-4BA42	–
	8PQ6000-2BA61	8PQ5000-4BA42	–
	8PQ6000-2BA61	8PQ5000-4BA42	–
	8PQ5000-2BA61	8PQ5000-4BA41	–
	8PQ5000-2BA61	8PQ5000-4BA41	–
	8PQ5000-2BA61	8PQ5000-4BA41	–
	8PQ5000-2BA61	8PQ5000-4BA41	2× 8PQ5000-4BA62 + 2× 8PQ5000-4BA70
	8PQ5000-2BA61	8PQ5000-4BA41	–
	8PQ5000-2BA61	8PQ5000-4BA41	–
	8PQ5000-2BA61	8PQ5000-4BA41	–
	8PQ5000-2BA61	8PQ5000-4BA41	2× 8PQ5000-4BA62 + 2× 8PQ5000-4BA70
+ 8PQ5000-4BA58	8PQ5000-2BA61	8PQ5000-4BA41	–
+ 8PQ5000-4BA58	8PQ5000-2BA61	8PQ5000-4BA41	–
+ 8PQ5000-4BA58	8PQ5000-2BA61	8PQ5000-4BA41	–
+ 8PQ5000-4BA58	8PQ5000-2BA61	8PQ5000-4BA41	–
+ 8PQ5000-4BA58	8PQ5000-2BA61	8PQ5000-4BA41	2× 8PQ5000-4BA62 + 2× 8PQ5000-4BA70
	8PQ5000-2BA61	8PQ5000-4BA42	–
	8PQ5000-2BA61	8PQ5000-4BA42	–
	8PQ5000-2BA61	8PQ5000-4BA42	–
	8PQ5000-2BA61	8PQ5000-4BA42	–
	8PQ5000-2BA61	8PQ5000-4BA42	–

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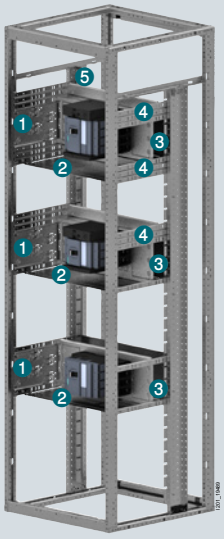
Section expansion

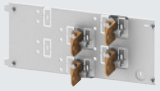
3VA molded case circuit breakers, internal separation – front connection



4-pole, width 800 mm

❶ Cable connection

4 units





Type	I_n	Height		Operating mechanism			Terminals
				Direct	Rotary	Motorized	
3VA10	100 A	150 mm	Fixed-mounted	■	■	–	8PQ5000-2BA28 + 8PQ5000-0BA05
3VA11	160 A	150 mm	Fixed-mounted	■	■	■	8PQ5000-2BA28 + 8PQ5000-0BA05
			Plug-in	■	■	■	8PQ5000-2BA28 + 8PQ5000-0BA05
3VA12	250 A	200 mm	Fixed-mounted	■	■	–	8PQ6000-8BA14
				–	–	■	8PQ6000-8BA15
			Plug-in	■	■	–	8PQ6000-8BA15
				–	–	■	8PQ6000-8BA14
		300 mm	Withdrawable	■	–	■	8PQ6000-8BA14
3VA13 new	400 A	250 mm	Fixed-mounted	■	■	–	8PQ6000-8BA22
				–	–	■	8PQ6000-8BA21
			Plug-in	■	■	■	8PQ6000-8BA21
		300 mm	Withdrawable	■	–	–	8PQ6000-8BA22
3VA14 new	630 A	250 mm	Fixed-mounted	■	■	–	8PQ6000-8BA22
				–	–	■	8PQ6000-8BA21
			Plug-in	■	■	■	8PQ6000-8BA21
			Withdrawable	■	–	–	8PQ6000-8BA22
3VA20	250 A	200 mm	Fixed-mounted	■	■	■	8PQ5000-2BA30 + 8PQ5000-0BA05
			Plug-in	■	■	■	8PQ5000-2BA30 + 8PQ5000-0BA05
		300 mm	Withdrawable	■	–	■	8PQ5000-2BA30 + 8PQ5000-0BA05
3VA21	250 A	200 mm	Fixed-mounted	■	■	■	8PQ5000-2BA30 + 8PQ5000-0BA05
			Plug-in	■	■	■	8PQ5000-2BA30 + 8PQ5000-0BA05
		250 mm	Withdrawable	■	–	■	8PQ5000-2BA30 + 8PQ5000-0BA05
3VA22	250 A	200 mm	Fixed-mounted	■	■	–	8PQ6000-8BA16
				–	–	■	8PQ6000-8BA17
			Plug-in	■	■		8PQ6000-8BA17
				–	–	■	8PQ6000-8BA16
		250 mm	Withdrawable	■	–	■	8PQ6000-8BA16
3VA23	400 A	250 mm	Fixed-mounted	■	■	–	8PQ6000-8BA22
				–	–	■	8PQ6000-8BA21
			Plug-in	■	■	■	8PQ6000-8BA21
3VA24	630 A	250 mm	Fixed-mounted	■	■	–	8PQ6000-8BA22
				–	–	■	8PQ6000-8BA21

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	❷ Separation, horizontal	❸ Separation, rear	❹ Increase in module height
			 
4th pole			
	8PQ5000-2BA62	–	–
	8PQ5000-2BA62	–	–
	8PQ5000-2BA62	–	–
	8PQ5000-2BA62	8PQ5000-4BA48	–
	8PQ5000-2BA62	8PQ5000-4BA48	–
	8PQ5000-2BA62	8PQ5000-4BA48	–
	8PQ5000-2BA62	8PQ5000-4BA48	–
	8PQ5000-2BA62	8PQ5000-4BA48	2× 8PQ5000-4BA61 + 2× 8PQ5000-4BA71
	8PQ5000-2BA62	8PQ5000-4BA50	–
	8PQ5000-2BA62	8PQ5000-4BA50	–
	8PQ5000-2BA62	8PQ5000-4BA50	–
	8PQ5000-2BA62	8PQ5000-4BA50	8PQ5000-4BA63 + 8PQ5000-4BA72
	8PQ5000-2BA62	8PQ5000-4BA50	–
	8PQ5000-2BA62	8PQ5000-4BA50	–
	8PQ5000-2BA62	8PQ5000-4BA50	–
	8PQ5000-2BA62	8PQ5000-4BA50	8PQ5000-4BA63 + 8PQ5000-4BA72
	8PQ5000-2BA62	8PQ5000-4BA48	–
	8PQ5000-2BA62	8PQ5000-4BA48	–
	8PQ5000-2BA62	8PQ5000-4BA48	2× 8PQ5000-4BA63 + 2× 8PQ5000-4BA72
	8PQ5000-2BA62	8PQ5000-4BA48	–
	8PQ5000-2BA62	8PQ5000-4BA48	–
	8PQ5000-2BA62	8PQ5000-4BA48	2× 8PQ5000-4BA63 + 2× 8PQ5000-4BA72
+ 8PQ5000-4BA58	8PQ5000-2BA62	8PQ5000-4BA48	–
+ 8PQ5000-4BA58	8PQ5000-2BA62	8PQ5000-4BA48	–
+ 8PQ5000-4BA58	8PQ5000-2BA62	8PQ5000-4BA48	–
+ 8PQ5000-4BA58	8PQ5000-2BA62	8PQ5000-4BA48	–
+ 8PQ5000-4BA58	8PQ5000-2BA62	8PQ5000-4BA48	2× 8PQ5000-4BA63 + 2× 8PQ5000-4BA72
	8PQ5000-2BA62	8PQ5000-4BA50	–
	8PQ5000-2BA62	8PQ5000-4BA50	–
	8PQ5000-2BA62	8PQ5000-4BA50	–
	8PQ5000-2BA62	8PQ5000-4BA50	–
	8PQ5000-2BA62	8PQ5000-4BA50	–

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Section expansion

3VA molded case circuit breakers, internal separation – front connection

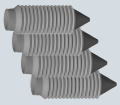
Accessories

Plug-in rails



Equipment height	Busbar system	Article No.
1600 mm	Top	8PQ3000-0BA82
1800 mm	Rear or without	8PQ3000-0BA83

Protective bellows



Version	Scope of supply	Article No.
For connecting terminal	4 units	8PQ9400-0BA71

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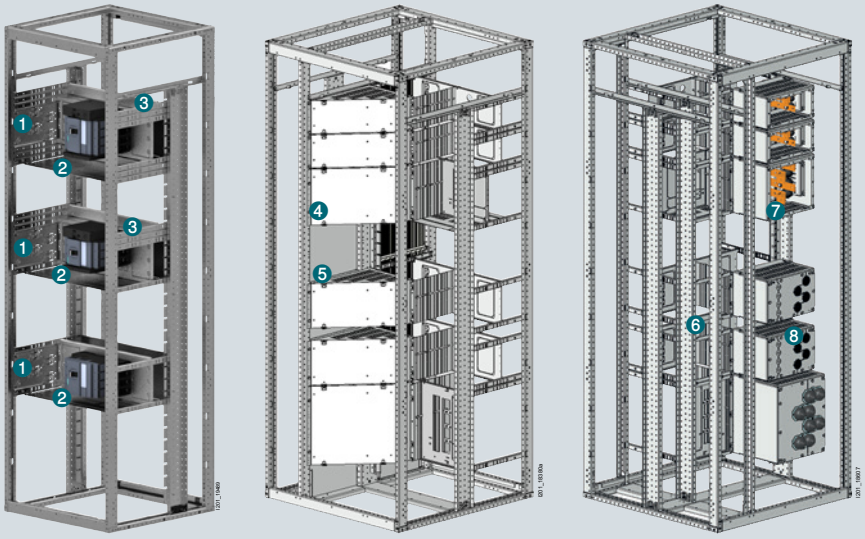
Section expansion

3VA molded case circuit breakers, internal separation – rear connection



3-pole, width 600 mm

❶ Side	❷ Horizontal
	

Type	I_n	Height		Operating mechanism				
				Direct	Rotary	Motorized		
3VA10	100 A	150 mm	Fixed-mounted	■	■	–	8PQ5000-2BA28	8PQ5000-2BA61
3VA11	160 A	150 mm	Fixed-mounted	■	■	–	8PQ5000-2BA28	8PQ5000-2BA61
			Plug-in	■	–	–	8PQ5000-2BA28	8PQ5000-2BA61
3VA12	250 A	150 mm	Fixed-mounted	■	■	■	8PQ5000-2BA28	8PQ5000-2BA61
			Plug-in	■	■	■	8PQ5000-2BA28	8PQ5000-2BA61
		250 mm	Withdrawable	■	–	■	8PQ5000-2BA28	8PQ5000-2BA61
3VA13 new	400 A	200 mm	Fixed-mounted	■	■	■	8PQ5000-2BA31	8PQ5000-2BA61
3VA14 new	630 A	200 mm	Fixed-mounted	■	■	■	8PQ5000-2BA31	8PQ5000-2BA61
3VA20	100 A	200 mm	Fixed-mounted	■	■	■	8PQ5000-2BA30	8PQ5000-2BA61
			Plug-in	■	■	■	8PQ5000-2BA30	8PQ5000-2BA61
		250 mm	Withdrawable	■	–	■	8PQ5000-2BA30	8PQ5000-2BA61
3VA21	160 A	200 mm	Fixed-mounted	■	■	■	8PQ5000-2BA30	8PQ5000-2BA61
			Plug-in	■	■	■	8PQ5000-2BA30	8PQ5000-2BA61
		250 mm	Withdrawable	■	–	■	8PQ5000-2BA30	8PQ5000-2BA61
3VA22	250 A	200 mm	Fixed-mounted	■	■	■	8PQ5000-2BA30	8PQ5000-2BA61
			Plug-in	■	■	■	8PQ5000-2BA30	8PQ5000-2BA61
		250 mm	Withdrawable	■	–	■	8PQ5000-2BA30	8PQ5000-2BA61
3VA23	400 A	200 mm	Fixed-mounted	■	■	■	8PQ5000-2BA31	8PQ5000-2BA61
3VA24	630 A	200 mm	Fixed-mounted	■	■	■	8PQ5000-2BA31	8PQ5000-2BA61

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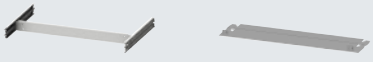
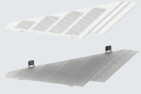
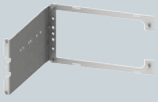
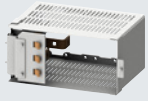
❸ Increase in module height	❹ Vertical busbar connection	❺ Segment covers	❻ Support plates	❼ Connection compartments	❽ Cover plates
					
–	8PQ5000-3BA52	8PQ5000-3BA63	8PQ5000-4BA73	8PQ6000-5BA13	8PQ5000-4BA80
–	8PQ5000-3BA52	8PQ5000-3BA63	8PQ5000-4BA73	8PQ6000-5BA13	8PQ5000-4BA80
–	8PQ5000-3BA52	8PQ5000-3BA63	8PQ5000-4BA73	8PQ6000-5BA13	8PQ5000-4BA80
–	8PQ5000-3BA52	8PQ5000-3BA63	8PQ5000-4BA73	8PQ6000-5BA15	8PQ5000-3BA71
–	8PQ5000-3BA52	8PQ5000-3BA63	8PQ5000-4BA73	8PQ6000-5BA15	8PQ5000-3BA71
2× 8PQ5000-4BA60 + 2× 8PQ5000-4BA68	8PQ5000-3BA54	8PQ5000-3BA63	8PQ5000-4BA73	8PQ6000-5BA15	8PQ5000-3BA71
–	8PQ5000-3BA53	8PQ5000-3BA63	8PQ5000-4BA74	8PQ6000-5BA18	8PQ5000-3BA73
–	8PQ5000-3BA53	8PQ5000-3BA63	8PQ5000-4BA74	8PQ6000-5BA18	8PQ5000-3BA73
–	8PQ5000-3BA53	8PQ5000-3BA63	8PQ5000-4BA74	8PQ6000-5BA14	8PQ5000-3BA72
–	8PQ5000-3BA53	8PQ5000-3BA63	8PQ5000-4BA74	8PQ6000-5BA14	8PQ5000-3BA72
8PQ5000-4BA62 + 8PQ5000-4BA70	8PQ5000-3BA54	8PQ5000-3BA63	8PQ5000-4BA74	8PQ6000-5BA14	8PQ5000-3BA72
–	8PQ5000-3BA53	8PQ5000-3BA63	8PQ5000-4BA74	8PQ6000-5BA14	8PQ5000-3BA72
–	8PQ5000-3BA53	8PQ5000-3BA63	8PQ5000-4BA74	8PQ6000-5BA14	8PQ5000-3BA72
8PQ5000-4BA62 + 8PQ5000-4BA70	8PQ5000-3BA54	8PQ5000-3BA63	8PQ5000-4BA74	8PQ6000-5BA14	8PQ5000-3BA72
–	8PQ5000-3BA53	8PQ5000-3BA63	8PQ5000-4BA74	8PQ6000-8BA30	8PQ5000-3BA72
–	8PQ5000-3BA53	8PQ5000-3BA63	8PQ5000-4BA74	8PQ6000-8BA30	8PQ5000-3BA72
8PQ5000-4BA62 + 8PQ5000-4BA70	8PQ5000-3BA54	8PQ5000-3BA63	8PQ5000-4BA74	8PQ6000-8BA30	8PQ5000-3BA72
–	8PQ5000-3BA53	8PQ5000-3BA63	8PQ5000-4BA74	8PQ6000-5BA18	8PQ5000-3BA73
–	8PQ5000-3BA53	8PQ5000-3BA63	8PQ5000-4BA74	8PQ6000-5BA18	8PQ5000-3BA73

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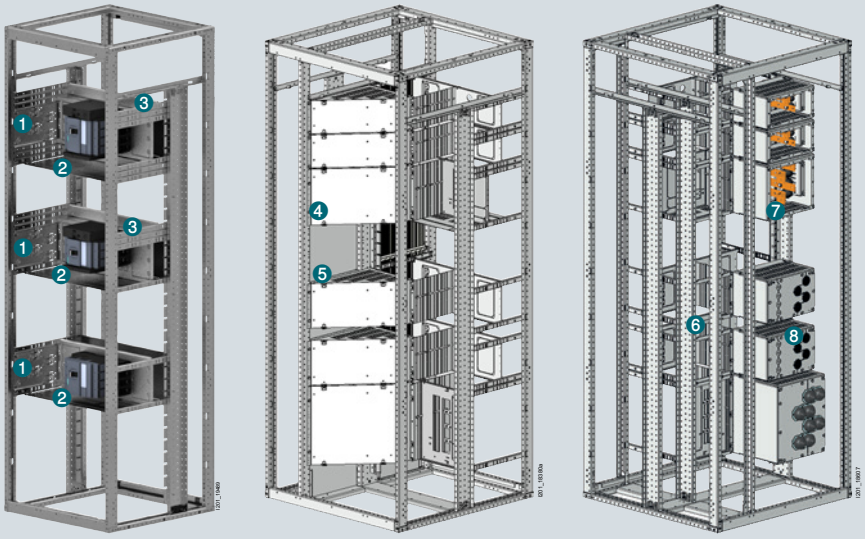
Section expansion

3VA molded case circuit breakers, internal separation – rear connection



4-pole, width 600 mm

❶ Side	❷ Horizontal
	

Type	I_n	Height		Operating mechanism				
				Direct	Rotary	Motorized		
3VA10	100 A	150 mm	Fixed-mounted	■	■	–	8PQ5000-2BA28	8PQ5000-2BA61
3VA11	160 A	150 mm	Fixed-mounted	■	■	■	8PQ5000-2BA28	8PQ5000-2BA61
			Plug-in	■	■	–	8PQ5000-2BA28	8PQ5000-2BA61
3VA12	250 A	200 mm	Fixed-mounted	■	■	■	8PQ5000-2BA30	8PQ5000-2BA61
			Plug-in	■	■	■	8PQ5000-2BA30	8PQ5000-2BA61
		300 mm	Withdrawable	■	–	■	8PQ5000-2BA30	8PQ5000-2BA61
3VA13 new	400 A	250 mm	Fixed-mounted	■	■	■	8PQ5000-2BA33	8PQ5000-2BA61
3VA14 new	630 A	250 mm	Fixed-mounted	■	■	■	8PQ5000-2BA33	8PQ5000-2BA61
3VA20	100 A	200 mm	Fixed-mounted	■	■	■	8PQ5000-2BA30	8PQ5000-2BA61
			Plug-in	■	■	■	8PQ5000-2BA30	8PQ5000-2BA61
		300 mm	Withdrawable	■	–	■	8PQ5000-2BA30	8PQ5000-2BA61
3VA21	160 A	200 mm	Fixed-mounted	■	■	■	8PQ5000-2BA30	8PQ5000-2BA61
			Plug-in	■	■	■	8PQ5000-2BA30	8PQ5000-2BA61
		300 mm	Withdrawable	■	–	■	8PQ5000-2BA30	8PQ5000-2BA61
3VA22	250 A	200 mm	Fixed-mounted	■	■	■	8PQ5000-2BA30	8PQ5000-2BA61
			Plug-in	■	■	■	8PQ5000-2BA30	8PQ5000-2BA61
		300 mm	Withdrawable	■	–	■	8PQ5000-2BA30	8PQ5000-2BA61
3VA23	400 A	250 mm	Fixed-mounted	■	■	■	8PQ5000-2BA33	8PQ5000-2BA61
3VA24	630 A	250 mm	Fixed-mounted	■	■	■	8PQ5000-2BA33	8PQ5000-2BA61

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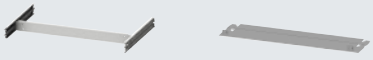
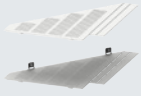
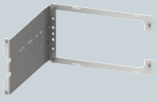
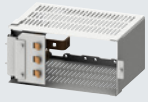
❸ Increase in module height	❹ Vertical busbar connection	❺ Segment covers	❻ Support plates	❼ Connection compartments	❽ Cover plates
					
–	8PQ5000-3BA52	8PQ5000-3BA63	8PQ5000-4BA73	8PQ6000-5BA13	8PQ5000-4BA80
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–	8PQ5000-3BA52	8PQ5000-3BA63	8PQ5000-4BA73	8PQ6000-5BA13	8PQ5000-4BA80
–	8PQ5000-3BA53	8PQ5000-3BA63	8PQ5000-4BA74	8PQ6000-5BA17	8PQ5000-3BA72
–	8PQ5000-3BA53	8PQ5000-3BA63	8PQ5000-4BA74	8PQ6000-5BA17	8PQ5000-3BA72
2× 8PQ5000-4BA60 + 2× 8PQ5000-4BA68	8PQ5000-3BA55	8PQ5000-3BA63	8PQ5000-4BA74	8PQ6000-5BA17	8PQ5000-3BA72
–	8PQ5000-3BA54	8PQ5000-3BA63	8PQ5000-4BA75	8PQ6000-5BA20	8PQ5000-3BA74
–	8PQ5000-3BA54	8PQ5000-3BA63	8PQ5000-4BA75	8PQ6000-5BA20	8PQ5000-3BA74
–	8PQ5000-3BA53	8PQ5000-3BA63	8PQ5000-4BA74	8PQ6000-5BA14	8PQ5000-3BA72
–	8PQ5000-3BA53	8PQ5000-3BA63	8PQ5000-4BA74	8PQ6000-5BA14	8PQ5000-3BA72
2× 8PQ5000-4BA62 + 2× 8PQ5000-4BA70	8PQ5000-3BA55	8PQ5000-3BA63	8PQ5000-4BA74	8PQ6000-5BA14	8PQ5000-3BA72
–	8PQ5000-3BA53	8PQ5000-3BA63	8PQ5000-4BA74	8PQ6000-5BA14	8PQ5000-3BA72
–	8PQ5000-3BA53	8PQ5000-3BA63	8PQ5000-4BA74	8PQ6000-5BA14	8PQ5000-3BA72
2× 8PQ5000-4BA62 + 2× 8PQ5000-4BA70	8PQ5000-3BA55	8PQ5000-3BA63	8PQ5000-4BA74	8PQ6000-5BA14	8PQ5000-3BA72
–	8PQ5000-3BA53	8PQ5000-3BA63	8PQ5000-4BA74	8PQ6000-5BA17	8PQ5000-3BA72
–	8PQ5000-3BA53	8PQ5000-3BA63	8PQ5000-4BA74	8PQ6000-5BA17	8PQ5000-3BA72
2× 8PQ5000-4BA62 + 2× 8PQ5000-4BA70	8PQ5000-3BA55	8PQ5000-3BA63	8PQ5000-4BA74	8PQ6000-5BA17	8PQ5000-3BA72
–	8PQ5000-3BA54	8PQ5000-3BA63	8PQ5000-4BA75	8PQ6000-5BA20	8PQ5000-3BA74
–	8PQ5000-3BA54	8PQ5000-3BA63	8PQ5000-4BA75	8PQ6000-5BA20	8PQ5000-3BA74

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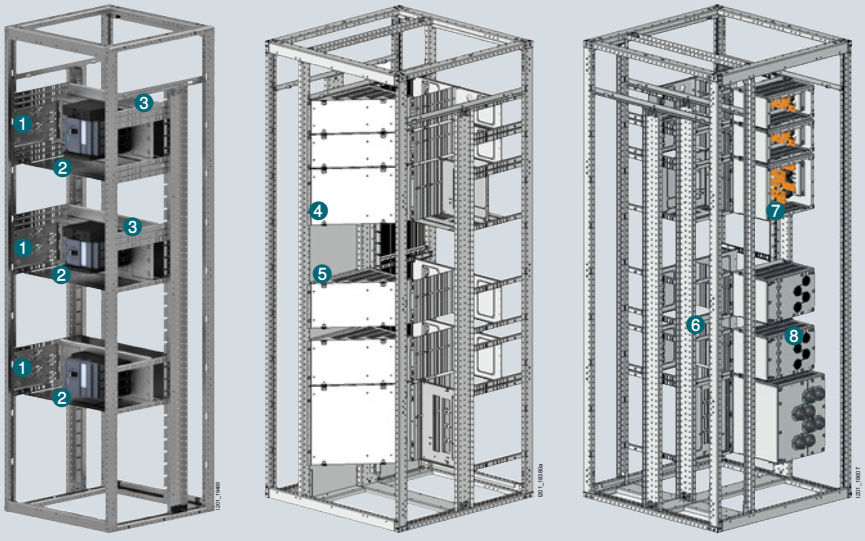
Section expansion

3VA molded case circuit breakers, internal separation – rear connection



3-pole, width 800 mm

Type	I_n	Height		Operating mechanism			❶ Side	❷ Horizontal
				Direct	Rotary	Motorized		
3VA10	100 A	150 mm	Fixed-mounted	■	–	–	8PQ5000-2BA28	8PQ5000-2BA62
3VA11	160 A	150 mm	Fixed-mounted	■	–	–	8PQ5000-2BA28	8PQ5000-2BA62
			Plug-in	■	–	–	8PQ5000-2BA28	8PQ5000-2BA62
3VA12	250 A	200 mm	Fixed-mounted	■	■	■	8PQ5000-2BA30	8PQ5000-2BA62
			Plug-in	■	■	■	8PQ5000-2BA30	8PQ5000-2BA62
		250 mm	Withdrawable	■	–	–	8PQ5000-2BA30	8PQ5000-2BA62
3VA13 new	400 A	250 mm	Fixed-mounted	■	■	■	8PQ5000-2BA33	8PQ5000-2BA62
			Plug-in	■	–	–	8PQ5000-2BA33	8PQ5000-2BA62
		300 mm	Withdrawable	■	–	–	8PQ5000-2BA33	8PQ5000-2BA62
3VA14 new	630 A	250 mm	Fixed-mounted	■	■	■	8PQ5000-2BA33	8PQ5000-2BA62
			Plug-in	■	–	–	8PQ5000-2BA33	8PQ5000-2BA62
		300 mm	Withdrawable	■	–	–	8PQ5000-2BA33	8PQ5000-2BA62
3VA20	100 A	200 mm	Fixed-mounted	■	■	■	8PQ5000-2BA30	8PQ5000-2BA62
			Plug-in	■	■	■	8PQ5000-2BA30	8PQ5000-2BA62
		250 mm	Withdrawable	■	–	–	8PQ5000-2BA30	8PQ5000-2BA62
3VA21	160 A	200 mm	Fixed-mounted	■	■	■	8PQ5000-2BA30	8PQ5000-2BA62
			Plug-in	■	■	■	8PQ5000-2BA30	8PQ5000-2BA62
		250 mm	Withdrawable	■	–	–	8PQ5000-2BA30	8PQ5000-2BA62
3VA22	250 A	200 mm	Fixed-mounted	■	■	■	8PQ5000-2BA30	8PQ5000-2BA62
			Plug-in	■	■	■	8PQ5000-2BA30	8PQ5000-2BA62
		250 mm	Withdrawable	■	–	–	8PQ5000-2BA30	8PQ5000-2BA62
3VA23	400 A	250 mm	Fixed-mounted	■	■	■	8PQ5000-2BA33	8PQ5000-2BA62
			Plug-in	■	■	■	8PQ5000-2BA33	8PQ5000-2BA62
		300 mm	Withdrawable	■	–	–	8PQ5000-2BA33	8PQ5000-2BA62
3VA24	630 A	250 mm	Fixed-mounted	■	■	■	8PQ5000-2BA33	8PQ5000-2BA62
			Plug-in	■	■	■	8PQ5000-2BA33	8PQ5000-2BA62
		300 mm	Withdrawable	■	–	–	8PQ5000-2BA33	8PQ5000-2BA62

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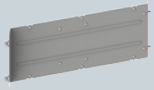
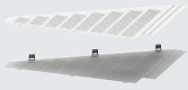
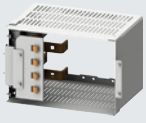
❸ Increase in module height	❹ Vertical busbar connection	❺ Segment covers	❻ Support plates	❼ Connection compartments	❽ Cover plates
					
–	8PQ5000-3BA57	8PQ5000-3BA64	8PQ5000-4BA76	8PQ6000-5BA13	8PQ5000-4BA80
–	8PQ5000-3BA57	8PQ5000-3BA64	8PQ5000-4BA76	8PQ6000-5BA13	8PQ5000-4BA80
–	8PQ5000-3BA57	8PQ5000-3BA64	8PQ5000-4BA76	8PQ6000-5BA13	8PQ5000-4BA80
–	8PQ5000-3BA58	8PQ5000-3BA64	8PQ5000-4BA77	8PQ6000-5BA17	8PQ5000-3BA72
–	8PQ5000-3BA58	8PQ5000-3BA64	8PQ5000-4BA77	8PQ6000-5BA17	8PQ5000-3BA72
8PQ5000-4BA61 + 8PQ5000-4BA71	8PQ5000-3BA58	8PQ5000-3BA64	8PQ5000-4BA77	8PQ6000-5BA17	8PQ5000-3BA72
–	8PQ5000-3BA60	8PQ5000-3BA64	8PQ5000-4BA78	8PQ6000-5BA20	8PQ5000-3BA74
–	8PQ5000-3BA60	8PQ5000-3BA64	8PQ5000-4BA78	8PQ6000-5BA20	8PQ5000-3BA74
8PQ5000-4BA63 + 8PQ5000-4BA72	8PQ5000-3BA60	8PQ5000-3BA64	8PQ5000-4BA78	8PQ6000-5BA20	8PQ5000-3BA74
–	8PQ5000-3BA60	8PQ5000-3BA64	8PQ5000-4BA78	8PQ6000-5BA20	8PQ5000-3BA74
–	8PQ5000-3BA60	8PQ5000-3BA64	8PQ5000-4BA78	8PQ6000-5BA20	8PQ5000-3BA74
8PQ5000-4BA63 + 8PQ5000-4BA72	8PQ5000-3BA60	8PQ5000-3BA64	8PQ5000-4BA78	8PQ6000-5BA20	8PQ5000-3BA74
–	8PQ5000-3BA58	8PQ5000-3BA64	8PQ5000-4BA77	8PQ6000-5BA14	8PQ5000-3BA72
–	8PQ5000-3BA58	8PQ5000-3BA64	8PQ5000-4BA77	8PQ6000-5BA14	8PQ5000-3BA72
8PQ5000-4BA63 + 8PQ5000-4BA72	8PQ5000-3BA58	8PQ5000-3BA64	8PQ5000-4BA77	8PQ6000-5BA14	8PQ5000-3BA72
–	8PQ5000-3BA58	8PQ5000-3BA64	8PQ5000-4BA77	8PQ6000-5BA14	8PQ5000-3BA72
–	8PQ5000-3BA58	8PQ5000-3BA64	8PQ5000-4BA77	8PQ6000-5BA14	8PQ5000-3BA72
8PQ5000-4BA63 + 8PQ5000-4BA72	8PQ5000-3BA58	8PQ5000-3BA64	8PQ5000-4BA77	8PQ6000-5BA14	8PQ5000-3BA72
–	8PQ5000-3BA58	8PQ5000-3BA64	8PQ5000-4BA77	8PQ6000-8BA30	8PQ5000-3BA72
–	8PQ5000-3BA58	8PQ5000-3BA64	8PQ5000-4BA77	8PQ6000-8BA30	8PQ5000-3BA72
8PQ5000-4BA63 + 8PQ5000-4BA72	8PQ5000-3BA58	8PQ5000-3BA64	8PQ5000-4BA77	8PQ6000-8BA30	8PQ5000-3BA72
–	8PQ5000-3BA60	8PQ5000-3BA64	8PQ5000-4BA78	8PQ6000-5BA20	8PQ5000-3BA74
–	8PQ5000-3BA60	8PQ5000-3BA64	8PQ5000-4BA78	8PQ6000-5BA20	8PQ5000-3BA74
8PQ5000-4BA63 + 8PQ5000-4BA72	8PQ5000-3BA60	8PQ5000-3BA64	8PQ5000-4BA78	8PQ6000-5BA20	8PQ5000-3BA74
–	8PQ5000-3BA60	8PQ5000-3BA64	8PQ5000-4BA78	8PQ6000-5BA20	8PQ5000-3BA74
–	8PQ5000-3BA60	8PQ5000-3BA64	8PQ5000-4BA78	8PQ6000-5BA20	8PQ5000-3BA74
8PQ5000-4BA63 + 8PQ5000-4BA72	8PQ5000-3BA60	8PQ5000-3BA64	8PQ5000-4BA78	8PQ6000-5BA20	8PQ5000-3BA74

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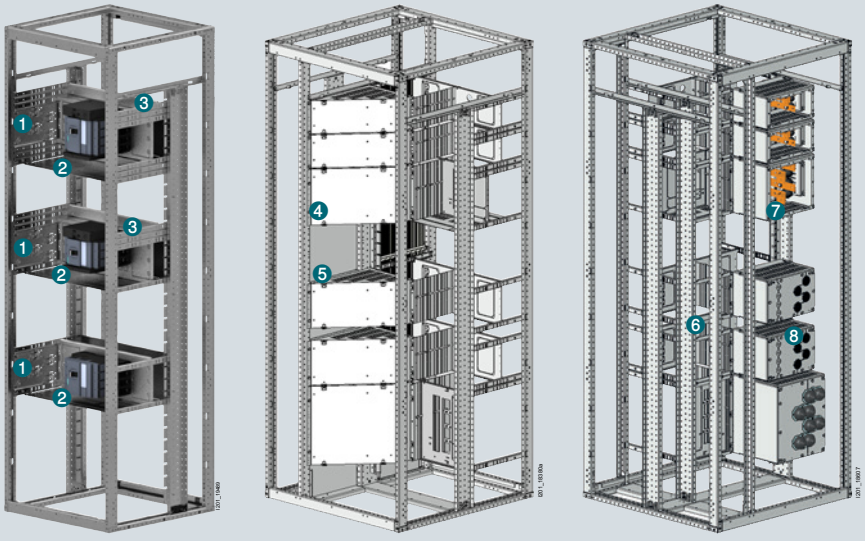
Section expansion

3VA molded case circuit breakers, internal separation – rear connection



4-pole, width 800 mm

Type	I_n	Height		Operating mechanism			❶ Side	❷ Horizontal
				Direct	Rotary	Motorized		
3VA10	100 A	150 mm	Fixed-mounted	■	■	–	8PQ5000-2BA28	8PQ5000-2BA62
3VA11	160 A	150 mm	Fixed-mounted	■	■	■	8PQ5000-2BA28	8PQ5000-2BA62
			Plug-in	■	■	■	8PQ5000-2BA28	8PQ5000-2BA62
3VA12	250 A	200 mm	Fixed-mounted	■	■	■	8PQ5000-2BA30	8PQ5000-2BA62
			Plug-in	■	■	■	8PQ5000-2BA30	8PQ5000-2BA62
		300 mm	Withdrawable	■	–	–	8PQ5000-2BA30	8PQ5000-2BA62
3VA13 new	400 A	250 mm	Fixed-mounted	■	■	■	8PQ5000-2BA33	8PQ5000-2BA62
			Plug-in	■	–	–	8PQ5000-2BA33	8PQ5000-2BA62
		300 mm	Withdrawable	■	–	–	8PQ5000-2BA33	8PQ5000-2BA62
3VA14 new	630 A	250 mm	Fixed-mounted	■	■	■	8PQ5000-2BA33	8PQ5000-2BA62
			Plug-in	■	–	–	8PQ5000-2BA33	8PQ5000-2BA62
		300 mm	Withdrawable	■	–	–	8PQ5000-2BA33	8PQ5000-2BA62
3VA20	100 A	200 mm	Fixed-mounted	■	■	■	8PQ5000-2BA30	8PQ5000-2BA62
			Plug-in	■	■	■	8PQ5000-2BA30	8PQ5000-2BA62
		300 mm	Withdrawable	■	–	–	8PQ5000-2BA30	8PQ5000-2BA62
3VA21	160 A	200 mm	Fixed-mounted	■	■	■	8PQ5000-2BA30	8PQ5000-2BA62
			Plug-in	■	■	■	8PQ5000-2BA30	8PQ5000-2BA62
		300 mm	Withdrawable	■	–	–	8PQ5000-2BA30	8PQ5000-2BA62
3VA22	250 A	200 mm	Fixed-mounted	■	■	■	8PQ5000-2BA30	8PQ5000-2BA62
			Plug-in	■	■	■	8PQ5000-2BA30	8PQ5000-2BA62
		300 mm	Withdrawable	■	–	–	8PQ5000-2BA30	8PQ5000-2BA62
3VA23	400 A	250 mm	Fixed-mounted	■	■	■	8PQ5000-2BA33	8PQ5000-2BA62
			Plug-in	■	■	■	8PQ5000-2BA33	8PQ5000-2BA62
		350 mm	Withdrawable	■	–	–	8PQ5000-2BA33	8PQ5000-2BA62
3VA24	630 A	250 mm	Fixed-mounted	■	■	■	8PQ5000-2BA33	8PQ5000-2BA62
			Plug-in	■	■	■	8PQ5000-2BA33	8PQ5000-2BA62
		350 mm	Withdrawable	■	–	–	8PQ5000-2BA33	8PQ5000-2BA62

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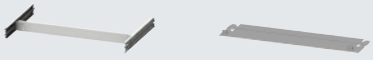
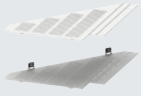
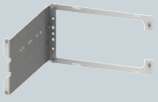
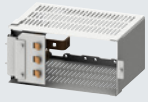
❸ Increase in module height	❹ Vertical busbar connection	❺ Segment covers	❻ Support plates	❼ Connection compartments	❽ Cover plates
					
–	8PQ5000-3BA57	8PQ5000-3BA64	8PQ5000-4BA76	8PQ6000-5BA13	8PQ5000-4BA80
–	8PQ5000-3BA57	8PQ5000-3BA64	8PQ5000-4BA76	8PQ6000-5BA13	8PQ5000-4BA80
–	8PQ5000-3BA57	8PQ5000-3BA64	8PQ5000-4BA76	8PQ6000-5BA13	8PQ5000-4BA80
–	8PQ5000-3BA58	8PQ5000-3BA64	8PQ5000-4BA77	8PQ6000-5BA17	8PQ5000-3BA72
–	8PQ5000-3BA58	8PQ5000-3BA64	8PQ5000-4BA77	8PQ6000-5BA17	8PQ5000-3BA72
2× 8PQ5000-4BA61 + 2× 8PQ5000-4BA71	8PQ5000-3BA58	8PQ5000-3BA64	8PQ5000-4BA77	8PQ6000-5BA17	8PQ5000-3BA72
–	8PQ5000-3BA60	8PQ5000-3BA64	8PQ5000-4BA78	8PQ6000-5BA20	8PQ5000-3BA74
–	8PQ5000-3BA60	8PQ5000-3BA64	8PQ5000-4BA78	8PQ6000-5BA20	8PQ5000-3BA74
8PQ5000-4BA63 + 8PQ5000-4BA72	8PQ5000-3BA60	8PQ5000-3BA64	8PQ5000-4BA78	8PQ6000-5BA20	8PQ5000-3BA74
–	8PQ5000-3BA60	8PQ5000-3BA64	8PQ5000-4BA78	8PQ6000-5BA20	8PQ5000-3BA74
–	8PQ5000-3BA60	8PQ5000-3BA64	8PQ5000-4BA78	8PQ6000-5BA20	8PQ5000-3BA74
8PQ5000-4BA63 + 8PQ5000-4BA72	8PQ5000-3BA60	8PQ5000-3BA64	8PQ5000-4BA78	8PQ6000-5BA20	8PQ5000-3BA74
–	8PQ5000-3BA58	8PQ5000-3BA64	8PQ5000-4BA77	8PQ6000-5BA14	8PQ5000-3BA72
–	8PQ5000-3BA58	8PQ5000-3BA64	8PQ5000-4BA77	8PQ6000-5BA14	8PQ5000-3BA72
2× 8PQ5000-4BA63 + 2× 8PQ5000-4BA72	8PQ5000-3BA58	8PQ5000-3BA64	8PQ5000-4BA77	8PQ6000-5BA14	8PQ5000-3BA72
–	8PQ5000-3BA58	8PQ5000-3BA64	8PQ5000-4BA77	8PQ6000-5BA14	8PQ5000-3BA72
–	8PQ5000-3BA58	8PQ5000-3BA64	8PQ5000-4BA77	8PQ6000-5BA14	8PQ5000-3BA72
2× 8PQ5000-4BA63 + 2× 8PQ5000-4BA72	8PQ5000-3BA58	8PQ5000-3BA64	8PQ5000-4BA77	8PQ6000-5BA14	8PQ5000-3BA72
–	8PQ5000-3BA58	8PQ5000-3BA64	8PQ5000-4BA77	8PQ6000-5BA17	8PQ5000-3BA72
–	8PQ5000-3BA58	8PQ5000-3BA64	8PQ5000-4BA77	8PQ6000-5BA17	8PQ5000-3BA72
2× 8PQ5000-4BA63 + 2× 8PQ5000-4BA72	8PQ5000-3BA58	8PQ5000-3BA64	8PQ5000-4BA77	8PQ6000-5BA17	8PQ5000-3BA72
–	8PQ5000-3BA60	8PQ5000-3BA64	8PQ5000-4BA78	8PQ6000-5BA20	8PQ5000-3BA74
–	8PQ5000-3BA60	8PQ5000-3BA64	8PQ5000-4BA78	8PQ6000-5BA20	8PQ5000-3BA74
2× 8PQ5000-4BA63 + 2× 8PQ5000-4BA72	8PQ5000-3BA60	8PQ5000-3BA64	8PQ5000-4BA78	8PQ6000-5BA20	8PQ5000-3BA74
–	8PQ5000-3BA60	8PQ5000-3BA64	8PQ5000-4BA78	8PQ6000-5BA20	8PQ5000-3BA74
–	8PQ5000-3BA60	8PQ5000-3BA64	8PQ5000-4BA78	8PQ6000-5BA20	8PQ5000-3BA74
2× 8PQ5000-4BA63 + 2× 8PQ5000-4BA72	8PQ5000-3BA60	8PQ5000-3BA64	8PQ5000-4BA78	8PQ6000-5BA20	8PQ5000-3BA74

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Section expansion

3VA molded case circuit breakers, internal separation – rear connection

Accessories

❺ Plug-in rails



Equipment height	Busbar system	Article No.
1600 mm	Top	8PQ3000-0BA82
1800 mm	Rear or without	8PQ3000-0BA83

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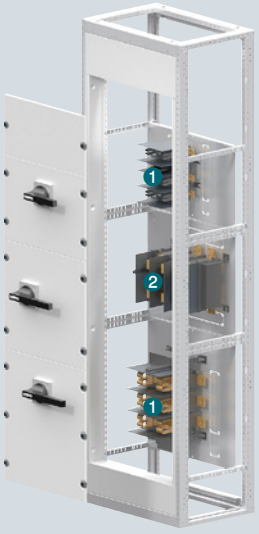
Section expansion

3K switch disconnectors



			❶ Horizontal			
			3-pole		4-pole	
						
Switching devices	**Width**	**Height**	**Device holders**	**Covers**	**Device holders**	**Covers**
3KL50/3KL52	600 mm	250 mm	–	–	–	–
		300 mm	8PQ6000-2BA65	8PQ2030-6BA06	8PQ6000-2BA65	8PQ2030-6BA06
3KL55/3KL57	600 mm	350 mm	8PQ6000-2BA71	8PQ2035-6BA08	8PQ6000-2BA71	8PQ2035-6BA08
3KL61	600 mm	450 mm	–	–	–	–
		550 mm	8PQ6000-2BA50	8PQ2055-6BA02	8PQ6000-2BA50	8PQ2055-6BA02
3KL711/3KA711	600 mm	200 mm	8PQ6000-2BA52	8PQ2020-6BA10	8PQ6000-2BA52	8PQ2020-6BA10
	800 mm	200 mm	–	–	–	–
3KL712/3KA712	600 mm	250 mm	8PQ6000-2BA55	8PQ2025-6BA03	8PQ6000-2BA55	8PQ2025-6BA03
	800 mm	250 mm	–	–	–	–
3KL713/3KA713	600 mm	300 mm	8PQ6000-2BA58	8PQ2030-6BA04	8PQ6000-2BA58	8PQ2030-6BA04
	800 mm	300 mm	–	–	–	–
3KL714/3KA714	600 mm	350 mm	8PQ6000-2BA62	8PQ2035-6BA06	8PQ6000-2BA62	8PQ2035-6BA06
	800 mm	350 mm	–	–	–	–
3KL715/3KA715 [1]	600 mm	450 mm	8PQ6000-2BA67	8PQ2045-6BA02	8PQ6000-2BA67	8PQ2045-6BA02
	800 mm	450 mm	–	–	–	–

[1] Due to the size of its handle, the 3KA715 disconnector can be used only up to 1250 A/35 kA when installed horizontally.
Due to the size of its handle, the 1250 A/50 kA 3KA715 disconnector requires an additional 200 mm cover.

