SIEMENS

Catalog
LV 13

Edition
03/2024

SENTRON

3WA Air Circuit Breakers

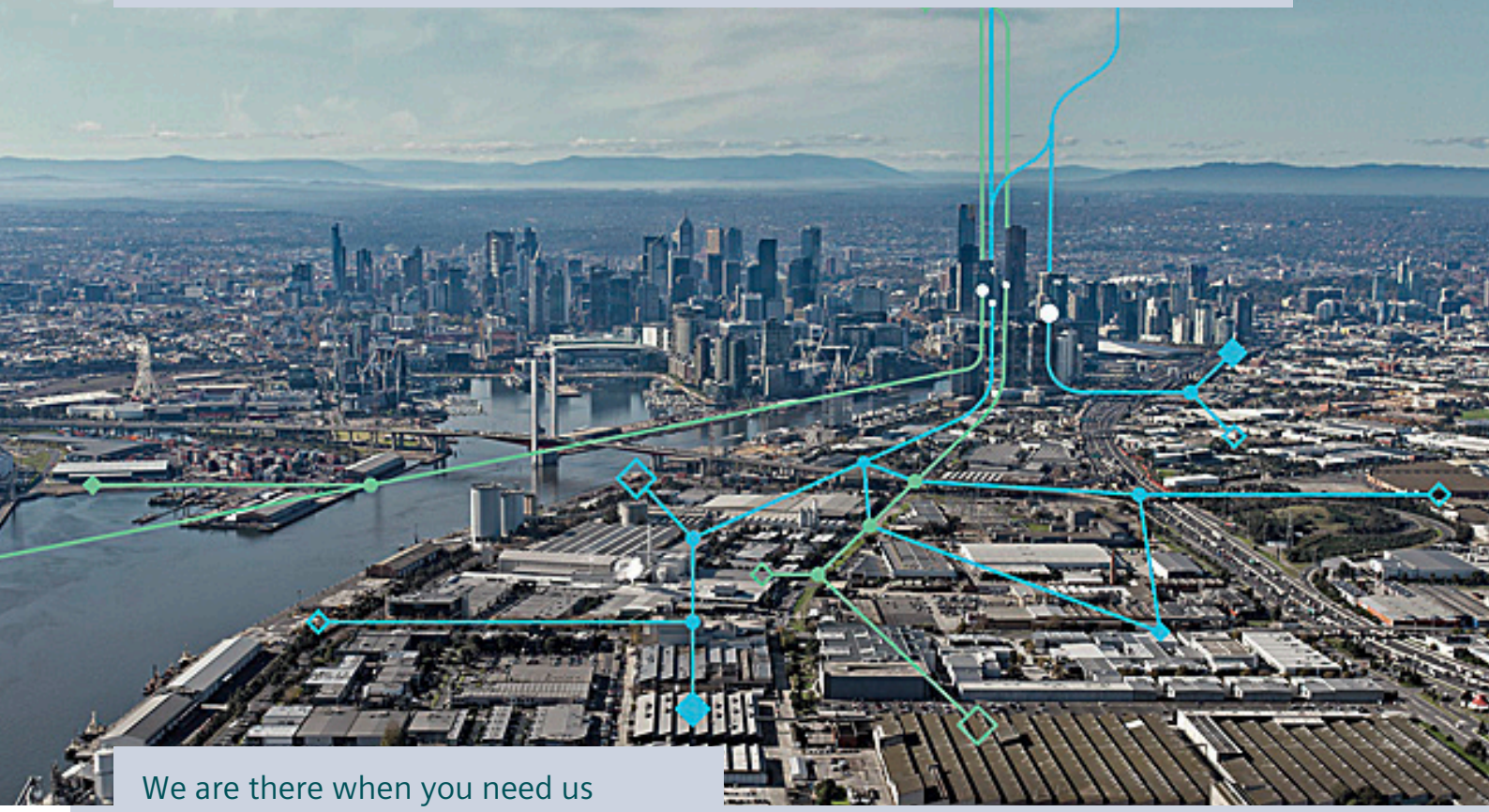
siemens.com/3WA

Innovative solutions for industrial controls and power distribution

Reliable components and systems are essential in ensuring smooth power distribution in buildings and industrial plants.

With SIRIUS, SENTRON, SIVACON and ALPHA, we offer an innovative portfolio for standard-compliant and demand-oriented applications.

Efficient engineering tools and innovative cloud-based solutions can be flexibly tailored to individual requirements.



We are there when you need us

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

Catalog LV 13 · 03/2024

You will find the latest edition and all future editions in SiePortal at **www.siemens.com/lowvoltage/catalogs**

You can find the current prices in SiePortal at
www.siemens.com/lowvoltage/product-catalog

The products and systems described in this catalog are manufactured/distributed under application of a certified quality management system in accordance with EN ISO 9001 (for the Certified Registration Nos., see **www.siemens.com/system-certificates/ep**).
The certificate is recognized by all IQNet countries.

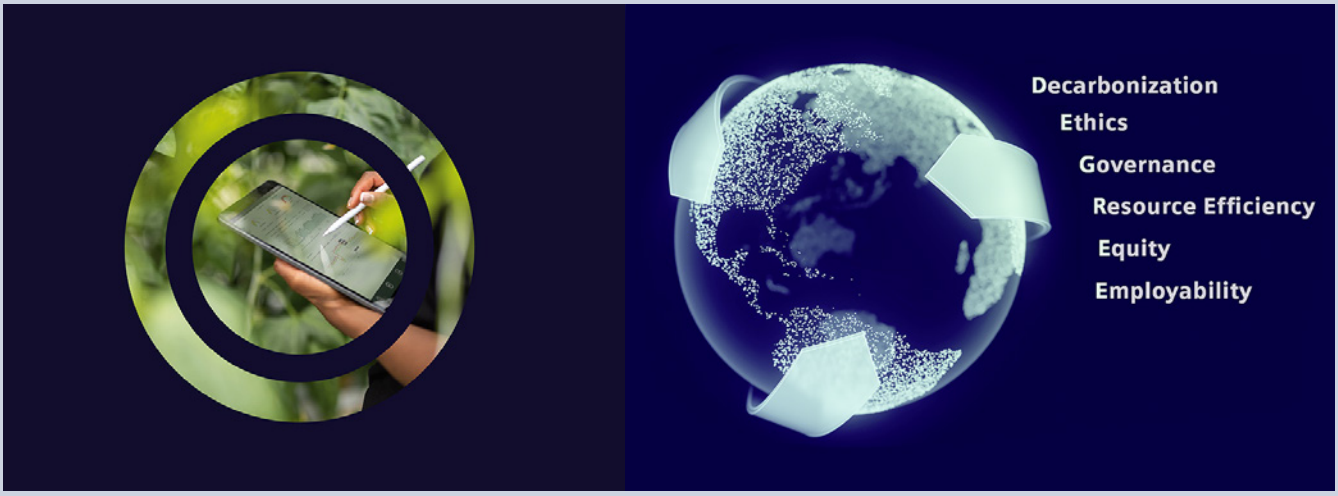
Technical specifications
The technical specifications are for general information purposes only.
Always heed the operating instructions and notices on individual products during assembly, operation and maintenance.

All illustrations are not binding.

3WA Air Circuit Breakers

Sustainability@Siemens

Transforming the everyday to create a better tomorrow.



Siemens as a company takes an all-round view of environmental, social and governance criteria (ESG) with its DEGREE rulebook (decarbonization, ethics, governance, resource efficiency, equity and employability). Not only are we committed to reducing the carbon footprint in our own plants to net zero by 2030, but also to helping our customers achieve their decarbonization and sustainability objectives.

Mission & strategy
As a focused technology company, Siemens is committed to tackling the world's most profound challenges by leveraging the synergies of digitalization and sustainability.

Technology with a purpose
We develop technologies that interconnect the real world and the digital world and enable our customers to make positive changes to their industries, which form the backbone of our economy: industry, infrastructure, transportation and healthcare.

Our contribution
Siemens makes a difference every single day by providing innovative solutions for challenges in environmental protection, decarbonization, health and safety. Innovative solutions that have a clear purpose: to make the world more sustainable, more integrative and a better place to live.

Facts about sustainability
For almost 175 years, Siemens has been driven by the desire to improve the lives of people around the world with our technologies.

Further information at:
www.siemens.com/sustainability

New products

LV 10
Low-Voltage Power Distribution and Electrical Installation Technology
SENTRON • SIVACON • ALPHA

PDF (E86060-K8280-A101-B8-7600)

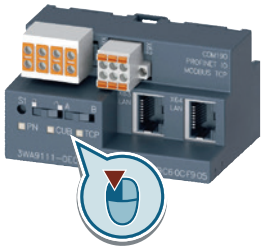
Clickable article numbers

Direct forwarding to the individual products in SiePortal (product catalog) by clicking on the article number in the catalog

or by entering this web address incl. article number
www.siemens.com/product_catalog_SIEP?Article No.