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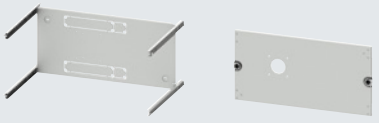
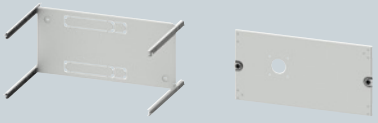
❷ Vertical

3-pole



4-pole



Device holders	Covers	Device holders	Covers
8PQ6000-2BA66	8PQ2025-6BA05	8PQ6000-2BA66	8PQ2025-6BA05
–	–	–	–
8PQ6000-2BA72	8PQ2035-6BA10	8PQ6000-2BA72	8PQ2035-6BA10
8PQ6000-2BA51	8PQ2045-6BA01	–	–
–	–	–	–
8PQ6000-2BA53	8PQ2020-6BA11	8PQ6000-2BA53	8PQ2020-6BA11
8PQ6000-2BA54	8PQ2020-8BA04	8PQ6000-2BA54	8PQ2020-8BA04
8PQ6000-2BA56	8PQ2025-6BA04	8PQ6000-2BA56	8PQ2025-6BA04
8PQ6000-2BA57	8PQ2025-8BA02	8PQ6000-2BA57	8PQ2025-8BA02
8PQ6000-2BA60	8PQ2030-6BA05	8PQ6000-2BA60	8PQ2030-6BA05
8PQ6000-2BA61	8PQ2030-8BA02	8PQ6000-2BA61	8PQ2030-8BA02
8PQ6000-2BA63	8PQ2035-6BA07	8PQ6000-2BA63	8PQ2035-6BA07
8PQ6000-2BA64	8PQ2035-8BA04	8PQ6000-2BA64	8PQ2035-8BA04
8PQ6000-2BA68	8PQ2045-6BA03	8PQ6000-2BA68	8PQ2045-6BA03
8PQ6000-2BA70	8PQ2045-8BA01	8PQ6000-2BA70	8PQ2045-8BA01

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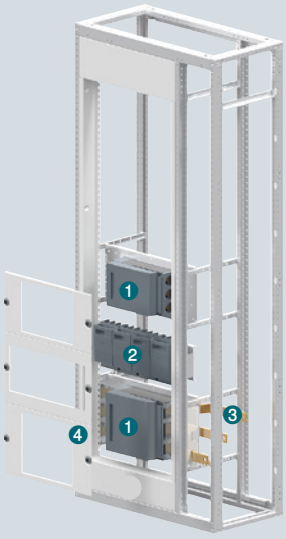
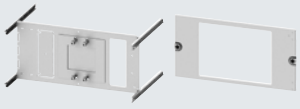
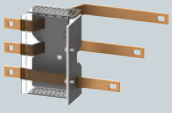
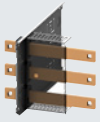
Section expansion

3NP1 fuse switch disconnectors, 3-pole



			❶ Horizontal		❸ Section busbars	❹ Cable connection
						
Switching devices	**Fuse**	**Width**	**Device holders**	**Covers**		**Form 3**
3NP1143	NH1 (up to 250 A)	600 mm	8PQ6000-3BA75	8PQ2025-6BA16	8PQ6000-5BA68	8PQ6000-5BA72
3NP1153	NH2 (up to 400 A)	600 mm	8PQ6000-3BA75	8PQ2025-6BA17	8PQ6000-5BA70	8PQ6000-5BA73
3NP1163	NH3 (up to 630 A)	600 mm	8PQ6000-3BA77	8PQ2030-6BA22	8PQ6000-5BA71	8PQ6000-5BA74

				❷ Vertical	
					
Switching device	**Fuse**	**Width**	**No. of switching devices**	**Device holders**	**Covers**
3NP1123	NH000 (up to 160 A)	600 mm	4	8PQ6000-3BA78	8PQ2025-6BA18
		800 mm	6	8PQ6000-3BA82	8PQ2025-8BA10
3NP1133	NH00 (up to 160 A)	600 mm	4	8PQ6000-3BA78	8PQ2030-6BA23
		800 mm	5	8PQ6000-3BA82	8PQ2030-8BA11

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Section expansion

3NJ4 fuse switch disconnectors, 3-pole



			Device holders	Busbar holders	Covers
					
Size	**Width**	**No. of switching devices**			
NH1 – NH3 (up to 630 A)	600 mm	4× 100 mm	8PQ6000-2BA48	2 × 3NJ5974-0AB	8PQ2000-6BA06
	800 mm	6× 100 mm	8PQ6000-2BA48	2 × 3NJ5974-0AB	8PQ2000-8BA06

Accessories

Blanking covers



Size	Width	Article No.
Size 00	50 mm	3NJ4912-2AA00
Sizes 1, 2, 3	100 mm	3NJ4912-2BA00

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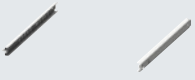
Compartment doors	Separation, form 3b	Separation, horizontal	Support rails
			
8PQ2080-6BA10	8PQ5000-1BA70	8PQ5000-2BA61	8PQ5000-2BA63
8PQ2080-8BA05	8PQ5000-1BA71	8PQ5000-2BA62	8PQ5000-2BA63

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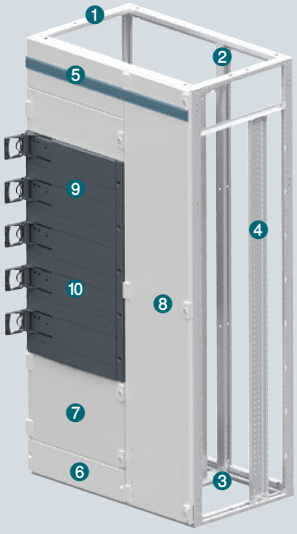
Section expansion

3NJ6 switch disconnectors with fuses 3 and 4-pole

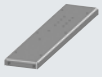


Technical specifications, distribution busbar

	Rated operational current I_n, ventilated						
Cross-section	20 °C	25 °C	30 °C	**35 °C**	40 °C	45 °C	50 °C
60 × 10 mm	1680 A	1640 A	1600 A	**1560 A**	1520 A	1480 A	1430 A
80 × 10 mm	2260 A	2210 A	2155 A	**2100 A**	2045 A	1985 A	1925 A

Frame

Main busbar at top

Width	Depth	❶ Frame	❷ Exterior intermediate uprights	❸ Bottom plate partition crossbars	❹ Uprights
					
600 + 400 mm	400 mm	8PQ1201-4BA02	8PQ3000-1BA43	1× 8PQ3000-1BA38	8PQ3000-0BA65
	600 mm	8PQ1201-6BA02	8PQ3000-1BA43	1× 8PQ3000-1BA40	8PQ3000-0BA01
	800 mm	8PQ1201-8BA03	8PQ3000-1BA43	2× 8PQ3000-1BA38	8PQ3000-0BA02
600 + 600 mm	400 mm	8PQ1202-4BA02	8PQ3000-1BA43	1× 8PQ3000-1BA38	8PQ3000-0BA65
	600 mm	8PQ1202-6BA02	8PQ3000-1BA43	1× 8PQ3000-1BA40	8PQ3000-0BA01
	800 mm	8PQ1202-8BA02	8PQ3000-1BA43	2× 8PQ3000-1BA38	8PQ3000-0BA02

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Device compartment

❺ Head compartment covers



Height	Article No.
225 mm	8PQ2022-6BA01

❾ 3NJ6 assembly kit



Height	Width	Article No.
1600 mm	600 mm	8PQ3000-1BA48

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Busbar cover



Height	Article No.
200 mm	8× 3NJ6916-4EA00

❼ Device compartments



Height	Article No.
200 mm	8PQ3000-1BA50
400 mm	8PQ3000-1BA51

❿ Blanking covers



Height	Article No.
50 mm	3NJ6900-4CB00

Form 2b separation



Position of main busbar	Width	Depth	Article No.
Top, front	600 mm	400 mm	8PQ3000-1BA44
		600 mm	8PQ3000-1BA45
		800 mm	8PQ3000-1BA46
Top, both sides	600 mm	800 mm	8PQ3000-1BA47

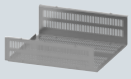
❻ Base compartment covers

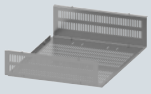


Height	Article No.
150 mm	8PQ2000-6BA07

Cable compartment

Form 2b separation





Position of main busbar	Width	Depth	Article No.
Top, front	400 mm	400 mm	8PQ3000-0BA67
		600 mm	8PQ3000-0BA52
		800 mm	8PQ3000-0BA55
	600 mm	400 mm	8PQ3000-0BA68
		600 mm	8PQ3000-0BA53
		800 mm	8PQ3000-0BA56
Top, both sides	400 mm	800 mm	8PQ3000-0BA58
	600 mm	800 mm	8PQ3000-0BA60
Front, rear	600 mm	800 mm	8PQ3000-0BA60

❽ Section doors



Lock type	Hinge position	Width	Article No.
Double-bit	Left	400 mm	8PQ2197-4BA08
		600 mm	8PQ2197-6BA06
	Right	400 mm	8PQ2197-4BA11
		600 mm	8PQ2197-6BA13
Profile semicylinders	Left	400 mm	8PQ2197-4BA06
		600 mm	8PQ2197-6BA04
	Right	400 mm	8PQ2197-4BA07
		600 mm	8PQ2197-6BA05

Terminal covers, form 4b



Version	Article No.
Size 00	3NJ6923-1DA00
Size 1	3NJ6933-1DA01
Size 2	3NJ6943-1DA00
4th pole for all sizes	3NJ6904-1DA00

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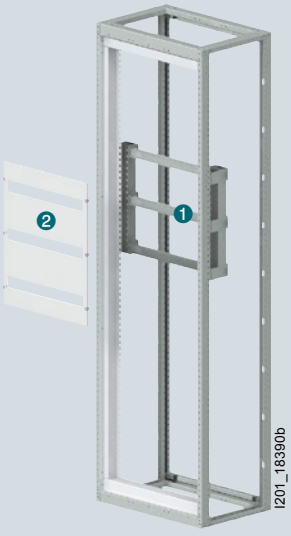
Section expansion

Modular installation devices



Internal covers

Width	MW	Tier spacing	Height	❶ Device holders	❷ Covers
600 mm	1× 24	150 mm	150 mm	1× 8PQ6000-3BA36	8PQ2015-6BA07
		200 mm	200 mm	1× 8PQ6000-3BA36	8PQ2020-6BA12
800 mm	1× 35	150 mm	150 mm	1× 8PQ6000-3BA37	8PQ2015-8BA03
		200 mm	200 mm	1× 8PQ6000-3BA37	8PQ2020-8BA05

Width	MW	Tier spacing	Height	❶ Device holders	❷ Covers
600 mm	2× 24	150 mm	300 mm	2× 8PQ6000-3BA36	8PQ2030-6BA07
		200 mm	400 mm	2× 8PQ6000-3BA36	8PQ2040-6BA10
800 mm	2× 35	150 mm	300 mm	2× 8PQ6000-3BA37	8PQ2030-8BA03
		200 mm	400 mm	2× 8PQ6000-3BA37	8PQ2040-8BA10

Width	MW	Tier spacing	Height	❶ Device holders	❷ Covers
600 mm	3× 24	150 mm	450 mm	3× 8PQ6000-3BA36	8PQ2045-6BA04
		200 mm	600 mm	3× 8PQ6000-3BA36	8PQ2060-6BA04
800 mm	3× 35	150 mm	450 mm	3× 8PQ6000-3BA37	8PQ2045-8BA02
		200 mm	600 mm	3× 8PQ6000-3BA37	8PQ2060-8BA02

Compartment doors

Width	MW	Tier spacing	Height	❶ Device holders	❷ Covers
600 mm	1× 24	200 mm	200 mm	1 × 8PQ6000-6BA52	8PQ2020-6BA28
800 mm	1× 35	200 mm	200 mm	1 × 8PQ6000-6BA53	8PQ2020-8BA14

Accessories

Cable duct fastening	
Version	Article No.
Mounting brackets	8PQ6000-0BA16

Blanking strips	
Versions	Article No.
For 12 MW	8GK9910-0KK00
Length 1 m, to cut to length	8GK9910-0KK01

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Section expansion

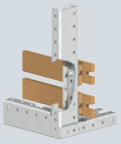
Cable section



❶ PE bars



Version	Scope of supply	Article No.
Busbar supports	5 units	8PQ4000-2BA23



Version	Scope of supply	Article No.
Frame connection	6 units	8PQ4000-0BA82

❷ N/PEN connection



Version	Article No.
Busbar supports and connection terminals	8PQ4000-2BA22

❸ Cable fixtures



Version	Scope of supply	Article No.
Holders	10 units	8PQ3000-0BA73

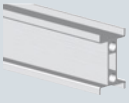


Version	Width	Depth	Scope of supply	Article No.
C profile (30 mm)	350 mm	–	5 units	8PQ3000-0BA38
	400 mm	–	5 units	8PQ3000-0BA41
	600 mm	–	5 units	8PQ3000-0BA42
	800 mm	–	5 units	8PQ3000-0BA43
	–	400 mm	5 units	8PQ3000-0BA38
		600 mm	5 units	8PQ3000-0BA38
		800 mm	5 units	8PQ3000-0BA38

❹ DIN rail outgoing terminals



Version	Scope of supply	Article No.
Universal brackets	10 units	8PQ9400-0BA01



Length	DIN rail	Article No.
1600 mm	35 mm	8PQ9600-0BA01

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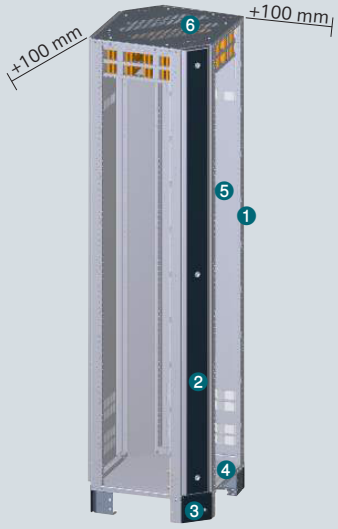
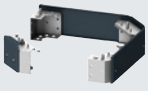
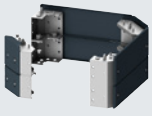
Section expansion

Corner sections



					Main busbar at bottom
	❶ Frames	❷ Conversion kits	❸ Base corner pieces		❹ Base plates
					
Depth			**Height** **100 mm**	**200 mm**	**IP20**
400 mm	8PQ1204-4BA01	8PQ1200-0BA03	8PQ1010-0BA04	8PQ1024-4BA01	8PQ2300-4BA25
600 mm	8PQ1206-6BA01	8PQ1200-0BA03	8PQ1010-0BA05	8PQ1026-6BA01	8PQ2300-6BA27
800 mm	8PQ1208-8BA01	8PQ1200-0BA03	8PQ1018-8BA01	8PQ1028-8BA01	8PQ2300-8BA14

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Main busbar at top

	❺ Rear panels		❻ Top plates		
					
IP55	**IP40**	**IP55**	**IP40**	**IP55**	**IPX1**
8PQ2304-4BA12	2× 8PQ2420-4BA02	2× 8PQ2420-4BA01	8PQ2304-4BA10	8PQ2304-4BA08	8PQ2304-4BA11
8PQ2306-6BA12	2× 8PQ2420-6BA02	2× 8PQ2420-6BA01	8PQ2306-6BA10	8PQ2306-6BA08	8PQ2306-6BA11
8PQ2308-8BA08	2× 8PQ2420-8BA02	2× 8PQ2420-8BA01	8PQ2308-8BA06	8PQ2308-8BA05	8PQ2308-8BA07

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Section expansion

Mounting plates



	❶ Double section doors – with double-bit lock		❶ Double section doors – for profile semicylinders		❷ Inner doors	Inner door struts
						
Width	**IP40**	**IP55**	**IP40**	**IP55**		
600 mm	–	–	–	–	8PQ2000-6BA05	2× 8PQ2080-0BA07
800 mm	–	–	–	–	8PQ2000-8BA05	2× 8PQ2080-0BA07
1000 mm (600 mm + 400 mm)	8PQ2197-1BA14	8PQ2197-1BA13	8PQ2197-1BA16	8PQ2197-1BA15	8PQ2000-1BA01	2× 8PQ2080-0BA07
1200 mm (600 mm + 600 mm)	8PQ2197-2BA11	8PQ2197-2BA10	8PQ2197-2BA13	8PQ2197-2BA12	–	–

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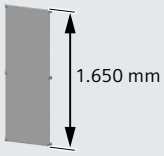
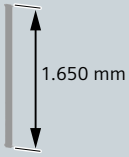
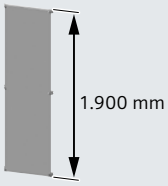
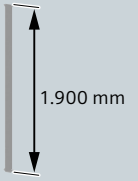
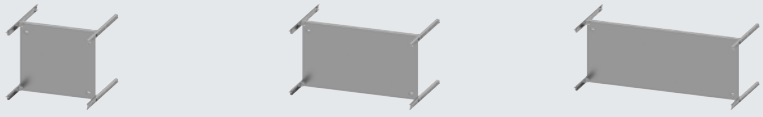
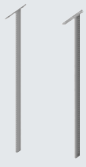
	Main busbar at top		Without main busbar	
	❸ Mounting plates	❹ Connecting panels	❸ Mounting plates	❹ Connecting panels
				
Width				
400 mm	8PQ3000-0BA33	8PQ3000-1BA10	8PQ3000-0BA32	8PQ3000-1BA08
600 mm	8PQ3000-0BA35	8PQ3000-1BA10	8PQ3000-0BA34	8PQ3000-1BA08
800 mm	8PQ3000-0BA37	8PQ3000-1BA10	8PQ3000-0BA36	8PQ3000-1BA08
1000 mm	8PQ3000-1BA06	8PQ3000-1BA10	8PQ3000-1BA04	8PQ3000-1BA08
1200 mm	8PQ3000-1BA07	8PQ3000-1BA10	8PQ3000-1BA05	8PQ3000-1BA08

Modular mounting plates



Height	Width		
	400 mm	600 mm	800 mm
150 mm	8PQ3000-2BA60	8PQ3000-2BA62	8PQ3000-2BA64
200 mm	8PQ3000-2BA17	8PQ3000-1BA56	8PQ3000-1BA58
300 mm	8PQ3000-2BA66	8PQ3000-2BA51	8PQ3000-2BA53
400 mm	8PQ3000-2BA18	8PQ3000-1BA61	8PQ3000-1BA63
550 mm	–	8PQ3000-3BA07	8PQ3000-3BA08
600 mm	8PQ3000-2BA21	8PQ3000-1BA65	8PQ3000-1BA67
800 mm	8PQ3000-2BA23	8PQ3000-1BA26	8PQ3000-1BA28

	Main busbar at top	Without main busbar
	❺ Uprights	
		
Depth		
600 mm	8PQ3000-0BA01	8PQ3000-0BA03
800 mm	8PQ3000-0BA02	8PQ3000-0BA03

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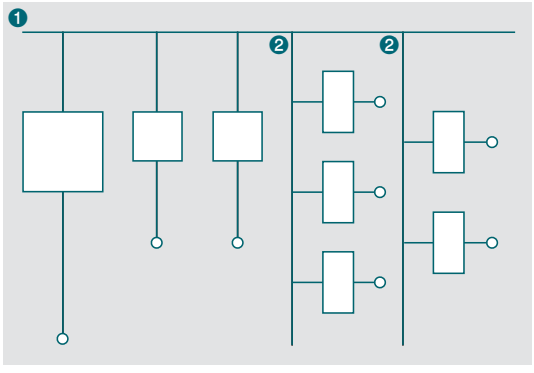
Internal separation

Quick selection guide

Form 1

Outgoing feeder panel
No internal separation

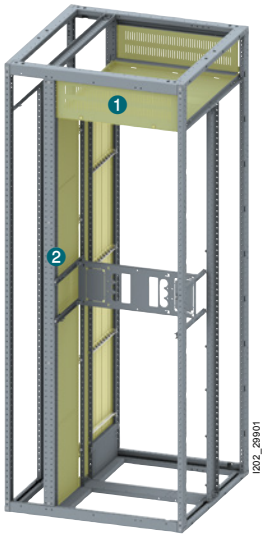


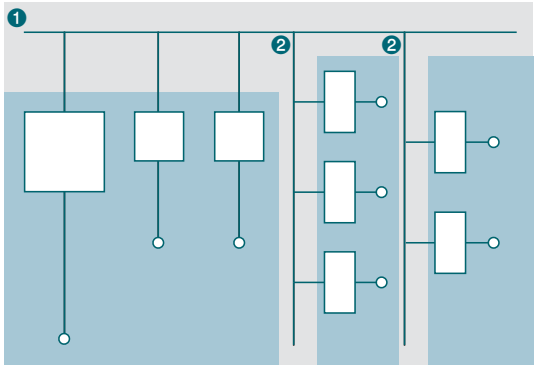


Functional unit Connection

Form 2b

Outgoing feeder panel
+ separation of main busbar ❶
+ separation of the vertical busbar ❷





Functional unit Connection

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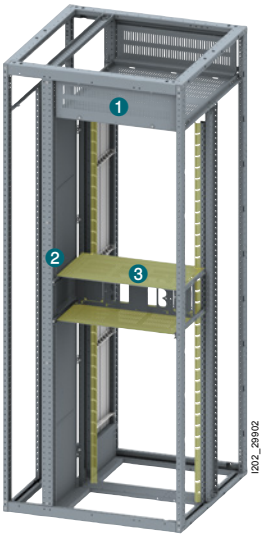
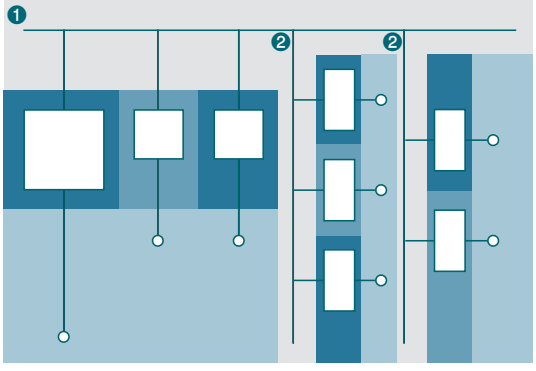
Form 3b

Outgoing feeder panel
With separation of main busbar ❶
With separation of the vertical busbar ❷
+ separation of device compartments (functional units) ❸

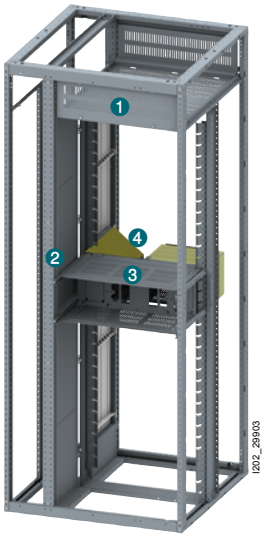


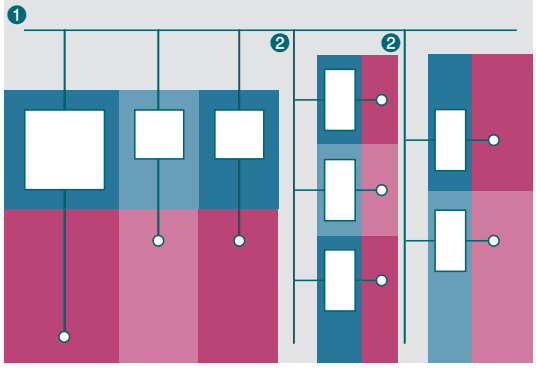


Functional unit ○ Connection

Form 4b

Outgoing feeder panel
With separation of main busbar ❶
With separation of the vertical busbar ❷
With separation of device compartments (functional units) ❸
+ separation of connections ❹





Functional unit ○ Connection

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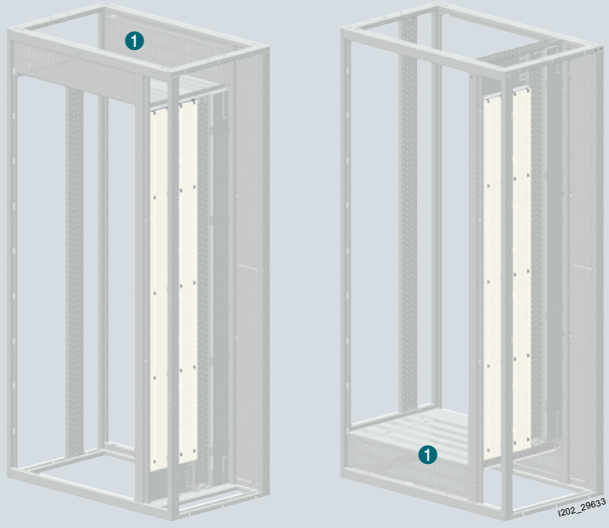
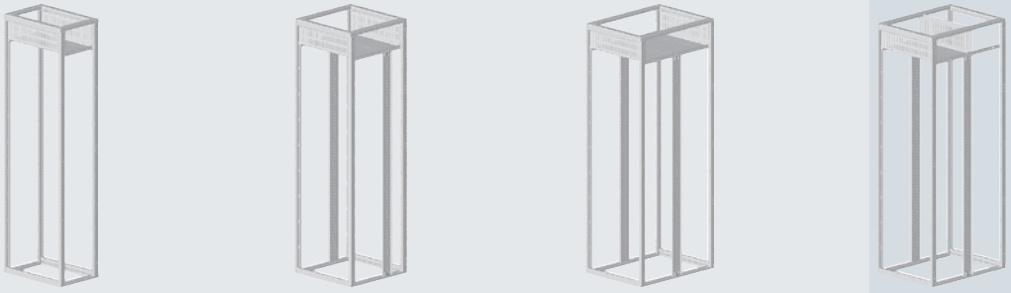
Internal separation

Main busbar, form 2b



Main busbar at top

1 Main busbars



Width	Depth			Depth
	400 mm	600 mm	800 mm	800 mm
200 mm	8PQ3000-1BA52	8PQ3000-1BA53	8PQ3000-1BA55	8PQ3000-1BA54
350 mm	8PQ3000-2BA68	8PQ3000-2BA71	8PQ3000-2BA75	8PQ3000-2BA73
400 mm	8PQ3000-0BA67	8PQ3000-0BA52	8PQ3000-0BA58	8PQ3000-0BA55
600 mm	8PQ3000-0BA68	8PQ3000-0BA53	8PQ3000-0BA60	8PQ3000-0BA56
800 mm	8PQ3000-0BA70	8PQ3000-0BA54	8PQ3000-0BA61	8PQ3000-0BA57
850 mm	8PQ3000-2BA70	8PQ3000-2BA72	8PQ3000-2BA76	8PQ3000-2BA74
1000 mm	8PQ3000-1BA13	8PQ3000-1BA14	8PQ3000-1BA20	8PQ3000-1BA17
1200 mm	8PQ3000-1BA15	8PQ3000-1BA16	8PQ3000-1BA21	8PQ3000-1BA18

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Main busbar at bottom

Main busbar at rear







Depth			Depth	
400 mm	600 mm	800 mm	800 mm	800 mm
–	–	–	–	–
8PQ3000-3BA13	8PQ3000-3BA22	8PQ3000-3BA31	8PQ3000-2BA77	–
8PQ3000-3BA14	8PQ3000-3BA23	8PQ3000-3BA32	8PQ3000-0BA78	8PQ5000-4BA24
8PQ3000-3BA15	8PQ3000-3BA24	8PQ3000-3BA33	8PQ3000-0BA80	8PQ5000-4BA25
8PQ3000-3BA16	8PQ3000-3BA25	8PQ3000-3BA34	8PQ3000-0BA81	8PQ5000-4BA26
8PQ3000-3BA17	8PQ3000-3BA26	8PQ3000-3BA35	8PQ3000-2BA78	–
8PQ3000-3BA18	8PQ3000-3BA27	8PQ3000-3BA36	8PQ3000-1BA22	8PQ5000-4BA27
8PQ3000-3BA20	8PQ3000-3BA28	8PQ3000-3BA37	8PQ3000-1BA23	–

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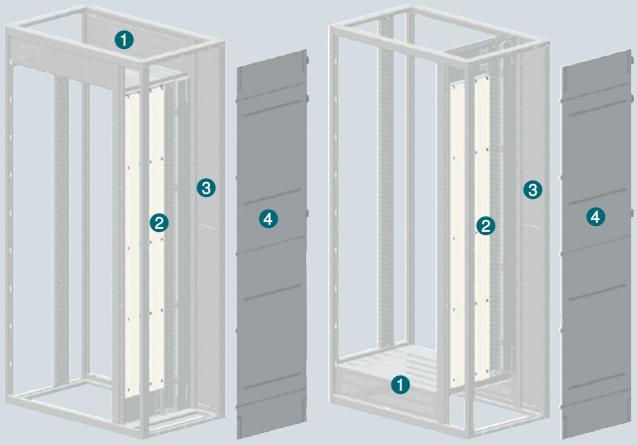
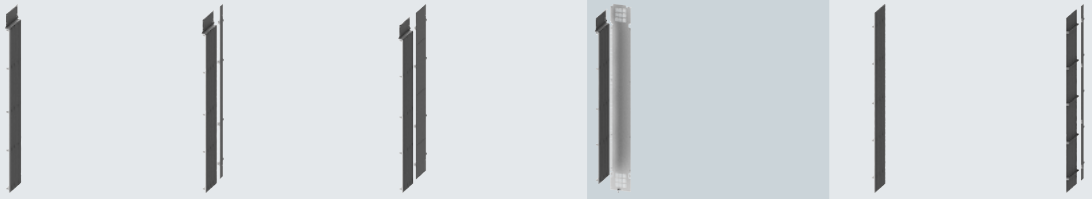
Internal separation

Vertical busbar, form 2b



	Main busbar at top				Without main busbar	
	❷ Vertical busbar					
						
Width	**Depth**			**Depth**	**Depth**	
	400 mm	**600 mm**	**800 mm**	**800 mm**	**400 mm**	**600 mm**
200 mm	8PQ4000-0BA05	8PQ4000-0BA07	8PQ4000-0BA64	8PQ4000-0BA02	8PQ4000-0BA06	8PQ4000-0BA03
400 mm	8PQ4000-0BA05	8PQ4000-0BA07	8PQ4000-0BA64	8PQ4000-0BA01	8PQ4000-0BA06	8PQ4000-0BA03

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	❸ Touch protection covers		❹ Vertical separation between sections		
	Depth		Depth		
800 mm	600 mm	800 mm	400 mm	600 mm	800 mm
8PQ4000-0BA76	8PQ3000-2BA50	8PQ3000-2BA50	8PQ3000-0BA15	8PQ3000-0BA16	2× 8PQ3000-0BA15
8PQ4000-0BA76	8PQ3000-0BA51	8PQ3000-0BA51	8PQ3000-0BA15	8PQ3000-0BA16	2× 8PQ3000-0BA15

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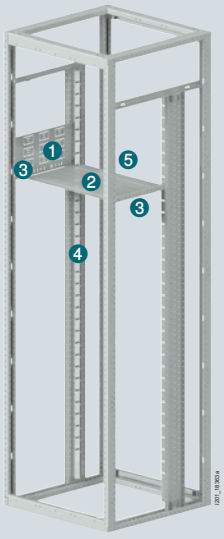
Internal separation

Modular kits, form 3b



Main busbar at top
Main busbar at bottom
Main busbar at rear
Frame without main busbar

❶ Side

Kit version support rail



Kit version crossbar



❷ Horizontal





Height	Branch current	Assembly kits	Branch current	Assembly kits	Width 400 mm	600 mm
50 mm		–		–	–	–
100 mm		8PQ5000-2BA27		–	8PQ5000-3BA44	8PQ5000-2BA61
150 mm		8PQ5000-2BA28		–	8PQ5000-3BA44	8PQ5000-2BA61
200 mm	≤250 A	8PQ5000-2BA30		–	8PQ5000-3BA44	8PQ5000-2BA61
	≥400 A	8PQ5000-2BA31		–	8PQ5000-3BA44	8PQ5000-2BA61
250 mm	≤250 A	8PQ5000-2BA32		–	8PQ5000-3BA44	8PQ5000-2BA61
	≥400 A	8PQ5000-2BA33		–	8PQ5000-3BA44	8PQ5000-2BA61
300 mm	≤250 A	8PQ5000-2BA34		–	8PQ5000-3BA44	8PQ5000-2BA61
	≥400 A	8PQ5000-2BA35		–	8PQ5000-3BA44	8PQ5000-2BA61
350 mm		8PQ5000-2BA36		–	8PQ5000-3BA44	8PQ5000-2BA61
400 mm		8PQ5000-2BA37	≥800 A	8PQ5000-3BA50	8PQ5000-3BA44	8PQ5000-2BA61
450 mm		8PQ5000-2BA38	≥800 A	8PQ5000-2BA65	8PQ5000-3BA44	8PQ5000-2BA61
500 mm		8PQ5000-2BA40	≥800 A	8PQ5000-2BA66	8PQ5000-3BA44	8PQ5000-2BA61
550 mm		8PQ5000-2BA41		–	8PQ5000-3BA44	8PQ5000-2BA61
600 mm		8PQ5000-2BA42	≥800 A	8PQ5000-2BA48	8PQ5000-3BA44	8PQ5000-2BA61
650 mm		8PQ5000-2BA43		–	8PQ5000-3BA44	8PQ5000-2BA61
700 mm		8PQ5000-2BA44	≥800 A	8PQ5000-2BA50	8PQ5000-3BA44	8PQ5000-2BA61
800 mm		8PQ5000-2BA45		–	8PQ5000-3BA44	8PQ5000-2BA61

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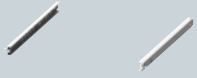
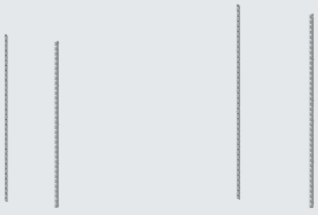
❸ Support rails		❹ Plug-in rails		❺ Rear	
					
Width 800 mm		**Height 1600 mm**	**1800 mm**	**Width 600 mm**	**800 mm**
–	–	–	–	8PQ5000-2BA51	8PQ5000-2BA67
8PQ5000-2BA62	8PQ5000-2BA63	8PQ3000-0BA82	8PQ3000-0BA83	8PQ5000-2BA52	8PQ5000-2BA68
8PQ5000-2BA62	8PQ5000-2BA63	8PQ3000-0BA82	8PQ3000-0BA83	8PQ5000-4BA40	–
8PQ5000-2BA62	8PQ5000-2BA63	8PQ3000-0BA82	8PQ3000-0BA83	8PQ5000-4BA41	8PQ5000-4BA48
8PQ5000-2BA62	8PQ5000-2BA63	8PQ3000-0BA82	8PQ3000-0BA83	8PQ5000-4BA41	8PQ5000-4BA48
8PQ5000-2BA62	8PQ5000-2BA63	8PQ3000-0BA82	8PQ3000-0BA83	8PQ5000-4BA42	8PQ5000-4BA50
8PQ5000-2BA62	8PQ5000-2BA63	8PQ3000-0BA82	8PQ3000-0BA83	8PQ5000-4BA42	8PQ5000-4BA50
8PQ5000-2BA62	8PQ5000-2BA63	8PQ3000-0BA82	8PQ3000-0BA83	8PQ5000-4BA43	–
8PQ5000-2BA62	8PQ5000-2BA63	8PQ3000-0BA82	8PQ3000-0BA83	8PQ5000-4BA43	–
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8PQ5000-2BA62	8PQ5000-2BA63	8PQ3000-0BA82	8PQ3000-0BA83	8PQ5000-4BA46	8PQ5000-4BA53
8PQ5000-2BA62	8PQ5000-2BA63	8PQ3000-0BA82	8PQ3000-0BA83	–	–
8PQ5000-2BA62	8PQ5000-2BA63	8PQ3000-0BA82	8PQ3000-0BA83	8PQ5000-4BA47	–
8PQ5000-2BA62	8PQ5000-2BA63	8PQ3000-0BA82	8PQ3000-0BA83	–	–
8PQ5000-2BA62	8PQ5000-2BA63	8PQ3000-0BA82	8PQ3000-0BA83	–	–
8PQ5000-2BA62	8PQ5000-2BA63	8PQ3000-0BA82	8PQ3000-0BA83	–	–
8PQ5000-2BA62	8PQ5000-2BA63	8PQ3000-0BA82	8PQ3000-0BA83	–	–

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Internal separation

Accessories

Connecting terminals

Rated current	Busbar	Scope of supply	Article No.
–	–	4 units	8PQ5000-0BA05
250 A	2× 25 × 5 mm	2 units	8PQ5000-0BA72
400 A	30 × 10 mm	4 units	8PQ5000-0BA73
630 A	40 × 10 mm	4 units	8PQ5000-0BA74

Protective bellows

Version	Scope of supply	Article No.
For connecting terminal	4 units	8PQ9400-0BA71

Self-tapping screws – frame

Version	Version	Scope of supply	Article No.
Cylinder-head screws	M6 × 10 mm	100 units	8PQ9500-0BA34
	M6 × 16 mm	100 units	8PQ9500-0BA32
	M6 × 20 mm	100 units	8PQ9500-0BA31
Covering caps	M6, RAL 7035	100 units	8PQ9400-0BA14
Countersunk screws	M6 × 12 mm	100 units	8PQ9500-1BA07

Standardized parts - electrical connections

Version	Version	Scope of supply	Article No.
Hexagonal nuts	For M10	50 units	8PQ9500-0BA05
Spring washers	For M10	50 units	8PQ9500-0BA60
Plain washers	For M10	50 units	8PQ9500-0BA67
Lock washers	For M10	50 units	8PQ9500-0BA50

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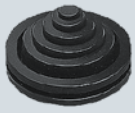
Transport aids



Version	Width	Scope of supply	Article No.
Lifting eyebolts	–	4 units	8PQ9400-0BA11
Lifting brackets	800 mm	2 units	8PQ3000-1BA01
	850 mm	2 units	8PQ3000-2BA38
	1000 mm	2 units	8PQ3000-1BA02
	1200 mm	2 units	8PQ3000-1BA03

Cable entries





Version	Scope of supply	Article No.
Cables with diam. up to 20 mm Ø Installation = 25.5 mm	20 units	8PQ9400-0BA16
Cables with diam. 14 ... 38 mm Ø Installation = 46 mm	6 units	8PQ9400-0BA33

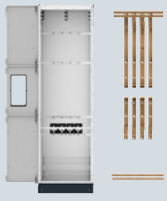
Other





Length	Scope of supply	Article No.
200 mm Torx bits	2 units	8PQ9400-0BA10
Universal mounting brackets	10 units	8PQ9400-0BA01

Extended delivery options



- After prior consultation with ALPHA-support.ic@siemens.com

Version	Description	Article No.
Pre-assembled solutions	Based on SIMARIS configuration • In various expansion stages • Mechanically with or without copper insert	8PQ9998-0BA20-Z
Copper for system sections	Drawings from SIMARIS	8PQ9998-0BA30-Z

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ALPHA UNIVERSAL system overview

Distribution boards, assembly kits and accessories

ALPHA UNIVERSAL 800



ALPHA UNIVERSAL 630



Unequipped distribution boards



ALPHA 800

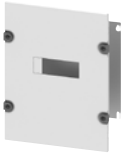


ALPHA 630

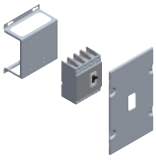


ALPHA 125

Assembly kits



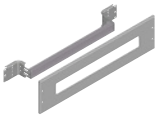
For molded case circuit breakers



For switch disconnectors



For fuse switch disconnectors



For modular installation devices



For front cover with cutout

Note:
You will find a detailed range of accessories with the basic units and in the Accessories section.