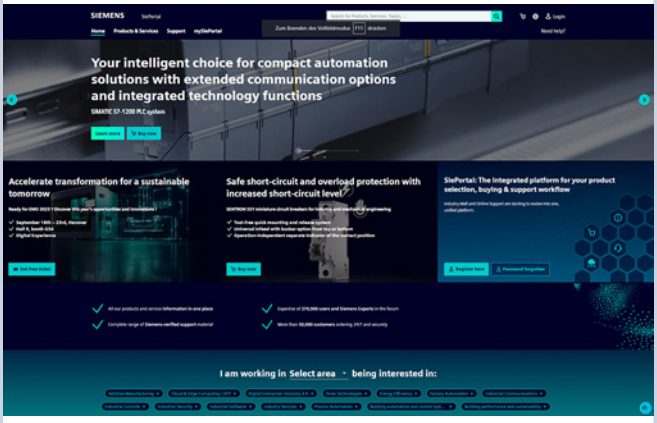
Clickable images

Direct forwarding to the individual motif types in the Industry image database by clicking on the images in the catalog



Industry image database:
www.siemens.com/lowvoltage/picturedb

SiePortal – The integrated platform for product selection, ordering and support



SiePortal:
www.siemens.com/sieportal

SiePortal – Knowledge base for low-voltage products

SiePortal > Support > Knowledge base

- Catalog/Brochure
- Manual
- Characteristic curves
- Certificates
- FAQ etc.

www.siemens.com/lowvoltage/product-support

SiePortal – Product catalog (Internet ordering platform) for low-voltage products

SiePortal > Products & Services

www.siemens.com/lowvoltage/product-catalog

Trust the tried-and-tested

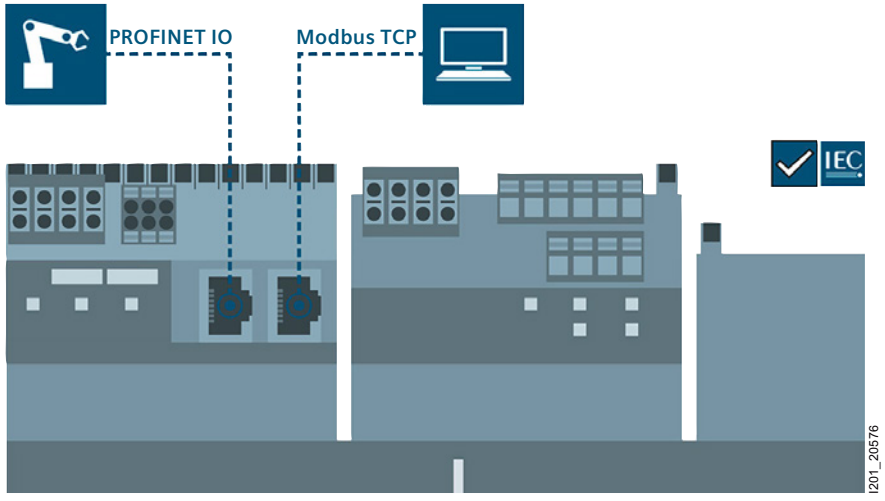
With the help of rock-solid 3WA air circuit breakers, your power distribution system will benefit from the reliable protection you know and trust. Benefit from a comprehensive portfolio that meets every requirement and suits every application. Extensive, modular accessories let you expand functions easily. A long service life and the low maintenance cost of all the components are your assurance of long-term reliability.

You will find more information on our website
sie.ag/3RptGW0

Consistent portfolio

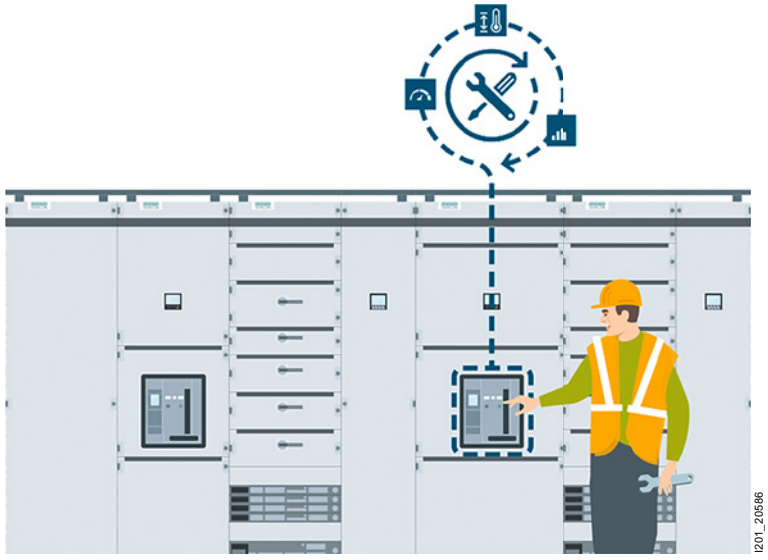
- Consistent, end-to-end portfolio since 2001 thanks to the 3WL and 3WA air circuit breakers having the same dimensions and terminals
- Consistent, end-to-end circuit breaker portfolio up to 1150 V AC
- Three sizes with rated currents from 630 A to 6300 A for AC applications
- One size up to 4000 A for DC applications
- High breaking capacity I_{cu} from 55 kA to 150 kA at 500 V AC
- Simple extension of functions thanks to uniform accessories for all sizes
- A single electronic trip unit that meets all requirements

Simple extension of functions



- Accessories can also be retrofitted on site at any time
- ETU functions can be extended by means of on-site upgrades
- COM190 PROFINET-IO/Modbus TCP module for connection to higher-level management systems; designed as a combination module to use multiple protocols simultaneously (Modbus TCP and PROFINET)
- Switched Ethernet functionality for optimized architecture, engineering, and redundancy while maintaining highest performance

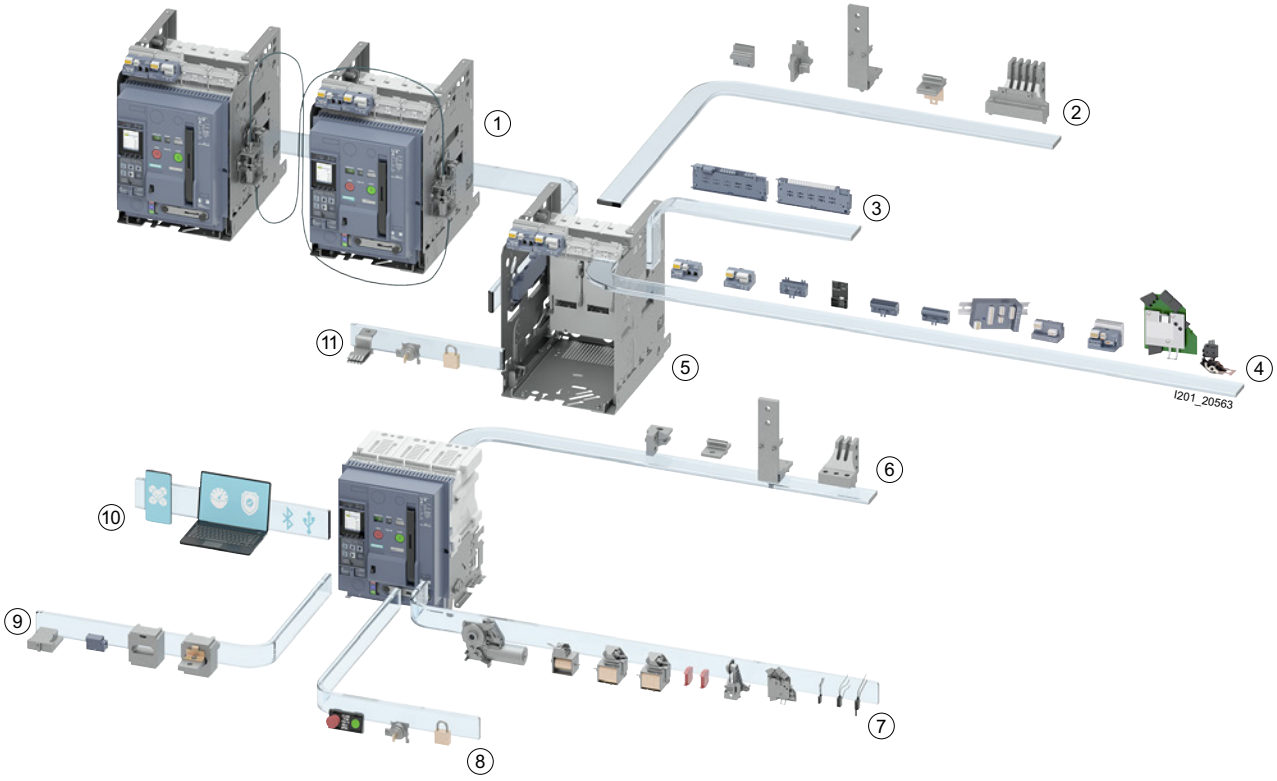
Long-term reliability



- Simple annual inspection can be carried out independently by the customer
- Replacement of wear parts can be performed as needed by the customer (no Siemens personnel required)
- Under certain ambient conditions, inspections are required only once every four years
- Automatic self-monitoring of proper functioning of the 3WA air circuit breaker
- Cybersecurity functions for secure communication

Trust the tried-and-tested

System overview



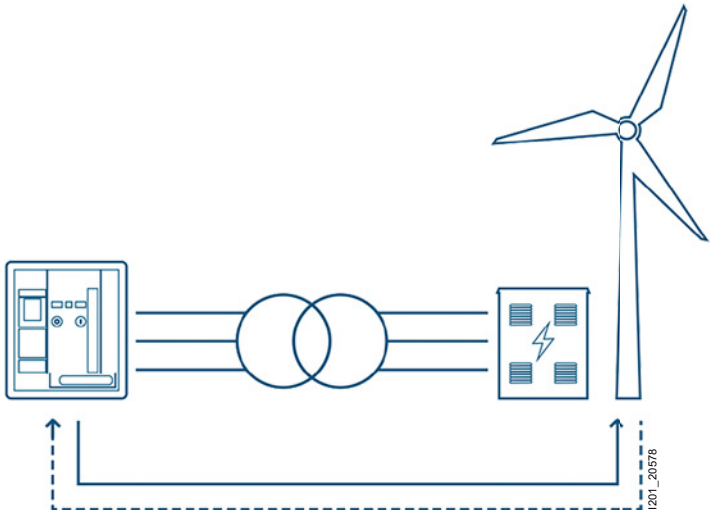
1. Interlocking solutions with Bowden cable
2. Main connection variants for guide frame
3. Position signaling switch (PSS) for the guide frame
4. Interfaces/COM-modules/Aux. terminals
5. Guide frame with shutter
6. Main connection variants for fixed-mounted version
7. Internal accessories: aux. release, spring charging motor, aux. contacts
8. Locking solutions for fixed-mounted version
9. Electronic trip units (ETU)
10. Digital function packages can be activated for the ETU
11. Interlocking solutions for withdrawable version

Benefit from efficiency

3WA air circuit breakers provide enhanced protective functions and increased selectivity to ensure maximum system availability. Their robust mechanisms and outstanding product quality are highly effective in demanding heavy-duty applications. With a 3WA air circuit breaker in your switchgear, you can efficiently retrofit a 3WL air circuit breaker, saving time and money.

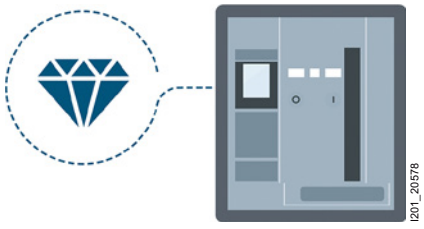
You will find more information on our website
sie.ag/3CZLoeb

Optimal selectivity



- Perfectly coordinated selectivity values and protective functions for air circuit breakers and downstream protective devices like molded case circuit breakers assure full selectivity in cases of both overload and short circuit (the system component directly affected is safely shut down)
- Directional protective function: better protection of equipment (e.g. transformer) thanks to the detection of short-circuits when the direction of energy flow changes
- Hazardous discharge currents are detected thanks to optimized ground-fault protection functions

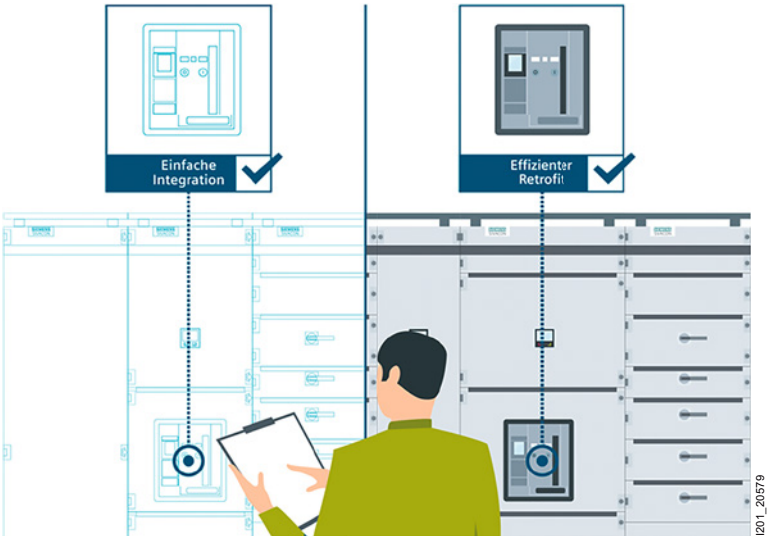
Highest product quality



- Further development of the proven, extremely robust design of the previous model, the 3WL air circuit breaker
- New special versions (high short-circuit breaking capacity at high voltages): up to 125 kA at 1000 V
- Maximum load capacity of circuit breaker thanks to long-lasting short-circuit breaking capacity at I_{cw} (3 s)
- Accessories designed for the maximum service life of the air circuit breaker
- The 3WA air circuit breaker is developed and manufactured in accordance with a certified quality management system complying with DIN EN ISO 9001:2008
- User-friendly operation of electronic trip unit via rotary coding switch, display, or remote parameterization

Trust the tried-and-tested

Time and cost savings when integrating into switchboards



- Easy integration of the 3WA air circuit breaker in switchboard with no need for additional testing if the 3WL air circuit breaker is already integrated in the switchboard design
- Easy to replace in existing switchboard: the 3WL air circuit breaker can be replaced by the 3WA air circuit breaker without additional testing according to IEC 61439 if the latter is operated under the same infeed/load conditions
- Type test according to IEC 61439 is only required if new technical features of the 3WA air circuit breaker are used (e.g. high switching capacities)
- Possibility of installing the 3WA air circuit breaker in an existing 3WL guide frame

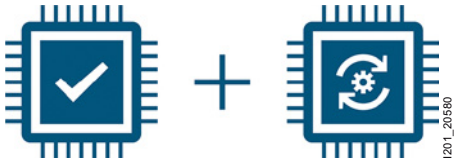
For certificate, see: **www.siemens.com/lowvoltage/certificate (109783797)**

Create solutions with potential

3WA air circuit breakers offer selectable and upgradable functionalities, giving you flexibility – both now and in the future. Power data recording guarantees maximum transparency during system operation. Sophisticated, powerful communication characteristics ensure secure data transmission – a must in the age of digitalization. And because they are easy to select, plan, and order, you can enjoy efficient workflows.

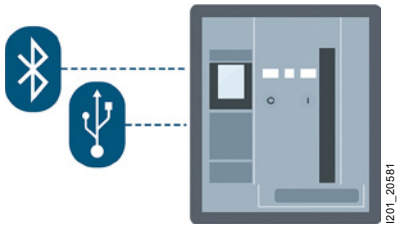
You will find more information on our website
sie.ag/3Qe3L1T

Long-term flexibility



- Intelligent dual-processor solution provides future-proofing and high levels of flexibility, together with strong security: Unmodifiable protection processor for basic protective functions and upgradable application processor for metering functions and enhanced protective functions
- Easy to install functions and upgrades using the SENTRON Powerconfig configuration software
- Optimal transparency for energy efficiency according to IEC 60364-8-1 thanks to a predefined metering function level (PMF level)
- Adaptation to new standards and modified standards possible at any time via upgrades

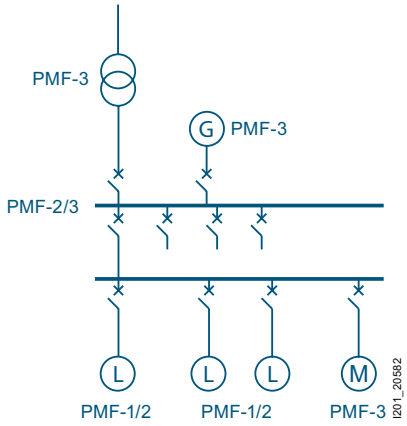
Future-proof communication solutions



- PROFINET-IO, for example for very demanding industrial communications, and Modbus TCP, e. g. for power monitoring
- PROFINET-IO redundancy and compliance with the highest PROFINET-IO standards (real-time capability)
- Modbus RTU for system expansion
- Standard interfaces like USB-C and Bluetooth available in every air circuit breaker
- Possibility of using two communications modules simultaneously