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ALPHA UNIVERSAL 125



Busbars



Cu busbars



Busbar supports

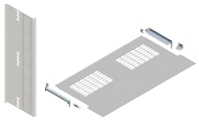
Accessories



Bases



Crossbars



Partitions



Front covers



Locking systems

Note:
You will find a detailed range of accessories with the basic units and in the Accessories section.

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ALPHA 800 UNIVERSAL floor-mounted distribution boards

Rated current 800 A

					Unequipped distribution boards
				Degree of protection	IP30/IP55
					
Height		**Depth**	**Width**		**Safety class I**
Outside	**Inside**	**Outside**	**Outside**	**Inside**	
1850 mm	1800 mm	400 mm	350 mm	300 mm	8GK2420-6KK14
			650 mm	600 mm	8GK2420-6KK24
			950 mm	900 mm	8GK2420-6KK34
2050 mm	2000 mm	400 mm	350 mm	300 mm	8GK2420-7KK14
			650 mm	600 mm	8GK2420-7KK24
			950 mm	900 mm	8GK2420-7KK34

Accessories

Sheet-steel doors

	Versions	Width	Cubicle height	Cubicle width	Unequipped distribution boards Article No.
	Standard	–	1800 mm	300 mm	8GK9515-8KK11
				600 mm	8GK9515-8KK21
				900 mm	8GK9515-8KK31
			2000 mm	300 mm	8GK9515-8KK12
				600 mm	8GK9515-8KK22
				900 mm	8GK9515-8KK32
	For cable compartment	250 mm	1800 mm	900 mm	8GK9515-8KK41
			2000 mm	900 mm	8GK9515-8KK42

Transparent doors

	Versions	Cubicle height	Cubicle width	Article No.
	Standard	1800 mm	300 mm	8GK9505-8KK12
			600 mm	8GK9505-8KK21
			900 mm	8GK9505-8KK31
		2000 mm	300 mm	8GK9505-8KK10
			600 mm	8GK9505-8KK22
			900 mm	8GK9505-8KK32
	Giugiaro design	1800 mm	600 mm	8GK9507-8KK21
			900 mm	8GK9507-8KK31
		2000 mm	600 mm	8GK9507-8KK22
			900 mm	8GK9507-8KK32

Double doors

	Versions	Width	Cubicle height	Cubicle width	Article No.
	Made of sheet steel	600 + 250 mm	1800 mm	900 mm	8GK9515-8KK21 + 8GK9515-8KK41
			2000 mm	900 mm	8GK9515-8KK22 + 8GK9515-8KK42
	Transparent door + sheet-steel door	600 + 250 mm	1800 mm	900 mm	8GK9505-8KK21 + 8GK9515-8KK41
			2000 mm	900 mm	8GK9505-8KK22 + 8GK9515-8KK42
	Transparent door in Giugiaro design + sheet-steel door	600 + 250 mm	1800 mm	900 mm	8GK9507-8KK21 + 8GK9515-8KK41
			2000 mm	900 mm	8GK9507-8KK22 + 8GK9515-8KK42

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Accessories

Vertical profile bars for compartment/busbars



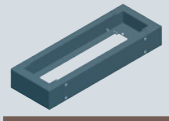
	Cubicle height	Cubicle width	Unequipped distribution boards Article No.
	1800 mm	300/600/900 mm	8GK9200-8KK00
	2000 mm	300/600/900 mm	8GK9200-8KK01

Front covers for cabling compartment



Height	Width	Cubicle height	Cubicle width	Article No.
800 + 1000 mm	250/300 mm	1800 mm	300 mm	8GK9607-5KK10 + 8GK9607-7KK10
			900 mm	8GK9606-5KK10 + 8GK9606-7KK10
1000 + 1000 mm	250/300 mm	2000 mm	300 mm	8GK9607-7KK10 + 8GK9607-7KK10
			900 mm	8GK9606-7KK10 + 8GK9606-7KK10

Bases



Color	Height	Cubicle height	Cubicle width	Article No.
Blue-green	100 mm	1800/2000 mm	300 mm	8GK9906-0KK15
			600 mm	8GK9906-0KK25
			900 mm	8GK9906-0KK35

Side panels



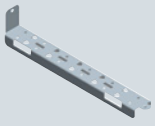
Color	Cubicle height	Cubicle width	Article No.
RAL 7035 (pair)	1800 mm	300/600/900 mm	8GK9200-8KK04
	2000 mm	300/600/900 mm	8GK9200-8KK05
Blue-green	1800 mm	300/600/900 mm	8GK9200-8KK07
	2000 mm	300/600/900 mm	8GK9200-8KK08

Supports



Versions	Height	Article No.
Mounting stays (pair)	1600 mm	8GK6850-0KK02
	1800 mm	8GK6850-0KK03
	2000 mm	8GK6850-0KK04
Rear universal supports	1800 mm	8GK6850-0KK05
	2000 mm	8GK6850-0KK06

Crossbars





Versions	Article No.
Upper crossbar	8GK6850-0KK00
Lateral crossbar	8GK6850-0KK01
Adapter for installation of assembly kits in the cabling compartment, width 250 mm (2 units)	8GK9920-0KK01

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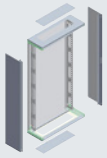
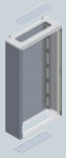
ALPHA 630 UNIVERSAL wall-mounted distribution boards

Rated current 630 A

					Flat pack	Unequipped distribution boards	Distribution boards with built-in distribution board panels
				Degree of protection	IP43	IP30 / IP55	IP55
							
Height		Depth	Width		Safety class I	Safety class I	Safety class I
Outside	Inside	Outside	Outside	Inside			
450 mm	400 mm	250 mm	650 mm	600 mm	8GK2100-0KS23	–	–
650 mm	600 mm	250 mm	650 mm	600 mm	8GK2100-1KS23	8GK2124-1KK23	–
850 mm	800 mm	250 mm	650 mm	600 mm	8GK2100-2KS23	8GK2124-2KK23	8GK9988-0KL00
1050 mm	1000 mm	250 mm	650 mm	600 mm	8GK2100-3KS23	8GK2124-3KK23	8GK9988-0KL01
			950 mm	900 mm	8GK2100-3KL23	8GK2124-3KK33	–
1250 mm	1200 mm	250 mm	650 mm	600 mm	8GK2100-4KS23	8GK2124-4KK23	8GK9988-0KL02
			950 mm	900 mm	8GK2100-4KL23	8GK2124-4KK33	–

Accessories

				Flat pack IP43	Unequipped distri-bution boards IP55
Sheet-steel doors					
	Versions	**Cubicle height**	**Cubicle width**	**Article No.**	**Article No.**
	Standard	400 mm	600 mm	8GK9515-3KK20	–
		600 mm	600 mm	8GK9515-4KK20	8GK9515-4KK20
		800 mm	600 mm	8GK9515-5KK20	8GK9515-5KK23
		1000 mm	600 mm	8GK9515-6KK20	8GK9515-6KK23
			900 mm	8GK9515-6KK30	8GK9515-6KK33
		1200 mm	600 mm	8GK9515-7KK20	8GK9515-7KK23
			900 mm	8GK9515-7KK30	8GK9515-7KK33
	For cable compartment	1000 mm	900 mm	8GK9515-6KK40	8GK9515-6KK43
		1200 mm	900 mm	8GK9515-7KK40	8GK9515-7KK33
			600 + 300 mm	–	8GK9515-7KK43
Transparent doors					
	Versions	**Cubicle height**	**Cubicle width**	**Article No.**	**Article No.**
	Standard	400 mm	600 mm	8GK9505-3KK20	–
		600 mm	600 mm	8GK9505-4KK20	8GK9505-4KK20
		800 mm	600 mm	8GK9505-5KK20	8GK9505-5KK23
		1000 mm	600 mm	8GK9505-6KK20	8GK9505-6KK23
			900 mm	8GK9505-6KK30	8GK9505-6KK33
		1200 mm	600 mm	8GK9505-7KK20	8GK9505-7KK23
			900 mm	8GK9505-7KK30	8GK9505-7KK33
	Giugiaro design	400 mm	600 mm	8GK9507-2KK23	–
		600 mm	600 mm	8GK9507-4KK23	8GK9507-4KK23
		800 mm	600 mm	8GK9507-5KK23	8GK9507-5KK23
		1000 mm	600 mm	8GK9507-7KK23	8GK9507-7KK23
			900 mm	8GK9507-7KK33	8GK9507-7KK33
		1200 mm	600 mm	8GK9507-8KK23	8GK9507-8KK23
			900 mm	8GK9507-8KK33	8GK9507-8KK33

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Accessories

Double doors

	Versions	Width	Cubicle height	Cubicle width	Flat pack IP43 Article No.	Unequipped distribution boards IP55 Article No.
	Made of sheet steel	600 + 250 mm [1]	1000 mm	900 mm	8GK9515-6KK20 + 8GK9515-6KK40	8GK9515-6KK23 + 8GK9515-6KK43
			1200 mm	900 mm	8GK9515-7KK20 + 8GK9515-7KK40	8GK9515-7KK23 + 8GK9515-7KK43
	Transparent door + sheet-steel door	600 + 250 mm	1000 mm	900 mm	8GK9505-6KK20 + 8GK9515-6KK40	8GK9505-6KK23 + 8GK9515-6KK43
			1200 mm	900 mm	8GK9505-7KK20 + 8GK9515-7KK40	8GK9505-7KK23 + 8GK9515-7KK43
	Transparent door in Giugiaro design + sheet-steel door	600 + 250 mm [1]	1600 mm	900 mm	8GK9507-7KK23 + 8GK9515-6KK40	8GK9507-7KK23 + 8GK9515-6KK43
			1800 mm	900 mm	8GK9507-8KK23 + 8GK9515-7KK40	8GK9507-8KK23 + 8GK9515-7KK43

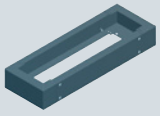
Vertical profile bars for cabling compartment

	Cubicle height	Cubicle width	Article No.	Article No.
	1000 mm	900 mm	8GK9125-7KK01	8GK9125-7KK01
	1200 mm	900 mm	8GK9127-8KK01	8GK9127-8KK01

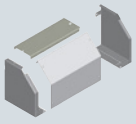
Front covers for cabling compartment

	Height	Width	Cubicle height	Cubicle width	Article No.	Article No.
	1000 mm	250 / 300 mm	1000 mm	900 mm	8GK9606-7KK10	8GK9606-7KK10
	600 + 600 mm	250 / 300 mm	1200 mm	900 mm	8GK9606-4KK10 + 8GK9606-4KK10	8GK9606-4KK10 + 8GK9606-4KK10

Bases

	Color	Height	Cubicle height	Cubicle width	Article No.	Article No.
	Blue-green	100 mm	600 / 1200 mm	600 mm	8GK9906-0KK23	8GK9906-0KK23
			1000 / 1200 mm	900 mm	8GK9906-0KK33	8GK9906-0KK33

Covers for cable entry and cable duct

	Cubicle height	Cubicle width	Article No.	Article No.
	600 / 1200 mm	600 mm	8GK9920-0KK41	8GK9920-0KK41
	1000 / 1200 mm	900 mm	8GK9920-0KK42	8GK9920-0KK42

Side panels

	Color	Cubicle height	Cubicle width	Article No.	Article No.
	Blue-green	600 mm	600 mm	–	8GK9122-4KK01
		800 mm	600 mm	–	8GK9122-5KK01
		1000 mm	600 / 900 mm	–	8GK9122-6KK01
		1200 mm	600 / 900 mm	–	8GK9122-7KK01

[1] For distribution boards of width 900 with double door and vertical profile bar

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ALPHA 630 UNIVERSAL floor-mounted distribution boards

Rated current 630 A

					Flat pack	Unequipped distribution boards	Control cabinet with built-in assembly kits for modular installation devices	With assembly kit for 3VL molded case circuit breakers
				Degree of protection	IP43	IP30 / IP55	IP55	IP55
								
Height		Depth	Width		Safety class I	Safety class I	Safety class I	Safety class I
Outside	Inside	Outside	Outside	Inside				
1650 mm	1600 mm	250 mm	350 mm	300 mm	8GK2300-5KL13	8GK2325-5KK13	–	–
			650 mm	600 mm	8GK2300-5KL23	8GK2325-5KK23	–	–
			950 mm	900 mm	8GK2300-5KL43	8GK2325-5KK43	–	–
1850 mm	1800 mm	250 mm	350 mm	300 mm	8GK2300-6KL13	8GK2325-6KK13	–	–
			650 mm	600 mm	8GK2300-6KL23	8GK2325-6KK23	8GK2348-7KL00	8GK2348-7KL01
			950 mm	900 mm	8GK2300-6KL43	8GK2325-6KK43	–	–
2050 mm	2000 mm	250 mm	350 mm	300 mm	8GK2300-7KL13	8GK2325-7KK13	–	–
			650 mm	600 mm	8GK2300-7KL23	8GK2325-7KK23	–	–
			950 mm	900 mm	8GK2300-7KL43	8GK2325-7KK43	–	–

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ALPHA 630 UNIVERSAL floor-mounted distribution boards

Rated current 630 A

Accessories

Sheet-steel doors

Versions	Width	Cubicle height	Cubicle width	Flat pack Article No.	Unequipped distribution boards Article No.
Standard	–	1600 mm	300 mm	8GK9515-8KK10	8GK9515-8KK10
			600 mm	8GK9515-8KK20	8GK9515-8KK20
			900 mm	8GK9515-8KK30	8GK9515-8KK30
		1800 mm	300 mm	8GK9515-8KK11	8GK9515-8KK11
			600 mm	8GK9515-8KK21	8GK9515-8KK21
			900 mm	8GK9515-8KK31	8GK9515-8KK31
		2000 mm	300 mm	8GK9515-8KK12	8GK9515-8KK12
			600 mm	8GK9515-8KK22	8GK9515-8KK22
			900 mm	8GK9515-8KK32	8GK9515-8KK32
For cable compartment	250 mm	1600 mm	900 mm	8GK9515-8KK40	8GK9515-8KK40
		1800 mm	900 mm	8GK9515-8KK41	8GK9515-8KK41
		2000 mm	900 mm	8GK9515-8KK42	8GK9515-8KK42

Transparent doors

Versions	Cubicle height	Cubicle width	Article No.	Article No.
Standard	1600 mm	300 mm	8GK9505-8KK11	8GK9505-8KK11
		600 mm	8GK9505-8KK20	8GK9505-8KK20
		900 mm	8GK9505-8KK30	8GK9505-8KK30
	1800 mm	300 mm	8GK9505-8KK12	8GK9505-8KK12
		600 mm	8GK9505-8KK21	8GK9505-8KK21
		900 mm	8GK9505-8KK31	8GK9505-8KK31
	2000 mm	300 mm	8GK9505-8KK10	8GK9505-8KK10
		600 mm	8GK9505-8KK22	8GK9505-8KK22
		900 mm	8GK9505-8KK32	8GK9505-8KK32
Giugiaro design	1600 mm	600 mm	8GK9507-8KK20	8GK9507-8KK20
		900 mm	8GK9507-8KK30	8GK9507-8KK30
	1800 mm	600 mm	8GK9507-8KK21	8GK9507-8KK21
		900 mm	8GK9507-8KK31	8GK9507-8KK31
	2000 mm	600 mm	8GK9507-8KK22	8GK9507-8KK22
		900 mm	8GK9507-8KK32	8GK9507-8KK32

Double doors

Versions	Width	Cubicle height	Cubicle width	Article No.	Article No.
Made of sheet steel	600 + 250 mm	1600 mm	900 mm	8GK9515-8KK20 + 8GK9515-8KK40	8GK9515-8KK20 + 8GK9515-8KK40
		1800 mm	900 mm	8GK9515-8KK21 + 8GK9515-8KK41	8GK9515-8KK21 + 8GK9515-8KK41
		2000 mm	900 mm	8GK9515-8KK22 + 8GK9515-8KK42	8GK9515-8KK22 + 8GK9515-8KK42
Transparent door + sheet-steel door	600 + 250 mm	1600 mm	900 mm	8GK9505-8KK20 + 8GK9515-8KK40	8GK9505-8KK20 + 8GK9515-8KK40
		1800 mm	900 mm	8GK9505-8KK21 + 8GK9515-8KK41	8GK9505-8KK21 + 8GK9515-8KK41
		2000 mm	900 mm	8GK9505-8KK22 + 8GK9515-8KK42	8GK9505-8KK22 + 8GK9515-8KK42
Transparent door in Giugiaro design + sheet-steel door	600 + 250 mm	1600 mm	900 mm	8GK9507-8KK20 + 8GK9515-8KK40	8GK9507-8KK20 + 8GK9515-8KK40
		1800 mm	900 mm	8GK9507-8KK21 + 8GK9515-8KK41	8GK9507-8KK21 + 8GK9515-8KK41
		2000 mm	900 mm	8GK9507-8KK22 + 8GK9515-8KK42	8GK9507-8KK22 + 8GK9515-8KK42

Vertical profile bars for cabling compartment

Cubicle height	Cubicle width	Article No.	Article No.
1600 mm	900 mm	8GK9125-8KK11	8GK9125-8KK11
1800 mm	900 mm	8GK9125-8KK12	8GK9125-8KK12
2000 mm	900 mm	8GK9125-8KK13	8GK9125-8KK13

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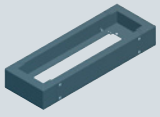
Accessories

Front covers for cabling compartment



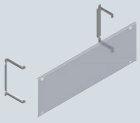
Height	Width	Cubicle height	Cubicle width	Flat pack Article No.	Unequipped distribution boards Article No.
800 + 800 mm	250/300 mm	1600 mm	300 mm	8GK9607-5KK10 + 8GK9607-5KK10	8GK9607-5KK10 + 8GK9607-5KK10
			900 mm	8GK9606-5KK10 + 8GK9606-5KK10	8GK9606-5KK10 + 8GK9606-5KK10
800 + 1000 mm	250/300 mm	1800 mm	300 mm	8GK9607-5KK10 + 8GK9607-7KK10	8GK9607-5KK10 + 8GK9607-7KK10
			900 mm	8GK9606-5KK10 + 8GK9606-7KK10	8GK9606-5KK10 + 8GK9606-7KK10
1000 + 1000 mm	250/300 mm	2000 mm	300 mm	8GK9607-7KK10 + 8GK9607-7KK10	8GK9607-7KK10 + 8GK9607-7KK10
			900 mm	8GK9606-7KK10 + 8GK9606-7KK10	8GK9606-7KK10 + 8GK9606-7KK10

Bases



Color	Height	Cubicle height	Cubicle width	Flat pack Article No.	Unequipped distribution boards Article No.
Blue-green	100 mm	1600/2000 mm	300 mm	8GK9906-0KK13	8GK9906-0KK13
		1600/2000 mm	600 mm	8GK9906-0KK23	8GK9906-0KK23
		1600/2000 mm	900 mm	8GK9906-0KK33	8GK9906-0KK33

Covers for cable entry and cable duct



Cubicle height	Cubicle width	Flat pack Article No.	Unequipped distribution boards Article No.
1600/2000 mm	300 mm	8GK9920-0KK40	8GK9920-0KK40
1600/2000 mm	600 mm	8GK9920-0KK41	8GK9920-0KK41
1600/2000 mm	900 mm	8GK9920-0KK42	8GK9920-0KK42

Side panels



Color	Cubicle height	Cubicle width	Flat pack Article No.	Unequipped distribution boards Article No.
RAL 7035 (pair)	1600 mm	300/600/900 mm	8GK9120-8KK00	8GK9122-8KK03
	1800 mm	300/600/900 mm	8GK9120-8KK01	8GK9122-8KK04
	2000 mm	300/600/900 mm	8GK9120-8KK02	8GK9122-8KK05

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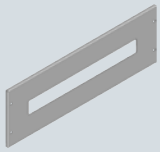
ALPHA UNIVERSAL 125 distribution boards

Rated current 125 A

						Surface-mounting distribution boards		Flush-mounting distribution boards	
						With sheet-steel door	With transparent door	With sheet-steel door	With transparent door
					Degree of protection	IP43	IP43	IP31D	IP31D
									
Height		Depth	Width		Tiers	Safety class I	Safety class I	Safety class I	Safety class I
Outside	Inside	Outside	Outside	Inside	(MW = 18 mm)				
450 mm	400 mm	140 mm	660 mm	600 mm	48 (2× 24)	8GK2042-0KL21	8GK2042-0KM21	–	–
650 mm	600 mm	140 mm	660 mm	600 mm	72 (3× 24)	8GK2042-1KL21	8GK2042-1KM21	–	–
800 mm	850 mm	140 mm	660 mm	600 mm	96 (4× 24)	8GK2042-2KL21	8GK2042-2KM21	–	–
1050 mm	1000 mm	140 mm	660 mm	600 mm	120 (5× 24)	8GK2042-3KL21	8GK2042-3KM21	–	–
1250 mm	1200 mm	140 mm	660 mm	600 mm	144 (6× 24)	8GK2042-4KL21	8GK2042-4KM21	–	–
508 mm	400 mm	140 mm	718 mm	600 mm	48 (2× 24)	–	–	8GK2043-0KL21	8GK2043-0KM21
708 mm	600 mm	140 mm	718 mm	600 mm	72 (3× 24)	–	–	8GK2043-1KL21	8GK2043-1KM21
908 mm	800 mm	140 mm	718 mm	600 mm	96 (4× 24)	–	–	8GK2043-2KL21	8GK2043-2KM21
1108 mm	1000 mm	140 mm	718 mm	600 mm	120 (5× 24)	–	–	8GK2043-3KL21	8GK2043-3KM21
1308 mm	1200 mm	140 mm	718 mm	600 mm	144 (6× 24)	–	–	8GK2043-4KL21	8GK2043-4KM21

Accessories

Front covers



- With quick-lock screws and integrated grounding connection

Version	Height	Width	Article No.
Closed	50 mm	600 mm	8GK9620-1KK20
	100 mm	600 mm	8GK9621-1KK20
	150 mm	600 mm	8GK9622-1KK20
	200 mm	600 mm	8GK9623-1KK20
	400 mm	600 mm	8GK9622-2KK20
	600 mm	600 mm	8GK9622-4KK20
	800 mm	600 mm	8GK9622-5KK20
For modular installation devices	150 mm	600 mm	8GK9608-1KK22
	200 mm	600 mm	8GK9608-1KK20
	300 mm	600 mm	8GK9608-2KK22
	400 mm	600 mm	8GK9608-2KK20
	450 mm	600 mm	8GK9608-3KK22
	600 mm	600 mm	8GK9608-4KK20

Standard mounting rails for modular installation devices



Width	Article No.
600 mm	8GK9920-0KK11

Holders for cable duct



Width	Article No.
600 mm	8GK9920-0KK20

Grounding bars, PE



Width	Article No.
600 mm (20 × 5 mm²)	8GK9920-0KK10

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Hinges for covers



Version	Article No.
For hinged covers	8GK9120-0KK11

Hinges for covers



Version	Scope of supply	Article No.
Hinge, incl. fixing accessories	1 set	8PQ2000-0BA08

Rotary handles



Version	Color	Article No.
Plastic	Black	8GK9560-0KK04
Lockable	Black	8GK9560-0KK13

Profile semicylinders E012



Version	Article No.
Insert and key 8GK9560	8GK9560-0KK07

Rotary handles for profile semicylinders



Version	Article No.
For 40 mm profile semicylinders	8GK9560-0KK06

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Assembly kits

For 3VA molded case circuit breakers

						Horizontal	
							
Switches				Distribution board		With RCD module	Without RCD module
Type	Rated current	No. of	Rotary operating mechanism	Height outside	Width outside	Infeed side	
3VA10.. and 3VA11..	100 A / 160 A	1	–	200 mm	600 mm	8GK6735-2KK23	8GK6730-2KK23
					900 mm	8GK6735-2KK33	8GK6730-2KK33
			■	200 mm	600 mm	–	8GK6733-2KK23
					900 mm	–	8GK6733-2KK33
3VA12..	250 A	1	–	200 mm	600 mm	8GK6736-2KK23	8GK6721-2KK23
					900 mm	8GK6736-2KK33	8GK6721-2KK33
			■	200 mm	600 mm	–	8GK6734-2KK23
					900 mm	–	8GK6734-2KK33
3VA20.. and 3VA22..	100 A / 250 A	1	–	200 mm	600 mm	8GK6725-2KK23	8GK6720-2KK23
					900 mm	8GK6725-2KK33	8GK6720-2KK33
			■	200 mm	600 mm	–	8GK6723-2KK23
					900 mm	–	8GK6723-2KK33
3VA23.. and 3VA24..	400 A / 630 A	1	–	400 mm	600 mm	–	8GK6740-4KK23
					900 mm	8GK6745-4KK23	8GK6740-4KK33

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Vertical



Switches				Distribution board		Mit RCD-Modul		Without RCD module
Type	Rated current	No. of	Motorized operating mechanism	Height outside	Width outside	Infeed side	At side	
3VA10.. and 3VA11..	100 A/ 160 A	1	–	200 mm	300 mm	–	–	8GK6731-2KK13
				400 mm	250 mm	–	–	8GK6730-4KK43
					300 mm	–	8GK6731-6KK13	8GK6730-4KK13
				600 mm	250 mm	8GK6735-4KK43	–	–
					300 mm	8GK6735-6KK13	–	–
			■	400 mm	300 mm	–	8GK6738-6KK13	8GK6734-4KK13
				600 mm	300 mm	8GK6736-6KK13	–	–
		3	–	200 mm	600 mm	–	–	8GK6731-2KK23
				400 mm	600 mm	–	8GK6731-6KK23	8GK6730-4KK23
					900 mm	–	–	8GK6731-6KK33
				600 mm	600 mm	8GK6735-6KK23	–	–
			■	200 mm	600 mm	–	–	8GK6734-4KK23
				400 mm	600 mm	–	8GK6737-6KK23	–
					900 mm	–	8GK6737-6KK33	–
				600 mm	600 mm	8GK6736-6KK23	–	–
		5	–	200 mm	900 mm	–	–	8GK6731-2KK33
				400 mm	900 mm	–	–	8GK6730-4KK33
			■	200 mm	900 mm	–	–	8GK6734-4KK33
				600 mm	900 mm	8GK6736-6KK33	–	–
3VA12..	250 A	1	–	400 mm	300 mm	–	–	8GK6721-4KK13
				600 mm	250 mm	8GK6732-6KK13	–	8GK6730-6KK13
					300 mm	–	8GK6722-6KK13	8GK6721-6KK13
		3	–	400 mm	600 mm	–	–	8GK6721-4KK23
				600 mm	600 mm	–	8GK6724-6KK23	8GK6721-6KK23
			■	400 mm	600 mm	–	–	8GK6722-6KK23
				600 mm	600 mm	–	8GK6723-6KK23	–
		5	–	400 mm	900 mm	–	–	8GK6721-4KK33
				600 mm	900 mm	–	8GK6724-6KK33	8GK6721-6KK33
			■	400 mm	900 mm	–	–	8GK6722-6KK33
				600 mm	900 mm	–	8GK6723-6KK33	–
3VA20.. and 3VA22..	100 A/ 250 A	1	–	400 mm	300 mm	–	–	8GK6720-4KK13
				600 mm	300 mm	8GK6725-6KK13	–	–
		3	–	400 mm	600 mm	–	–	8GK6720-4KK23
				600 mm	600 mm	8GK6725-6KK23	–	–
			■	400 mm	600 mm	–	–	8GK6724-4KK23
		5	–	400 mm	900 mm	–	–	8GK6720-4KK33
				600 mm	900 mm	8GK6725-6KK33	–	–
			■	400 mm	900 mm	–	–	8GK6724-4KK33
3VA23.. and 3VA24..	400 A/ 630 A	1	–	600 mm	300 mm	–	–	8GK6740-6KK13
		2	–	600 mm	600 mm	8GK6745-6KK23	–	8GK6740-6KK23
		3	–	600 mm	900 mm	8GK6745-6KK33	–	8GK6740-6KK33

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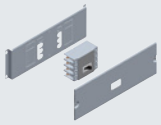
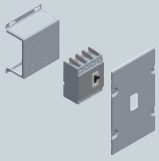
Assembly kits

For 3VL molded case circuit breakers

Horizontal	Vertical
	

Switches		Distribution board				
Type	Version	No. of	Height outside	Width outside		
VL160X – VL160 – VL250	Max. 250 A	1	200 mm	300 mm [2]	8GK6711-2KK13	–
			400 mm	250 mm [1]	–	8GK6710-4KK13
				300 mm [2]	–	8GK6711-4KK13
		3	200 mm	600 mm	8GK6710-2KK23	–
			400 mm	600 mm	–	8GK6710-4KK23
		5	200 mm	900 mm	8GK6710-2KK33	–
			400 mm	900 mm	–	8GK6710-4KK33
	With rotary operating mechanism	3	200 mm	600 mm	8GK6711-2KK23	–
		5	200 mm	900 mm	8GK6701-2KK33	–
VL160X	With interconnected residual current operated circuit breaker	1	300 mm	600 mm	–	8GK6710-3KK23
				900 mm	–	8GK6710-3KK33
	With residual current operated circuit breaker mounted anderneath	1	400 mm	250 mm [1]	–	8GK6725-4KK13
			600 mm	250 mm [1]	–	8GK6713-4KK13
		3	200 mm	600 mm	8GK6712-2KK23	–
			600 mm	600 mm	–	8GK6710-6KK23
		5	200 mm	900 mm	8GK6704-2KK33	–
			600 mm	900 mm	–	8GK6710-6KK33
VL160 – VL250	With residual current operated circuit breaker mounted anderneath	1	400 mm	250 mm [1]	–	8GK6726-4KK13
			600 mm	250 mm [1]	–	8GK6712-4KK13
		3	200 mm	600 mm	8GK6713-2KK23	–
			600 mm	600 mm	–	8GK6711-6KK23
		5	200 mm	900 mm	8GK6705-2KK33	–
			600 mm	900 mm	–	8GK6711-6KK33
VL400	Max. 400 A	1	200 mm	600 mm	8GK6714-2KK23	–
			600 mm	250 mm [1]	–	8GK6710-6KK13
				300 mm [2]	–	8GK6723-6KK13
				600 mm	–	8GK6712-6KK23
		2	200 mm	900 mm	8GK6706-2KK33	–
			600 mm	900 mm	–	8GK6712-6KK33
	With residual current operated circuit breaker mounted anderneath	1	200 mm	600 mm	8GK6715-2KK23	–
			600 mm	250 mm [1]	–	8GK6712-6KK13
				300 mm [2]	–	8GK6727-6KK13
				600 mm	–	8GK6713-6KK23
		2	200 mm	900 mm	8GK6707-2KK33	–
			600 mm	900 mm	–	8GK6713-6KK33
VL630	Max. 630 A	1	400 mm	600 mm	8GK6715-4KK23	–
				900 mm	8GK6715-4KK33	–
			600 mm	250 mm [1]	–	8GK6711-6KK13
				300 mm [2]	–	8GK6724-6KK13
				600 mm	–	8GK6714-6KK23
				900 mm	–	8GK6714-6KK33
VL800	Max. 800 A (for ALPHA 800 UNIVERSAL only)	1	600 mm	600 mm	–	8GK6700-6KK24
				900 mm	–	8GK6700-6KK34

[1] The assembly kits for 3VL molded case circuit breakers have a cover with a cutout and are designed to accommodate the installation of both 3 and 4-pole circuit breakers. If installing 3-pole circuit breakers, we recommend that you do not leave the cutout open but cover it with blanking strip 8GK9910-0KK00. For further details, please refer to the mounting instructions at: http://support.automation.siemens.com/WW/view/en/53477794/130000

[2] In order to install assembly kits in the cubicles width 300 mm of the ALPHA 630 UNIVERSAL, you must order the following inner supports: 8GK9126-8KK03 (height 1600 mm), 8GK9126-8KK04 (height 1800 mm) and 8GK9126-8KK05 (height 2000 mm). In order to use cubicle width 300 mm in the ALPHA 800 UNIVERSAL as a switchgear compartment, you must order the following side supports: 8GK6850-0KK02 (height 1600 mm), 8GK6850-0KK03 (height 1800 mm) and 8GK6850-0KK04 (height 2000 mm).

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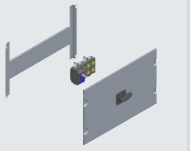
Assembly kits

For 3KA7 switch disconnectors

Vertical



Switches			Distribution board			
Type	Description	No. of	Height outside	Width outside	Depth	
3KA7	3KA711 size 1 max. 125 A	1	200 mm	600 mm	–	8GK6400-2KK20
			400 mm	250 mm [1]	–	8GK6400-4KK10
				300 mm [2]	–	8GK6400-4KK11
		3	200 mm	900 mm	–	8GK6400-2KK30
	3KA712 size 2 max. 250 A	1	400 mm	250 mm [1]	–	8GK6401-4KK10
				300 mm [2]	–	8GK6401-4KK12
				600 mm	–	8GK6400-4KK20
		3	400 mm	900 mm	–	8GK6400-4KK30
	3KA713 size 3 max. 400 A	1	400 mm	600 mm	–	8GK6401-4KK20
		3	400 mm	900 mm	–	8GK6400-4KK31
3KA7 / 3KL7	3KA7/3KL711 size 1 max. 125 A	1	400 mm	250 mm	250 mm	8GK6430-4KK03
				300 mm	250 mm	8GK6430-4KK14
		2	200 mm	600 mm	250 mm	8GK6430-4KK24
				900 mm	250 mm	8GK6430-4KK34
	3KA7/3KL712 size 2 max. 250 A	1	400 mm	250 mm	400 mm	8GK6431-4KK04
				300 mm	400 mm	8GK6431-4KK14
		2	400 mm	600 mm	250 mm	8GK6431-4KK24
				900 mm	250 mm	8GK6431-4KK34
	3KA7/3KL713 size 3 max. 400 A	1	400 mm	600 mm	400 mm	8GK6432-4KK24
				900 mm	400 mm	8GK6432-4KK34
	3KA7/3KL714 size 4 max. 630 A	1	400 mm	600 mm	400 mm	8GK6433-4KK24
			400 mm	900 mm	400 mm	8GK6433-4KK34

[1] In order to use box width 250 mm in the ALPHA 630 UNIVERSAL as a switchgear compartment, the following mounting rails (pair) are required:
8GF9655 (height 1000 mm),
8GF9656 (height 1200 mm),
8GF9650 (height 1600 mm),
8GF9658 (height 1800 mm),
8GF9654 (height 2000 mm) .
In order to use box width 250 mm in the ALPHA 800 UNIVERSAL as a switchgear compartment, you must order side supports and, for each assembly kit, a pair of crossbars 8GK9920-0KK01.

[2] In order to use cubicle width 300 mm in the ALPHA 630 UNIVERSAL as a switchgear compartment, you require the following inner supports:
8GK9126-8KK03 (height 1600 mm),
8GK9126-8KK04 (height 1800 mm),
8GK9126-8KK05 (height 2000 mm).
In order to use cubicle width 300 mm in the ALPHA 800 UNIVERSAL as a switchgear compartment, you must order the following side supports:
8GK6850-0KK02 (height 1600 mm),
8GK6850-0KK03 (height 1800 mm),
8GK6850-0KK04 (height 2000 mm).

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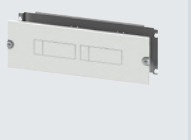
For 3KF switch disconnectors with fuses

Vertical



Switches				Distribution board			
Type	Rated current	Operating mechanism in center	Door-coupling rotary operating mechanism	Height	Width	Depth	
2× 3KF1	80 A	■	–	200 mm	600 mm	250 mm	8GK6431-2KK23
					900 mm	250 mm	8GK6431-2KK33
2× 3KF2	160 A	■	–	200 mm	600 mm	250 mm	8GK6432-2KK23
					900 mm	250 mm	8GK6432-2KK33
2× 3KF1 / 3KF2 or 1× 3KF3 / 3KF4	400 A	–	■	400 mm	600 mm	400 mm	8GK6431-4KK33
					900 mm	400 mm	8GK6432-4KK33

For 3KD switch disconnectors

Vertical



Switches				Distribution board		
Size	Rated current	No. of	Door-coupling rotary operating mechanism	Height outside	Width outside	
1 / 2 / 3	63 A / 250 A / 400 A	1 / 1	■	400 mm	250 mm	8GK6430-4KK13
1 / 2 / 3 / 4	63 A / 250 A / 400 A / 630 A	2 / 1	■	400 mm	600 mm	8GK6430-4KK23
1 / 2 / 3 / 4	63 A / 250 A / 400 A /630 A	2	■	400 mm	900 mm	8GK6430-4KK33

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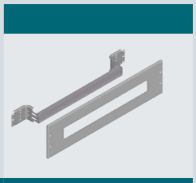
Assembly kits

For modular installation devices



Switches		Distribution board		
No. of tiers	MW	Height outside	Width outside	
1	12	200 mm	300 mm	8GK6352-2KK13
	24	150 mm	600 mm	8GK6302-1KK23
		200 mm	600 mm	8GK6352-2KK23
	36	150 mm	900 mm	8GK6302-1KK33
		200 mm	900 mm	8GK6352-2KK33

Accessories

Standard mounting rails



Version	Width	No. of tiers	Article No.
For mounting modular devices at various depths	600 mm	1	8GF9670
	900 mm	1	8GF9671

Depth adapters 9 mm



Version	Width	No. of tiers	MW	Article No.
For linking 5SY and 5SJ on standard mounting rails, L 360 mm [2)]	600 mm	1	20	8GF9670-1

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For front cover with cutout



Switches		Distribution board		
No. of tiers	MW	Height outside	Width outside	
1	24	150 mm	600 mm	8GK9608-1KK22
	24	200 mm	600 mm	8GK9608-1KK20
	36	150 mm	900 mm	8GK9608-1KK32
		200 mm	900 mm	8GK9608-1KK30
2	48	300 mm	600 mm	8GK9608-2KK22
		400 mm	600 mm	8GK9608-2KK20
	72	300 mm	900 mm	8GK9608-2KK32
		400 mm	900 mm	8GK9608-2KK30
		450 mm	600 mm	8GK9608-3KK22
		600 mm	600 mm	8GK9608-4KK20
	108	600 mm	900 mm	8GK9608-4KK30

Accessories

Standard mounting rails



Version	Width	No. of tiers	Article No.
For mounting modular devices at various depths	600 mm	1	8GF9670
	900 mm	1	8GF9671

Depth adapters 9 mm



Version	Width	No. of tiers	MW	Article No.
For linking 5SY and 5SJ on standard mounting rails, L 360 mm [2)]	600 mm	1	20	8GF9670-1

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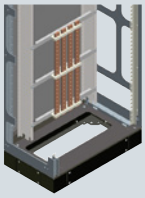
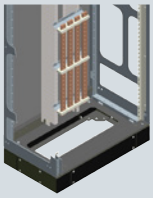
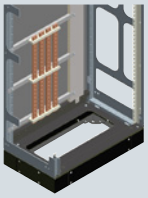
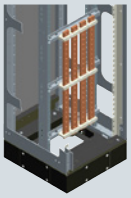
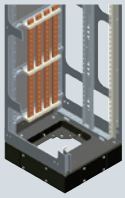
Busbars

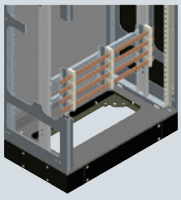
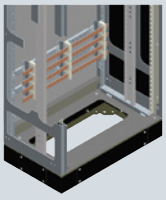
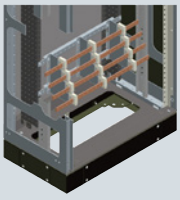
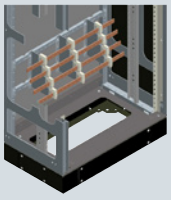
For ALPHA 800 / 630 UNIVERSAL distribution boards

Vertical installation of rear busbars (single bars only)

Version		Width 600/900 mm	For a spacing of 150 mm, width 600/900 mm	Recessed, width 600/900 mm	Width 300 mm	Recessed, width 300 mm
Busbar supports:		8GF5764/65 (width 600 mm) 8GF5766/67 (width 900 mm)	8GF5762/63	8GF5764/65 (width 600 mm) 8GF5766/67 (width 900 mm)	8GF5768/70	8GF5768/70
Supplements:	Rear universal supports	8GK6850-0KK05 /06 (2 units)	8GK6850-0KK05 /06 (2 units)	8GK6850-0KK05 /06 (1 unit)	–	–

Horizontal busbars (single bars only)

Version		Front	Recessed	At front, with steps	Recessed, with steps
Busbar supports:		8GF5762/63	8GF5762/63	8GF5760/61	8GF5760/61
Supplements:	Support plate	8GF9652 (width 600 mm) 8GF9653 (width 900 mm)	8GF9652 (width 600 mm) 8GF9653 (width 900 mm)	8GK9920-0KK35 (width 600 mm) 8GK9920-0KK36 (width 900 mm)	8GF9652 (width 600 mm) 8GF9653 (width 900 mm)
	Rear universal supports	–	–	8GK6850-0KK05 /06 (2 units)	–

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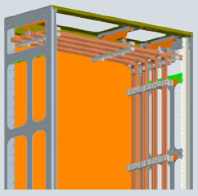
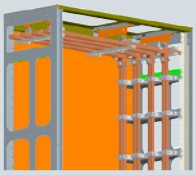
For ALPHA 800 UNIVERSAL distribution boards

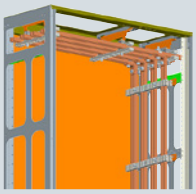
Horizontal busbars at top (double bars only)



Version		
Busbar supports	With support plate	8GK9750-0KK02
	Without support plate	8PQ4000-1BA12
Supplements		If there is no support 8GK9750-0KK02 mounted onto the side of the cabling compartment, you will need to order an upper crossbar 8GK6850-0KK00.

Vertical busbars, for sides






Version		Double busbar with steps	Single busbar with steps	Double busbar	Busbar
Busbar supports:		8GK9750-0KK01	8GF5760/61	8GK9750-0KK02	8GF5762/63
Supplements	Lateral crossbar	8GK6850-0KK01	8GK6850-0KK01	8GK6850-0KK01	8GK6850-0KK01

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Busbars



Busbar cross-section	Length	Article No. ALPHA 630	Article No. ALPHA 800
Copper busbars			
15 × 5	2000 mm	8GF5751	8GF5751
	1300 mm	8GF5771	8GF5771
20 × 5	2000 mm	8GF5737	8GF5737
	1300 mm	8GF5772	8GF5772
30 × 5	2000 mm	8GF5742	8GF5742
	1300 mm	8GF5773	8GF5773
30 × 10	2000 mm	8GF5752	8GF5752
	1300 mm	8GF5774	8GF5774

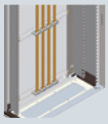


Busbar cross-section	Length	Width	Article No. ALPHA 630	Article No. ALPHA 800
Copper grounding bars				
20 × 5	1300/2000 mm	600 mm	8GK9920-0KK10	8GK9920-0KK10
		900 mm	8GK9920-0KK13	8GK9920-0KK13

Busbar supports



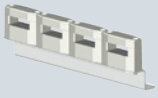
Busbar cross-section	Width	Number of poles	Busbar center-to-center spacing	Article No. ALPHA 630	Article No. ALPHA 800
Vertical at side / horizontal, at front, graded					
15/20/30 × 5	600/900 mm	4-pole	50 mm	8GF5760	8GF5760
30 × 10	600/900 mm	4-pole	50 mm	8GF5761	8GF5761
15/20/30 × 10	600/900 mm	4-pole	50 mm	–	8GK9750-0KK01
20/30 × 10	600/900 mm	4-pole	50 mm	–	8GK9750-0KK02



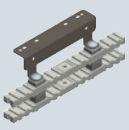
Busbar cross-section	Width	Number of poles		Article No. ALPHA 630	Article No. ALPHA 800
Vertical					
15/20/30 × 5	300 mm	4-pole	50 mm	8GF5768	8GF5768
30 × 10	300 mm	4-pole	50 mm	8GF5770	8GF5770



Busbar cross-section	Width	Number of poles		Article No. ALPHA 630	Article No. ALPHA 800
Vertical at rear					
15/20/30 × 5	600 mm	4-pole	50 mm	8GF5764	8GF5764
	900 mm	4-pole	50 mm	8GF5766	8GF5766
30 × 10	600 mm	4-pole	50 mm	8GF5765	8GF5765
	900 mm	4-pole	50 mm	8GF5767	8GF5767



Busbar cross-section	Width	Number of poles		Article No. ALPHA 630	Article No. ALPHA 800
Horizontal, at front [1]					
15/20/30 × 5	300/600/900 mm	4-pole	50 mm	8GF5762	8GF5762
30 × 10	300/600/900 mm	4-pole	50 mm	8GF5763	8GF5763
	600/900 mm	4-pole	50 mm	–	8GK9608-1KK22



Busbar cross-section	Width	Number of poles		Article No. ALPHA 630	Article No. ALPHA 800
Horizontal, at top					
20/30 × 10	600/900 mm	4-pole	50 mm	–	8GK9750-0KK02
					8PQ4000-1BA12

[1] Can be mounted directly on equipment racks with a clearance of 525 mm (width 600 mm) and 825 mm (width 900 mm).

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Further accessories

Set of screws/bolts for slotted bars



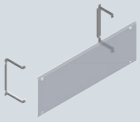
Cross-section	Outer thread	Tightening torque	ALPHA 630 Article No.	ALPHA 800 Article No.
15/20/30 × 5	M6	8 Nm	8GF5891	8GF5891
30 × 10	M8	20 Nm	8GF5892	8GF5892

Crossbars for installation of support



Version	Width	ALPHA 630 Article No.	ALPHA 800 Article No.
For 8GF5762, 8GF5760, 8GF5763, 8GK9608-1KK22	600 mm	8GF9652	8GF9652
	900 mm	8GF9653	8GF9653
For 8GF5760	600 mm	8GK9920-0KK35	8GK9920-0KK35
	900 mm	8GK9920-0KK36	8GK9920-0KK36
For 8GK9750-0KK02	400 mm	–	8GK6850-0KK00
For 8GF5760, 8GF5768, 8GF5761, 8GF5770, 8GK9750-0KK01, 8GK9750-0KK02	400 mm	–	8GK6850-0KK01

Transparent cover



Version	Width	ALPHA 630 Article No.	ALPHA 800 Article No.
For horizontal busbars, at front	600 mm	8GK9920-0KK37	8GK9920-0KK37
	900 mm	8GK9920-0KK38	8GK9920-0KK38

Connecting kit for double bars



Version	Current	ALPHA 630 Article No.	ALPHA 800 Article No.
Connecting kit for upper horizontal bars – vertical busbars	800 A	–	8GK9790-0KK00
Connecting kit for upper horizontal busbars	800 A	–	8GK9790-0KK01

Holder for grounding bar



ALPHA 630 Article No.	ALPHA 800 Article No.
–	8GK9750-0KK00

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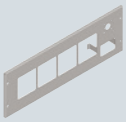
Accessories

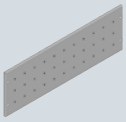
Covers and holders

Covers for mounting measuring instruments



Measuring devices	Type	Height	Width	Article No.	125	630	800
72 × 72	2 instruments + 2 selectors	200 mm	600 mm	8GK9610-1KK20	■	■	■
			900 mm	8GK9610-1KK30	■	■	■
	4 instruments + 1 selector	200 mm	600 mm	8GK9611-1KK20	■	■	■
			900 mm	8GK9611-1KK30	■	■	■
96 × 96	2 instruments + 2 selectors	200 mm	600 mm	8GK9612-1KK20	■	■	■
			900 mm	8GK9612-1KK30	■	■	■
	4 instruments + 1 selector	200 mm	600 mm	8GK9613-1KK20	■	■	■
			900 mm	8GK9613-1KK30	■	■	■

Covers for pushbuttons and indicator lights



Height	Width	Article No.	125	630	800
200 mm	600 mm	8GK9630-1KK20	■	■	■
	900 mm	8GK9631-1KK20	■	■	■

Non-transparent covers



Height	Width	Article No.	125	630	800
50 mm	600 mm	8GK9620-1KK20	■	■	■
	900 mm	8GK9620-1KK30	■	■	■
100 mm	600 mm	8GK9621-1KK20	■	■	■
	900 mm	8GK9621-1KK30	■	■	■
150 mm	600 mm	8GK9622-1KK20	■	■	■
	900 mm	8GK9622-1KK30	■	■	■
200 mm	300 mm	8GK9607-1KK10	■	■	■
	600 mm	8GK9623-1KK20	■	■	■
	900 mm	8GK9623-1KK30	■	■	■
400 mm	250 mm	8GK9606-2KK10	■	■	■
	300 mm	8GK9607-2KK10	■	■	■
	600 mm	8GK9622-2KK20	■	■	■
	900 mm	8GK9622-2KK30	■	■	■
600 mm	250 mm	8GK9606-4KK10	■	■	■
	300 mm	8GK9607-4KK10	■	■	■
	600 mm	8GK9622-4KK20	■	■	■
	900 mm	8GK9622-4KK30	■	■	■
800 mm	250 mm	8GK9606-5KK10	■	■	■
	300 mm	8GK9607-5KK10	■	■	■
	600 mm	8GK9622-5KK20	■	■	■
	900 mm	8GK9622-5KK30	■	■	■
1000 mm	250 mm	8GK9606-7KK10	■	■	■
	300 mm	8GK9607-7KK10	■	■	■

Deep-drawn covers 25 mm

Height	Width	Article No.	125	630	800
800 mm	600 mm	8GK9635-5KK20	■	■	■
	900 mm	8GK9635-5KK30	■	■	■
1000 mm	600 mm	8GK9636-7KK20	■	■	■
	900 mm	8GK9636-7KK30	■	■	■

Deep-drawn front covers 35 mm



Height	Width	Article No.	125	630	800
200 mm	600 mm	8GK9605-1KK20	■	■	■
	900 mm	8GK9605-1KK30	■	■	■
400 mm	600 mm	8GK9605-2KK20	■	■	■
	900 mm	8GK9605-2KK30	■	■	■
600 mm	600 mm	8GK9605-4KK20	■	■	■
	900 mm	8GK9605-4KK30	■	■	■

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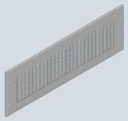
Covers and holders



Covers with ventilation openings IP30

Height	Width	Article No.	125	630	800
200 mm	600 mm	8GK9632-1KK20	■	■	■
	900 mm	8GK9633-1KK20	■	■	■



Holders for horizontal cable ducts / horizontal busbars (pair)

Width	Article No.	125	630	800
600 mm	8GF9652	■	■	■
900 mm	8GF9653	■	■	■



Horizontal crossbars with steps (pair)

Width	Article No.	125	630	800
600 mm	8GK9920-0KK35	■	■	■
900 mm	8GK9920-0KK36	■	■	■

Support rails (pair)

- ALPHA 630 UNIVERSAL vertical/horizontal busbar support, with steps
- Vertical side terminal strip (not suitable for use in ALPHA 800 UNIVERSAL)



Height	Article No.	125	630	800
1000 mm	8GF9655	■	■	■
1200 mm	8GF9656	■	■	■
1600 mm	8GF9650	■	■	■
1800 mm	8GF9658	■	■	■
2000 mm	8GF9654	■	■	■

Inner supports

- For using cubicle B 300 as a switchgear compartment in ALPHA 630 UNIVERSAL (not suitable for use in ALPHA 800 UNIVERSAL)



Height	Article No.	125	630	800
1600 mm	8GK9126-8KK03	■	■	■
1800 mm	8GK9126-8KK04	■	■	■
2000 mm	8GK9126-8KK05	■	■	■

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Accessories

Mounting plates and inner subdivisions

Modular mounting plates



- ALPHA 800 UNIVERSAL: for mounting on side supports or on the base of the cabinet

Height	Width	Article No.	125	630	800
200 mm	600 mm	8GF7155	■	■	■
	900 mm	8GF7158	■	■	■
400 mm	600 mm	8GF7156	■	■	■
	900 mm	8GF7160	■	■	■
600 mm	600 mm	8GF7157	■	■	■
	900 mm	8GF7161	■	■	■

Recessed modular mounting plates



- ALPHA 800 UNIVERSAL: for mounting on two rear supports or on the rear panel of the cabinet with one rear support

Height	Width	Article No.			
200 mm	600 mm	8GF9676	■	■	■
	900 mm	8GF9680	■	■	■
400 mm	600 mm	8GF9677	■	■	■
	900 mm	8GF9681	■	■	■
600 mm	600 mm	8GF9678	■	■	■
	900 mm	8GF9682	■	■	■

2 mm mounting plates for electrotechnical use with height and width of the cabinet



- ALPHA 800 UNIVERSAL: Plates that are not as high as the cabinet can be mounted using side supports and holders 8GF9652/3

Height	Width	Article No.			
600 mm	600 mm	8GK9535-4KK21	■	■	■
800 mm	600 mm	8GK9535-5KK21	■	■	■
1000 mm	600 mm	8GK9536-7KK21	■	■	■
	900 mm	8GK9536-7KK31	■	■	■
1200 mm	600 mm	8GK9537-8KK21	■	■	■
	900 mm	8GK9537-8KK31	■	■	■
1600 mm	600 mm	8GK9535-8KK23	■	■	■
	900 mm	8GK9535-8KK26	■	■	■
1800 mm	600 mm	8GK9535-8KK24	■	■	■
	900 mm	8GK9535-8KK34	■	■	■
2000 mm	600 mm	8GK9535-8KK25	■	■	■
	900 mm	8GK9535-8KK35	■	■	■

Adjustable depth brackets for mounting plates



Distribution board depth	Article No.			
250 mm	8GK9930-0KK03		■	

Partitions for ALPHA 630 UNIVERSAL





Mounting	Height	Width	Article No.			
Horizontal	–	250 mm	8GK9525-0KK03		■	
	–	300 mm	8GK9525-0KK13		■	
	–	600 mm	8GK9525-0KK23		■	
	–	900 mm	8GK9525-0KK33		■	
Vertical	800 mm	–	8GK9525-5KK03		■	
	1000 mm	–	8GK9525-6KK03		■	
	1200 mm	–	8GK9525-7KK03		■	
	1600 mm	–	8GK9525-8KK03		■	
	1800 mm	–	8GK9525-8KK13		■	
	2000 mm	–	8GK9525-8KK23		■	

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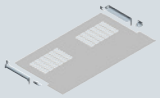
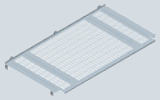
Mounting plates and inner subdivisions

Partitions for ALPHA 800 UNIVERSAL incabinets in form 2b







Mounting	Height	Width	Article No.	125	630	800
Horizontal subdivisions between devices	–	300 mm	8GK9526-0KK06			■
	–	600 mm	8GK9526-0KK07			■
	–	900 mm	8GK9526-0KK08			■
Horizontal subdivisions between upper busbar compartment and devices	–	250 mm	8GK9527-0KK05			■
	–	300 mm	8GK9526-0KK03			■
	–	600 mm	8GK9526-0KK04			■
	–	900 mm	8GK9526-0KK05			■
Vertical subdivisions between the switchgear compartment and busbar compartment	1600 mm	600 mm	8GK9526-0KK00			■
	1800 mm	600 mm	8GK9526-0KK01			■
	2000 mm	600 mm	8GK9526-0KK02			■

Transparent covers



Width	Article No.	125	630	800
250 mm	8GK9527-0KK03	■	■	■
300 mm	8GK9527-0KK00	■	■	■
600 mm	8GK9527-0KK01	■	■	■
900 mm	8GK9527-0KK02	■	■	■

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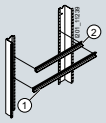
Accessories

Holders for terminal strips and locking systems

Standard mounting rails for terminal blocks



Version	Height	Width	Article No.	125	630	800
Horizontal	–	600 mm	8GF9672	■	■	■
	–	900 mm	8GF9674	■	■	■
Horizontal, recessed	–	600 mm	8GF9673	■	■	■
	–	900 mm	8GF9675	■	■	■
Vertical with 3 mounting rails	200 mm	600 mm	8GF7175	■	■	■
	400 mm	600 mm	8GF7176	■	■	■
Vertical with 5 mounting rails	–	900 mm	8GF7178	■	■	■
	400 mm	900 mm	8GF7180	■	■	■

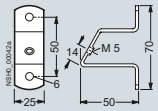
Holder for vertical terminal strips in side compartment L = 900 mm



- ALPHA 800 UNIVERSAL: Each holder must be mounted onto a lateral crossbar

Width	Article No.	125	630	800
600/900 mm	8GF9683	■	■	■

Mounting brackets



Version	Width	Article No.	125	630	800
For angular mounting of the terminal blocks	600/900 mm	8WA746	■	■	■

Holders for standard mounting rails

Version	Scope of supply	Width	Article No.	125	630	800
For mounting the terminal strip vertically in the cabling compartment	4 units	600/900 mm	8GK9920-0KK28	■	■	■

Standard locking devices for wall-mounted distribution boards



Material	Width	Article No.	125	630	800
Made of plastic, black (spare part)	600/900 mm	8GK9560-0KK04	■	■	■

Seals for standard locking devices



Degree of protection	Width	Article No.	125	630	800
IP55	600/900 mm	8GK9560-0KK05	■	■	■

Rotary handle locking mechanism



- For wall-mounted distribution boards, IP43 and IP55, semicylinder insert possible for E012

Width	Article No.	125	630	800
600/900 mm	8GK9560-0KK06	■	■	■

Profile semicylinders E012



- Insert and key

Width	Article No.	125	630	800
600/900 mm	8GK9560-0KK07	■	■	■

Locking systems for floor-mounted distribution boards



Version	Width	Article No.	125	630	800
Espagnolette lock with pushbutton (replacement part)	600/900 mm	8GK9561-0KK01	■	■	■
Insert for profile semicylinder with key	600/900 mm	8GK9561-0KK02	■	■	■
Profile semicylinder, 40 mm with lock E012 (for use only with espagnolette lock)	600/900 mm	8GK9561-0KK00	■	■	■

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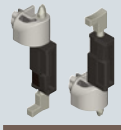
Further accessories

			125	630	800
Assembly kit for mounting flat pack cabinets for self-assembly, IP43					
	Height	**Article No.**			
	400 mm	8GK9126-3KK00	■	■	■
	600 mm	8GK9126-4KK00	■	■	■
	800 mm	8GK9126-5KK00	■	■	■
	1000 mm	8GK9126-6KK00	■	■	■
	1200 mm	8GK9126-7KK00	■	■	■
	1600 mm	8GK9126-8KK00	■	■	■
	1800 mm	8GK9126-8KK01	■	■	■
	2000 mm	8GK9126-8KK02	■	■	■
Z-shaped crossbar for lifting the flat pack for self-assembly					
	Height	**Article No.**			
	600 mm	8GK9127-0KK01	■	■	■
	900 mm	8GK9127-0KK02	■	■	■
	1200 mm	8GK9127-0KK03	■	■	■
	1500 mm	8GK9127-0KK04	■	■	■
	1800 mm	8GK9127-0KK05	■	■	■
Z-shaped crossbar for mounting and vertical linking of wall-mounted distribution boards					
	Height	**Article No.**			
	1200 mm	8GK9920-0KK43	■	■	■
	1400 mm	8GK9920-0KK44	■	■	■
	1600 mm	8GK9920-0KK45	■	■	■
	1800 mm	8GK9920-0KK46	■	■	■
Flange plates for flat pack delivery (optional)					
	Height	**Article No.**			
	300 mm	8GK9120-0KK10	■	■	■
	600 mm	8GK9120-0KK20	■	■	■
Ventilation grilles – side panels					
	Scope of supply	**Article No.**			
	4 units	8GK9120-0KK30	■	■	■
Replacement hinges for doors for wall/floor-mounted distribution boards					
	Scope of supply	**Article No.**			
	2 units	8GK9920-0KK24	■	■	■
Hinges for front covers					
	Scope of supply	**Article No.**			
	10 units	8GK9120-0KK11	■	■	■
Hinges for covers					
		Article No.			
		8PQ2000-0BA08	■	■	■

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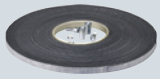
Accessories

Further accessories

					125	630	800
Quick-lock screws for ALPHA cabinets with ¼ turn							
	Scope of supply			Article No.			
	20 units			8GK9562-0KK00	■	■	■
Mounting kit for modular distribution boards, IP55 (incl. seal)							
				Article No.			
				8GK9920-0KK31	■	■	■
Self-tapping screws M6 × 10							
	Scope of supply			Article No.			
	10 units			8GF9662	■	■	■
Captive nuts M6							
	Scope of supply			Article No.			
	100 units			8GF9643	■	■	■
Transport eyebolts							
	Scope of supply			Article No.			
	4 units			8GF9660	■	■	■
Key for double-bit interlocking mechanism							
				Article No.			
				8GD9290	■	■	■
Siemens nameplate							
	Material	Version	Color	Article No.			
SIEMENS	Aluminum	Self-adhesive	Petrol	8GD9084	■	■	■
	Sticker, foil	Self-adhesive	Petrol	8GF9661	■	■	■
Circuit diagram pockets							
	Versions		Depth	Article No.			
	DIN A3, made of sheet steel		10 mm	8GK9910-0KK22	■	■	■
	DIN A4, transparent sleeve, adhered all-over		10 mm	8GK9910-0KK23	■	■	■
	DIN A4, made of plastic		30 mm	8GD9132	■	■	■
	DIN A4, large pack, made of plastic		30 mm	8GK9910-1KK24	■	■	■
Blanking cover for modular installation devices							
	Version			Article No.			
	For 12 modular widths (1 MW=18 mm)			8GK9910-0KK00	■	■	■
Cover strips							
	Length			Article No.			
	1 m			8GK9910-0KK01	■	■	■
Spare brackets for flat pack assembly							
	Scope of supply			Article No.			
	2 units			8GK9920-0KK26	■	■	■
Failsafe kit ALPHA							
	• Thread-forming tapping screws, captive nuts, hinges for covers, covers etc.						
				Article No.			
				8GK9920-0KK32	■	■	■
Wall-mounting brackets							
				Article No.			
				8GK9920-0KK33	■	■	■

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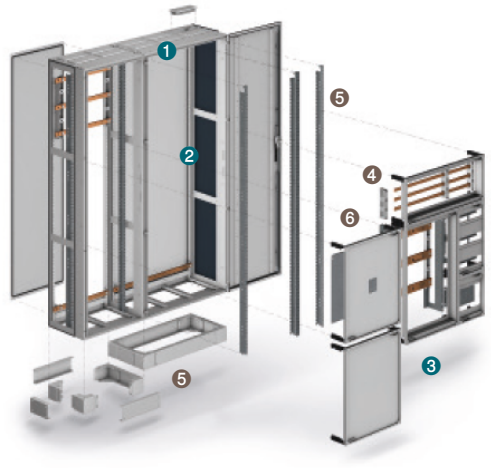
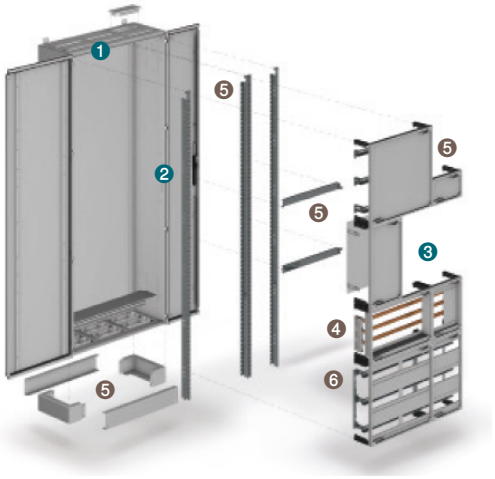
ALPHA system overview

Distribution boards, assembly kits and accessories

ALPHA 1250



ALPHA 630



❶ Unequipped distribution boards


ALPHA 1250


ALPHA 630


ALPHA 630


ALPHA 400


ALPHA 160


ALPHA SIMBOX XL and WP

❷ Quick-assembly kits


ALPHA 1250 / 630 / 400


ALPHA 160

❸ Assembly kits


For modular installation devices


For terminal blocks


For fuse switch disconnectors

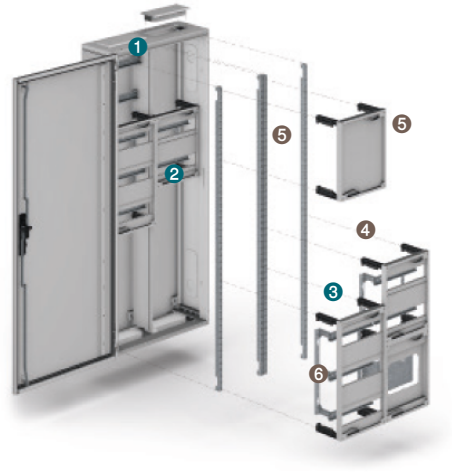

For switch disconnectors


For molded case circuit breakers

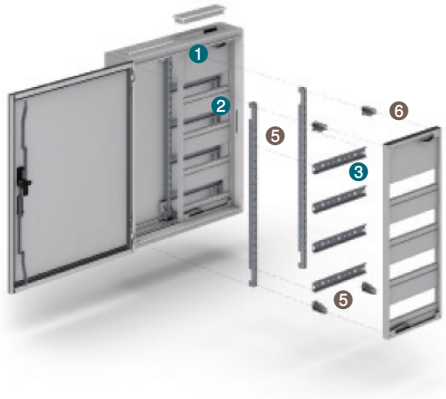

For busbar-adaptable units

Note:
You will find a detailed range of accessories with the basic units and in the Accessories section.

ALPHA 400



ALPHA 160



❹ Busbars



Cu busbars

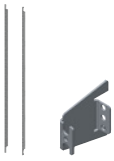


Busbar supports

❺ Mechanical accessories



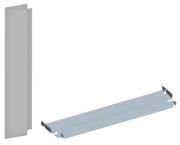
Bases



Stays



Crossbars



Partitions



Front covers

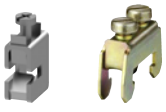


Locking system

❻ Electrical accessories



N and PE terminals



Connection terminals



N/PE bars



Flanges



Cable entries



Cable holders

Note:
You will find a detailed range of accessories with the basic units and in the Accessories section.

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ALPHA 1250 floor-mounted distribution boards

Rated current 1250 A

						Unequipped distribution boards	Unequipped distribution boards for isolating transformers	
						With open side panel	With open side panel	With closed side panel
					Degree of protection	IP55	IP30	IP30
								
Height		Depth	Tiers	Width		Safety class I	Safety class I	Safety class I
Outside	Inside	Outside	(MW = 18 mm)	Outside	Inside			
1950 mm	1800 mm	400 mm	max. 12 MW	300 mm	250 mm	8GK1423-8KK15	8GK1483-8KP15	8GK1483-8KN15
				550 mm	500 mm	8GK1423-8KK25	8GK1483-8KP25	8GK1483-8KN25
				800 mm	750 mm	8GK1423-8KK35	8GK1483-8KP35	8GK1483-8KN35
				1050 mm	1000 mm	8GK1423-8KK45	8GK1483-8KP45	8GK1483-8KN45
				1300 mm	1250 mm	8GK1423-8KK55	–	–

Accessories

Replacement doors



Height	Cubicle width	Door version	Door width	Article No.
1950 mm	300 mm	Complete	300 mm	8GK9513-8KK10
	550 mm	Complete	550 mm	8GK9513-8KK20
	800 mm	Left	525 mm	8GK9513-8KK30
		Right	275 mm	8GK9513-8KK40
	1050 mm	Left	525 mm	8GK9513-8KK30
		Right	525 mm	8GK9513-8KK50
	1300 mm	Left	775 mm	8GK9513-8KK60
		Right	525 mm	8GK9513-8KK50

Side panels, modular distribution board



Depth	Article No.
400 mm	8GK9520-0KK05

Assembly kits for masking frame for front cover



- For mounting the mounting stays at the rear of the modular distribution board

Height	Width	Article No.
1800 mm	250 mm	8GK9913-0KK10
	500 mm	8GK9913-0KK20
	750 mm	8GK9913-0KK30
	1000 mm	8GK9913-0KK40
	1250 mm	8GK9913-0KK50

Flange plates with rubber sleeve



- For lower flange opening (sheet steel closed)

Number of rubber sleeves	Article No.
1	8GK9100-0KK14
2	8GK9100-0KK15
3	8GK9100-0KK16
4	8GK9100-0KK17

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Busbar supports



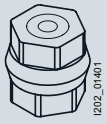
- Busbar spacing 100/185 mm

Version	Article No.
With matching support plate for mounting on the rear panel	8GK9720-0KK00
Without support plate for mounting on the busbar (no fixing to the cabinet enclosure)	8GK9720-0KK01

PEN bar holders and N/PE busbar supports

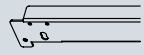
Version	Article No.
PEN bar holder	8GK9721-0KK00

Pin insulator for N busbar



Version	Article No.
1P with M10 female thread and holder	8GK9110-0KK00

Cross arm for N/PEN pin insulators and/or holders for PEN bars



Width	Article No.
250 mm	8GK4854-0KK10
500 mm	8GK4854-0KK20
750 mm	8GK4854-0KK30
1000 mm	8GK4854-0KK40
1250 mm	8GK4854-0KK50

Longitudinal stays



Height	Depth	Article No.
1800 mm	250/320/400 mm	8GK48538KK02

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ALPHA 1250 marshaling boxes

Rated current 630 A

				Marshaling boxes
			Degree of protection	IP43
				
Height Outside	**Depth Outside**	**Width Outside**	**Inside**	**Safety class I**
500 mm	400 mm	300 mm	250 mm	8GK1383-1KK15
		550 mm	500 mm	8GK1383-1KK25
		800 mm	750 mm	8GK1383-1KK35
		1050 mm	1000 mm	8GK1383-1KK45
		1300 mm	1250 mm	8GK1383-1KK55
650 mm	400 mm	300 mm	250 mm	8GK1383-2KK15
		550 mm	500 mm	8GK1383-2KK25
		800 mm	750 mm	8GK1383-2KK35
		1050 mm	1000 mm	8GK1383-2KK45
		1300 mm	1250 mm	8GK1383-2KK55

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ALPHA 630 floor-mounted distribution boards

Rated current 630 A

						Unequipped distribution boards Welded and riveted	
					Degree of protection	IP44	
							
Height		**Depth**	**Tiers/MW**	**Width**		**Safety class I**	**Safety class II**
Outside	**Inside**	**Outside**		**Outside**	**Inside**		
1950 mm	1800 mm	210 mm	12/144	300 mm	250 mm	8GK1322-8KA12	8GK1332-8KA12
			24/288	550 mm	500 mm	8GK1322-8KA22	8GK1332-8KA22
			36/432	800 mm	750 mm	8GK1322-8KA32	8GK1332-8KA32
			48/576	1050 mm	1000 mm	8GK1322-8KA42	8GK1332-8KA42
			60/720	1300 mm	1250 mm	8GK1322-8KA52	8GK1332-8KA52
		250 mm	12/144	300 mm	250 mm	–	–
			24/288	550 mm	500 mm	–	–
			36/432	800 mm	750 mm	–	–
			48/576	1050 mm	1000 mm	–	–
			60/720	1300 mm	1250 mm	–	–
		320 mm	12/144	300 mm	250 mm	–	–
			24/288	550 mm	500 mm	–	–
			36/432	800 mm	750 mm	–	–
			48/576	1050 mm	1000 mm	–	–
			60/720	1300 mm	1250 mm	–	–

Accessories

Replacement doors



Height	Cubicle width	Door version	Door width	Article No.
1950 mm	300 mm	Complete	300 mm	8GK9513-8KK10
	550 mm	Complete	550 mm	8GK9513-8KK20
	800 mm	Left	525 mm	8GK9513-8KK30
		Right	275 mm	8GK9513-8KK40
	1050 mm	Left	525 mm	8GK9513-8KK30
		Right	525 mm	8GK9513-8KK50
	1300 mm	Left	775 mm	8GK9513-8KK60
		Right	525 mm	8GK9513-8KK50

Side panels, modular distribution board



Depth	Article No.
250/320 mm	8GK9520-0KK03

Assembly kits for masking frame for front cover



Height	Width	Article No.
1800 mm	250 mm	8GK9913-0KK10
	500 mm	8GK9913-0KK20
	750 mm	8GK9913-0KK30
	1000 mm	8GK9913-0KK40
	1250 mm	8GK9913-0KK50

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With closed side panel		With open side panel	Flat pack	
IP55		IP55	IP43	
				
Safety class I	**Safety class II**	**Safety class I**	**Safety class I**	**Safety class II**
–	–	–	8GK1302-8KK12	8GK1312-8KK12
–	–	–	8GK1302-8KK22	8GK1312-8KK22
–	–	–	8GK1302-8KK32	8GK1312-8KK32
–	–	–	8GK1302-8KK42	8GK1312-8KK42
–	–	–	8GK1302-8KK52	8GK1312-8KK52
8GK1323-8KN13	8GK1333-8KN13	8GK1323-8KP13	–	–
8GK1323-8KN23	8GK1333-8KN23	8GK1323-8KP23	–	–
8GK1323-8KN33	8GK1333-8KN33	8GK1323-8KP33	–	–
8GK1323-8KN43	8GK1333-8KN43	8GK1323-8KP43	–	–
8GK1323-8KN53	8GK1333-8KN53	8GK1323-8KP53	–	–
8GK1323-8KN14	8GK1333-8KN14	8GK1323-8KP14	–	–
8GK1323-8KN24	8GK1333-8KN24	8GK1323-8KP24	–	–
8GK1323-8KN34	8GK1333-8KN34	8GK1323-8KP34	–	–
8GK1323-8KN44	8GK1333-8KN44	8GK1323-8KP44	–	–
8GK1323-8KN54	8GK1333-8KN54	8GK1323-8KP54	–	–

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ALPHA 630 marshaling boxes

Rated current 630 A

				Marshaling boxes	
			Degree of protection	IP43	IP55
					
Height Outside	Depth Outside	Width Outside	Inside	Safety class I	Safety class I
350 mm	210 mm [1]	300 mm	250 mm	8GK1382-0KK12	–
		550 mm	500 mm	8GK1382-0KK22	–
		800 mm	750 mm	8GK1382-0KK32	–
		1050 mm	1000 mm	8GK1382-0KK42	–
		1300 mm	1250 mm	8GK1382-0KK52	–
	250 mm	300 mm	250 mm	–	8GK1383-0KK13
		550 mm	500 mm	–	8GK1383-0KK23
		800 mm	750 mm	–	8GK1383-0KK33
		1050 mm	1000 mm	–	8GK1383-0KK43
		1300 mm	1250 mm	–	8GK1383-0KK53
	320 mm	300 mm	250 mm	–	8GK1383-0KK14
		550 mm	500 mm	–	8GK1383-0KK24
		800 mm	750 mm	–	8GK1383-0KK34
		1050 mm	1000 mm	–	8GK1383-0KK44
		1300 mm	1250 mm	–	8GK1383-0KK54
400 mm	250 mm	300 mm	250 mm	–	8GK1383-1KK13
		550 mm	500 mm	–	8GK1383-1KK23
		800 mm	750 mm	–	8GK1383-1KK33
		1050 mm	1000 mm	–	8GK1383-1KK43
		1300 mm	1250 mm	–	8GK1383-1KK53
	320 mm	300 mm	250 mm	–	8GK1383-1KK14
		550 mm	500 mm	–	8GK1383-1KK24
		800 mm	750 mm	–	8GK1383-1KK34
		1050 mm	1000 mm	–	8GK1383-1KK44
		1300 mm	1250 mm	–	8GK1383-1KK54
600 mm	250 mm	300 mm	250 mm	–	8GK1383-2KK13
		550 mm	500 mm	–	8GK1383-2KK23
		800 mm	750 mm	–	8GK1383-2KK33
		1050 mm	1000 mm	–	8GK1383-2KK43
		1300 mm	1250 mm	–	8GK1383-2KK53
	320 mm	300 mm	250 mm	–	8GK1383-2KK14
		550 mm	500 mm	–	8GK1383-2KK24
		800 mm	750 mm	–	8GK1383-2KK34
		1050 mm	1000 mm	–	8GK1383-2KK44
		1300 mm	1250 mm	–	8GK1383-2KK54