Create solutions with potential

High system transparency



- Simple integration in energy management systems according to ISO 50001 with selection of metering functions based on the energy efficiency guidelines of IEC 60364-8-1
- ETU600 electronic trip unit with advanced monitoring and reporting concept
- 3WA air circuit breaker monitored remotely via the SENTRON Powerconfig mobile app

Secure communication

- Communication via Bluetooth: deactivated by default and protected by safe pairing with a one-use PIN
- Comprehensive cybersecurity solutions, such as
  – lockable communications module
  – lockable USB-C interface
- Communication via USB: setting parameters, testing, and switching using the SENTRON Powerconfig configuration software

Selection, planning, and ordering

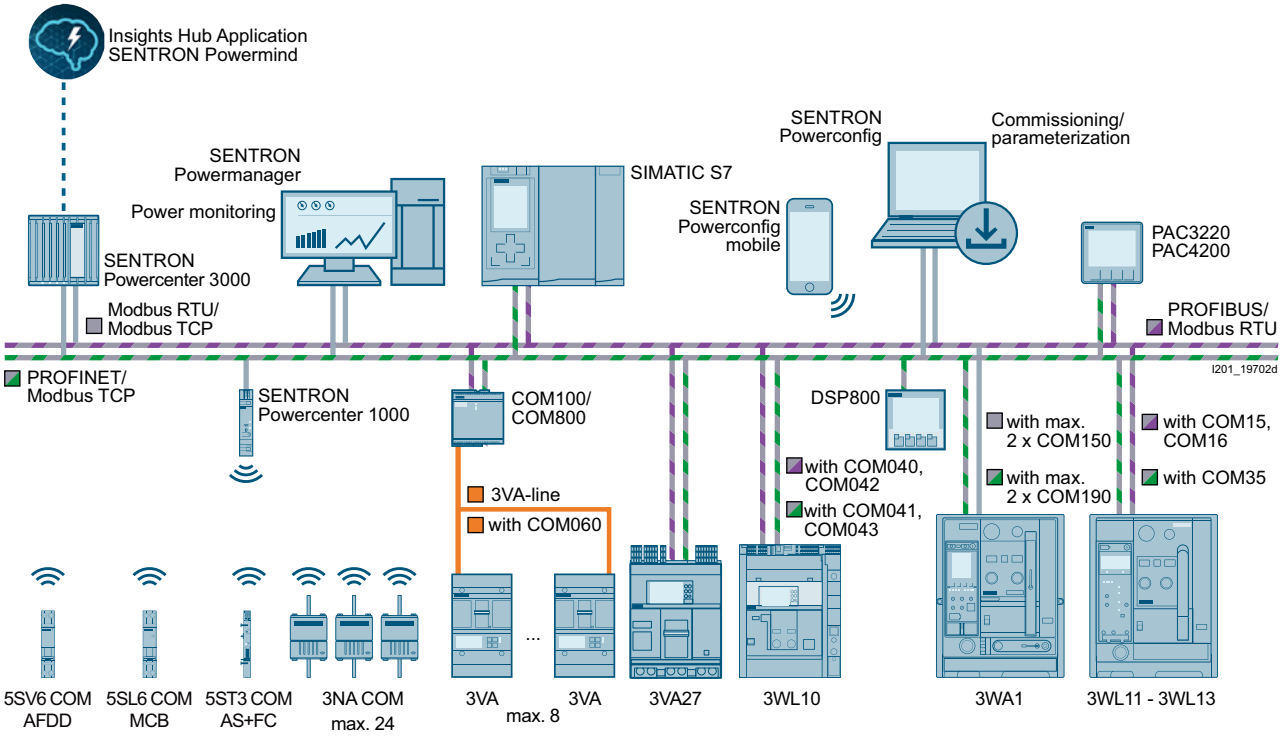
- Reduced complexity, bundling of functions, and rapid selection of device configuration
- Visual and interactive online configurator with interface to comprehensive CAx data support
- Direct conversion of 3WL air circuit breaker article numbers to 3WA air circuit breaker article numbers available
- Quick and easy switchgear documentation thanks to switch-specific EPLAN macros
- After configuration, the 3WA air circuit breaker and guide frame can be ordered separately

Enjoy seamless consistency

3WA air circuit breakers allow all low-voltage components to communicate seamlessly, ensuring you can use standard tools and benefit from data consistency. An extensive tool landscape and access to all necessary engineering data ensure maximum convenience for planning and configuration.

You will find more information on our website
sie.ag/3Rl8vEc

Consistent tool landscape



- Uniform communication landscape for all low-voltage components
- SENTRON Powerconfig configuration software for all low-voltage components
- Monitoring and analysis of all low-voltage components using the power monitoring software
- SENTRON Powermanager enable optimization measures through data transparency
- Remote status check of all low-voltage components via the SENTRON Powerconfig mobile app
- Easy planning of all low-voltage components using SIMARIS software tools

Enjoy seamless consistency

Convenient planning and configuration

- Data-based engineering: reduced effort thanks to extensive CAx data and creation of a digital twin
- Easy and fast planning with SIMARIS software tools,
  e. g. to verify selectivity and for easy calculation of short circuits across the entire power distribution system
- Generating individual EPLAN macros to integrate data (2D, 3D) easily and quickly and configure the circuit diagram

The advantages: How makers benefit

- Transparent power data can improve energy efficiency by up to 30%
- Lower penalty payments for grid operators in the event of power outages
- Robust air circuit breakers can withstand deviations in voltage supply, minimizing the risk of system faults
- While up to seven hours were previously required to plan the wiring, it can now be done at the push of a button, resulting in considerable time savings
- System tests confirm a combination of robust mechanics, automated diagnostics, and web-based upgrades increase the real service life of the circuit breaker, if properly maintained, to potentially as long as 30 years, which represents a considerable reduction in system life-cycle costs
- 3WA air circuit breaker can be easily and inexpensively integrated into switchboards if the 3WL air circuit breaker is already integrated

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. The 3WA air circuit breaker is also part of the Siemens Xcelerator portfolio and therefore provides support with achieving digital and sustainable transformation – faster, simpler, and scalable.

Reliable, versatile and perfectly integrated

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

Air Circuit Breakers

Siemens Xcelerator

A multitude of additional information ...

Information + ordering

All the important things at a glance

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

Your product in detail

The SiePortal platform (knowledge base) provides comprehensive information
www.siemens.com/lowvoltage/product-support

- Quick Selection Guide
  - 3WA air circuit breakers **(109781967)**
- Brochure
  - 3WA air circuit breakers **(109800077)**

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

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

Siemens YouTube channel

- 3WA air circuit breaker – Teaserfilm
  sie.ag/2Myvit
- 3WA air circuit breaker – Highlightfilm
  sie.ag/3dy65A

Everything you need for your order

Refer to SiePortal to find an overview of your products (product catalog)

- Air circuit breakers **sie.ag/2lXiZjB**

Direct forwarding to the individual products in SiePortal by clicking on the article number in the catalog or entering this web address incl. article number
www.siemens.com/product_catalog_SIEP?Article No.

Order supports can be found in SiePortal at
www.siemens.com/lowvoltage/product-support

- Order Support
  - 3WA air circuit breakers – Made for makers. Simply reliable. **(109800074)**

Configurators

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

The following are additionally available for your configured air circuit breaker:

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

The fast track to the experts

Contact persons in your region

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

You will find further information on services at
www.siemens.com/service-offers

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/support-request

… can be found in our online services

Commissioning + operation

SENTRON Powerconfig

The combined commissioning and service tool SENTRON Powerconfig for communication-capable measuring devices, circuit protection devices and circuit breakers.