[1] For flat pack floor-mounted distribution boards only

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ALPHA 400 distribution boards

Rated current 400 A

						Surface-mounting distribution boards Flat pack	
					Degree of protection	IP43	
							
Height		Depth	Tiers	Width		Safety class I	Safety class II
Outside	Inside	Outside	(MW = 18 mm)	Outside	Inside		
500 mm	450 mm	210 mm	12 + 1 MW mountable	300 mm	250 mm	–	–
				550 mm	500 mm	–	–
650 mm	600 mm	210 mm	12 + 1 MW mountable	300 mm	250 mm	8GK1102-2KK12	8GK1112-2KK12
				550 mm	500 mm	8GK1102-2KK22	8GK1112-2KK22
				800 mm	750 mm	8GK1102-2KK32	8GK1112-2KK32
				1050 mm	1000 mm	8GK1102-2KK42	8GK1112-2KK42
800 mm	750 mm	210 mm	12 + 1 MW mountable	300 mm	250 mm	8GK1102-3KK12	8GK1112-3KK12
				550 mm	500 mm	8GK1102-3KK22	8GK1112-3KK22
				800 mm	750 mm	8GK1102-3KK32	8GK1112-3KK32
				1050 mm	1000 mm	8GK1102-3KK42	8GK1112-3KK42
950 mm	900 mm	210 mm	12 + 1 MW mountable	300 mm	250 mm	8GK1102-4KK12	8GK1112-4KK12
				550 mm	500 mm	8GK1102-4KK22	8GK1112-4KK22
				800 mm	750 mm	8GK1102-4KK32	8GK1112-4KK32
				1050 mm	1000 mm	8GK1102-4KK42	8GK1112-4KK42
				1300 mm	1250 mm	8GK1102-4KK52	8GK1112-4KK52
1100 mm	1050 mm	210 mm	12 + 1 MW mountable	300 mm	250 mm	8GK1102-5KK12	8GK1112-5KK12
				550 mm	500 mm	8GK1102-5KK22	8GK1112-5KK22
				800 mm	750 mm	8GK1102-5KK32	8GK1112-5KK32
				1050 mm	1000 mm	8GK1102-5KK42	8GK1112-5KK42
				1300 mm	1250 mm	8GK1102-5KK52	8GK1112-5KK52
1250 mm	1200 mm	210 mm	12 + 1 MW mountable	300 mm	250 mm	8GK1102-6KK12	8GK1112-6KK12
				550 mm	500 mm	8GK1102-6KK22	8GK1112-6KK22
				800 mm	750 mm	8GK1102-6KK32	8GK1112-6KK32
				1050 mm	1000 mm	8GK1102-6KK42	8GK1112-6KK42
				1300 mm	1250 mm	8GK1102-6KK52	8GK1112-6KK52
1400 mm	1350 mm	210 mm	12 + 1 MW mountable	300 mm	250 mm	8GK1102-7KK12	8GK1112-7KK12
				550 mm	500 mm	8GK1102-7KK22	8GK1112-7KK22
				800 mm	750 mm	8GK1102-7KK32	8GK1112-7KK32
				1050 mm	1000 mm	8GK1102-7KK42	8GK1112-7KK42
				1300 mm	1250 mm	8GK1102-7KK52	8GK1112-7KK52

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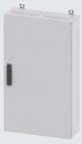
Unequipped distribution boards				Flush-mounting distribution boards Unequipped distribution boards
IP43		IP55		IP31
				
Safety class I	Safety class II	Safety class I	Safety class II	Safety class I
8GK1122-1KA12	–	–	–	–
8GK1122-1KA22	–	–	–	–
8GK1122-2KA12	8GK1132-2KA12	–	–	–
8GK1122-2KA22	8GK1132-2KA22	–	–	–
8GK1122-2KA32	8GK1132-2KA32	–	–	–
8GK1122-2KA42	8GK1132-2KA42	–	–	–
8GK1122-3KA12	8GK1132-3KA12	–	–	–
8GK1122-3KA22	8GK1132-3KA22	–	–	8GK1121-3KK22
8GK1122-3KA32	8GK1132-3KA32	–	–	8GK1121-3KK32
8GK1122-3KA42	8GK1132-3KA42	–	–	–
8GK1122-4KA12	8GK1132-4KA12	8GK1123-4KA12	8GK1133-4KA12	–
8GK1122-4KA22	8GK1132-4KA22	8GK1123-4KA22	8GK1133-4KA22	8GK1121-4KK22
8GK1122-4KA32	8GK1132-4KA32	8GK1123-4KA32	8GK1133-4KA32	8GK1121-4KK32
8GK1122-4KA42	8GK1132-4KA42	8GK1123-4KA42	8GK1133-4KA42	–
8GK1122-4KA52	8GK1132-4KA52	8GK1123-4KA52	8GK1133-4KA52	–
8GK1122-5KA12	8GK1132-5KA12	8GK1123-5KA12	8GK1133-5KA12	–
8GK1122-5KA22	8GK1132-5KA22	8GK1123-5KA22	8GK1133-5KA22	–
8GK1122-5KA32	8GK1132-5KA32	8GK1123-5KA32	8GK1133-5KA32	–
8GK1122-5KA42	8GK1132-5KA42	8GK1123-5KA42	8GK1133-5KA42	–
8GK1122-5KA52	8GK1132-5KA52	8GK1123-5KA52	8GK1133-5KA52	–
8GK1122-6KA12	8GK1132-6KA12	8GK1123-6KA12	8GK1133-6KA12	–
8GK1122-6KA22	8GK1132-6KA22	8GK1123-6KA22	8GK1133-6KA22	8GK1121-6KK22
8GK1122-6KA32	8GK1132-6KA32	8GK1123-6KA32	8GK1133-6KA32	8GK1121-6KK32
8GK1122-6KA42	8GK1132-6KA42	8GK1123-6KA42	8GK1133-6KA42	–
8GK1122-6KA52	8GK1132-6KA52	8GK1123-6KA52	8GK1133-6KA52	–
8GK1122-7KA12	8GK1132-7KA12	8GK1123-7KA12	8GK1133-7KA12	–
8GK1122-7KA22	8GK1132-7KA22	8GK1123-7KA22	8GK1133-7KA22	8GK1121-7KK22
8GK1122-7KA32	8GK1132-7KA32	8GK1123-7KA32	8GK1133-7KA32	8GK1121-7KK32
8GK1122-7KA42	8GK1132-7KA42	8GK1123-7KA42	8GK1133-7KA42	–
8GK1122-7KA52	8GK1132-7KA52	8GK1123-7KA52	8GK1133-7KA52	–

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ALPHA 400 distribution boards

Rated current 400 A

Accessories

Replacement doors



Height	Cubicle width	Door version	Door width	Article No.
950 mm	300 mm	Complete	300 mm	8GK9510-6KK10
	550 mm	Complete	550 mm	8GK9510-6KK20
	800 mm	Left	525 mm	8GK9510-6KK31
		Right	275 mm	8GK9510-6KK42
	1050 mm	Left	525 mm	8GK9510-6KK31
		Right	525 mm	8GK9510-6KK52
	1300 mm	Left	775 mm	8GK9510-6KK51
		Right	525 mm	8GK9510-6KK52
1100 mm	300 mm	Complete	300 mm	8GK9510-7KK10
	550 mm	Complete	550 mm	8GK9510-7KK20
	800 mm	Left	525 mm	8GK9510-7KK31
		Right	275 mm	8GK9510-7KK32
	1050 mm	Left	525 mm	8GK9510-7KK31
		Right	525 mm	8GK9510-7KK42
	1300 mm	Left	775 mm	8GK9510-7KK41
		Right	525 mm	8GK9510-7KK42
1250 mm	300 mm	Complete	300 mm	8GK9510-8KK10
	550 mm	Complete	550 mm	8GK9510-8KK20
	800 mm	Left	525 mm	8GK9510-8KK31
		Right	275 mm	8GK9510-8KK32
	1050 mm	Left	525 mm	8GK9510-8KK31
		Right	525 mm	8GK9510-8KK52
	1300 mm	Left	775 mm	8GK9510-8KK41
		Right	525 mm	8GK9510-8KK52
1400 mm	300 mm	Complete	300 mm	8GK9510-8KK16
	550 mm	Complete	550 mm	8GK9510-8KK26
	800 mm	Left	525 mm	8GK9510-8KK37
		Right	275 mm	8GK9510-8KK38
	1050 mm	Left	525 mm	8GK9510-8KK37
		Right	525 mm	8GK9510-8KK58
	1300 mm	Left	775 mm	8GK9510-8KK47
		Right	525 mm	8GK9510-8KK58

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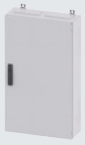
ALPHA 160 distribution boards

Rated current 160 A

						Surface-mounting distribution boards		Flush-mounting distribution boards
						Unequipped distribution boards	Distribution boards with built-in distribution board panels	Unequipped distribution boards
				Degree of protection		IP43	IP43	IP31
								
Height		Depth	Tiers	Width		Safety class II	Safety class II	Safety class II
Outside	Inside	Outside	(MW = 18 mm)	Outside	Inside			
500 mm	450 mm	140 mm	12 + 1 MW mountable	300 mm	250 mm	8GK1032-1KK11	8GK1052-1KK11	8GK1031-1KK11
				550 mm	500 mm	8GK1032-1KK21	8GK1052-1KK21	8GK1031-1KK21
				800 mm	750 mm	8GK1032-1KK31	8GK1052-1KK31	–
650 mm	600 mm	140 mm	12 + 1 MW mountable	300 mm	250 mm	8GK1032-2KK11	8GK1052-2KK11	8GK1031-2KK11
				550 mm	500 mm	8GK1032-2KK21	8GK1052-2KK21	8GK1031-2KK21
				800 mm	750 mm	8GK1032-2KK31	8GK1052-2KK31	–
				1050 mm	1000 mm	8GK1032-2KK41	8GK1052-2KK41	–
800 mm	750 mm	140 mm	12 + 1 MW mountable	300 mm	250 mm	8GK1032-3KK11	8GK1052-3KK11	8GK1031-3KK11
				550 mm	500 mm	8GK1032-3KK21	8GK1052-3KK21	8GK1031-3KK21
				800 mm	750 mm	8GK1032-3KK31	8GK1052-3KK31	–
				1050 mm	1000 mm	8GK1032-3KK41	8GK1052-3KK41	–
950 mm	900 mm	140 mm	12 + 1 MW mountable	300 mm	250 mm	8GK1032-4KK11	8GK1052-4KK11	8GK1031-4KK11
				550 mm	500 mm	8GK1032-4KK21	8GK1052-4KK21	8GK1031-4KK21
				800 mm	750 mm	8GK1032-4KK31	8GK1052-4KK31	–
				1050 mm	1000 mm	8GK1032-4KK41	8GK1052-4KK41	–
1100 mm	1050 mm	140 mm	12 + 1 MW mountable	300 mm	250 mm	8GK1032-5KK11	8GK1052-5KK11	8GK1031-5KK11
				550 mm	500 mm	8GK1032-5KK21	8GK1052-5KK21	8GK1031-5KK21
				800 mm	750 mm	8GK1032-5KK31	8GK1052-5KK31	–
				1050 mm	1000 mm	8GK1032-5KK41	8GK1052-5KK41	–

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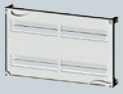
Assembly kits

For modular installation devices

				ALPHA 1250 / 630 / 400		ALPHA 160	
			Tier spacing	125 mm	150 mm	125 mm	150 mm
							
No. of tiers	MW	Height outside	Width outside				
1	12	150 mm	250 mm	–	8GK4351-1KK12	–	8GK4351-1KK11
	24	150 mm	500 mm	–	8GK4351-1KK22	–	8GK4351-1KK21
	36	150 mm	750 mm	–	8GK4351-1KK32	–	–
2	24	300 mm	250 mm	8GK4301-2KK12	8GK4351-2KK12	8GK4301-2KK11	8GK4351-2KK11
	48	300 mm	500 mm	8GK4301-2KK22	8GK4351-2KK22	8GK4301-2KK21	8GK4351-2KK21
	72	300 mm	750 mm	–	8GK4351-2KK32	–	–
3	36	450 mm	250 mm	8GK4301-3KK12	8GK4351-3KK12	8GK4301-3KK11	8GK4351-3KK11
	72	450 mm	500 mm	8GK4301-3KK22	8GK4351-3KK22	8GK4301-3KK21	8GK4351-3KK21
	108	450 mm	750 mm	–	8GK4351-3KK32	–	–
4	48	600 mm	250 mm	8GK4301-4KK12	8GK4351-4KK12	8GK4301-4KK11	8GK4351-4KK11
	96	600 mm	500 mm	8GK4301-4KK22	8GK4351-4KK22	8GK4301-4KK21	8GK4351-4KK21
	144	600 mm	750 mm	–	8GK4351-4KK32	–	–

For terminal blocks

		ALPHA 1250 / 630 / 400		ALPHA 160
				
Height outside	Width outside	Horizontal	Vertical	Horizontal
150 mm	250 mm	8GK4401-1KK12	–	8GK4401-1KK11
	500 mm	–	–	8GK4401-1KK21
300 mm	250 mm	8GK4401-2KK12	8GK4402-2KK12	8GK4401-2KK11
	500 mm	8GK4401-2KK22	8GK4402-2KK22	8GK4401-2KK21
	750 mm	8GK4401-2KK32	8GK4402-2KK32	–
450 mm	250 mm	8GK4401-3KK12	8GK4402-3KK12	–
	500 mm	8GK4401-3KK22	8GK4402-3KK22	–
	750 mm	8GK4401-3KK32	8GK4402-3KK32	–
600 mm	250 mm	–	8GK4402-4KK12	–
	500 mm	–	8GK4402-4KK22	–
	750 mm	–	8GK4402-4KK32	–

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With mounting plates

					ALPHA 1250 / 630 / 400	ALPHA 160
						
Mounting plates			**Distribution board**			
Height	**Width**	**Version**	**Height outside**	**Width outside**		
245 mm	207.5 mm	Closed	300 mm	250 mm	8GK4451-2KK12	8GK4451-2KK11
	457.5 mm	Closed	300 mm	500 mm	8GK4451-2KK22	–
	707.5 mm	Closed	300 mm	750 mm	8GK4451-2KK32	–
395 mm	207.5 mm	Closed	450 mm	250 mm	8GK4451-3KK12	8GK4451-3KK11
	457.5 mm	Closed	450 mm	500 mm	8GK4451-3KK22	–
	707.5 mm	Closed	450 mm	750 mm	8GK4451-3KK32	–
545 mm	207.5 mm	Closed	600 mm	250 mm	8GK4451-4KK12	8GK4451-4KK11
	457.5 mm	Closed	600 mm	500 mm	8GK4451-4KK22	–
	707.5 mm	Closed	600 mm	750 mm	8GK4451-4KK32	–

For unequipped panels

		ALPHA 1250 / 630 / 400			ALPHA 160
					
Height outside	**Width outside**	**Standard**	**With inspection window**	**With deep-drawn cover 40 mm**	**Standard**
75 mm	250 mm	8GK4501-0KK12	–	–	–
	500 mm	8GK4501-0KK22	–	–	–
150 mm	250 mm	8GK4501-1KK12	–	–	8GK4501-1KK11
	500 mm	8GK4501-1KK22	–	–	8GK4501-1KK21
	750 mm	8GK4501-1KK32	–	–	–
300 mm	250 mm	8GK4501-2KK12	8GK4500-2KK12	8GK4501-2KK13	8GK4501-2KK11
	500 mm	8GK4501-2KK22	8GK4500-2KK22	8GK4501-2KK23	8GK4501-2KK21
	750 mm	8GK4501-2KK32	–	8GK4501-2KK33	–
450 mm	250 mm	8GK4501-3KK12	8GK4500-3KK12	8GK4501-3KK13	8GK4501-3KK11
	500 mm	8GK4501-3KK22	8GK4500-3KK22	8GK4501-3KK23	8GK4501-3KK21
	750 mm	8GK4501-3KK32	–	8GK4501-3KK33	–
600 mm	250 mm	8GK4501-4KK12	8GK4500-4KK12	–	8GK4501-4KK11
	500 mm	8GK4501-4KK22	8GK4500-4KK22	–	8GK4501-4KK21
	750 mm	8GK4501-4KK32	–	–	–
750 mm	250 mm	8GK4501-5KK12	–	–	–
	500 mm	8GK4501-5KK22	–	–	–
	750 mm	8GK4501-5KK32	–	–	–

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Assembly kits

For 3NP1 fuse switch disconnectors

				ALPHA 1250 / 630 / 400	
					
LV HRC fuse Size	Switches No. of	Distribution board Height outside	Width outside	Mounting on support plate	on busbars [1]
00/000	2	300 mm	250 mm	8GK4550-2KK12	8GK4650-2KK12
		450 mm	250 mm	–	8GK4650-3KK12
	4	300 mm	500 mm	8GK4550-2KK22	8GK4650-2KK22
		450 mm	500 mm	–	8GK4650-3KK22
1	1	450 mm	250 mm	8GK4550-3KK12	8GK4651-3KK12
	2	450 mm	500 mm	8GK4550-3KK22	8GK4651-3KK22
2	1	450 mm	250 mm	8GK4551-3KK12	8GK4652-3KK12
3	1	450 mm	500 mm	8GK4551-3KK22	–

[1] For busbar support 8GK9711-0KK03

Accessories

Cover 3NP1123 ... size 000



- Required for size 000 fuse switch disconnectors

Article No.
8GK9912-0KK00

Busbar supports





Busbar center-to-center spacing	Number of poles	Article No.
60 mm	1-pole	8GK9710-0KK00
	2-pole	8GK9710-0KK01
	3-pole	8GK9711-0KK03
	4-pole	8GK9670-0KK00
40 mm	5-pole	8GK9650-0KK00

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For 3NJ4 fuse switch disconnectors in in-line design

					ALPHA 1250 / 630 / 400	
				Busbar center-to-center spacing	100 mm	185 mm
						
Switches	**Number of 3NJ4 disconnectors**		**Distribution board**			**Distribution board depth**
Size	**With screw fixing**	**With fixing claws**	**Height outside**	**Width outside**		**min. 320 mm**
Assembly kits for 3NJ4 fuse switch disconnectors						
NH00	4	3	600 mm	250 mm	8GK4751-4KK13	–
	9	8	600 mm	500 mm	8GK4751-4KK23	–
	14	13	600 mm	750 mm	8GK4751-4KK33	–
NH1 ... NH3	2	–	750 mm	250 mm	–	8GK4752-5KK15
	4	3	750 mm	500 mm	–	8GK4752-5KK25
	7	6	750 mm	750 mm	–	8GK4752-5KK35

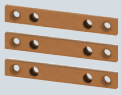
Accessories

Blanking covers



Switching device size	Busbar center-to-center spacing	Height	Width	Article No.
NH00	100 mm	299 mm	50 mm	3NJ4912-2CA00
NH1 ... NH3	185 mm	699 mm	50 mm	3NJ4912-2AA00
			100 mm	3NJ4912-2BA00

Ready-to-install copper bars



Switching device size	Distribution board width outside	Article No.
NH00	250 mm	8GK9735-1KK10
	500 mm	8GK9735-1KK20
	750 mm	8GK9735-1KK30
NH1 ... NH3	250 mm	8GK9735-2KK10
	500 mm	8GK9735-2KK20
	750 mm	8GK9735-2KK30

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Assembly kits

For SR60 busbar-adaptable units

		ALPHA 1250 / 630 / 400
	Busbar center-to-center spacing	60 mm
		
Height outside	**Width outside**	
300 mm	250 mm	8GK4801-2KK13
	500 mm	8GK4801-2KK23
	750 mm	8GK4801-2KK33
450 mm	250 mm	8GK4801-3KK13
	500 mm	8GK4801-3KK23
	750 mm	8GK4801-3KK33

Accessories

Supports for blanking covers		
		Article No.
		8US1922-2EA00

Blanking covers		
		Article No.
		8US1922-2EB00

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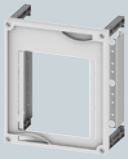
For bus-mounting fuse bases, for mounting on busbar systems

				ALPHA 1250 / 630 / 400	
			Busbar system	SR60, 60 mm	8US, 60 mm
					
Number of poles		**Height**	**Width**		
3P	**4P**	**outside**	**outside**		
■	–	300 mm	250 mm	8GK4801-2KK12	–
		450 mm	250 mm	8GK4801-3KK12	–
	■	300 mm	250 mm	–	8GK4800-2KK12
			500 mm	–	8GK4800-2KK22
			750 mm	–	8GK4800-2KK32

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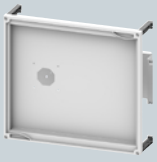
Assembly kits

For 3KF switch disconnectors with fuses

							ALPHA 1250 / 630 / 400	
						Operating mechanism	Front operating mechanism, center	Door-coupling rotary operating mechanism (mounted in the front cover)
								
Switches				**Distribution board**				
Size	**Rated current**	**3P**	**4P**	**Height outside**	**Width outside**	**Depth outside**		
3KF1	80 A	■	■	300 mm	250 mm	≥210 mm	8GK4722-2KK10	–
3KF2	160 A	■	■	300 mm	500 mm	≥210 mm	8GK4723-2KK10	–
3KF3 ... 3KF4	400 A	■	■	300 mm	500 mm	≥320 mm	–	8GK4722-2KK20

For 3KD switch disconnectors

								ALPHA 1250 / 630 / 400	
							Operating mechanism	Direct operating mechanism	Door-coupling rotary operating mechanism (mounted in the front cover)
									
Switches					**Distribution board**				
Size	**Rated current**	**No. of**	**3P**	**4P**	**Height outside**	**Width outside**	**Depth outside**		
1	16 ... 63 A	2	■	–	300 mm	250 mm	210 mm	8GK4720-2KK10	–
2	80 ... 200 A	1	■	■	300 mm	250 mm	210 mm	8GK4720-2KK10	–
3	200 ... 400 A	1	■	■	300 mm	250 mm	210 mm	8GK4721-2KK10	–
3 ... 4	200 ... 800 A	1	■	■	450 mm	500 mm	≥250 mm	–	8GK4720-3KK20

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For 3KA switch disconnectors on support plate

							ALPHA 1250 / 630 / 400	
						Operating mechanism	Direct operating mechanism	Direct operating mechanism
								
Switches					**Distribution board**			
Size	**Rated current**	**No. of**	**3P**	**4P**	**Height outside**	**Width outside**		
3KA 50/51/52/53	63 A / 80 A/ 125 A / 160 A	1	■	–	300 mm	250 mm	8GK4707-3KK17	–
3KA 55/57/58	250 A / 400 A/ 630 A	1	■	■	300 mm	500 mm	–	8GK4707-4KK27

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Assembly kits

For 3VL molded case circuit breakers

ALPHA 1250 / 630 / 400



Switches						Distribution board		Standard
Size	Type	Rated current	No. of	3P	4P	Height outside	Width outside	
3VL1	3VL160X	16 ... 160 A	1	■	■	300 mm	250 mm	8GK4701-2KK12
						450 mm	250 mm	8GK4701-3KK12
3VL2	3VL160	50 ... 160 A	1	■	■	300 mm	250 mm	8GK4701-2KK12
						450 mm	250 mm	8GK4701-3KK12
3VL3	3VL250	200 ... 250 A	1	■	■	450 mm	250 mm	8GK4701-3KK12
3VL4	3VL400	200 ... 400 A	1	■	■	600 mm	250 mm	8GK4702-4KK12
						750 mm	250 mm	–
3VL5	3VL630	315 ... 630 A	1	■	–	600 mm	250 mm	8GK4703-4KK13
			1	■	■	600 mm	500 mm	8GK4704-4KK13
			1	■	–	600 mm	500 mm	–
			1	–	■	600 mm	500 mm	–
3VL6	3VL800	800 A	1	■	–	600 mm	250 mm	8GK4704-4KK15
			1	■	■	600 mm	500 mm	8GK4704-4KK25
3VL7	3VL1250	1000 ... 1250 A	1	■	■	600 mm	500 mm	8GK4705-4KK25
3VL8	3VL1600	1600 A	1	■	■	600 mm	500 mm	8GK4705-4KK25

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With RCD module mounted	**For installation with front-operated rotary operating mechanism**
–	–
8GK4720-3KK10	8GK4722-3KK10
–	–
8GK4721-3KK10	8GK4722-3KK10
8GK4721-3KK10	8GK4722-3KK10
–	8GK4722-4KK10
8GK4720-5KK10	–
–	–
–	–
–	8GK4723-4KK10
–	8GK4721-4KK20
–	–
–	–
–	–
–	–

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Assembly kits

For 3VA molded case circuit breakers, 3-pole and 4-pole

ALPHA 1250 / 630 / 400



Switches						Distribution board		
Size	Rated current	No. of	Direct operating mechanism	Rotary operating mechanism	Motorized operating mechanism	Height outside	Width outside	
3VA10.., 3VA11..	100 ... 160 A	1	■	–	–	300 mm [1]	250 mm	8GK4731-2KK12
						450 mm	250 mm	8GK4730-2KK12
			–	■	–	300 mm [1]	250 mm	8GK4733-2KK12
			–	–	■	300 mm [1]	250 mm	–
						450 mm	250 mm	–
		3	■	–	–	300 mm [1]	500 mm	8GK4731-2KK22
						450 mm	500 mm	8GK4730-2KK22
			–	■	–	300 mm [1]	500 mm	8GK4733-2KK22
			–	–	■	300 mm [1]	500 mm	–
						450 mm	500 mm	–
3VA12	250 A	1	■	–	–	300 mm	250 mm	8GK4732-2KK12
						450 mm	250 mm	8GK4733-3KK10
			–	■	–	300 mm	250 mm	8GK4735-2KK12
			–	–	■	300 mm	250 mm	–
						450 mm	250 mm	–
						600 mm	250 mm	–
		3	■	–	–	300 mm	500 mm	8GK4732-2KK22
						450 mm	500 mm	8GK4731-3KK20
			–	■	–	300 mm	500 mm	8GK4735-2KK22
			–	–	■	300 mm	500 mm	–
3VA20.., 3VA22..	100 ... 250 A	1	■	–	–	300 mm	250 mm	8GK4730-3KK10
			–	■	–	300 mm	250 mm	8GK4736-2KK12
			–	–	■	600 mm	250 mm	–
		3	■	–	–	300 mm	500 mm	8GK4730-3KK20
			–	■	–	300 mm	500 mm	8GK4736-2KK22
			–	–	■	600 mm	500 mm	–
3VA23.., 3VA24..	400 ... 630 A	1	■	–	–	450 mm	250 mm	8GK4730-4KK12
							500 mm	8GK4730-4KK22
			–	■	–	450 mm	500 mm	8GK4733-4KK22
			–	–	■	450 mm	250 mm	–
							500 mm	–
						600 mm	250 mm	–
							500 mm	–

[1] For insulated connection only
[2] Distribution board depth at least 250 mm
[3] Distribution board depth at least 320 mm

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	With RCD module Infeed side	**At side**		**With RCD module Infeed side**	**At side**
–	–	–	–	–	–
–	–	–	–	–	–
–	–	–	–	–	–
8GK4734-2KK12 [2]	–	–	–	–	–
–	8GK4731-3KK12	8GK4731-3KK10	–	8GK4734-3KK12 [2]	–
–	–	–	–	–	–
–	–	–	–	–	–
–	–	–	–	–	–
8GK4734-2KK22 [2]	–	–	–	–	–
–	8GK4731-3KK22	–	–	8GK4734-3KK22 [2]	–
–	–	–	–	–	–
–	–	–	–	–	–
–	–	–	–	–	–
8GK4735-3KK10 [2]	–	–	–	–	–
–	–	–	–	–	8GK4733-4KK10 [2]
–	8GK4732-4KK10	–	–	8GK4736-4KK12	–
–	–	–	–	–	–
–	–	–	–	–	–
–	–	–	–	–	–
8GK4732-3KK20 [2]	–	–	–	–	–
–	–	–	–	–	–
–	–	–	–	–	–
–	8GK4735-4KK12	–	–	–	–
–	–	–	–	–	–
–	–	–	–	–	–
–	8GK4735-4KK22	–	–	8GK4736-4KK22 [3]	–
–	–	–	–	–	–
–	–	–	–	–	–
–	–	–	–	–	–
8GK4734-4KK12 [3]	–	–	–	–	–
8GK4734-4KK22 [3]	–	–	–	–	–
–	8GK4731-4KK12	–	–	–	–
–	8GK4731-4KK22	–	–	–	–

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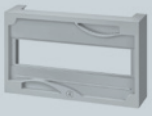
Assembly kits

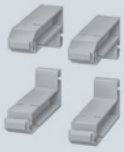
For meter mounting without top and bottom termination area

		ALPHA 630
		
Height outside	**Width outside**	
450 mm	250 mm	8GE3713-4

For meter mounting with top and bottom termination area

		ALPHA ZS	
		Meter support plate	Covers
			
Height	**Width**		**Top/bottom termination area**
150 mm	250 mm	–	8GS4006-0
300 mm	250 mm	–	8GS4006-5
450 mm	250 mm	8GS4007-4	–

Accessories

Supports for front cover	
	**Article No.**
	8GS4018-8

Standard mounting rails	
	**Article No.**
	8GS4010-6

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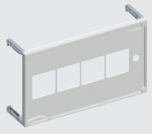
Front covers for measuring devices

ALPHA 1250 / 630 / 400



Use	Height outside	Width outside	Cutout dimensions	
1× measuring device 96 × 96 mm	300 mm	500 mm	92 × 92 mm	8GK4500-2KK20

For cable connections to the door

ALPHA 1250 / 630 / 400



Height	Width	Diameter	
150 mm	250 mm	M20	8GK4500-1KK12
	500 mm	M20	8GK4500-1KK22

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Quick-assembly kits

For modular installation devices and terminal blocks

					ALPHA 1250 / 630 / 400	
				Tier spacing	125 mm	
						
Height outside	Width outside	No. of tiers	Terminals	MW	With N/PE bar	With 2 N/PE bars
For modular installation devices						
450 mm	250 mm	3	–	36	–	–
600 mm	250 mm	4	–	48	8GK4001-4KK11	–
	500 mm	8	–	96	8GK4001-4KK22	–
750 mm	250 mm	5	–	60	8GK4001-5KK11	–
	500 mm	10	–	120	8GK4001-5KK22	–
900 mm	250 mm	6	–	72	8GK4001-6KK11	8GK4003-6KK11
	500 mm	12	–	144	8GK4001-6KK22	–
1050 mm	250 mm	7	–	84	8GK4001-7KK11	8GK4003-7KK11
	500 mm	14	–	168	8GK4001-7KK22	–
1200 mm	250 mm	8	–	96	8GK4001-8KK12	8GK4003-8KK12
	500 mm	16	–	192	8GK4001-8KK22	–
1350 mm	250 mm	9	–	108	8GK4002-8KK12	8GK4003-8KK13
	500 mm	18	–	216	8GK4002-8KK22	–
For modular installation devices and terminal blocks						
900 mm	250 mm	2	4	48	–	–
	500 mm	4	8	96	–	–
	750 mm	6	12	144	–	–
1050 mm	250 mm	2	5	60	–	–
	500 mm	4	10	120	–	–
	750 mm	6	15	180	–	–
1200 mm	250 mm	2	6	72	–	–
	500 mm	4	12	144	–	–
	750 mm	6	18	216	–	–
1350 mm	250 mm	3	6	72	–	–
	500 mm	6	12	144	–	–
	750 mm	9	18	216	–	–

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	ALPHA 160	
150 mm	125 mm	150 mm
		
Without N/PE bar	**With N/PE bar**	**Without N/PE bar**
–	8GK4001-3KK11	8GK4051-3KK11
–	8GK4001-4KK11	8GK4051-4KK11
–	–	–
–	8GK4001-5KK11	8GK4051-5KK11
–	–	–
8GK4051-6KK11	8GK4001-6KK11	8GK4051-6KK11
8GK4101-6KK22	–	–
8GK4051-7KK11	8GK4001-7KK11	8GK4051-7KK11
8GK4101-7KK22	–	–
8GK4101-8KK12	–	–
8GK4101-8KK22	–	–
8GK4102-8KK12	–	–
8GK4102-8KK22	–	–
8GK4100-6KK12	–	–
8GK4100-6KK22	–	–
8GK4100-6KK32	–	–
8GK4100-7KK12	–	–
8GK4100-7KK22	–	–
8GK4100-7KK32	–	–
8GK4100-8KK12	–	–
8GK4100-8KK22	–	–
8GK4100-8KK32	–	–
8GK4110-8KK12	–	–
8GK4110-8KK22	–	–
8GK4110-8KK32	–	–

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Busbars

For ALPHA 1250 / 630 / 400 distribution boards

Cu busbars



Cross-section	Current	Length	Article No.
12 × 5 mm	250 A	250 mm	8GK9731-0KK10
		500 mm	8GK9731-0KK20
		750 mm	8GK9731-0KK30
		1000 mm	8GK9731-0KK40
		1250 mm	8GK9731-0KK50
20 × 5 mm	320 A	250 mm	8GK9733-0KK10
		500 mm	8GK9733-0KK20
		750 mm	8GK9733-0KK30
		1000 mm	8GK9733-0KK40
		1250 mm	8GK9733-0KK50
30 × 5 mm	450 A	250 mm	8GK9735-0KK10
		500 mm	8GK9735-0KK20
		750 mm	8GK9735-0KK30
		1000 mm	8GK9735-0KK40
		1250 mm	8GK9735-0KK50
30 × 10 mm	630 A	250 mm	8GK9736-0KK10
		500 mm	8GK9736-0KK20
		750 mm	8GK9736-0KK30
		1000 mm	8GK9736-0KK40
		1250 mm	8GK9736-0KK50

Busbar supports

Version	Use	Busbar center-to-center spacing	Article No.
 1-pole	For Cu busbars 12 × 5 (10) mm, 20 × 5 (10) mm, 30 × 5 (10) mm	–	8GK9710-0KK00
 2-pole	For Cu busbars 12 × 5 (10) mm, 20 × 5 (10) mm, 30 × 5 (10) mm	60 mm	8GK9710-0KK01
3-pole	For Cu busbars 12 × 5 (10) mm, 20 × 5 (10) mm, 30 × 5 (10) mm, Bus-mounting fuse bases and 3NP4076 switch disconnectors in conjunction with assembly kits	60 mm	8GK9711-0KK03
 4-pole	For Cu busbars 12 × 5 (10) mm, 30 × 5 (10) mm	60 mm	8GK9670-0KK00
 5-pole	For Cu busbars 12 × 5 (10) mm 3NP fuse switch disconnectors	40 mm	8GK9650-0KK00

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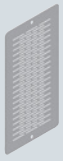
Accessories

For ALPHA 1250 / 630 / 400 / 160 distribution boards

				1250	630	400	160
Wall-mounting rails							
	• For all wall-mounted distribution boards						
	Length		**Article No.**				
	250 mm		8GK9912-0KK10			■	■
	500 mm		8GK9912-0KK20			■	■
	750 mm		8GK9912-0KK30			■	■
	1000 mm		8GK9912-0KK40			■	■
	1250 mm		8GK9912-0KK50			■	■
Cabinet mounting lugs, flat							
	**Use**		**Article No.**				
	For mounting and fixing a distribution board directly against the wall without a clearance (1 set = 4 units)		8GK9910-0KK36		■	■	■
	For connecting 2 distribution boards and for mounting and fixing a distribution board directly against the wall without a clearance (8GK9910-0KK36 additionally required for the ends) 1 set = 2 units		8GK9910-0KK37		■	■	■
Wall mounting lug, standard							
	• 1 set = 4 units						
			Article No.				
			8GK9920-0KK33	■	■	■	■
Hollow wall set							
	Use		**Article No.**				
	For mounting flush-mounting distribution boards in hollow walls		8GK9910-0KK28			■	■
M12 transport eyebolts							
			**Article No.**				
			8GK9918-0KK00	■	■	■	■
Ventilation grilles for side panel							
			**Article No.**				
			8GK9120-0KK30	■	■	■	
Bases for flat pack floor-mounted distribution boards							
	**Height outside**	**Depth**	**Width**	**Article No.**			
	100 mm	210 mm	300 mm	8GK9901-0KK12		■	
			550 mm	8GK9901-0KK22		■	
			800 mm	8GK9901-0KK32		■	
			1050 mm	8GK9901-0KK42		■	
			1300 mm	8GK9901-0KK52		■	

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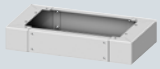
Accessories

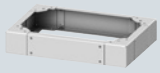
For ALPHA 1250 / 630 / 400 / 160 distribution boards

Bases for pre-assembled (welded) floor-mounted distribution boards









Height outside	Depth	Width	Article No.	1250	630	400	160
100 mm	210 mm	300 mm	8GK9901-0KA12	■	■		
		550 mm	8GK9901-0KA22	■	■		
		800 mm	8GK9901-0KA32	■	■		
		1050 mm	8GK9901-0KA42	■	■		
		1300 mm	8GK9901-0KA52	■	■		
	250 mm	300 mm	8GK9900-0KK13	■	■		
		550 mm	8GK9900-0KK23	■	■		
		800 mm	8GK9900-0KK33	■	■		
		1050 mm	8GK9900-0KK43	■	■		
		1300 mm	8GK9900-0KK53	■	■		
	320 mm	300 mm	8GK9900-0KK14	■	■		
		550 mm	8GK9900-0KK24	■	■		
		800 mm	8GK9900-0KK34	■	■		
		1050 mm	8GK9900-0KK44	■	■		
		1300 mm	8GK9900-0KK54	■	■		
	400 mm	300 mm	8GK9902-0KK13	■	■		
		550 mm	8GK9902-0KK23	■	■		
		800 mm	8GK9902-0KK33	■	■		
		1050 mm	8GK9902-0KK43	■	■		
		1300 mm	8GK9902-0KK53	■	■		

Partitions, vertical





- For the visual and spatial separation of different potentials

Cubicle depth	Height	Article No.	1250	630	400	160
140 mm	450 mm	8GK9001-3KK01				■
	600 mm	8GK9001-4KK01				■
	750 mm	8GK9001-5KK01				■
	900 mm	8GK9001-6KK01				■
	1050 mm	8GK9001-7KK01				■
210 mm	300 mm	8GK9301-2KK01		■	■	
	450 mm	8GK9301-3KK01		■	■	
	600 mm	8GK9101-4KK01		■	■	
	750 mm	8GK9101-5KK01		■	■	
	900 mm	8GK9101-6KK01		■	■	
	1050 mm	8GK9101-7KK01		■	■	
	1200 mm	8GK9101-8KK01		■	■	
	1350 mm	8GK9102-8KK01		■	■	
250/320 mm	1800 mm	8GK9520-8KK00		■		
400 mm	1800 mm	8GK9521-8KK00	■			

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Partitions, horizontal



- For the visual and spatial separation of different potentials

Cubicle depth	Width	Article No.	1250	630	400	160
140 mm	250 mm	8GK9002-0KK10				■
210 mm	250 mm	8GK9103-0KK10		■	■	
	500 mm	8GK9103-0KK20		■	■	
	750 mm	8GK9103-0KK30		■	■	
250 /320 mm	250 mm	8GK9520-0KK10		■		
	500 mm	8GK9520-0KK20		■		
400 mm	250 mm	8GK9520-0KK30	■			

Mounting plates



Cubicle Height	Width	Mounting plates Height	Width	Article No.				
600 mm	250 mm	596 mm	243 mm	8GK9531-4KK10			■	
	500 mm	596 mm	493 mm	8GK9531-4KK20			■	
750 mm	250 mm	685 mm	243 mm	8GK9531-5KK10			■	
	500 mm	685 mm	493 mm	8GK9531-5KK20			■	
900 mm	250 mm	835 mm	243 mm	8GK9531-6KK10			■	
	500 mm	835 mm	493 mm	8GK9531-6KK20			■	
1050 mm	250 mm	985 mm	243 mm	8GK9531-7KK10			■	
	500 mm	985 mm	493 mm	8GK9531-7KK20			■	
1200 mm	250 mm	1135 mm	243 mm	8GK9531-8KK10			■	
	500 mm	1135 mm	493 mm	8GK9531-8KK20			■	
1350 mm	250 mm	1285 mm	243 mm	8GK9532-8KK10			■	
	500 mm	1285 mm	493 mm	8GK9532-8KK20			■	
1800 mm	250 mm	1680 mm	242 mm	8GK9533-0KK10	■	■		
	500 mm	1680 mm	492 mm	8GK9533-0KK20	■	■		
	750 mm	1680 mm	742 mm	8GK9533-0KK30	■	■		
	1000 mm	1680 mm	992 mm	8GK9533-0KK40	■	■		
	1250 mm	1680 mm	1242 mm	8GK9533-0KK50	■	■		

Mounting plates for telecommunication units

- Made of perforated steel plate
- With insert nuts and quick-locking technology

Cubicle Height	Width	Mounting plates Height	Width	Article No.
900 mm	250 mm	835 mm	243 mm	8GS4016-1
1050 mm	250 mm	985 mm	243 mm	8GS4016-2
1200 mm	250 mm	1135 mm	243 mm	8GS4016-3
1350 mm	250 mm	1285 mm	243 mm	8GS4016-4

Longitudinal stays



- In order to mount the assembly kits in unequipped distribution boards, 2 longitudinal stays are required for each assembly kit width
- 1 set = 2 stays

Cubicle depth	Length	Article No.	1250	630	400	160
210 mm	300 mm	8GK4855-2KK02		■		
	450 mm	8GK4851-3KK00				■
	600 mm	8GK4851-4KK00			■	■
	750 mm	8GK4851-5KK00			■	■
	900 mm	8GK4851-6KK00			■	■
	1050 mm	8GK4851-7KK00			■	■
	1200 mm	8GK4851-8KK00			■	
	1350 mm	8GK4852-8KK00			■	
	1800 mm	8GK4853-8KK00		■		
250 mm, 320 mm, 400 mm	1800 mm	8GK4853-8KK02	■	■		

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Accessories

For ALPHA 1250 / 630 / 400 / 160 distribution boards

Stay supports



- For depth of 210 mm when mounting stays are to be shifted forward by 55 mm
- Necessary whenever standard mounting rails are mounted directly on the stays

Article No.	1250	630	400	160
8GK9910-0KK38			■	

Universal brackets



Article No.	1250	630	400	160
8GK9910-0KK05	■	■		

Connecting kits for longitudinal stays



Depth	Article No.	1250	630	400	160
250/320 mm	8GK9910-0KK32	■	■	■	

Crossbars



Width	Article No.	1250	630	400	160
500 mm	8GK4853-0KK20	■	■	■	
750 mm	8GK4853-0KK30	■	■	■	

Front cover, closed



Tier spacing	Height	Width	Article No.	1250	630	400	160
150 mm	75 mm	250 mm	8GK9601-0KK10	■	■	■	■
	150 mm	250 mm	8GK9601-1KK10	■	■	■	■
		500 mm	8GK9601-1KK20	■	■	■	■
		750 mm	8GK9601-1KK30	■	■	■	■
	300 mm	250 mm	8GK9601-2KK10	■	■	■	■
		500 mm	8GK9601-2KK20	■	■	■	■
		750 mm	8GK9601-2KK30	■	■	■	■
	450 mm	250 mm	8GK9601-3KK10	■	■	■	■
		500 mm	8GK9601-3KK20	■	■	■	■
		750 mm	8GK9601-3KK30	■	■	■	■
	600 mm	250 mm	8GK9601-4KK10	■	■	■	■
		500 mm	8GK9601-4KK20	■	■	■	■
		750 mm	8GK9601-4KK30	■	■	■	■

Front cover with cutout



Height	Width	Tiers	MW	Article No.	1250	630	400	160
150 mm	250 mm	1	12	8GK9601-1KK11	■	■	■	■
	500 mm	1	24	8GK9601-1KK21	■	■	■	■
	750 mm	1	36	8GK9601-1KK31	■	■	■	■
300 mm	250 mm	2	24	8GK9601-2KK11	■	■	■	■
	500 mm	2	48	8GK9601-2KK21	■	■	■	■
	750 mm	2	72	8GK9601-2KK31	■	■	■	■
450 mm	250 mm	3	36	8GK9601-3KK11	■	■	■	■
	500 mm	3	72	8GK9601-3KK21	■	■	■	■
	750 mm	3	108	8GK9601-3KK31	■	■	■	■
600 mm	250 mm	4	48	8GK9601-4KK11	■	■	■	■
	500 mm	4	96	8GK9601-4KK21	■	■	■	■
	750 mm	4	144	8GK9601-4KK31	■	■	■	■

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Supports for front cover



- Plastic

Version	Length	Mounting	Article No.	1250	630	400	160
Spare part	117 mm	Standard	8GK9910-0KK30	■	■	■	
	54 mm	Standard	8GK9910-0KK20				■
Large pack	117 mm	For 15 mm standard mounting rail directly onto the standard mounting rail holder	8GK9910-0KK31	■	■	■	
	61.5 mm	For 15 mm standard mounting rail directly onto the stays	8GK9910-0KK24	■	■	■	

Assembly tool for supports



- For short and long version
- With ergonomic handle

Article No.	1250	630	400	160
8GK9910-0KK27	■	■	■	■

Support extensions



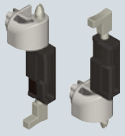
Length	Article No.	1250	630	400	160
7.5 mm	8GK9911-0KK03	■	■	■	■

Quick-lock screws for front cover



Material	Color	Article No.	1250	630	400	160
Plastic	RAL 7035 (light gray)	8GK9910-0KK26	■	■	■	■

Replacement door hinges



- For wall/floor-mounted distribution boards
- 1 set = 2 units

Article No.	1250	630	400	160
8GK9920-0KK24	■	■	■	■

Circuit diagram pockets

Version	Format	Depth	Article No.	1250	630	400	160
Sheet steel	DIN A3	10 mm	8GK9910-0KK22	■	■	■	■
Transparent sleeve, adhered all-over	DIN A4		8GK9910-0KK23	■	■	■	■
Plastic	DIN A4	30 mm	8GD9132	■	■	■	■
Plastic, large pack	DIN A4	30 mm	8GK9910-1KK24	■	■	■	■







Siemens nameplate

Material	Version	Color	Article No.	1250	630	400	160
Aluminum	Self-adhesive	Petrol	8GD9084	■	■	■	■
Sticker	Self-adhesive	Petrol	8GF9661	■	■	■	■

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Accessories

For ALPHA 1250 / 630 / 400 / 160 distribution boards

			1250	630	400	160
IP43/IP55 locking systems for wall-mounted distribution boards						
	Version	**Article No.**				
	Standard locking device with rotary handle	8GK9560-0KK04			■	■
	Retrofit kit for standard locking device with degree of protection IP44	8GK9560-0KK05			■	■
	Rotary handle locking device for profile cylinders (E012 or Senat tumbler)	8GK9560-0KK06			■	■
	Rotary handle, lockable, incl. E012 lock and two keys	8GK9560-0KK13			■	■
Locking systems for floor-mounted distribution boards						
	Version	**Article No.**				
	Rotary handle, recessable, with pushbutton technique	8GK9561-0KK01	■	■		
	Lock insert for installation of profile semicylinder	8GK9561-0KK02	■	■		
Profile semicylinder for locks						
	Use / **Version**	**Article No.**				
	Wall-mounted distribution boards — With E012 lock and two keys	8GK9560-0KK07			■	■
	With Senat tumbler and two keys	8GK9560-0KK08			■	■
	With 3-mm pin as double-bit lock	8GK9560-0KK10			■	■
	Floor-mounted distribution boards — With E012 lock and two keys	8GK9561-0KK00	■	■		
	With Senat tumbler and two keys	8GK9560-0KK03	■	■		

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			1250	630	400	160
Spare keys						
	**Version**	**Article No.**				
	For double-bit interlocking mechanism	8GD9290	■	■		
	For E012 lock	8GF9390-2	■	■	■	■
Connecting kit, IP43/IP55						
	• For side-by-side mounting of enclosures • Comprising: screws, washers, nuts and 10 m roll of sealing strip					
		Article No.				
		8GK9920-0KK31	■	■	■	
Extra-deep brackets						
	• For recessed installation of standard mounting rails					
		Article No.				
		8GK9910-0KK34	■	■	■	
Extra-deep brackets, depth-adjustable						
		**Article No.**				
		8GK9911-0KK01	■	■	■	
Drop-down brackets, universal						
		**Article No.**				
		8GK9911-0KK02	■	■	■	
Standard mounting rails, lowered						
	**Width**	**Article No.**				
	250 mm	8GK9910-0KK35	■	■	■	
	500 mm	8GK9910-0KK40	■	■	■	
	750 mm	8GK9910-0KK41	■	■	■	
15 mm standard mounting rails						
	**Width**	**Article No.**				
	250 mm	8GK9910-1KK10	■	■		
	500 mm	8GK9910-1KK20	■	■		
	750 mm	8GK9910-1KK30	■	■		
	1000 mm	8GK9910-1KK40	■	■		
	1250 mm	8GK9910-1KK50	■	■		
Standard mounting rail holders for 15 mm standard mounting rail						
	• Comprising a left and a right holder					
	Version	**Version**	**Article No.**			
	Long	For 1 standard mounting rail	8GK9910-1KK81	■	■	■
		For 2 standard mounting rails	8GK9910-1KK83	■	■	■
		For 3 standard mounting rails	8GK9910-1KK84	■	■	■
		For 4 standard mounting rails	8GK9910-1KK85	■	■	■

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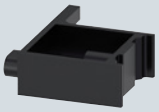
Accessories

For ALPHA 1250 / 630 / 400 / 160 distribution boards

Iso supports



- For insulated standard mounting rail assembly

Version	Article No.	1250	630	400	160
12 mm	8GK9911-0KK04	■	■	■	■
31.5 mm	8GK9911-0KK05	■	■	■	
55.5 mm	8GK9911-0KK06	■	■	■	

Screws M5 × 10, self-tapping



- Large pack: 500 units

Article No.	1250	630	400	160
8GK9911-0KK00	■	■	■	■

Crossbars for mounting vertical busbar systems



Width	Article No.	1250	630	400	160
250 mm	8GK9911-1KK00	■	■	■	
500 mm	8GK9911-1KK01	■	■	■	
750 mm	8GK9911-1KK02	■	■	■	

Blanking strips



Version	Color	Article No.	1250	630	400	160
For 12 MW (1 MW = 18 mm)	RAL 7035 (light gray)	8GK9910-0KK00	■	■	■	■
Length 1 m w/o pressure-relief joint, to cut to length	RAL 7035 (light gray)	8GK9910-0KK01	■	■	■	

Blanking plugs

Diameter	Article No.	1250	630	400	160
6 mm	8GK9910-0KK06	■	■	■	■
11 mm	8GK9910-0KK07	■	■	■	■

N terminals



- For snap-on mounting onto the standard mounting rail
- For distributing the neutral conductor when using several RCCBs
- 2× screw terminal, conductor cross-section max. 16 mm²
- 14× plug-in terminal, conductor cross-section max. 4 mm²

Article No.	1250	630	400	160
8GS4034-1	■	■	■	■

PE terminals



- For snap-on mounting onto the standard mounting rail
- 2× screw terminal, conductor cross-section max. 16 mm²
- 14× plug-in terminal, conductor cross-section max. 4 mm²

Article No.	1250	630	400	160
8GS4034-2	■	■	■	■

N/PE terminals



- For snap-on mounting onto the standard mounting rail
- For distributing the neutral conductor when using several RCCBs
- 1× screw terminal, conductor cross-section max. 16 mm², per PE and N potential
- 7× plug-in terminal, conductor cross-section max. 4 mm², per PE and N potential

Article No.	1250	630	400	160
8GS4034-3	■	■	■	■

N/N terminals



- For snap-on mounting onto the standard mounting rail
- For distributing the neutral conductor when using several RCCBs
- 1× screw terminal, conductor cross-section max. 16 mm², per PE and N potential
- 7× plug-in terminal, conductor cross-section max. 4 mm², per PE and N potential

Article No.	1250	630	400	160
8GS4034-4	■	■	■	■

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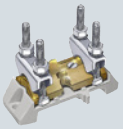
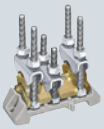
				1250	630	400	160
Terminals for circular conductors							
	Busbar thickness	**Conductor cross-section**	**Article No.**				
	5 mm	1.5 ... 16 mm²	8US1921-2AA00	■	■	■	
		1.5 ... 35 mm²	8US1921-2AB00	■	■	■	
		16 ... 70 mm²	8US1921-2AC00	■	■	■	
		16 ... 120 mm²	8US1921-2AD00	■	■	■	
Terminals for circular conductors							
	Busbar thickness	**Conductor cross-section**	**Article No.**				
	10 mm	1.5 ... 16 mm²	8US1921-2BA00	■	■	■	
		1.5 ... 35 mm²	8US1921-2BB00	■	■	■	
		16 ... 70 mm²	8US1921-2BC00	■	■	■	
		16 ... 120 mm²	8US1921-2BD00	■	■	■	
Terminals with bases made of glass-fiber reinforced polyester resin							
	Incoming cables		**Outgoing cables**			**Article No.**	
	No. of	**Cross-section**	**No. of**	**Cross-section**			
	1	6 ... 70 mm²	1	6 ... 70 mm²	8JK401	■	■	■	
		4 ... 35 mm²	3	4 ... 35 mm²	8JH4044	■	■	■	
		50 ... 240 mm²	1	50 ... 240 mm²	8JK4061	■	■	■	
	2	50 ... 240 mm²	2	50 ... 185 mm²	8JK406	■	■	■	

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Accessories

For ALPHA 1250 / 630 / 400 / 160 distribution boards

Incoming and outgoing terminal for busbars

Busbar Dimensions	No. of	Conductor cross-section	Description	Article No.	1250	630	400	160
16 × 3 mm	1	1.5 … 16 mm²		8JH4122	■	■	■	
		10 … 35 mm²		8JH4124	■	■	■	
6 × 6 mm	1	16 … 35 mm²	Can be retrofitted without dismantling the busbar	8JH4114	■	■	■	
20 × 8 mm	1 or 2	50 … 240 mm²	1 conductor per clamping point	8JK3171	■	■	■	

Incoming and outgoing terminal for busbars

Busbar Dimensions	No. of	Conductor cross-section	Description	Article No.	1250	630	400	160
–	–	–	2 conductors per clamping point	8JK3172	■	■	■	
12 × 5 mm	1	10 … 35 mm²		8JH4104	■	■	■	
		16 … 70 mm²		8JH4105	■	■	■	
	2	16 … 35 mm²		8JH4105	■	■	■	

N/PE bars as plug-in terminals

- For mounting on longitudinal stays at a 30° inclination

Version	Connections	Article No.	1250	630	400	160
PE bar	6 screw connections 2.5 … 16 mm² and 21 screw connections 1.5 … 4 mm²	8GK9910-0KK11				■
PE + N bar	PE bar: 6 screw connections 2.5 … 16 mm² and 21 screw connections 1.5 … 4 mm² N bar: 2 screw connections 2.5 … 16 mm² and 10 screw connections 1.5 … 4 mm²	8GK9910-0KK12				■

Terminal with ceramic base

Incoming cables No. of	Incoming cables Cross-section	Outgoing cables No. of	Outgoing cables Cross-section	Article No.	1250	630	400	160
1	4 … 35 mm²	1	4 … 35 mm²	8JH404	■	■	■	■

Cable clamping rail

- For strain relief
- C-profile 30 × 15 mm

Width	Article No.	1250	630	400	160
250 mm	8GK9911-0KK10	■	■	■	
500 mm	8GK9911-0KK20	■	■	■	
750 mm	8GK9911-0KK30	■	■	■	
1000 mm	8GK9911-0KK40	■	■	■	
1250 mm	8GK9911-0KK50	■	■	■	

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Cable holders



Use	Version	Article No.	1250	630	400	160
For standard mounting rail	Height 45 mm, width 40 mm	8GK9910-0KK80	■	■	■	
For mounting in 5-mm hole	Clip with cable tie	8GK9910-0KK81	■	■	■	

Cable flange for cable entry





Version	Degree of protection	Cable routing	Article No.	1250	630	400	160
1-component flange	IP43	Bottom	8GK9100-0KK00	■	■	■	
2-component flange		Top/bottom	8GK9000-0KK02				■
2-component flange	IP55	Top/bottom	8GK9100-0KK01	■	■	■	
Bushing flange		Busbar system	8GK9100-0KK10	■	■	■	

Cable flange for cable entry (only safety class I)






Version	Degree of protection	Cable diameter	Article No.	1250	630	400	160
Blank flange	IP43		8GK9100-0KK02	■	■	■	
	IP55		8GK9100-0KK03	■	■	■	
Sheet steel, without knockouts	IP55		8GK9100-0KK04	■			
Flange, incl. 1 cable support sleeve	IP55	14 ... 65 mm	8GK9100-0KK05	■	■	■	
Flange, incl. 2 cable support sleeves	IP55	14 ... 65 mm	8GK9100-0KK06	■	■	■	

Rubber cable entries






- For inserting in 38 mm diameter knockouts (= Pg29)
- Degree of protection IP65

No. of	Cable diameter	Article No.	1250	630	400	160
1	12 ... 29 mm	8HP1805	■	■	■	■
2	6 ... 15 mm	8HP1806	■	■	■	■
3	4 ... 12.5 mm	8HP1807	■	■	■	■
4	4 ... 12 mm	8HP1808	■	■	■	■

Cable entries for cable entry plate



- For 8HP1520 cable entry plates

Cable diameter	Article No.	1250	630	400	160
14 ... 65 mm	8HC6900	■	■	■	■

Breathers, PG 16



- For distribution boards in an outdoor climate to avoid condensate
- Degree of protection IP54

Article No.	1250	630	400	160
8HE8541	■	■	■	■

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System overview

Small distribution boards ALPHA

SIMBOX XL



SIMBOX WP



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ALPHA SIMBOX XL



Flush-mounting and hollow-wall distribution boards



Surface-mounting distribution boards



Multimedia distribution boards

Accessories



Terminal strips



RCCB terminals



Door locking kit



Mounting aid for flush mounting

ALPHA SIMBOX WP



Surface-mounting distribution boards

Accessories



Covers



N/PE terminal strips



Inner partitions



Safety cylinder locks

Note:
You will find a detailed range of accessories with the basic units.

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ALPHA SIMBOX XL small distribution boards

Flush-mounting and hollow-wall distribution boards, rated current up to 63 A

				Complete supply	Project supply	
			Degree of protection	IP30	IP30	
						
Recess dimensions			Type	Safety class II	Safety class II	
Width	Depth	Length			Wall-recessed box	Expansion package
Flush-mounting distribution boards						
359 mm	88 mm	393 mm	1-tier	8GB5012-1KM	8GB5212-1KM01	8GB5212-3KM01
		518 mm	2-tier	8GB5024-1KM	8GB5224-1KM01	8GB5224-3KM01
		643 mm	3-tier	8GB5036-1KM	8GB5236-1KM01	8GB5236-3KM01
		768 mm	4-tier	8GB5048-1KM	8GB5248-1KM01	8GB5248-3KM01
Hollow-wall distribution boards						
323 mm	88 mm	355 mm	1-tier	8GB5012-4KM	8GB5212-2KM01	8GB5212-4KM01
		480 mm	2-tier	8GB5024-4KM	8GB5224-2KM01	8GB5224-4KM01
		605 mm	3-tier	8GB5036-4KM	8GB5236-2KM01	8GB5236-4KM01
		730 mm	4-tier	8GB5048-4KM	8GB5248-2KM01	8GB5248-4KM01

Accessories

Terminal strips with plug-in terminals



Type	Potential 1	Potential 2	Article No.
N/PE	N = 3 × 25 + 14 × 4 mm²	PE = 3 × 25 + 14 × 14 mm²	8GB5016-5KM
N/N	N1 = 3 × 25 + 14 × 4 mm²	N2 = 3 × 25 + 14 × 14 mm²	8GB5017-5KM
N	N = 6 × 25 + 28 × 4 mm²		8GB5020-5KM
PE	PE = 6 × 16 + 28 × 5 mm²		8GB5021-5KM

Terminal strips with screw terminals



Type	Potential 1	Potential 2	Article No.
N/PE	N = 3 × 16 + 14 × 10 mm²	PE = 3 × 16 + 14 × 10 mm²	8GB5008-5KM
N/N	N1 = 3 × 16 + 14 × 10 mm²	N2 = 3 × 16 + 14 × 10 mm²	8GB5015-5KM
N	N = 6 × 16 + 28 × 10 mm²		8GB5010-5KM
PE	PE = 6 × 16 + 28 × 10 mm²		8GB5011-5KM

RCCB terminals



Use	Potential	Article No.
For distributing the neutral conductor to two RCCBs	N = 3 × 16 + 2 × 10 mm²	8GB5005-5KM

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Surface-mounting distribution boards, rated current up to 63 A

				Distribution boards without door	Metal doors, white	Plastic doors, white
			Degree of protection	IP30	IP30	IP30
						
External dimensions			**Type**	**Safety class II**	**Safety class II**	**Safety class II**
Width	**Depth**	**Length**				
Surface-mounting distribution boards						
305 mm	99 mm	250 mm	1-tier	8GB5012-0KM	8GB5001-5KM	8GB5001-5KM01
		375 mm	2-tier	8GB5024-0KM	8GB5002-5KM	8GB5002-5KM01
		515 mm	3-tier	8GB5036-0KM	8GB5003-5KM	8GB5003-5KM01
		640 mm	4-tier	8GB5048-0KM	8GB5004-5KM	8GB5004-5KM01

Door locking kit



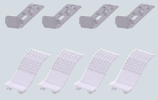
Use	Feature	Article No.
For snapping into door handle	With two keys	8GB5006-5KM

Blanking strips



Width	Feature	Color	Article No.
12 MW	Increased flame protection up to 850 °C	White	8GB4683

Mounting aid for flush mounting



Use	Article No.
For flush-mounting and hollow-wall distribution boards	8GB5013-5KM

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ALPHA SIMBOX XL small distribution boards

Multimedia distribution boards, rated current up to 63 A

				Surface-mounting distribution boards
			Degree of protection	IP30
				
Cutout width	**Cutout depth**	**Cutout length**	**Type**	**Safety class II**
Hollow-wall/flush-mounting distribution boards				
323 mm	88 mm	605 mm	3-tier	8GB5036-3KM01
		730 mm	4-tier	8GB5048-3KM01
Surface-mounting distribution boards				
323 mm	88 mm	605 mm	3-tier	8GB5036-3KM00
		730 mm	4-tier	8GB5048-3KM00

Accessories

Connecting lugs		
	Use	**Article No.**
	For installing several distribution boards in a row, vertically or horizontally	8GB5025-5KM

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ALPHA SIMBOX WP small distribution boards

Surface-mounting distribution boards, rated current up to 63 A

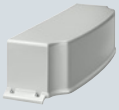
	Unequipped surface-mounting distribution boards
Degree of protection	IP65



Type	Height outside	Width outside	Depth outside	Safety class II
Surface-mounting distribution boards				
1-tier	210 mm	143 mm	100 mm	8GB1371-0
		215 mm	100 mm	8GB1371-1
	260 mm	298 mm	140 mm	8GB1371-2
	285 mm	410 mm	140 mm	8GB1371-3
2-tier	420 mm	298 mm	140 mm	8GB1372-2
	463 mm	410 mm	140 mm	8GB1372-3
3-tier	655 mm	410 mm	140 mm	8GB1373-3
4-tier	878 mm	410 mm	160 mm	8GB1374-3

Accessories

Covers



- For connection of conduit and cable duct entries
- Snap-on mounting

MW	Article No.
12	8GB2051-0
18	8GB2051-1

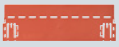
N/PE terminal strips



- For snapping onto device holder

MW	Potential 1	Potential 2	Article No.
8	N = 1 × 25 + 7 × 10 mm²	PE = 1 × 25 + 7 × 10 mm²	8GB2052-0
12	N = 3 × 25 + 10 × 10 mm²	PE = 3 × 25 + 10 × 10 mm²	8GB2052-1
18	N = 5 × 25 + 14 × 10 mm²	PE = 5 × 25 + 14 × 10 mm²	8GB2052-2

Inner partitions, horizontal



MW	Article No.
12	8GB2053-0
18	8GB2053-1

Front covers

MW	Article No.
12	8GB2054-0
18	8GB2054-1

Safety cylinder locks



Material	Scope of supply	Article No.
Metal	With key	8GB2055-0

Blanking strips



Version	Color	Article No.
For 12 MW (1 MW = 18 mm)	RAL 7035 (light gray)	8GK9910-0KK00

15

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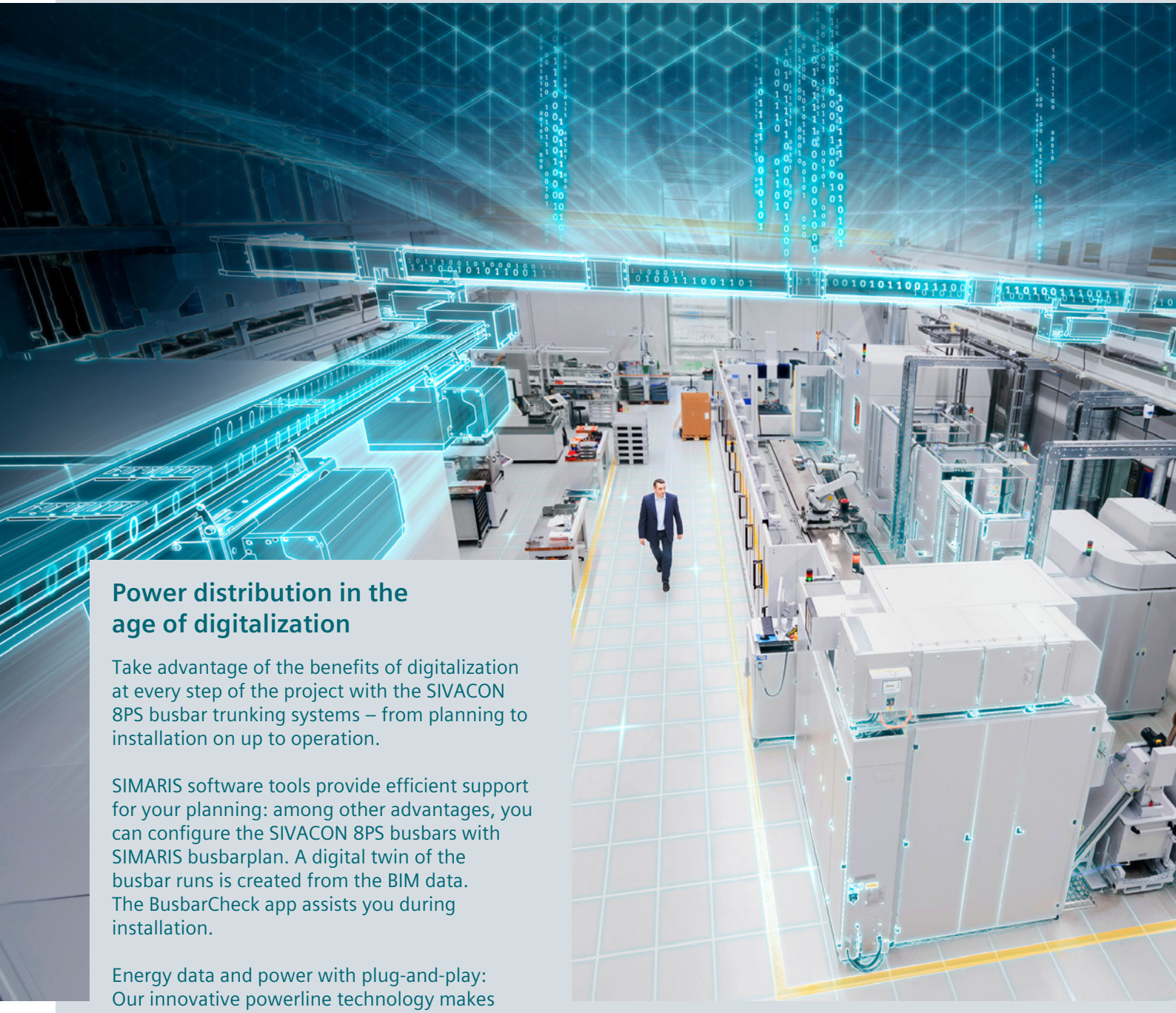

Power distribution in the age of digitalization

Take advantage of the benefits of digitalization at every step of the project with the SIVACON 8PS busbar trunking systems – from planning to installation on up to operation.

SIMARIS software tools provide efficient support for your planning: among other advantages, you can configure the SIVACON 8PS busbars with SIMARIS busbarplan. A digital twin of the busbar runs is created from the BIM data. The BusbarCheck app assists you during installation.

Energy data and power with plug-and-play: Our innovative powerline technology makes this possible for SIVACON 8PS busbar trunking systems – efficient and reliable.
Energy data is simply transferred to the automation and energy management systems, as well as to cloud-based systems (IoT). Data and electricity travel the same path via the conductor circuits and phases of the BD2, LD, LData and LI busbar trunking systems.

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Busbar Trunking Systems



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Quick selection guide 16/4

SIVACON 8PS busbar trunking systems 16/4

Planning and installation tools 16/6

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A multitude of additional information ...

Information + ordering

All the important things at a glance

Information to get you started

For information about busbar trunking systems, please visit our website
www.siemens.com/sivacon-8PS

Contact persons in your region

We are there when you need us

You can find your local contacts at
www.siemens.com/lowvoltage/contact

Your product in detail

The Siemens Industry Online Support portal provides comprehensive information
www.siemens.com/lowvoltage/product-support

- Brochure – Energy and data successfully put on track (109747761)
- Catalog LV 70 – 2015 – SIVACON 8PS busbar trunking systems – BD01, BD2 up to 1250 A (109744546)

The relevant tender specifications can be found at
www.siemens.com/lowvoltage/tenderspecifications

Use our conversion tool for quick and easy conversion to Siemens products www.siemens.com/conversion-tool

Our video range

Siemens YouTube channel

- SIVACON power distribution (general)
  bit.ly/2m4oSLI

Everything you need for your order

Refer to the Industry Mall for an overview of your products

- SIVACON 8PS sie.ag/2lXpCT1
- SIMARIS planning tools sie.ag/2m3oFbS

Direct forwarding to the individual products in the Industry Mall by clicking on the Article No. in the catalog or by entering this web address incl. Article No.
www.siemens.com/product?Article No.

Order support for SIVACON 8PS – BD01 and BD2
www.siemens.com/LV70

Configurators

Configure your SIVACON 8PS BD01 or BD2 busbar trunking system in the Industry Mall

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... can be found in our online services

Commissioning + operation

Planning tools

BIM-compliant SIMARIS planning tools

The SIMARIS planning tools effectively assist you in your planning process. Project-specific BIM (Building Information Modeling) data for cross-package planning is also possible.
www.siemens.com/simaris

Your product in detail

The Siemens Industry Online Support portal provides detailed technical information
www.siemens.com/lowvoltage/product-support

- Operating instructions
- Certificates

Engineering data for CAD or CAE systems are available in the CAx Download Manager at
www.siemens.com/lowvoltage/cax

Manuals

Manuals are available for downloading in Siemens Industry Online Support at
www.siemens.com/lowvoltage/manuals

- Planning manual – Planning with SIVACON 8PS (109478425)

The fast track to the experts

Competent expert advice on technical questions with a wide range of demand-optimized services for all our products and systems.

Assistance with technical queries is provided at
www.siemens.com/lowvoltage/support-request

We offer a comprehensive portfolio of services. You can find your local contacts at
www.siemens.com/lowvoltage/contact

You can find further information on services at
www.siemens.com/service-catalog

Training and tutorials

Our training courses can be found at
www.power-academy.siemens.com

Technical overview – Busbar trunking systems

The fast way to get you to our online services

This page provides you with comprehensive information and links on busbar trunking systems
www.siemens.com/lowvoltage/product-support (109769090)

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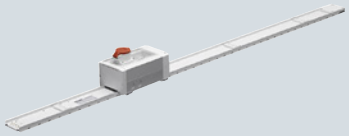
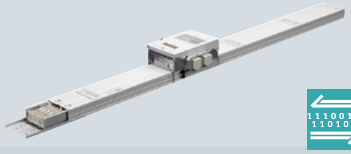
SIVACON 8PS busbar trunking systems





Busbar trunking systems	BD01	BD2
Basic data		
System description	Flexible power supply in workshops and production plants for skilled trades and businesses and commercial enterprises	The universal solution for high power levels in a small space, especially in offices and in industrial transfer lines
Typical applications	• Workshops and production plants • Supermarkets • Data centers • High-rise buildings • Trade fair buildings • Automotive industry • Marine applications	• Workshops and production plants • Production industry • Do-it-yourself centers • Data centers • High-rise buildings • Foodstuffs industry • Trade fair buildings • Hospitals • Automotive industry • Marine applications
Basic data		
Rated insulation voltage U_i	400 V AC	690 V AC
Rated operational voltage U_e	400 V AC	690 V AC
Degree of protection	IP54, IP55	IP52, IP55
Rated current I_{nA}	40 ... 160 A	160 ... 1250 A
Rated peak withstand current I_{pk}	Up to 15.3 kA	Up to 90 kA
Rated short-time withstand current I_{cw} (1 s)	Up to 2.5 kA	Up to 34 kA
Number of conductors	4 (PE = enclosure)	5
Connection technology	Connecting flange with built-in expansion compensation	With built-in expansion compensation, bolt-type terminal
Outgoing feeders and junctions		
Tap-off point	On one side every 0.5 or 1 m	On one side every 0.5 m, On two sides offset every 0.25 m
Tap-off unit	Up to 63 A	Up to 530 A
Material		
Conductors	Aluminum / Copper	Aluminum or copper
Enclosures (trunking unit, feeder unit)	Sheet steel zinc-plated and painted	Sheet steel zinc-plated and painted
Communication		
Data transmission	Data line	powerline, data line
Approvals / Certificates		
Approvals	EAC	EAC
Certificates	• DNV GL • Environmental Product Declaration (EPD)	• DNV GL • Environmental Product Declaration (EPD)

[1] IP66 for pure energy transfer runs without outgoing feeders.

Data transfer with powerline technology

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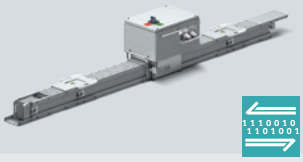

LD	LData new	LI	LR
The proven high-current busbar for industry and special applications	Efficient and reliable power supply for today and tomorrow's data centers	An integrated solution for safe and efficient infrastructure power supply – for example in multi-story buildings and industrial applications	The reliable busbar for a high degree of protection in harsh environments, for example for networking of building sections outdoors or for power supply in tunnels
• Automotive industry • Production industry • Foodstuffs industry • Trade fair buildings • Wind power plants • Semiconductor production • Marine applications	• Data centers	• Data centers • High-rise buildings • Production industry • Chemicals industry • Airports • Trade fair buildings • Hospitals • Do-it-yourself centers • Shopping malls • Supermarkets	• Chemicals industry • Oil and Gas • Tunnels and subways • Outdoor applications
1000 V AC	600 V AC	1000 V AC	1000 V AC
1000 V AC	600 V AC	1000 V AC	1000 V AC
IP34, IP54	Trunking units: IP21 Tap-off units: IP21, IP41	IP55, IP66 [1)]	IP68
1100 ... 5000 A	630 ... 2500 A	800 ... 6300 A	400 ... 6300 A
Up to 286 kA	Min. 84 KA	Up to 330 kA	Up to 275 kA
Up to 116 kA	Min. 40 kA	Up to 150 kA	Up to 125 kA
4, 5	5	4 ... 6 conductors (incl. 200% N or add. clean earth)	3 and PEN or 3, N and PE
Bolt-type terminal connection with hook and bolt connection	Direct hook and bolt connection (LD technology)	Hook and bolt connection with shear nut	Bolt terminal block
On one side every 1 m	Can be plugged in anywhere along the system	Up to 3 for every 3 m (per side)	On one side every 1 m
Up to 1250 A	Up to 250 A	Up to 1250 A	On request
Aluminum or copper	Aluminum, nickel and tin-coated	Aluminum or copper	Aluminum or copper
Sheet steel zinc-plated and painted	Sheet steel, tin-coated and powder-coated, black (RAL9017), insulating material on the underside	Aluminum painted	Epoxy resin
powerline, data line	powerline, data line	powerline, data line	–
EAC	–	EAC	EAC
• DNV GL • Environmental Product Declaration (EPD)	–	• Environmental Product Declaration (EPD)	• DNV GL • SEISMIC Qualification Certificate (earthquake test) • ATEX • Product Environmental Profile (PEP)

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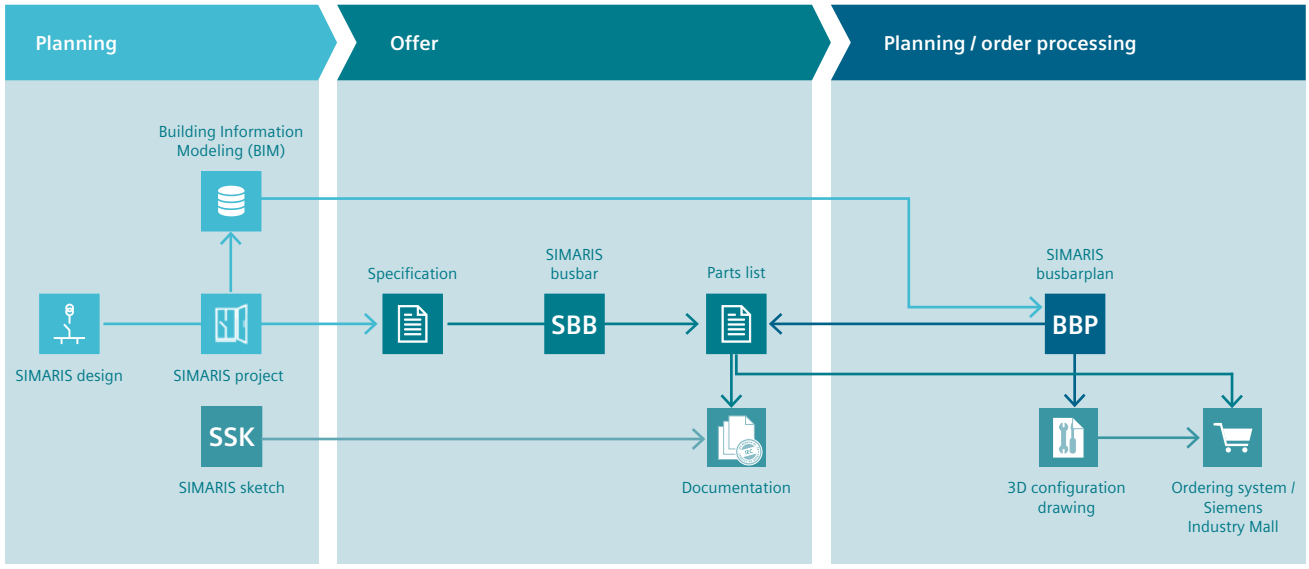
Planning and installation tools

For planning, visualization and installation of busbar trunking systems

From planning to commissioning



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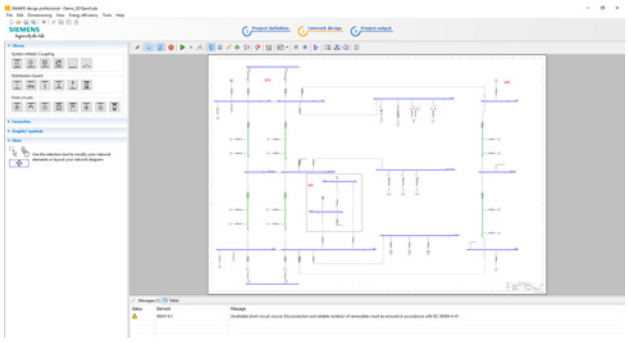
SIMARIS design

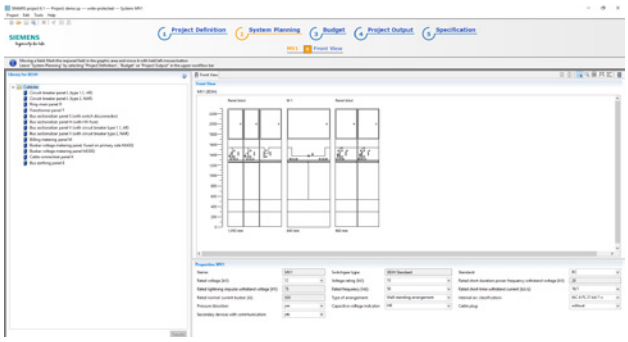


SIMARIS design is a planning tool for fast and efficient grid calculation and dimensioning of electrical power distribution for special-purpose and industrial buildings.