Free download SENTRON Powerconfig
www.siemens.com/powerconfig

Free download SENTRON Powerconfig mobile via
App Store and **Play Store**

Your product in detail

The SiePortal platform (knowledge base) provides detailed technical information
www.siemens.com/lowvoltage/product-support

- Operating instructions
- Characteristic curves
- Certificates

Online Support app available for download from the
App Store and **Play Store**
You will find further information at
www.siemens.com/support-app

Provision of 3D data (step and u3d data formats)

- SiePortal (product catalog)
  www.siemens.com/lowvoltage/product-catalog
- Image database
  www.siemens.com/lowvoltage/picturedb

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

Manuals

Manuals can be found in SiePortal at
www.siemens.com/lowvoltage/manuals

- Equipment Manual
  – 3WA1 air circuit breakers **(109763061)**
- System Manual
  – 3WA air circuit breaker communication **(109792368)**
- Configuration Manual
  – Low-voltage protection devices selectivity tables **(109748621)**

Face-to-face or online training

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

- 3WA air circuit breakers (WT-LV3WA)
- Protection systems in low-voltage power distribution (WT-LVAPS)
- Maintenance and operation of 3WA circuit breakers (LV-3WAMAIN)
- Certification: Maintenance and operation of 3WL and 3WA circuit breakers (LV-CBCERT)
- 3WL and 3WA air circuit breakers protection technology and communication (LV-COPR)

Technical overview – Air circuit breakers

The fast way to get you to our online services

This page provides you with comprehensive information and links on air circuit breakers
www.siemens.com/lowvoltage/product-support (109781188)

3WA1 circuit breakers and non-automatic circuit breakers 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	466|516		437|462		466|516		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, LRS, BV, PRS, CCS				ABS, DNV, LRS, BV, PRS, CCS				
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 I_{cm}										
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

System overview, page 1/30

AC		DC	
			
3WA13		**3WA12**	
≤ 1150		≤ 1000 (≤ 1500 for 4-pole, Breaking capacity E)	
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
466 | 516	437 | 462	466 | 516	437 | 462
471	357	471	357
VDE, EAC, CCC, CE, C-Tick		VDE, EAC, CCC, CE, C-Tick	
ABS, DNV, LRS, BV, PRS, CCS		ABS, DNV, LRS, BV, PRS, CCS	

H	C	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	–	–

System overview, page 1/30

3WA1 circuit breakers and non-automatic circuit breakers for AC and DC

IEC 60947-2 (continued)

AC

			3WA11				3WA12				
Breaking capacity			**N**	**S**	**M**	**E**	**S**	**M**	**H**	**C**	**E**
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	–	–	–	–	–	–	–	–	–
I_{cw} at U_e up to 1500 V DC	1 s	kA	–	–	–	–	–	–	–	–	–
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 DC		kA	–	–	–	–	–	–	–	–	–
Up to 300 V DC		kA	–	–	–	–	–	–	–	–	–
Up to 600 V DC		kA	–	–	–	–	–	–	–	–	–
Up to 1000 V DC		kA	–	–	–	–	–	–	–	–	–
Up to 1500 V DC		kA	–	–	–	–	–	–	–	–	–
IT network 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	–	–	–	–	–	–	–	–	–

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

[2] Size 1 with $I_{n\,max} \leq 1250$ A

[3] Size 1 with $I_{n\,max} \geq 1600$ A

[4] $I_{n\,max} \leq 2500$ A

[5] $I_{n\,max} \geq 3200$ A

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AC

DC

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

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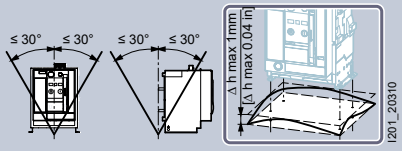
3WA1 circuit breakers and non-automatic circuit breakers for AC

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	2370
	Up to 70 °C (Cu bare)	A	630	800	1000	1250	1545	1855	2060
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 3-phase symmetrical load with maximum rated current, complete device (3/4p)	Fixed-mounted	W	30	45	70	105	135	240	360
	Withdrawable versions	W	55	85	130	205	310	440	600

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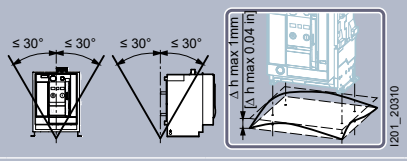
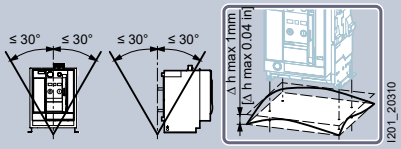
3WA12				3WA13		
						
2000 A	**2500 A**	**3200 A**	**4000 A**	**4000 A**	**5000 A**	**6300 A**
Yes				Yes		
B				B		
–40 ... +70				–40 ... +70		
–40 ... +80				–40 ... +80		
						
IP20 without control cabinet door, IP41 with door sealing frame, IP55 with cover				IP20 without control cabinet door, 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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3WA1 circuit breakers and non-automatic circuit breakers 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									
Make time		ms				35			
Opening time		ms				38			
Electrical make time (through closing coil) [1]		ms				80			
Electrical opening time (through shunt trip)		ms				73			
Electrical opening time (instantaneous undervoltage release)		ms				≤ 80			
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			7500	5000
	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			10000			7500	5000
	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			10000			7500	5000
	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			10000			7500	5000
	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				–			
Switching frequency									
Breaking capacity N and S									
Electrical	3-pole	1/h				45			
	4-pole	1/h				45			
Breaking capacity M, H and C									
Electrical	3- and 4-pole	1/h				60 ≤ 690 V			
Breaking capacity E									
Electrical	3- and 4-pole	1/h				20 at 1000 V, 60 ≤ 690 V			

[1] Make time through closing coil for momentary duty for synchronization purposes 5% OP = 50 ms
[2] Maintenance means: Replacing main contact elements and arc chutes (see operating instructions: 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		
≤ 80				≤ 80		
50				50		
–				–		
–				–		
–				–		
–				–		
10000				–		
20000				–		
7500	7500	4000	2000	–		
20000				–		
10000				–		
20000				–		
7500	7500	4000	2000	–		
20000				–		
10000				5000		
20000				10000		
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	1000	1000		
10000	10000	10000	10000	10000		
45				–		
60				–		
60 ≤ 690 V				60 ≤ 690 V		
20 at 1000/1150 V, 60 ≤ 690 V				20 at 1000/1150 V, 60 ≤ 690 V		

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3WA1 circuit breakers and non-automatic circuit breakers 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									
Minimum main conductor 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 [1]									
3-pole	Fixed-mounted circuit breaker	kg	38.5	38.5	38.5	42.5	42.5	43.5	43.5
	Withdrawable circuit breaker without guide frame	kg	39	39	39	40	40	41	41
	Guide frames	kg	26	26	26	27	27	29	29
4-pole	Fixed-mounted circuit breaker	kg	47	47	47	52	52	53	53
	Withdrawable circuit breaker without guide frame	kg	45	45	45	46	46	47	47
	Guide frames	kg	30	30	30	32	32	34	34

[1] Weights refer to:
- Breakers with the lowest breaking capacity in each case (size 1: breaking capacity N, size 2: breaking capacity S, size 3: breaking capacity H)
- Breakers with ETU600 (LSI)
- Fixed-mounted circuit breakers/guide frames with vertical connections
- Guide frame with position signaling switch
- Without any other accessories

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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)		
55	57	69	77	113	115	115
52	54	59	59	91	92	92
33.5	35.5	36.5	40	85.5	87	87
68.5	71.5	86.5	97.5	147.5	149.5	149.5
63.5	66	73	73	115.5	116.5	116.5
40	42.5	51.5	53	103.5	105.5	105.5

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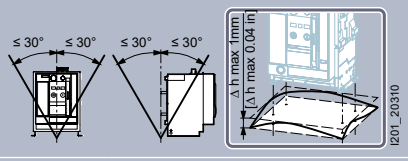
3WA1 non-automatic circuit breakers for DC

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	Breaking capacity D | E	V DC	600 | 1000 (3-pole); 1500 (4-pole)		
Rated insulation voltage U_i	Breaking capacity D | E	V DC	600 | 1000 (3-pole); 1500 (4-pole)		
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 3-phase symmetrical load, complete device (3/4p)	Withdrawable versions	W	280	770	1640
	Fixed-mounted	W	140	390	820
Switching times					
Make time		ms	35	35	35
Opening time		ms	34	34	34
Electrical make 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	≤ 80	≤ 80	≤ 80
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

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3WA12

Rated current I_n			1000 A	2000 A	4000 A
Service life/endurance					
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
Breaking capacity E, 4-pole					
Electrical	Without maintenance 1500 V [2]	Operating cycles	1000	1000	1000
	With maintenance [1]	Operating cycles	20000	20000	20000
Switching frequency					
Breaking capacity D					
Electrical	3- and 4-pole	1/h	60	60	60
Breaking capacity E					
Electrical	3- and 4-pole	1/h	20	20	20
Connection					
Minimum main conductor cross-sections					
Copper bars, bare		Unit, mm²	1 × 50 × 10	2 × 50 × 10	3 × 100 × 10 on the infeed and outgoing side; 6 × 250 × 500 × 5 for jumpers
Copper bars, painted black		Unit, mm²	1 × 50 × 10	2 × 50 × 10	3 × 100 × 10 on the infeed and outgoing side; 6 × 250 × 500 × 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 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]					
3-pole	Fixed-mounted circuit breaker	kg	55	55	68
	Withdrawable circuit breaker without guide frame	kg	52	52	59
	Guide frames	kg	34	34	50
4-pole	Fixed-mounted circuit breaker	kg	68.5	68.5	86.5
	Withdrawable circuit breaker without guide frame	kg	63.5	63.5	74
	Guide frames	kg	40.5	40.5	61.5