- Dimensioning of electrical networks on the basis of real products according to acknowledged rules of technology and the applicable standards (VDE, IEC)
- Automatic selection of the appropriate components from the stored product database

Free download of the SIMARIS Suite and further information at: **www.siemens.com/simarisdesign**

SIMARIS project



SIMARIS project is a planning tool used to quickly determine the necessary space requirements and the budget for electrical energy distribution for special-purpose and industrial buildings and for automatic generation of specifications.

- Import into projects created with SIMARIS design
- Export of 3D data in IFC 4.x format for BIM (Building Information Modeling)

Free download of the SIMARIS Suite and further information at: **www.siemens.com/simarisproject**

SIMARIS Toolbox (online)



The SIMARIS Toolbox is a platform for provision of online tools for assisting electrical installation planners. It includes, for example:

- EMC Busbar (tool for calculating magnetic field strength in the vicinity of SIVACON 8PS busbar trunking systems)

Free download of the SIMARIS Suite and further information at: **www.siemens.com/simaristoolbox**

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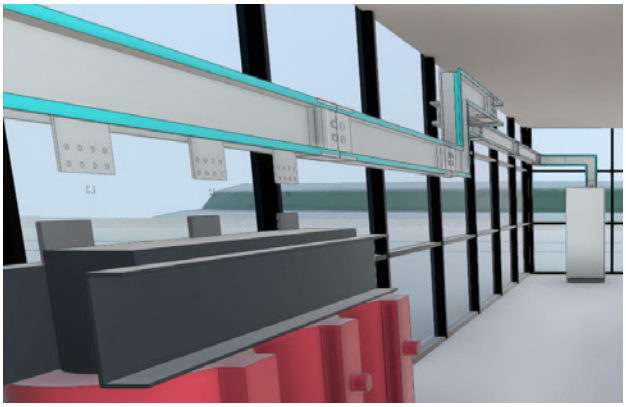
Planning and installation tools

For planning, visualization and installation of busbar trunking systems

SIMARIS busbarplan new



The new SIMARIS busbarplan planning tool supports simple configuration of SIVACON 8PS busbars.

- Plugin based on the BIM Autodesk REVIT software
- Version for planners and for Siemens project engineers

www.siemens.com/simaris

BIM data



BIM simplifies the planning process. While the simple exchange of relevant building data between the planners and the facility manager ensures high quality and reduces costs, the digital twin for power distribution fits in seamlessly with the overall structure – for efficient planning, performance and maintenance.

www.siemens.com/bim-eplanning

SIMARIS sketch



SIMARIS sketch is a software tool for quick and easy planning and visualization of busbar trunking systems.

- Representation of complex building structures
- Presentation of complete projects directly in 3D
- Export of parts lists as Excel files and graphics for preparation of orders

Free download and further information available at:
www.siemens.com/simarissketch

BusbarCheck app



BusbarCheck is an installation app to use for easy and high-quality installation and documentation.

- Detailed explanation of all steps
- Written record and proper documentation for better and easier evaluation of the installation
- Can be used by all installation companies and SIVACON 8PS busbar trunking installations in Germany and in other selected countries

Free download from:
App Store and Play Store

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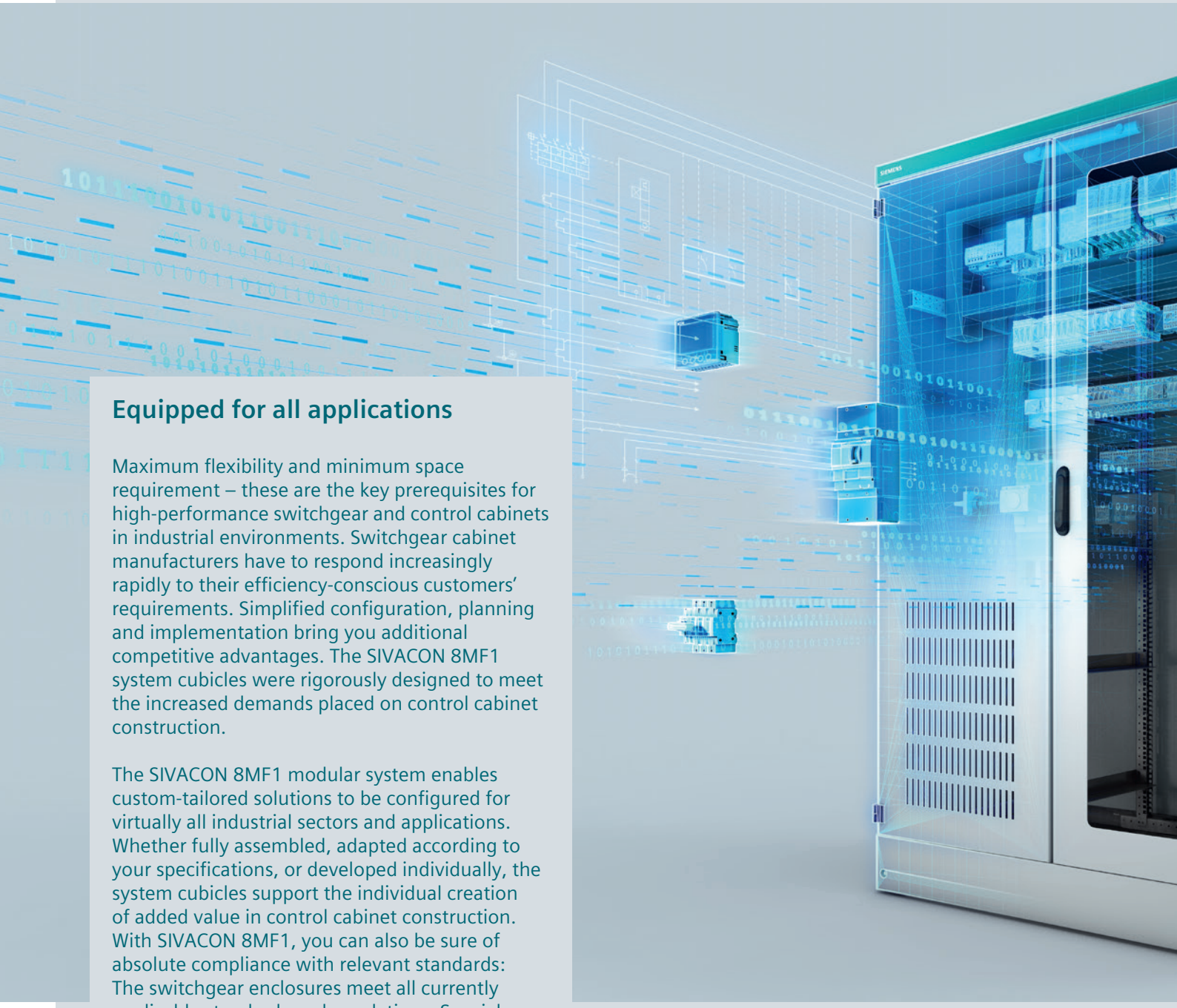

Equipped for all applications

Maximum flexibility and minimum space requirement – these are the key prerequisites for high-performance switchgear and control cabinets in industrial environments. Switchgear cabinet manufacturers have to respond increasingly rapidly to their efficiency-conscious customers' requirements. Simplified configuration, planning and implementation bring you additional competitive advantages. The SIVACON 8MF1 system cubicles were rigorously designed to meet the increased demands placed on control cabinet construction.

The SIVACON 8MF1 modular system enables custom-tailored solutions to be configured for virtually all industrial sectors and applications. Whether fully assembled, adapted according to your specifications, or developed individually, the system cubicles support the individual creation of added value in control cabinet construction. With SIVACON 8MF1, you can also be sure of absolute compliance with relevant standards: The switchgear enclosures meet all currently applicable standards and regulations. Special versions, and control cabinets with various special certifications and specific approvals, as well as variants adapted to specific sectors, can be individually developed.

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System Cubicles, System Lighting and System Air-Conditioning



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- Door 17/14
- Modular door 17/17
- Side/rear panel 17/18
- Roof 17/20
- Floor 17/22
- Mounting panels 17/24
- Mounting plates 17/25
- Mounting rails 17/26
- 19-inch expansion 17/28
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A multitude of additional information ...

Information + ordering

All the important things at a glance

Information to get you started

For information about system cubicles, system lighting and system air-conditioning, please visit our website
www.siemens.com/sivacon-8mf

Contact persons in your region

We are there when you need us

You can find your local contacts at
www.siemens.com/lowvoltage/contact

Your product in detail

The Siemens Industry Online Support portal provides comprehensive information
www.siemens.com/lowvoltage/product-support

- Technical basic information – SIVACON 8MF1 system cubicle (109767386)
- Brochure – SIVACON 8MF1 system cubicles – As versatile as your requirements (109744677)

The relevant tender specifications can be found at
www.siemens.com/lowvoltage/tenderspecifications

Use our conversion tool for quick and easy conversion to Siemens products www.siemens.com/conversion-tool

Everything you need for your order

Refer to the Industry Mall for an overview of your products

- System cubicles, system lighting and system air-conditioning sie.ag/339cQB9

Direct forwarding to the individual products in the Industry Mall by clicking on the Article No. in the catalog or by entering this web address incl. Article No.
www.siemens.com/product?Article No.

Configurators

Exactly the right cubicle for your application

The configurator reduces the time and effort required in the planning and ordering process, and allows for individual adaptations. Configure your SIVACON 8MF1 system cubicle at
www.siemens.com/lowvoltage/8mf1-configurator

The following are additionally available for your configured SIVACON 8MF1 system cubicle:

- Parts lists
- 2D data
- 3D data

… can be found in our online services

Commissioning + operation

Calculation tool

SIMARIS therm

SIMARIS therm helps you to correctly dimension the heat dissipation of control cabinets. If necessary, you can immediately select the necessary cooling devices and air conditioners. You can also define the necessary heating power for anti-condensation heating.
www.siemens.com/simaristherm

Your product in detail

The Siemens Industry Online Support portal provides detailed technical information
www.siemens.com/lowvoltage/product-support

- Operating instructions
- Certificates

Engineering data for CAD or CAE systems are available in the CAx Download Manager at
www.siemens.com/lowvoltage/cax

Manuals

Manuals are available for downloading in Siemens Industry Online Support at
www.siemens.com/lowvoltage/manuals

- Operating Manual – Software SIMARIS therm planning tool (109744553)

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You can find further information on services at
www.siemens.com/service-catalog

Technical overview – System cubicles, system lighting and system air-conditioning

The fast way to get you to our online services

This page provides you with comprehensive information and links on system cubicles, system lighting and system air-conditioning
www.siemens.com/lowvoltage/product-support (109769091)

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System overview

Complete and configurable cabinets, system lighting and system air conditioning

For a complete and valid configuration of your complete cubicle, please use our online configurator at www.siemens.com/lowvoltage/8mf1-configurator

SIVACON 8MF1 complete cubicles


Basic cubicles, IP40


Basic cubicles, IP55


Ventilated cubicles, IP20


Data cubicles, IP40


Earthquake-reinforced cubicles, IP40

Frames


Standard frames


Corner frames

Frame accessories


Bases

Separators


Trim strips


Transport eyebolts


Transport brackets


Cubicle suites

Enclosures

Section doors


Ventilated doors

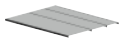
Glass doors

Door halves


Modular doors

Side walls/ rear walls

Rooves


Floors

Enclosure accessories


Roof trays

Covers


Grilles

Strips


Hinges


Rotary handles


Door position switches


Door stays

Note:
You will find a detailed range of accessories with the basic units and in the Accessories section.

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Interior installation


Mounting panels


Mounting plates


Partitions


Shelves


Busbars

Interior installation accessories


Brackets


Groundings


Grounding screws

19-inch expansion


Swing frames


Fixed-mounted

Covers




Universal supports


Device panels

SIVACON 8MR system lighting

LED lights with motion detector


LED lights with On/Off switch


Cables, plugs and sockets

SIVACON 8MR system air-conditioning


Filters and filter fans


Air conditioners/ cooling devices


Heat exchangers


Heater units


Fan heaters


Thermostats, hygrostats, hygrotherms

Note:
You will find a detailed range of accessories with the basic units and in the Accessories section.

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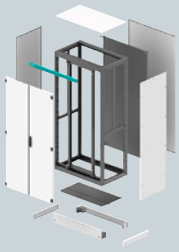
System overview

SIVACON 8MF1 system cubicles



Complete cubicles



Individual modification

Available dimensions				
Height	mm	1800 | 2000 | 2200		Special dimensions available on request (max. 2400 mm)
Width	mm	400 | 600 | 800 | 900 | 1000 | 1200		Special dimensions available on request (max. 1600 mm)
Depth	mm	400 | 500 | 600 | 800 | 1000		Special dimensions available on request (max. 1200 mm)
Approvals				
Standards		IEC 62208		IEC 62208
Protection				
Degree of protection		IP20 | IP40 | IP55 | Shock resistance IK09 | Glass doors IK08		IP20 | IP21 | IP40 | IP41 | IP42 | IP55 | Shock resistance IK09 | Glass doors IK08
Safety class		I		I
Enclosure				
Material		Sheet steel		Sheet steel
Surface		Zinc-plated | Powder-coated		Zinc-plated | Powder-coated
Color		RAL 7035 (light gray)		All RAL colors available, other color palettes available on request
Corrosivity category in acc. to EN ISO 12944-2		C3 medium, paint thickness 100 µm (+/-25 µm)		C5-M very high (marine), paint thickness 150 µm (+/-25 µm)
Material thickness				
Frame		2.5 mm		2.5 mm
Enclosure (without doors)		1.5 mm		2.5 mm
Mounting panels		2.5 mm		3.0 mm
Mounting plates		2.0 mm		3.0 mm
Doors		1.5 mm		2.0 mm
EMC attenuation				
EMC attenuation		www.siemens.com/sios		www.siemens.com/sios
Installable module heights (HU = 1 3/4" = 44.45 mm)				
		19" fixed-mounted	**19" swing frame**	
Height 1800 mm		36 HU	34 HU	On request
Height 2000 mm		41 HU	38 HU	On request
Height 2200 mm		45 HU	43 HU	On request

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Quick selection guide

Two installation variants



Stand-alone installation
- With side panels
  (lockable in the case of data cubicles)



Suite installation
- Without side panels

Four versions



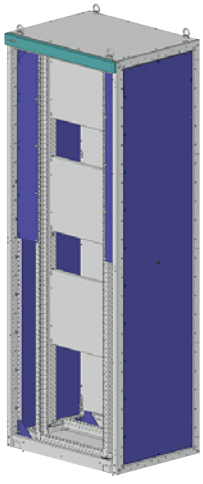
Basic version
- IP40 or IP55



Ventilated cubicles
- IP20
- Door and roof with ventilation fins



Data cubicles
- IP40
- Glass door at front
- Section door at rear
- Roof with cable entry
- 19" fixed mounting



Earthquake-resistant version
- IP40
- Increased stability

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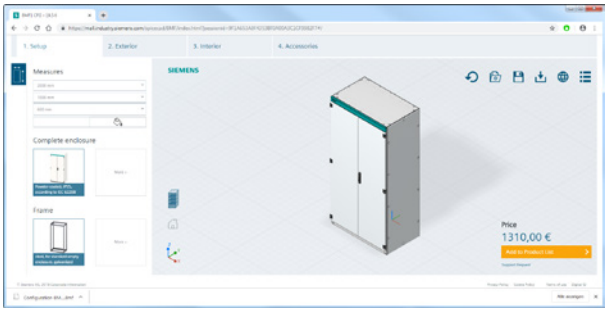
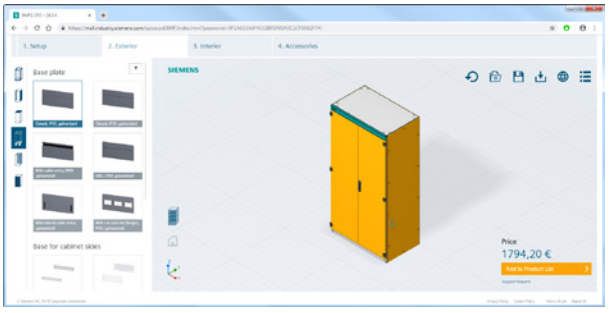
Online configurator highlights

www.siemens.com/lowvoltage/8mf1-configurator

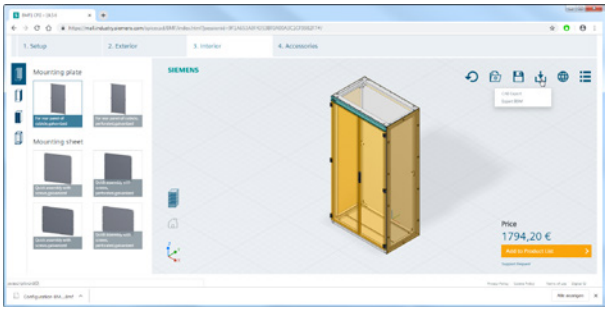
Graphical configuration directly on the 3D model (WYSIWYG)



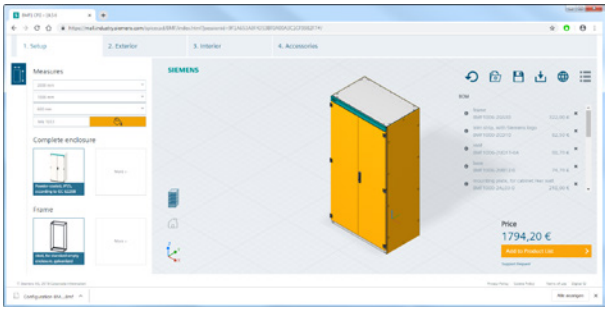
Customization of the control cabinet with cutouts and color



Exporting of parts lists and 3D and 2D data



Dynamic and interactive parts lists



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Structure of the article numbers

**The structure shown below is intended as an overview of each position and its meaning.
For a complete and valid configuration of your complete cubicle, please use our online configurator at
www.siemens.com/lowvoltage/8mf1-configurator**

		5	6	7	8	9	10	11
8MF1					3			
Height	1800 mm	8						
	2000 mm	0						
	2200 mm	2						
Width	400 mm		4					
	600 mm		6					
	800 mm		8					
	900 mm		9					
	1000 mm		0					
	1200 mm		2					
Depth	400 mm			4				
	500 mm			5				
	600 mm			6				
	800 mm			8				
	1000 mm			0				
Version	Basic					B		
	Ventilated					V		
	Data					D		
	Earthquake-resistant					E		
Installation	Singly						S	
	Side by side						R	
Degree of protection	Basic cubicles, data cubicles	IP40						4
		IP55						5
	Ventilated cubicles	IP20						4
	Earthquake-reinforced cubicles	IP40						5

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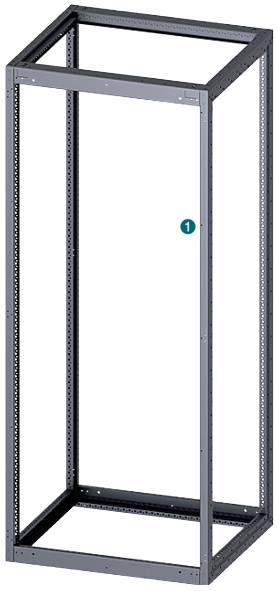
Quick selection guide

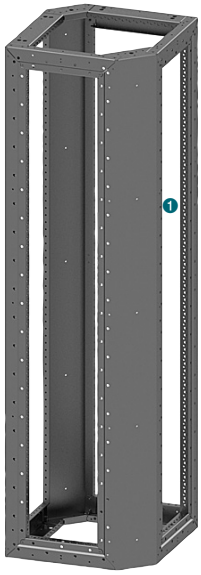
Frame

For standard enclosure

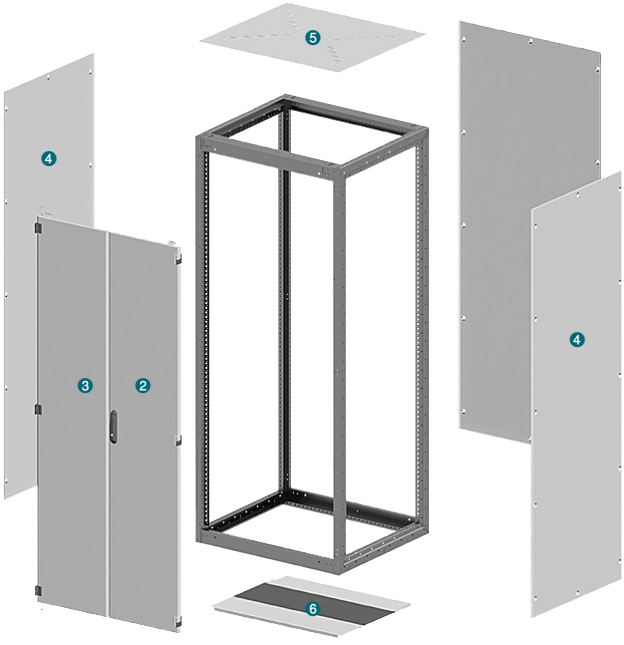


❶ Frame

For corner enclosure



Enclosure



❷ Door, door half
❸ Modular door
❹ Side panels, rear panel
❺ Roof
❻ Floor

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❶ Frame



The structure shown below is intended as an overview of each position and its meaning.
For a complete and valid configuration of your complete cubicle, please use our online configurator at
www.siemens.com/lowvoltage/8mf1-configurator

For standard enclosure

8MF1		5	6	7	8	9	10	11	12
					3	G	S		0
Height	1800 mm	8							
	2000 mm	0							
	2200 mm	2							
Width	400 mm		4						
	600 mm		6						
	800 mm		8						
	900 mm		9						
	1000 mm		0						
	1200 mm		2						
Depth	400 mm			4					
	500 mm			5					
	600 mm			6					
	800 mm			8					
	1000 mm			0					
Material, surface	Zinc-plated							3	
	Powder-coated, RAL 7035							4	

For corner enclosure

8MF1		5	6	7	8	9	10	11	12
					2	G	E		0
Height	1800 mm	8							
	2000 mm	0							
	2200 mm	2							
Width	400 mm		4						
	600 mm		6						
	800 mm		8						
	1000 mm		0						
Depth	400 mm			5					
	600 mm			7					
	800 mm			0					
	1000 mm			1					
Material, surface	Zinc-plated							3	

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❶ Frame

**The structure shown below is intended as an overview of each position and its meaning.
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www.siemens.com/lowvoltage/8mf1-configurator**

Accessories

Base

8MF1	5	6	7	8	9	10
			0	2		

		5	6	9	10
Height	100 mm	0			
	200 mm	2			
Width	400 mm		4		
	600 mm		6		
	800 mm		8		
	900 mm		9		
	1000 mm		0		
	1200 mm		2		
Version	Base for cubicles with door at the front and the rear			C	R
	Base and feet for cubicles with door at the front			C	S
	Base for corner cubicle			E	S

Base cover

8MF1	5	6	7	8	9	10
		0		2	C	

		5	7	10
Height	100 mm	0		
	200 mm	2		
Depth	400 mm		4	
	500 mm		5	
	600 mm		6	
	800 mm		8	
	1000 mm		0	
Version	Base covers for cubicle sides			T

Trim strip

8MF1	5	6	7	8	9	10	11	12
	0		0	2	C	D		

				6	11	12
Width	400 mm			4		
	600 mm			6		
	800 mm			8		
	900 mm			9		
	1000 mm			0		
	1200 mm			2		
Version	Trim strip petrol	Without Siemens logo, above the door	Without cutout		0	0
		With Siemens logo, left, above the door	Without cutout		1	0
		With Siemens logo, right, above the door	With cutout, left		1	6
		With Siemens logo, left, above the door	With cutout, right		1	7
	Trim strip RAL 7035	Without Siemens logo, below the door	Without cutout		0	8

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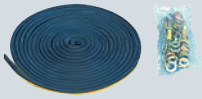
Separator

Separator for vertical division of the enclosure

Height	Article No.
1800 mm	8MF1165-2AT30
2000 mm	8MF1185-2AT30
2200 mm	8MF1205-2AT30

Mounting accessories

Accessories for cubicle suites



Version	Degree of protection	Article No.
Screw set	IP40	8MF1000-2CA
Sealing tape	IP40 to IP55	8MF1000-2CB
Side-by-side installation kit	IP40 EMC (IP55 not available)	8MF1000-2CE

Kit for stabilization of corner connections



Article No.
8MF1000-2HF

Transport accessories

Transport eyebolts



Load bearing capacity	Article No.
Up to 500 kg	8MF1000-2CK

Transport brakets



Width	Article No.
400 mm	8MF1040-2CW
600 mm	8MF1060-2CW
800 mm	8MF1080-2CW
900 mm	8MF1090-2CW
1000 mm	8MF1000-2CW
1200 mm	8MF1020-2CW

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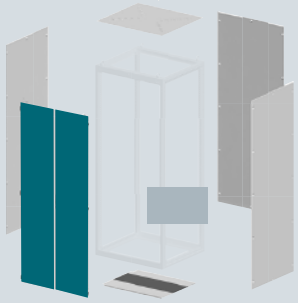
❷ Door



The structure shown below is intended as an overview of each position and its meaning.
For a complete and valid configuration of your complete cubicle, please use our online configurator at
www.siemens.com/lowvoltage/8mf1-configurator

		5	6	7	8	9	10	11	12	13		14		15	16
8MF1				0	2	U	T								
Height	1800 mm	8													
	2000 mm	0													
	2200 mm	2													
Width	300 mm		3												
	400 mm		4												
	450 mm		7												
	500 mm		5												
	600 mm		6												
	800 mm		8												
	900 mm		9												
	1000 mm		0												
	1200 mm		2												
Door type	Section door / inner door							1							
	Door halves (only available with hinging on the left)							2							
Hinge position	Left								5						
	Right								4						
Door version	IP20	With ventilation openings			Foamed seal					1		B		A	2
	IP40	Closed			EMC seal					0		C		A	1
		With ventilation slits			Foamed seal					2		B		A	2
	IP55	Closed			Foamed seal					0		B		A	2
		With inspection window			Foamed seal					0		B		E	2
	IPxx	With cutout 292 × 292 mm (up to IP55) for filter fan			Foamed seal					3		B		A	2
	–	Inner door, closed (up to 800 mm wide)			Without seal					4		B		A	2

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Accessories

Pockets in the doors



- Surface: zinc-plated
- Storage: RAL 7035

For door width	Article No.
600 mm	8MF1060-2VP
800 mm	8MF1080-2VP

Grilles



- To upgrade degree of protection from IP2x to IP4x
- Surface: zinc-plated

Width	Article No.
300 mm	8MF1030-2HM
400 mm	8MF1040-2HM
500 mm	8MF1050-2HM
600 mm	8MF1060-2HM
700 mm	8MF1070-2HM
800 mm	8MF1080-2HM
900 mm	8MF1090-2HM

Strips

- For door reinforcement
- Surface: zinc-plated
- Cannot be used for glass doors

Height	Article No.
1800 mm	8MF1008-2VM
2000 mm	8MF1000-2VM
2200 mm	8MF1002-2VM

Position switches



Version	Article No.
1 NO + 1 NC	8MF1000-2VL
1 NO + 2 NC	8MF1000-2VR

Circuit diagram pockets



- Cannot be used for glass doors

Version	Article No.
Plastic	8MF1000-2VK
Steel, zinc-plated	8MF1000-2VU

Rotary handles



Version	Article No.
With padlock	8MF1000-2VN

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❷ Door

Accessories

Rotary handle inserts

- Not suitable for door halves

	Version	Article No.
	Double-bit key	8MF1000-2VA
	Square key	8MF1000-2VC
	Triangular key	8MF1000-2VD
	Daimler	8MF1000-2VE
	Cylinder lock	8MF1000-2VF

Door stays



- With variable opening angle
- Surface: zinc-plated

Article No.
8MF1000-2VG

Spare part door

Hinge sets



Version	Article No.
For left-hand hinge	8MF1000-2VT
For right-hand hinge	8MF1000-2VW

Rotary handles



Version	Article No.
Without insert	8MF1000-2VP

Grounding cables for doors



Cable cross-section	Article No.
6 mm²	8MF1010-2HD3

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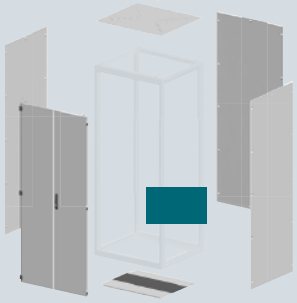
❸ Modular door



The structure shown below is intended as an overview of each position and its meaning.
For a complete and valid configuration of your complete cubicle, please use our online configurator at
www.siemens.com/lowvoltage/8mf1-configurator

		5	6	7	8	9	10	11	12	13	14	15	16
8MF1				0	2	U	T	3	4	0	B	A	2
Compartment height	300 mm	3											
	400 mm	4											
	500 mm	5											
	600 mm	6											
	700 mm	7											
	800 mm	8											
	900 mm	9											
	1000 mm	0											
	1100 mm	1											
	1200 mm	2											
Width	600 mm		6										
	800 mm		8										

Accessories

Limit plates



For a number n of modular doors, n–1 limit plates are additionally required.
Please order separately

Width	Article No.
600 mm	8MF1060-2AK14-0
800 mm	8MF1080-2AK14-0

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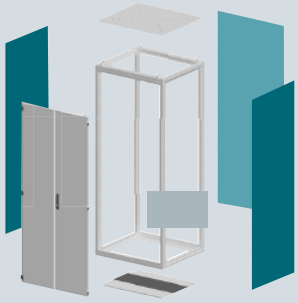
❹ Side/rear panel



The structure shown below is intended as an overview of each position and its meaning.
For a complete and valid configuration of your complete cubicle, please use our online configurator at
www.siemens.com/lowvoltage/8mf1-configurator

8MF1				5	6	7	8	9	10	11	12	13	14
							2	U	W				
Height			1800 mm	8									
			2000 mm	0									
			2200 mm	2									
Width			300 mm		3								
			400 mm		4								
			450 mm		7								
			500 mm		5								
			600 mm		6								
			800 mm		8								
			900 mm		9								
			1000 mm / *No selection available for partitions*		0								
			1200 mm		2								
Depth			No value			0							
			400 mm			4							
			500 mm			5							
			600 mm			6							
			800 mm			8							
			1000 mm / *No selection available for side panels*			0							
Side wall/ rear wall	IP40	Closed	Without seal							6	0	1	C
			EMC seal							6	2	1	B
		Flat								6	3	1	C
	IP55	Closed	Foamed seal							6	1	1	C
Partition		Closed	Without seal							7	0	3	C

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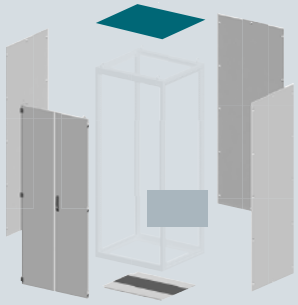
❺ Roof



The structure shown below is intended as an overview of each position and its meaning.
For a complete and valid configuration of your complete cubicle, please use our online configurator at
www.siemens.com/lowvoltage/8mf1-configurator

For standard systems

8MF1	5	6	7	8	9	10	11	12	13	14
	0			2	U	D				

Width	400 mm					4					
	600 mm					6					
	800 mm					8					
	900 mm					9					
	1000 mm					0					
	1200 mm					2					
Depth	400 mm						4				
	500 mm						5				
	600 mm						6				
	800 mm						8				
	1000 mm						0				
Version	IP20	Perforated			Without seal			2	0	0	A
	IP40	Closed			Without seal			1	0	0	A
					EMC seal			1	2	0	A
		With ventilation fins			Without seal			3	0	0	A
	IP55	Closed			Foamed seal			1	1	0	A

For corner enclosure

8MF1	5	6	7	8	9	10	11	12	13	14
	0	0		2	U	E				

Width/depth	400/400 mm						4				
	600/600 mm						6				
	800/800 mm						8				
	1000/1000 mm						0				
Version	For corner cubicle	IP20	With ventilation openings					2	0	0	A
		IP40	Closed					1	0	0	A
			With ventilation openings					3	0	0	A
		IP55	Closed					1	1	0	A

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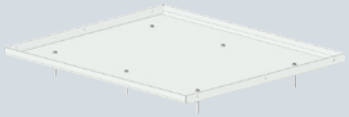
Accessories

Roof trays

Roof trays for increasing the degree of protection, IPX1



Width	Depth	Article No.
400 mm	400 mm	8MF1044-2VH
	500 mm	8MF1045-2VH
	600 mm	8MF1046-2VH
	800 mm	8MF1048-2VH
	1000 mm	8MF1040-2VH
600 mm	400 mm	8MF1064-2VH
	500 mm	8MF1065-2VH
	600 mm	8MF1066-2VH
	800 mm	8MF1068-2VH
	1000 mm	8MF1060-2VH
800 mm	400 mm	8MF1084-2VH
	500 mm	8MF1085-2VH
	600 mm	8MF1086-2VH
	800 mm	8MF1088-2VH
	1000 mm	8MF1080-2VH
900 mm	400 mm	8MF1094-2VH
	500 mm	8MF1095-2VH
	600 mm	8MF1096-2VH
	800 mm	8MF1098-2VH
	1000 mm	8MF1090-2VH
1000 mm	400 mm	8MF1004-2VH
	500 mm	8MF1005-2VH
	600 mm	8MF1006-2VH
	800 mm	8MF1008-2VH
	1000 mm	8MF1000-2VH
1200 mm	400 mm	8MF1024-2VH
	500 mm	8MF1025-2VH
	600 mm	8MF1026-2VH
	800 mm	8MF1028-2VH
	1000 mm	8MF1020-2VH

Roof tray rims

Roof tray rims for cubicle side, IPX1



Each cubicle or cubicle group with a roof tray requires two roof tray rims.
(1 set = 2 units)

Depth	Article No.
400 mm	8MF1004-2VB
500 mm	8MF1005-2VB
600 mm	8MF1006-2VB
800 mm	8MF1008-2VB
1000 mm	8MF1000-2VB

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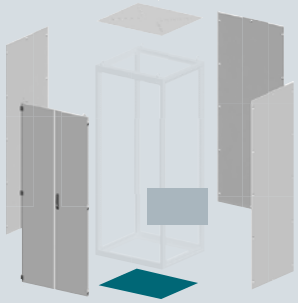
❻ Floor



The structure shown below is intended as an overview of each position and its meaning.
For a complete and valid configuration of your complete cubicle, please use our online configurator at
www.siemens.com/lowvoltage/8mf1-configurator

For standard enclosure

8MF1				5	6	7	8	9	10	11	12	13
				0			2	U	B			
Width		400 mm			4							
		600 mm			6							
		800 mm			8							
		900 mm			9							
		1000 mm			0							
		1200 mm			2							
Depth		400 mm				4						
		500 mm				5						
		600 mm				6						
		800 mm				8						
		1000 mm				0						
Version	IP30	Closed, divided								2	2	0
	IP40	Closed	EMC seal							4	2	0
	IP55	Closed	Foamed seal							1	2	0
	IPxx	With cable entry								3	2	0
		With cable entry, lateral								5	1	2
		With cut-outs for flanges								5	2	0

For corner enclosure

8MF1				5	6	7	8	9	10	11	12	13
				0	0		2	U	E		1	0
Depth		400 mm				4						
		600 mm				6						
		800 mm				8						
		1000 mm				0						
Degree of protection		IP40								2		
		IP55								1		

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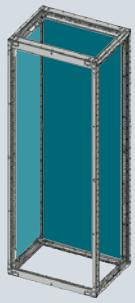
Mounting panels



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For a complete and valid configuration of your complete cubicle, please use our online configurator at
www.siemens.com/lowvoltage/8mf1-configurator

		5	6	7	8	9	10	11	12	13
8MF1					2	A				0
Cubicle height	1800 mm	8								
	2000 mm	0								
	2200 mm	2								
Cubicle width	400 mm		4							
	600 mm		6							
	800 mm		8							
	900 mm		9							
	1000 mm / *No selection available for installation on side of cubicle*		0							
	1200 mm		2							
Depth	400 mm			4						
	500 mm			5						
	600 mm			6						
	800 mm			8						
	1000 mm / *No selection available for installation on cubicle width*			0						
Installation location	Cubicle width						L			
	Cubicle side						K			
Version	Smooth							0		
	Perforated							1		
Material	2.5 mm sheet steel								3	

Accessories

Mounting panel adapters



- For connecting side-by-side mounting panels
- Surface: zinc-plated

Height	Article No.
1800 mm	8MF1800-2CH
2000 mm	8MF1000-2CH
2200 mm	8MF1200-2CH

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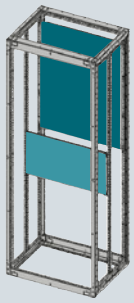
Mounting plates



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For a complete and valid configuration of your complete cubicle, please use our online configurator at
www.siemens.com/lowvoltage/8mf1-configurator

		5	6	7	8	9	10	11	12	13
8MF1				0	2	A				0
Height	100 mm	1								
	200 mm	2								
	300 mm	3								
	400 mm	4								
	600 mm	6								
	800 mm	8								
Width	400 mm		4							
	600 mm		6							
	800 mm		8							
	900 mm		9							
	1000 mm		0							
	1200 mm		2							
Installation location	Fixed with zinc die-cast parts between the bars of the frame						M			
	Fixed directly to the frame						A			
Version	Smooth							0		
	Perforated							1		
Material	2.0 mm sheet steel								2	

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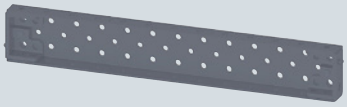
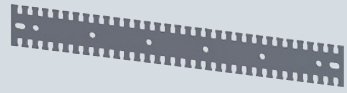
Mounting rails

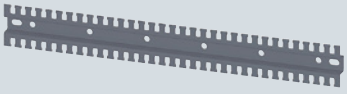
Mounting rails (50)



Version		Length	Article No.
Suitable for cubicle width	400 mm	325 mm	8MF1032-2AS30
	600 mm	525 mm	8MF1052-2AS30
		550 mm	8MF1055-2AS30
		625 mm	8MF1062-2AS30
	800 mm	725 mm	8MF1072-2AS30
		750 mm	8MF1075-2AS30
	900 mm	825 mm	8MF1082-2AS30
	1000 mm	925 mm	8MF1092-2AS30
		1050 mm	8MF1105-2AS30
	1200 mm	1125 mm	8MF1112-2AS30
		1250 mm	8MF1125-2AS30
		1350 mm	8MF1135-2AS30
		1450 mm	8MF1145-2AS30
		1550 mm	8MF1155-2AS30
Suitable for cubicle height	1800 mm	1650 mm	8MF1165-2AS30
		1750 mm	8MF1175-2AS30
	2000 mm	1850 mm	8MF1185-2AS30
		1950 mm	8MF1195-2AS30
	2200 mm	2050 mm	8MF1205-2AS30
		2150 mm	8MF1215-2AS30
		2250 mm	8MF1225-2AS30
Suitable for cubicle depth	400 mm	250 mm	8MF1025-2AS30
	500 mm	350 mm	8MF1035-2AS30
		425 mm	8MF1042-2AS30
	600 mm	450 mm	8MF1045-2AS30
	800 mm	650 mm	8MF1062-2AS30
	1000 mm	850 mm	8MF1085-2AS30

Mounting rails, serrated





Version		Length	Article No.
Flat		600 mm	8MF1060-2HC13-0
		800 mm	8MF1080-2HC13-0
		900 mm	8MF1090-2HC13-0
		1000 mm	8MF1000-2HC13-0
		1200 mm	8MF1020-2HC13-0
U-shape		600 mm	8MF1060-2HC03-0
		800 mm	8MF1080-2HC03-0
		900 mm	8MF1090-2HC03-0
		1000 mm	8MF1000-2HC03-0
		1200 mm	8MF1020-2HC03-0

Mounting rails, compact



Version		Length	Article No.
Suitable for cubicle width	600 mm	566 mm	8MF1056-2AS30
	1000 mm	966 mm	8MF1096-2AS30
	1200 mm	1166 mm	8MF1006-2AS30
Suitable for door width	300 mm	166 mm	8MF1016-2AS30
	400 mm	266 mm	8MF1026-2AS30
	450 mm	316 mm	8MF1031-2AS30
	500 mm	366 mm	8MF1036-2AS30
	600 mm	466 mm	8MF1046-2AS30
	800 mm	666 mm	8MF1066-2AS30
	900 mm	766 mm	8MF1076-2AS30
	1000 mm	866 mm	8MF1086-2AS30

Mounting rails, heavy duty



- Can be installed in the cubicle depth and width (the length corresponds to the appropriate cubicle dimension)

Length	Article No.
600 mm	8MF1060-2AH60
800 mm	8MF1080-2AH60
900 mm	8MF1090-2AH60
1000 mm	8MF1000-2AH60
1200 mm	8MF1020-2AH60

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19-inch expansion

Cubicle frames



- For the installation of 19" devices, screwed
- In combination with 2 mounting rails heavy duty in cabinet width (order separately, see page 17/26)
- For cabinet width ≧ 600 mm

Surface	Height	Article No.
Zinc-plated	400 mm	8MF1100-2AN30
	600 mm	8MF1200-2AN30
	800 mm	8MF1300-2AN30
	1000 mm	8MF1400-2AN30
	1200 mm	8MF1500-2AN30
	1400 mm	8MF1600-2AN30
	1800 mm	8MF1700-2AN30
	2000 mm	8MF1800-2AN30
	2200 mm	8MF1900-2AN30

Swing frames





- For the installation of 19" devices, screwed
- Endstop left / right
- In combination with 2 mounting rails heavy duty in cabinet width (order mounting rail separately)
- For cubicle width ≧800 mm

Version	Surface	Height	Article No.
Screwed	Zinc-plated	1800 mm	8MF1800-2AR02-4
		2000 mm	8MF1000-2AR02-4
		2200 mm	8MF1200-2AR02-4
	Powder-coated	1800 mm	8MF1800-2AR02-3
		2000 mm	8MF1000-2AR02-3
		2200 mm	8MF1200-2AR02-3
Welded	Powder-coated	1800 mm	8MF1800-2AR02-2
		2000 mm	8MF1000-2AR02-2
		2200 mm	8MF1200-2AR02-2

Accessories

Universal supports







Version	For mounting height	Article No.
For cable channel, DIN rail and C-bar	1 HU	8MF1000-2HH2
	2 HU	8MF1000-2HH3
For cable channel, DIN rail, C-bar and lamp		8MF1000-2HH4

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Covers

Version	Surface	For mounting height	Article No.
Closed	RAL 7035	1 HU	8MF1000-2AB01
		2 HU	8MF1000-2AB02
		3 HU	8MF1000-2AB03
		4 HU	8MF1000-2AB04
		5 HU	8MF1000-2AB05
		6 HU	8MF1000-2AB06
		7 HU	8MF1000-2AB07
With ventilation openings	RAL 7035	2 HU	8MF1000-2AB32
		3 HU	8MF1000-2AB33
For modular installation devices	RAL 7035	3 HU	8MF1000-2AB31

Frames

Version	Surface	Article No.
For mounting test switches, 19"	RAL 7035	8MF1000-2AB30

Covers for frames

Version	Surface	Article No.
For mounting 7XP 1/6 standard devices	RAL 7035	8MF1000-2AB34
For mounting 7XP 2/6 standard devices	RAL 7035	8MF1000-2AB35
For mounting 7XP 3/6 standard devices	RAL 7035	8MF1000-2AB36

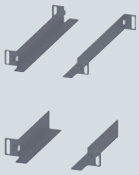
Shelves



- For 19" frame

Version	Surface	Depth	Article No.
Non-adjustable	Zinc-plated	230 mm	8MF1000-2AB12
		400 mm	8MF1000-2AB14
Withdrawable	RAL 7035		8MF1000-2HF12

Slide rails



Version	Depth	Article No.
For 19" fixed mounting (double mounting at front and rear)	400 mm	8MF1004-2HG12
	600 mm	8MF1006-2HG12
	800 mm	8MF1008-2HG12
	1000 mm	8MF1000-2HG12
For 19" fixed mounting and For 19" swing frame		8MF1000-2HS12

Device panels



Surface	Height	Width	Article No.
Zinc-plated	1800 mm	100 mm	8MF1810-2AB00
		150 mm	8MF1850-2AB00
		200 mm	8MF1820-2AB00
	2000 mm	100 mm	8MF1010-2AB00
		150 mm	8MF1050-2AB00
		200 mm	8MF1020-2AB00
	2200 mm	100 mm	8MF1210-2AB00
		150 mm	8MF1250-2AB00
		200 mm	8MF1220-2AB00

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Interior installation

General accessories

Telescopic rails



- For withdrawable shelves

For cubicle depth	Article No.
400 mm and 600 mm	8MF1003-2HF
800 mm and 1000 mm	8MF1006-2HF

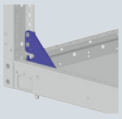
Mounting brackets



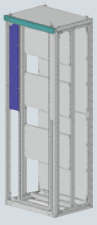
- For mounting expansion elements

Article No.
8MF1000-2CP

Earthquake assembly kits







For stabilization of	Article No.
Corner connections	8MF1000-2HA
Intermediate panel	8MF1000-2HW
19" fixed-mounteds	8MF1000-2HE

Grounding plates



- For fixing to the frame (although fixing points for ground connection are already provided on the frame)

Article No.
8MF1000-2HK

Grounding bars



Version	Width	Article No.
30 × 10 mm²	600 mm	8MF1060-2HD2
	800 mm	8MF1080-2HD2
	900 mm	8MF1090-2HD2
	1000 mm	8MF1000-2HD2
	1200 mm	8MF1020-2HD2
30 × 5 mm²	600 mm	8MF1060-2HD1
	800 mm	8MF1080-2HD1
	900 mm	8MF1090-2HD1
	1000 mm	8MF1000-2HD1
	1200 mm	8MF1020-2HD1

Grounding screws



Thread	Article No.
M12	8MF1000-2HB

Grounding straps



Cross-section	Article No.
16 mm²	8MF1000-2HK1
31 mm²	8MF1000-2HK2

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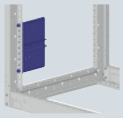
Universal sheets



- Incl. standard mounting rail; e.g. for mounting a heater unit

Article No.
8MF1000-2HG

DIN rails



- For mounting modular installation devices

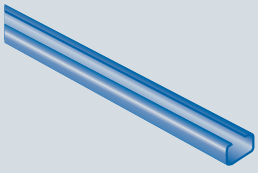
Height	Article No.
7.5 mm	8MF1500-2HS
15 mm	8MF1100-2HS

Insulated supports



Thread	Dimensions	Article No.
M8	D 40 × 50 mm	8MF1000-2VY

Cable clamping rails



Height	Width	Depth	Article No.
30 mm	600 mm	–	8MF1360-2HH
	800 mm	–	8MF1380-2HH
	900 mm	–	8MF1390-2HH
	1000 mm	–	8MF1310-2HH
	1200 mm	–	8MF1320-2HH
	–	400 mm	8MF1304-2HH
		600 mm	8MF1306-2HH
		800 mm	8MF1308-2HH
		1000 mm	8MF1301-2HH
40 mm	600 mm	–	8MF1460-2HH
	800 mm	–	8MF1480-2HH
	900 mm	–	8MF1490-2HH
	1000 mm	–	8MF1410-2HH
	1200 mm	–	8MF1420-2HH
	–	400 mm	8MF1404-2HH
		600 mm	8MF1406-2HH
		800 mm	8MF1408-2HH
		1000 mm	8MF1401-2HH
50 mm	600 mm	–	8MF1560-2HH
	800 mm	–	8MF1580-2HH
	900 mm	–	8MF1590-2HH
	1000 mm	–	8MF1510-2HH
	1200 mm	–	8MF1520-2HH
	–	400 mm	8MF1504-2HH
		600 mm	8MF1506-2HH
		800 mm	8MF1508-2HH
		1000 mm	8MF1501-2HH

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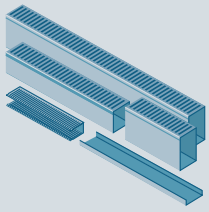
Interior installation

General accessories

Cable ducts



Version	Color	Height	Width	Article No.
Halogen-free	RAL 7035	37.5 mm	25 mm	8MF1120-2HL7
		50 mm	25 mm	8MF1220-2HL7
			37.5 mm	8MF1240-2HL7
			50 mm	8MF1250-2HL7
			75 mm	8MF1260-2HL7
		75 mm	50 mm	8MF1350-2HL7
			75 mm	8MF1360-2HL7
			100 mm	8MF1370-2HL7
			125 mm	8MF1380-2HL7
		100 mm	75 mm	8MF1460-2HL7
Standard	RAL 7030	37.5 mm	25 mm	8MF1120-2HL6
		50 mm	25 mm	8MF1220-2HL6
			37.5 mm	8MF1240-2HL6
			50 mm	8MF1250-2HL6
			75 mm	8MF1260-2HL6
		75 mm	50 mm	8MF1350-2HL6
			75 mm	8MF1360-2HL6
			100 mm	8MF1370-2HL6
			125 mm	8MF1380-2HL6
		100 mm	75 mm	8MF1460-2HL6

Edge protection



Dimensions	Article No.
9.5 mm × 6.5 mm	8MF1000-2CD

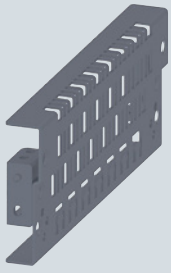
Mounting plates





Dimensions	Version	Article No.
122 mm × 91 mm	Standard	8MF1000-2HH
122 mm × 92 mm	With DIN rail	8MF1000-2HH1

Buses for improving EMC



Installation in	Width	Depth	Article No.
Cubicle width	400 mm	–	8MF1040-2HN
	600 mm	–	8MF1060-2HN
	800 mm	–	8MF1080-2HN
	900 mm	–	8MF1090-2HN
	1000 mm	–	8MF1000-2HN
	1200 mm	–	8MF1020-2HN
Cubicle depth	–	400 mm	8MF1004-2HN
		600 mm	8MF1006-2HN
		800 mm	8MF1008-2HN
		1000 mm	8MF1001-2HN

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Brackets



- For variable mounting of cable clamping rails

	Article No.
	8MF1000-2HH5

Toothed bars



- For installation on mounting rail

Length	Article No.
100 mm	8MF1000-2HC

Contact washers

- Size 6

Scope of supply	Article No.
100 units	8MF1000-2VJ

Screws

- M6 × 12

Scope of supply	Article No.
100 units	8MF1000-2VS

Adapters for wiring systems



Version	
For Lütze wiring system	8MF1000-2HL
For Promet wiring system	8MF1000-2HP

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Quick selection guide

SIVACON 8MR system lighting ensures optimum lighting conditions during installation and maintenance.
The LED technology is energy-efficient and maintenance-free.

	Magnetic fixing	Screw fixing	Clip fixing
	Easy installation at any point on the steel cubicle	Fixed installation in the case of impact loads or high vibration levels	The lamp is snapped into the clip bracket and can be turned in both directions
With motion detector The lights switch on when the door is opened, enabling work in the cubicle to be started immediately			
With On/Off switch Particularly suitable for operation in cubicles and enclosures with a high density of built-in electrical/electronic components			

System overview, page 17/4

SIVACON 8MR system lighting

	Magnetic fixing	Screw fixing	Clip fixing
			
LED lights with motion detector			
100 ... 240 V AC, 50/60 Hz	8MR2200-0A	8MR2200-0B	8MR2200-0C
24 ... 48 V DC	8MR2201-0A	8MR2201-0B	8MR2201-0C
LED lights with On/Off switch			
100 ... 240 V AC, 50/60 Hz	8MR2200-1A	8MR2200-1B	8MR2200-1C
24 ... 48 V DC	8MR2201-1A	8MR2201-1B	8MR2201-1C

Accessories

Cables

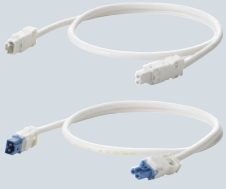
Connecting cables with socket and open end



- For connection of an LED light (switch side)
- Length 2 m

Version	Cross-section	Standard	Article No.
AC connecting cable	2 × 1.5 mm²	VDE	8MR2210-1B
	AWG 16	UL	8MR2210-2B
DC connecting cable	2 × 1.5 mm²	VDE	8MR2210-3B
	AWG 16	UL	8MR2210-4B

Extension cables with socket and plug



- For looping through to another LED light
- Length 1 m

Version	Cross-section	Standard	Article No.
AC plastic-sheathed cable	2 × 1.5 mm²	VDE	8MR2210-1C
	AWG 16	UL	8MR2210-2C
DC plastic-sheathed cable	2 × 1.5 mm²	VDE	8MR2210-3C
	AWG 16	UL	8MR2210-4C

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Individual plugs or sockets for self-assembly of cables

For connection of an LED light (switch side)



Version	Application	Color	Article No.
AC socket	For input side	White	8MR2210-1A
DC socket	For input side	Blue	8MR2210-3A

For looping through to another LED light



Version	Application	Color	Article No.
AC connector	For output side	White	8MR2210-2A
DC connector	For output side	Blue	8MR2210-4A

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Quick selection guide

Solutions to provide protection against heat

Cooling devices



Heat exchangers



Filter fans / outlet fans



Thermostats



Solutions to provide protection against cold

Heater units



Fan heaters



Thermostats



Solutions to provide protection against corrosion and condensation

Heater units / fan heaters



Filter fans / outlet filters



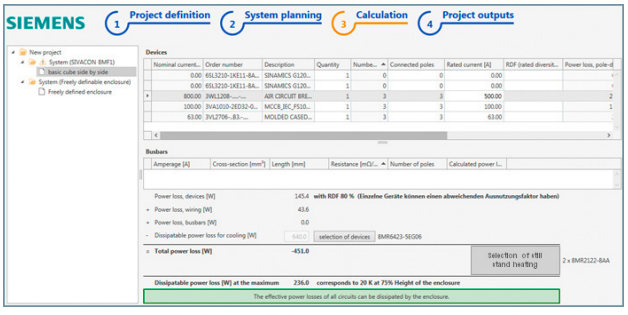
Thermostats



Hygrostats / hygrotherms



SIMARIS therm



SIMARIS therm is a software tool that lets you easily and precisely dimension the heat dissipation of your control cubicles, simply by entering the ambient air temperature and selecting the relevant devices in the cubicle.

For a free download, and further information, visit:
www.siemens.com/simaristherm

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Filter fans and outlet filters

Filter fans

	Size	Cutout	Voltage	Input rating at 50 Hz	Color	Degree of protection IP54		Degree of protection IP55	
						Air current, free-blowing at 50 Hz	Article No.	Air current, free-blowing at 50 Hz	Article No.
	**Filter fans with EC technology**								
	2	125 × 125 mm	115 V AC, 50/60 Hz	4.4 W	RAL 7035	62 m³/h	8MR6411-5LE25		–
			230 V AC, 50/60 Hz	4.4 W	RAL 7035	62 m³/h	8MR6423-5LE25		–
	3	177 × 177 mm	115 V AC, 50/60 Hz	4.4 W	RAL 7035	120 m³/h	8MR6411-5LE30		–
			230 V AC, 50/60 Hz	4.4 W	RAL 7035	120 m³/h	8MR6423-5LE30		–
	**Standard filter fans**								
	1	92 × 92 mm	115 V AC, 50/60 Hz	12 W	RAL 7035	25 m³/h	8MR6411-5LV10		–
			230 V AC, 50/60 Hz	12 W	RAL 7032	25 m³/h	8MR6423-2LV10		–
					RAL 7035	25 m³/h	8MR6423-5LV10		–
	2	125 × 125 mm	115 V AC, 50/60 Hz	20 W	RAL 7035	63 m³/h	8MR6411-5LV25	58 m³/h	8MR6511-5LV25
			230 V AC, 50/60 Hz	20 W	RAL 7032	63 m³/h	8MR6423-2LV25		–
					RAL 7035	63 m³/h	8MR6423-5LV25	58 m³/h	8MR6523-5LV25
	3	177 × 177 mm	115 V AC, 50/60 Hz	20 W	RAL 7035	115 m³/h	8MR6411-5LV30	105 m³/h	8MR6511-5LV30
			230 V AC, 50/60 Hz	20 W	RAL 7035	115 m³/h	8MR6423-5LV30	105 m³/h	8MR6523-5LV30
	4	223 × 223 mm	115 V AC, 50/60 Hz	18 W	RAL 7035	160 m³/h	8MR6411-5LV45	147 m³/h	8MR6511-5LV45
				43 W	RAL 7035	250 m³/h	8MR6411-5LV41	230 m³/h	8MR6511-5LV41
			230 V AC, 50/60 Hz	18 W	RAL 7032	160 m³/h	8MR6423-2LV45		–
					RAL 7035	160 m³/h	8MR6423-5LV45	147 m³/h	8MR6523-5LV45
				45 W	RAL 7032	250 m³/h	8MR6423-2LV41		–
					RAL 7035	250 m³/h	8MR6423-5LV41	230 m³/h	8MR6423-5LV41
			24 V DC	16 W	RAL 7032	250 m³/h	8MR6402-2LV41		–
	6	292 × 292 mm	115 V AC, 50/60 Hz	64 W	RAL 7035	580 m³/h	8MR6411-5LV60	531 m³/h	8MR6511-5LV60
				115 W	RAL 7035	930 m³/h	8MR6411-5LV80	850 m³/h	8MR6511-5LV80
			230 V AC, 50/60 Hz	64 W	RAL 7032	580 m³/h	8MR6423-2LV60		–
					RAL 7035	580 m³/h	8MR6423-5LV60	531 m³/h	8MR6523-5LV60
				135 W	RAL 7035	930 m³/h	8MR6423-5LV80	850 m³/h	8MR6523-5LV80
	**EMC filter fans**								
	3	177 × 177 mm	115 V AC, 50/60 Hz	20 W	RAL 7035	115 m³ /h	8MR6411-6LV30	105 m³/h	8MR6511-6LV30
			230 V AC, 50/60 Hz	20 W	RAL 7035	115 m³/h	8MR6423-6LV30	105 m³/h	8MR6523-6LV30
	4	223 × 223 mm	115 V AC, 50/60 Hz	18 W	RAL 7035	160 m³/h	8MR6411-6LV45	147 m³/h	8MR6511-6LV45
				43 W	RAL 7035	250 m³/h	8MR6411-6LV41	230 m³/h	8MR6511-6LV41
			230 V AC, 50/60 Hz	18 W	RAL 7035	160 m³/h	8MR6423-6LV45	147 m³/h	8MR6523-6LV45
				45 W	RAL 7035	250 m³/h	8MR6423-6LV41	230 m³/h	8MR6523-6LV41

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Filter fans and outlet filters

Outlet filters without fan





	Size	Cutout	External dimensions W x H	Mounting depth	Cover grille height	Color	Degree of protection IP54 Article No.	Degree of protection IP55 Article No.
	Standard outlet filters							
	1	92 × 92 mm	105 × 105 mm	12 mm	4.5 mm	RAL 7032	8MR6400-2GV10	–
						RAL 7035	8MR6400-5GV10	–
	2	125 × 125 mm	148 × 148 mm	23 mm	5.5 mm	RAL 7032	8MR6400-2GV25	–
						RAL 7035	8MR6400-5GV25	8MR6500-5GV25
	3	177 × 177 mm	204 × 204 mm	26 mm	6 mm	RAL 7035	8MR6400-5GV30	8MR6500-5GV30
	4	223 × 223 mm	250 × 250 mm	32 mm	6 mm	RAL 7032	8MR6400-2GV45	–
						RAL 7035	8MR6400-5GV45	8MR6500-5GV45
	6	292 × 292 mm	323 × 323 mm	33 mm	6.5 mm	RAL 7032	8MR6400-2GV67	–
						RAL 7035	8MR6400-5GV67	8MR6500-5GV67
	EMC outlet filters							
	3	177 × 177 mm	204 × 204 mm	26 mm	6 mm	RAL 7035	8MR6400-6GV30	8MR6500-6GV30
	4	223 × 223 mm	250 × 250 mm	32 mm	6 mm	RAL 7035	8MR6400-6GV45	8MR6500-6GV45

Filter mats for filter fans and outlet filters

	Size	Degree of protection IP54 Dimensions W x H	Degree of protection IP54 Article No.	Degree of protection IP55 Dimensions W x H	Degree of protection IP55 Article No.
	Standard filter mats				
	1	92 × 92 mm	8MR6000-0AM10		–
	2	125 × 125 mm	8MR6000-0AM25	116 × 116 mm	8MR6000-0CF25
	3	177 × 177 mm	8MR6000-0AM30	169 × 169 mm	8MR6000-0CF30
	4	223 × 223 mm	8MR6000-0AM45	215 × 215 mm	8MR6000-0CF45
	6	292 × 292 mm	8MR6000-0AM67	281 × 281 mm	8MR6000-0CF67

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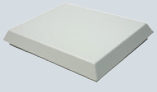
Roof filter fans and roof outlet filters

Roof filter fans

	Air current, free-blowing at 50 Hz	External dimensions W x H x D	Voltage	Input rating	Degree of protection IP44 Article No.	Degree of protection IP54 Article No.
	**For cutout 223 × 223 mm, color RAL 7035**					
	71 m³/h	287 × 287 × 104 mm	230 V AC, 50/60 Hz	40 W	–	8MR6423-5VL44
			115 V AC, 50/60 Hz	48 W	–	8MR6411-5VL44
			24 V DC	8.8 W	–	8MR6402-5VL44
	240 m³/h	287 × 287 × 174 mm	230 V AC, 50/60 Hz	45 W	–	8MR6423-5VL41
			115 V AC, 50/60 Hz	43 W	–	8MR6411-5VL41
			24 V DC	16 W	–	8MR6402-5VL41
	300 m³/h	287 × 287 × 174 mm	230 V AC, 50/60 Hz	45 W	–	8MR6423-5VL55
	**For cutout 292 × 292 mm, color RAL 7035**					
	232 m³/h	361 × 361 × 114 mm	230 V AC, 50/60 Hz	68 W	–	8MR6423-5VL64
			115 V AC, 50/60 Hz	68 W	–	8MR6411-5VL64
			24 V DC	14 W	–	8MR6402-5VL64
	550 m³/h	361 × 361 × 211 mm	230 V AC, 50/60 Hz	64 W	–	8MR6423-5VL60
			115 V AC, 50/60 Hz	64 W	–	8MR6411-5VL60
			24 V DC	55 W	–	8MR6402-5VL60
	840 m³/h	361 × 361 × 203 mm	230 V AC, 50/60 Hz	135 W	–	8MR6423-5VL80
			115 V AC, 50/60 Hz	115 W	–	8MR6411-5VL80
			24 V DC	105 W	–	8MR6402-5VL80
	**For cutout 345 × 265 mm, color RAL 7035, metal**					
	405 m³/h	420 × 340 × 108 mm	115 V AC, 50/60 Hz	40/45 W	8MR6311-5DL40	–
			230 V AC, 50/60 Hz	40/45 W	8MR6323-5DL40	–
	690 m³/h	420 × 340 × 108 mm	115 V AC, 50/60 Hz	100/130 W	8MR6311-5DL42	–
			230 V AC, 50/60 Hz	100/130 W	8MR6323-5DL42	–

Roof outlet filters without fan

	External dimensions W x H x D	Degree of protection IP44 Article No.	Degree of protection IP54 Article No.
	**For cutout 223 × 223 mm, color RAL 7035**		
	287 × 287 × 85 mm	–	8MR6400-5VE45
	**For cutout 292 × 292 mm, color RAL 7035**		
	361 × 361 × 96 mm	–	8MR6400-5VE67
	**For cutout 345 × 265 mm, color RAL 7035, metal**		
	420 × 340 × 83 mm	8MR6000-5DE40	–

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Air conditioners/cooling devices

For door or side mounting, degree of protection inside IP54 / outside IP34, color RAL 7035





Cooling capacity	Rated power	Dimensions W × H × D	Air capacity Inside	Air capacity Outside	Design	Mounting Undrilled	Mounting Part	Article No.
230 V, 50/60 Hz								
380 W	280 W	285 × 460 × 180 mm	280 m³/h	280 m³/h	■	■	–	8MR6423-5EG04
640 W	400 W	360 × 606 × 212 mm	330 m³/h	570 m³/h	■	■	–	8MR6423-5EG06
820 W	440 W	348 × 783 × 215 mm	330 m³/h	570 m³/h	■	■	–	8MR6423-5EG08
1050 W	570 W	348 × 783 × 215 mm	570 m³/h	860 m³/h	■	■	■	8MR6423-5SK10
1550 W	880 W	400 × 950 × 233 mm	570 m³/h	1050 m³/h	■	■	■	8MR6423-5SK15
2050 W	1080 W	400 × 1265 × 236 mm	860 m³/h	1050 m³/h	■	■	■	8MR6423-5SK20
400 V, 50/60 Hz								
2900 W	1220 W	500 × 1270 × 336 mm	860 m³/h	1450 m³/h	■	■	–	8MR6440-5EG30
3850 W	1780 W	500 × 1270 × 336 mm	1450 m³/h	1450 m³/h	■	■	–	8MR6440-5EG40
5800 W	2340 W	600 × 2000 × 380 mm	1450 m³/h	2900 m³/h	■	■	–	8MR6440-5EG60

For roof mounting, degree of protection inside IP54 / outside IP34, color RAL 7035



Cooling capacity	Rated power	Dimensions W × H × D	Air capacity Inside	Air capacity Outside	Design	Mounting Undrilled	Mounting Part	Article No.
230 V, 50/60 Hz								
410 W	270 W	259 × 264 × 486 mm	235 m³/h	330 m³/h	■	■	–	8MR6423-5DE04
820 W	510 W	340 × 340 × 600 mm	330 m³/h	570 m³/h	■	■	–	8MR6423-5DE08
1150 W	550 W	401 × 415 × 567 mm	570 m³/h	1010 m³/h	■	■	–	8MR6423-5DE12
1550 W	810 W	401 × 415 × 567 mm	860 m³/h	1820 m³/h	■	■	–	8MR6423-5DE15
2050 W	1190 W	401 × 415 × 567 mm	1050 m³/h	1820 m³/h	■	■	–	8MR6423-5DE20
400 V, 50/60 Hz								
2900 W	1210 W	492 × 496 × 797 mm	860 m³/h	3410 m³/h	■	■	–	8MR6440-5DE30
3850 W	1630 W	492 × 496 × 797 mm	1450 m³/h	3410 m³/h	■	■	–	8MR6440-5DE40

Heat exchangers

Air/air heat exchangers, degree of protection IP54, color RAL 7035



Thermal power	Rated power	Dimensions W × H × D	Air capacity Inside	Air capacity Outside	Design	Mounting Undrilled	Mounting Part	Article No.
230 V, 50/60 Hz								
36 W/K	140 W	316 × 771 × 103 mm	570 m³/h	570 m³/h	■	■	–	8MR6423-5ML36
80 W/K	240 W	317 × 1260 × 148 mm	1050 m³/h	1050 m³/h	■	■	–	8MR6423-5ML80

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Heater units

	Rated value	Rated power	Shutdown temperature	Article No.
	**Heater units with PTC thermistor, UL-approved**			
	120 ... 240 V AC/DC	15 W	–	8MR2130-1A
		30 W	–	8MR2130-3A
		45 W	–	8MR2130-4A
		60 W	–	8MR2130-6A
		75 W	–	8MR2130-7A
		100 W	–	8MR2130-0A
		150 W	–	8MR2130-5A
	**Semiconductor heater units without thermostat, compact design, UL-approved**			
	120 ... 240 V AC/DC	50 W	–	8MR2131-4A
		100 W	–	8MR2131-0A
		150 W		8MR2131-5A
	**Semiconductor heater units with thermostat, compact design**			
	120 ... 240 V AC/DC	50 W	15 °C	8MR2132-1A
			25 °C	8MR2132-1AB
		100 W	15 °C	8MR2132-0A
			25 °C	8MR2132-0AB
		150 W	15 °C	8MR2132-5A
			25 °C	8MR2132-5AB
	**Semiconductor heater units**			
	12 ... 30 V AC/DC	15 W	–	8MR2130-1BA
		30 W	–	8MR2130-3BA
		45 W	–	8MR2130-4BA
		60 W	–	8MR2130-6BA

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Fan heaters

Fan heaters



Version	Voltage	Continuous heat output	Parameter	Article No.
Standard version				
Without fan	230 V AC	100 W	–	8MR2140-0A
		150 W	–	8MR2140-1A
		200 W	–	8MR2140-2A
		300 W	–	8MR2140-3A
		400 W	–	8MR2140-4A
With fan	230 V AC	100 W	–	8MR2140-0B
		150 W	–	8MR2140-1B
		200 W	–	8MR2140-2B
		300 W	–	8MR2140-3B
		400 W	–	8MR2140-4B



Compact fan heater				
Without fan	230 V AC	250 W	–	8MR2122-4A
		400 W	–	8MR2122-8A
	120 V AC	250 W	–	8MR2122-4B
		400 W	–	8MR2122-8B
With fan	24 V DC	250 W	–	8MR2122-4AB
	48 V DC	250 W	–	8MR2122-4AC
		400 W	–	8MR2122-8AA



With integrated thermostat				
For floor mounting	230 V AC	950 W	0 ... +60 °C	8MR2150-0A
For wall mounting	230 V AC	950 W	0 ... +60 °C	8MR2150-0C
With integrated hygrostat				
For floor mounting	230 V AC	950 W	65% R.H.	8MR2150-0BA
For wall mounting	230 V AC	950 W	65% R.H.	8MR2150-0CA

Semiconductor fan heaters



Fixing	Voltage	Continuous heat output	Version	Article No.
Fan heaters				
Clip fixing	230 V AC	150 W	–	8MR2150-2C
		250 W	–	8MR2150-5A
		400 W	–	8MR2150-4A
	120 V AC	250 W	–	8MR2150-5AA
		400 W	–	8MR2150-4AA
Screw fixing	230 V AC	150 W	–	8MR2150-2D
		250 W	–	8MR2150-5B
		400 W	–	8MR2150-4B
	120 V AC	250 W	–	8MR2150-5AB
		400 W	–	8MR2150-4AB



PTC fan heaters for wall mounting				
Screw fixing	230 V AC	1200 W	With thermostat 0 ... +60 °C	8MR2150-3A
		1200 W	Without thermostat	8MR2150-3B
Clip fixing	120 V AC	1200 W	With thermostat +32 ... +140 °F	8MR2151-3A
		1200 W	Without thermostat	8MR2151-3B



PTC fan heaters for floor mounting				
Screw fixing	230 V AC	1200 W	With thermostat 0 ... +60 °C	8MR2150-2A
		1200 W	Without thermostat	8MR2150-2B
Clip fixing	120 V AC	1200 W	With thermostat +32 ... +140 °F	8MR2151-2A
		1200 W	Without thermostat	8MR2151-2B

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Thermostats

Adjustable thermostats









Version	Max. switching power	Temperature range	Article No.
Mini thermostat			
NC contact with red adjusting knob	250 V AC, 10 (2) A	–10 ... +50 °C	8MR2170-1CA
		0 ... +60 °C	8MR2170-2BA
		+20 ... +80 °C	8MR2170-1DA
NO contact with blue adjusting knob	250 V AC, 10 (2) A	–10 ... +50 °C	8MR2170-1CB
		0 ... +60 °C	8MR2170-2BB
		+20 ... +80 °C	8MR2170-1DB
Mechanical thermostat			
CO contact	250 V AC, 10 (4) A	+5 ... +60 °C	8MR2170-1A
		–20 ... +30 °C	8MR2170-1B
Electronic thermostat			
CO contact	230 V AC, 8 (1.6) A	–20 ... +60 °C	8MR2170-1GA
	120 V AC, 8 (1.6) A	–4 ... +140 °F	8MR2170-1GB
	24 V DC, 16 A	0 ... +60 °C	8MR2170-2A
CO contact, integrated	230 V AC, 8 (1.6) A	–20 ... +60 °C	8MR2170-1GC
Twin thermostat			
NC contact and NO contact	250 V AC, 10 (2) A	0 ... +60 °C	8MR2170-1E
NO contact and NO contact	250 V AC, 10 (2) A	0 ... +60 °C	8MR2170-1EA

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Thermostats

Tamper-proof thermostats





Version	Max. switching power	Shutdown temperature	Article No.
Tamper-proof thermostat			
NC contact	250 V AC, 5 (1.6) A	15 °C	8MR2171-1BA
		25 °C	8MR2171-2BA
NO contact	250 V AC, 5 (1.6) A	35 °C	8MR2171-3BB
		50 °C	8MR2171-1BB
		60 °C	8MR2171-2BB
Twin thermostat			
NC contact and NO contact	250 V AC, 5 (1.6) A	15 °C | 50 °C (NC contact | NO contact)	8MR2172-1A
	250 V AC, 5 (1.6) A or 30 W DC	25 °C | 60 °C (NC contact | NO contact)	8MR2172-2A
NO contact and NO contact	250 V AC, 5 (1.6) A	50 °C | 60 °C (NO contact | NO contact)	8MR2172-1AB

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Hygrostats, hygrotherms, switching modules

Hygrostats





Version	Relative air humidity	Voltage	Max. switching power	Article No.
Mechanical hygrostat				
CO contact	35 ... 95%	230 V AC	250 V AC, 5 (0.2) A / 20 W DC	8MR2170-1C
Electronic hygrostat				
CO contact	40 ... 90%	230 V AC	240 V AC, 8 (1.6) A	8MR2170-1AF
		120 V AC	240 V AC, 8 (1.6) A	8MR2170-2AF
	65%	230 V AC	240 V AC	8MR2170-1BF
		120 V AC	120 V AC	8MR2170-2BF

Hygrotherms



Version	Relative air humidity	Temperature range	Voltage	Max. switching power	Article No.
Electronic hygrotherm					
NC contact and NO contact	50 ... 90%	+32 ... +140 °F	100 ... 240 V AC	NC contact: 120 V AC, 6 (1) A NO contact: 120 V AC, 8 (1.6) A	8MR2170-4F
		0 ... +60 °C	100 ... 240 V AC	NC contact: 100 ... 240 V AC, 6 (1) A NO contact: 100 ... 240 V AC, 8 (1.6) A	8MR2170-4E

Switching modules



Purpose	Switching capacity	Article No.
For switching high-power DC devices from thermostats, hygrostats or hygrotherms	24 V DC, 16 A	8MR2180-1A
	48 V DC, 16 A	8MR2180-1B

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General information

Information on low-voltage power distribution and electrical installation technology	www.siemens.com/lowvoltage
Tender specifications	www.siemens.com/lowvoltage/tenderspecifications
Conversion tool	www.siemens.com/conversion-tool
Image database	www.siemens.com/lowvoltage/picturedb
CAx download manager	www.siemens.com/lowvoltage/cax
Newsletter system	www.siemens.com/lowvoltage/newsletter
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Brochures / catalogs	www.siemens.com/lowvoltage/catalogs
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Siemens Industry Online Support	www.siemens.com/lowvoltage/product-support
Siemens Industry Online Support app	www.siemens.com/support-app
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Configurators	www.siemens.com/lowvoltage/configurators
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Control panels for the North American market	www.siemens.com/northamerican-standards
Control panel building	www.siemens.com/controlpanel
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Energy Suite	www.siemens.com/energysuite
SITOP power supplies	www.siemens.com/sitop
Power distribution with Totally Integrated Power	www.siemens.com/tip

Information + ordering

Technical overviews	
Air circuit breakers	www.siemens.com/lowvoltage/produkt-support (109781188) www.siemens.com/lowvoltage/product-support (109766020)
Molded case circuit breakers	www.siemens.com/lowvoltage/product-support (109767421)
Miniature circuit breakers	www.siemens.com/lowvoltage/product-support (109769082)
Residual current protective devices / arc fault detection devices	www.siemens.com/lowvoltage/product-support (109769082)
Switching devices	www.siemens.com/lowvoltage/product-support (109769083)
Overvoltage protection devices	www.siemens.com/lowvoltage/product-support (109769084)
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Terminal blocks	www.siemens.com/lowvoltage/product-support (109769088)
Power distribution boards, motor control center s and distribution boards	www.siemens.com/lowvoltage/product-support (109769089)
Busbar trunking systems	www.siemens.com/lowvoltage/product-support (109769090)
System cubicles, system lighting and system air-conditioning	www.siemens.com/lowvoltage/product-support (109769091)

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All the important things at a glance	
Air circuit breakers	www.siemens.com/3WA www.siemens.com/3WL
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Miniature circuit breakers	www.siemens.com/mcb www.siemens.com/protection-concept
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Your product in detail	
Brochure – 3WA air circuit breakers	www.siemens.com/lowvoltage/product-support (109781968)
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Brochure – SENTRON portfolio for power monitoring	www.siemens.com/lowvoltage/product-support (109744725)
Brochure – The plus for your business: Intelligent. Flexible. Safe. Low-voltage switchboard SIVACON S8^{plus}	www.siemens.com/lowvoltage/product-support (109747937)
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Brochure – SIVACON 8MF1 system cubicles – As versatile as your requirements	www.siemens.com/lowvoltage/product-support (109744677)
Catalog LV 70 – 2019 – SIVACON 8PS busbar trunking systems – BD01, BD2 up to 1250 A	www.siemens.com/lowvoltage/product-support (109744546)
Quick selection guide – 3WA air circuit breakers	www.siemens.com/lowvoltage/product-support (109781967)
Quick selection guide – 3WL air circuit breakers	www.siemens.com/lowvoltage/product-support (109751638)
Technical basic information – 3WL air circuit breakers	www.siemens.com/lowvoltage/product-support (109767789)
Technical basic information – 3VA molded case circuit breakers	www.siemens.com/lowvoltage/product-support (109766672)
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Technology primer – Residual current protective devices	www.siemens.com/lowvoltage/product-support (109482301)
Technology primer – Overvoltage protection devices	www.siemens.com/lowvoltage/product-support (109756965)
Technology primer – Fuse systems	www.siemens.com/lowvoltage/product-support (109482303)
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Power Distribution Low Voltage (EN)	bit.ly/3iiuhXS
3WL air circuit breakers (general)	bit.ly/2ZH1rXH

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Siemens ALPHA FIX terminal blocks – 8WH3 insulation displacement terminals (IDC)	bit.ly/2Y3JCVq
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Siemens SIVACON S4 power distribution boards up to 4000 A	bit.ly/2krni6h
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Overvoltage protection devices	sie.ag/2kTfytV
Fuse systems	sie.ag/2kW3pnU
Switching devices	sie.ag/2mryctm
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Terminal blocks	sie.ag/2kW8ZXo
SIVACON S4 power distribution boards	sie.ag/2JUQwE4
ALPHA distribution boards	sie.ag/2kURLd8
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SIVACON 8PS	sie.ag/2lXpCT1
System cubicles, system lighting and system air-conditioning	sie.ag/339cQB9
SIVACON S8	www.siemens.com/sivacon-partnerfinder
Order support	
3KD switch disconnectors – End-to-end safety for user and systems	www.siemens.com/lowvoltage/catalogs (109750228)
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PDF (E86060-K8280-A101-B2-7600)



LV 14
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SENTRON

E86060-K1814-A101-A7-7600



LV 18
Air Circuit Breakers and Molded Case Circuit Breakers with UL Certification
SENTRON

PDF (E86060-K8280-E347-A5-7600)



ET D1
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DELTA

PDF



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