[1] Maintenance means: Replacing main contact elements and arc chutes (see operating instructions: www.siemens.com/lowvoltage/manuals).
[2] 1500 V DC applications only possible with 4-pole circuit breakers and breaking capacity E.
[3] Weights refer to:
- Breakers with breaking capacity E
- Fixed-mounted circuit breakers/guide frames with vertical connections
- Guide frame with position signaling switch
- Without any other accessories

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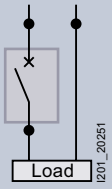
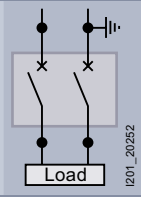
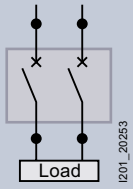
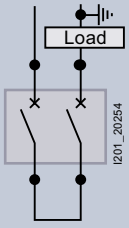
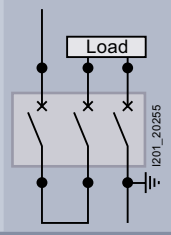
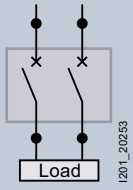
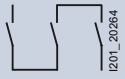
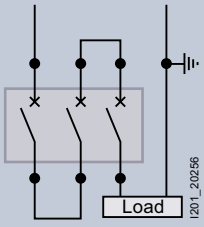
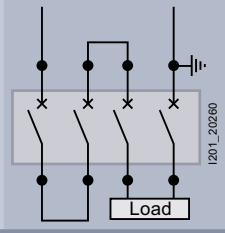
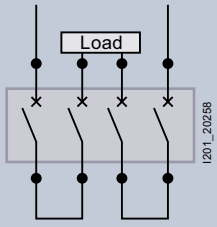
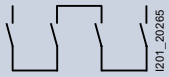
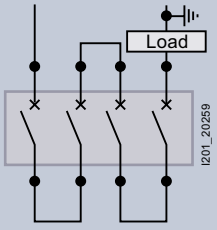
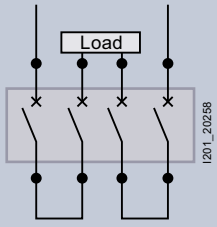
3WA1 non-automatic circuit breakers for DC

Application examples

The connection to the non-automatic 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 connection bars, for thermal reasons the continuous load on the non-automatic 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 connection bars, the non-automatic circuit breaker can be used at full operational current load.

Minimum 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 up to 300 V			
			
Rated operational voltage up to 600 V			
			
Rated operational voltage up to 1000 V			
			
Rated operational voltage up to 1500 V			
			

Note:
DC 2-pole (all-pole) disconnection; grounded system
The grounded conductor must always be assigned to the individual switching pole of the non-automatic air circuit breaker, 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.
The jumpers between the switching poles must be short-circuit and ground-fault proof.

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Electronic trip unit

Differentiation

	ETU300 electronic trip unit	ETU600 electronic trip unit
Function		
Protective function LSI	■	■
Protective function LSIG	■	■
Protective function LSIG Hi-Z	–	■
Neutral conductor protection (N)	■	■
Metering function	–	■
Enhanced Protective functions	–	■
CubicleBUS[2]	–	■
Display	–	■
DAS+ input/output	■	■
LED display of reason for tripping	■	■
Bluetooth and USB	–	■
FW Updates	–	■
Internal self-test with and without tripping	■	■
Extended test option (tripping characteristic)	–	■
Activation of the ETU via powerbank	–	■
Activation of the ETU for self-test via TD400	■	–

Note:
By replacing the electronic trip unit, it is possible to upgrade from ETU300 to ETU600.

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ETU300 electronic trip unit

Protective functions

ETU300 LSI, ETU300 LSIG

Protective function	Setting range and invariable parameters	Values
L: Overload protection LT		
Tripping	Switched on	
Current setting I_r	0.4 ... 1.0 × I_n	0.4/0.5/0.6/0.7/0.75/0.8/0.85/0.9/0.95/1.0 × I_n
Tripping time t_r at 6 × I_r	0.75 ... 25 s	0.75/1/2/5/8/10/14/17/21/25 s
Characteristic LT curve	I^2t	
Thermal memory	Switched on	
Cooling time constant	18 × t_r	
Phase failure detection	Switched on	
L: Overload protection LT, neutral conductor		
Tripping	Switched on	
Current setting I_N	1.0 × I_n	
S: Short-time-delayed short-circuit protection ST		
Tripping	Can be switched on/off	
Current setting I_{sd}	1.5 ... 10 × I_n max. 0.8 × I_{cw} [1]	OFF/1.5/2/2.5/3/4/5/6/8/10 × I_r max. 0.8 × I_{cw} [1]
Tripping time t_{sd}	0.08 ... 0.4 s	0.08/0.15/0.22/0.3/0.4 s
Characteristic ST curve	I^0t and I^2t	
Reference point $I_{ST\ ref}$	8 × I_r	
I: Instantaneous short-circuit protection INST		
Tripping	Switched on	
Current setting I_i	1.5 ... 15 × I_n max. 0.8 × I_{cs} [1]	1.5/2/3/4/5/6/8/10/12/15 × I_n max. 0.8 × I_{cs} [1]
Maintenance mode DAS+		
Current setting $I_{i\ DAS+}$	1.5 × I_n	Activation via ETU input

ETU300 LSIG

Protective function	Setting range	
G: Ground fault protection GF		
Tripping	Switched on	
Method of ground fault detection	Residual	Detection of ground-fault current via summation current formation in all phases and the N conductor
Characteristic KF curve		I^0t
Current setting I_g		0.2 × I_n (min. 100 A, max. 1200 A)
Tripping time t_g	0.2 s	

[1] The setting value is limited as a function of the breaking capacity at rated operational voltage U_e.

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ETU600 electronic trip unit

Protective functions

ETU600 LSI, ETU600 LSIG, ETU600 LSIG Hi-Z			Current metering	ready4COM	PMF-I Energy efficiency	PMF-II Basic Power Monitoring	PMF-III Advanced Power Monitoring
Protective function	**Variable setting range**	**Setting values with rotary switch**					
L: Overload protection LT							
Tripping	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 × I_n	■	■	■	■	■
Tripping time t_r at 6 × I_r	At I^2t: 0.5 ... 30 s and at I^4t: 0.5 ... 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 × 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 × I_r		■	■	■	■	■
Delay time $t_{r\,PAL}$	0.5 ... 1.0 × 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. $I_{n\,max}$		■	■	■	■	■
Current setting $I_{N\,PAL}$	0.7 ... 1.0 × I_N		■	■	■	■	■
S: Short-time-delayed short-circuit protection ST							
Tripping	Can be switched on/off		■	■	■	■	■
Current setting I_{sd}	0.6 × I_n ... 0.8 × I_{cw} max. 0.8 × I_{cw} [1]	1.5/2/2.5/3/4/5/6/8/10 × I_r max. 0.8 × I_{cw} [1]	■	■	■	■	■
Tripping time t_{sd}	0.02 ... 0.4 s	At Fix: 0.08/0.15/0.22/0.3/0.4 s At 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 × I_r		■	■	■	■	■
Intermittent detection	Can be switched on/off		■	■	■	■	■
S: Directional short-time-delayed short-circuit protection dST							
Tripping	Can be switched on/off		□	□	□	■	■
Direction setting	Forwards: ↓ or ↑		□	□	□	■	■
Current setting I_{sd} FW	0.6 × I_n ... 0.8 × I_{cw}		□	□	□	■	■
Current setting I_{sd} REV	0.6 × I_n ... 0.8 × 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 × I_n ... 0.8 × I_{cs} max. 0.8 × I_{cs} [1]	1.5/2/3/4/6/8/10/12/15 × I_n max. 0.8 × I_{cs} [1]	■	■	■	■	■

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

[1] The setting value is limited as a function of the breaking capacity at the set rated voltage.

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ETU600 LSI, ETU600 LSIG, ETU600 LSIG Hi-Z			Current metering	ready4COM	PMF-I Energy efficiency	PMF-II Basic Power Monitoring	PMF-III Advanced Power Monitoring
Protective function	**Variable setting range**	**Setting values with rotary switch**					
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							
Phase unbalance current and phase unbalance voltage			□	□	□	■	■
Undervoltage and overvoltage			□	□	□	■	■
Active power import and active power export			□	□	□	■	■
Underfrequency and overfrequency			□	□	□	■	■
Total harmonic distortion for current and voltage			□	□	□	■	■
Phase sequence detection			□	□	□	■	■
Maintenance mode DAS+							
Current setting $I_{i\ DAS+}$	1.5 ... 10 × 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		■	■	■	■	■
Options							
Parameter set changeover	Switchable between parameter set A and B		□	□	□	■	■
Limit values	Undershooting, overshooting		■	■	■	■	■
Waveform memory			□	□	□	□	■

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

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ETU600 electronic trip unit

Protective functions

ETU600 LSI			Current metering	ready4COM	PMF-I Energy efficiency	PMF-II Basic Power Monitoring	PMF-III Advanced Power Monitoring
Protective function	**Variable setting range**						
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
□ Can be retrofitted

ETU600 LSIG			Current metering	ready4COM	PMF-I Energy efficiency	PMF-II Basic Power Monitoring	PMF-III Advanced Power Monitoring
Protective function	**Variable 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: Metering 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 × I_g	0 ... 30 s	■	■	■	■	■
	$t_{g\ def}$ at I^xt	0.05 ... 0.5 s	■	■	■	■	■
Intermittent detection	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	ready4COM	PMF-I Energy efficiency	PMF-II Basic Power Monitoring	PMF-III Advanced Power Monitoring
Protective function	**Variable 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: Metering 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 × I_g in protection zone UREF	0 ... 30 s	■	■	■	■	■
	$t_{g\ def}$ at I^xt	0.05 ... 0.5 s	■	■	■	■	■
Intermittent detection	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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ETU600 electronic trip unit

Operation, interfaces and metering function

ETU600		Current metering	ready4COM	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 [1] and USB interface		■	■	■	■	■	–
Communication							
Prepared for connection of a communications module (ready4COM feature)	Status messages of the circuit breaker	□	■	■	■	■	□
	Status messages of the ETU600 electronic trip unit	□	■	■	■	■	–
	Remote operation, requires a communications module, closing coil, shunt trip	□	■	■	■	■	□
Communications module		□	□	□	□	□	□
Digital input and output on the ETU600 electronic trip unit							
Parameterizable input	For activating Maintenance mode DAS+ or can be used for parameter set changeover	■	■	■	■	■	–
Parameterizable output	Usable as "life contact", early trip contact, and for displaying "Parameter set B active" or "Maintenance mode DAS+ active"	■	■	■	■	■	–

[1] A country-specific radio license is required to operate the Bluetooth interface. Before activating the Bluetooth function, ensure that the license is available: www.siemens.com/lowvoltage/certificates

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

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ETU600		Current metering	ready4COM	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						
Temperature		–	■	■	■	■
Accuracy according to IEC 61557-12						
Phase current I_{L1}, I_{L2}, I_{L3}	Class 1	■	■	■	■	■
Neutral conductor current I_N	Class 1	■	■	■	■	■
Voltage U_{LN}	Class 0.5	–	–	■	■	■
Voltage U_{LL}	Class 0.5	–	–	■	■	■
Active energy E_a	Class 2	–	–	■	■	■
Active power P	Class 2	–	–	–	■	■
Accuracy according to manufacturer's specifications						
Ground-fault current I_g with ETU600 LSI	2%	–	–	–	■	■
Ground-fault current I_g with ETU600 LSIG, ETU600 LSIG Hi-Z	2%	■	■	■	■	■
Reactive energy E_r	2%	–	–	–	■	■
Apparent energy E_{ap}	2%	–	–	–	■	■
Reactive power Q	2%	–	–	–	■	■
Apparent power S	2%	–	–	–	■	■
Power factor PF	6%	–	–	–	■	■
cos φ	6%	–	–	–	■	■
Frequency f	0.5%	–	–	–	■	■
Current unbalance	2.5%	–	–	–	■	■
Voltage unbalance	1.5%	–	–	–	■	■
Total harmonic distortion $THD\text{-}I$ [1]	2%	–	–	–	–	■
Total harmonic distortion $THD\text{-}U$ [1]	2%	–	–	–	–	■
Harmonic I, U [1]	2%	–	–	–	–	■

[1] For 2nd to 15th harmonic ±2% and for 16th to 31st harmonic ±5%

■ Available, feature of the application package
– Not available

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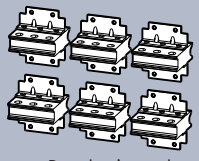
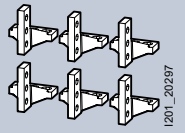
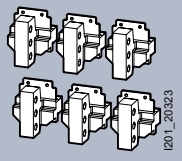
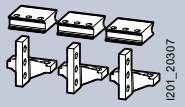
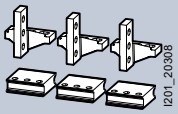
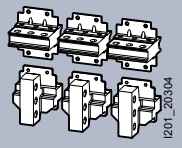
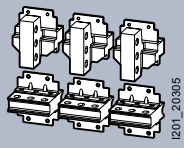
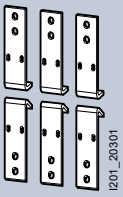
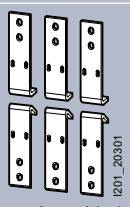
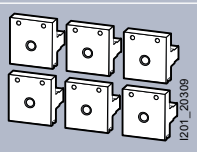
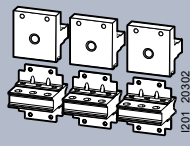
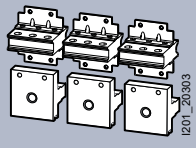
Connection

Main circuit connection

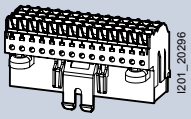
3WA11 – 3WA13

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

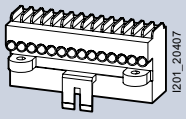
Secondary disconnect terminal

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)

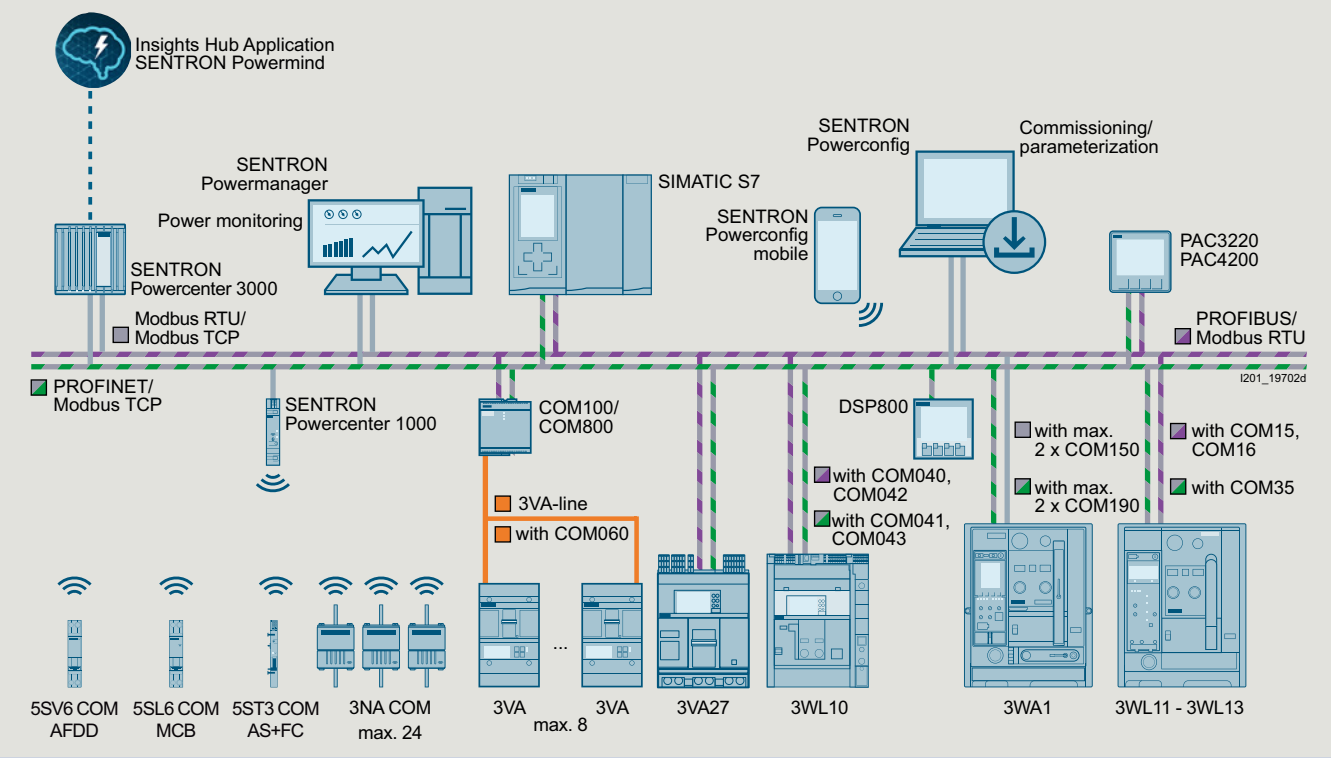
For size 1, up to 4 secondary disconnect terminal blocks are possible; for sizes 2 and 3, up to 5 secondary disconnect terminal blocks are possible

- 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
  - Non-automatic circuit breaker with ETU300 LSI/LSIG with 4 blocks

For dimension drawings, see Equipment Manual – 3WA1 air circuit breakers www.siemens.com/lowvoltage/manuals (109763061)

System overview, page 1/30

Communication



The 3WA can be equipped with up to two PROFINET IO/Modbus TCP COM190 communications modules or Modbus RTU COM150 and up to five IOM230 digital input/output modules.

For the optional communications interface with the COM190 or COM150 communications module, a circuit breaker with the "ready4COM" feature must be selected as the circuit breaker/non-automatic air circuit breaker. The first COM190 or COM150 communications module must be selected via a Z option. If you want to use a further COM190 or COM150 communications module, this must be ordered separately as an accessory. Both COM190 or COM150 communications 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 – 3WA1 air circuit breakers
www.siemens.com/lowvoltage/manuals (109763061)

System overview, page 1/30

Selection guide

Components pre-installed at the factory

The following components are contained in the 3WA air circuit breakers as standard (if the condition is fulfilled) and do not have to be configured:

Components	Condition
Ready-to-close signaling switch (S20)	Installed at the factory in all 3WA1 as standard
1st trip alarm switch (S24)	Installed at the factory in all 3WA1 circuit breakers (incl. ETU) as standard
Spring charge signaling switch (S21)	Installed at the factory in all 3WA1 as standard when using a spring charging motor
Shutters	Installed at the factory in all 3WA1 withdrawable circuit breakers as standard

System overview, page 1/30

Manuals for downloading

You will find further information under:
www.siemens.com/lowvoltage/manuals

Equipment Manual:
- 3WA1 air circuit breakers **(109763061)**

System Manual:
- 3WA air circuit breaker communication **(109792368)**

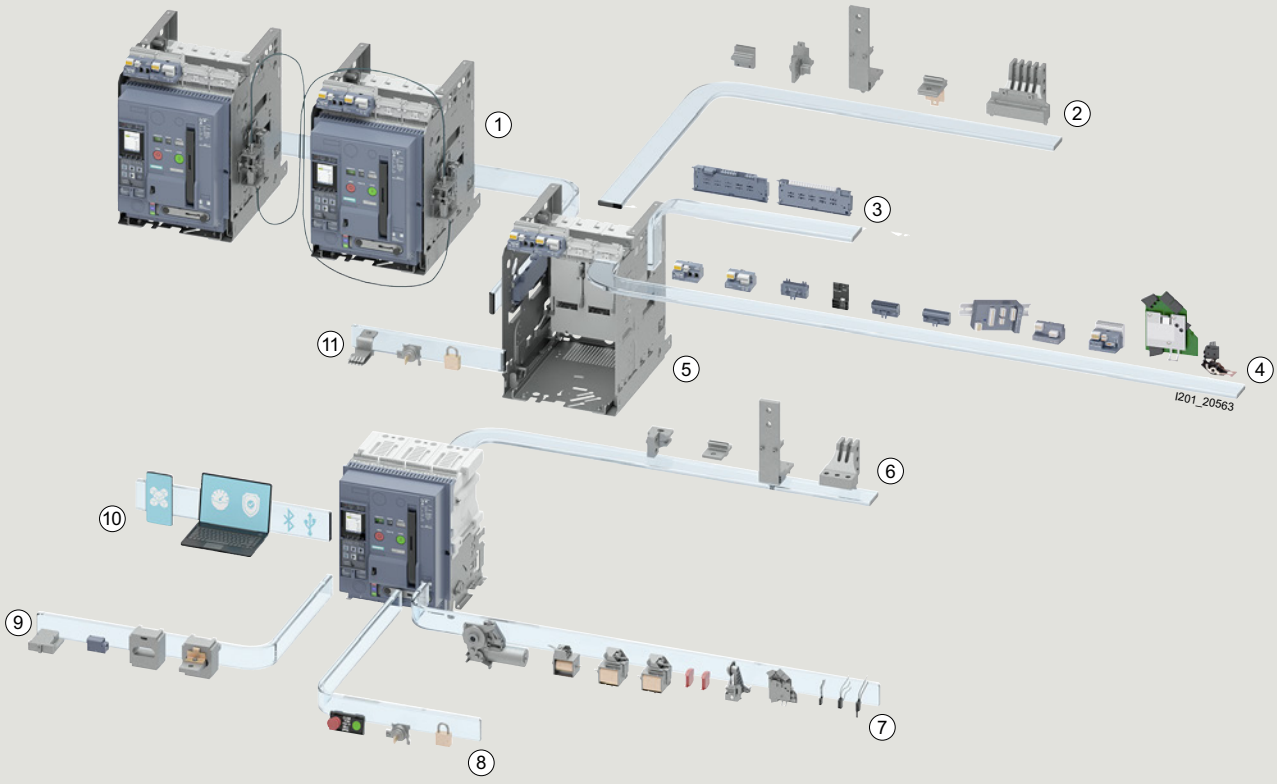
Configuration Manual:
- Low voltage protection devices selectivity-tables **(109748621)**

System overview, page 1/30

3WA11 – 3WA13 system overview

Circuit breakers and non-automatic circuit breakers 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



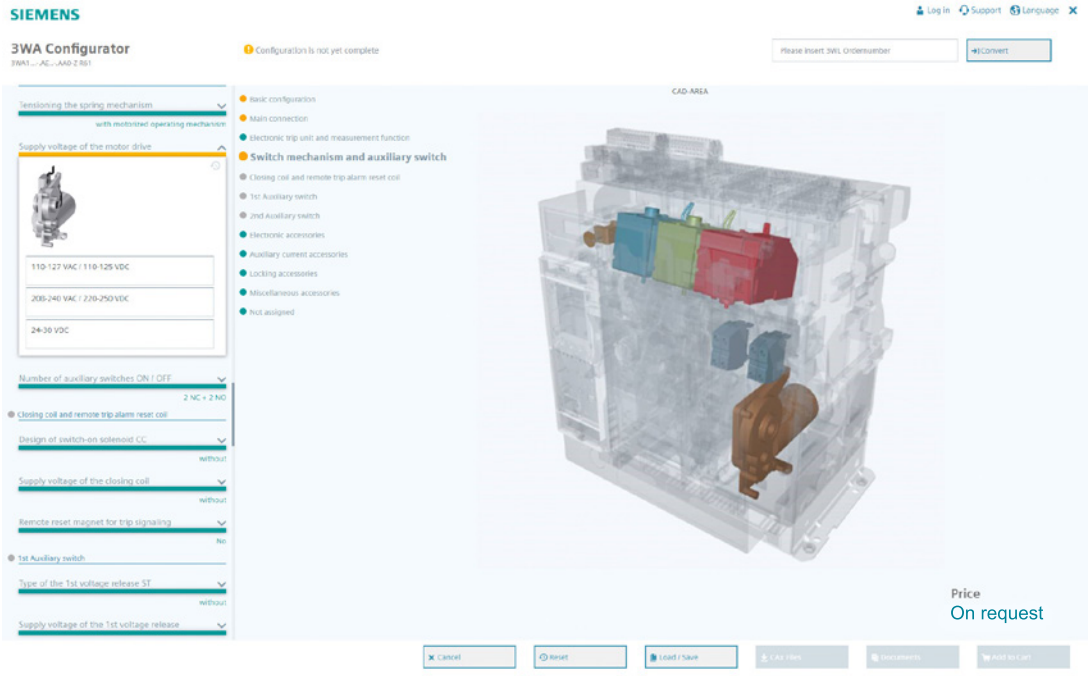
1. Interlocking solutions with Bowden cable
2. Main connection variants for guide frame
3. Position signaling switch (PSS) for the guide frame
4. Interfaces/COM-modules/Aux. terminals
5. Guide frame with shutter
6. Main connection variants for fixed-mounted version
7. Internal accessories: aux. release, spring charging motor, aux. contacts
8. Locking solutions for fixed-mounted version
9. Electronic trip units (ETU)
10. Digital function packages can be activated for the ETU
11. Interlocking solutions for withdrawable version

Online configurator highlights

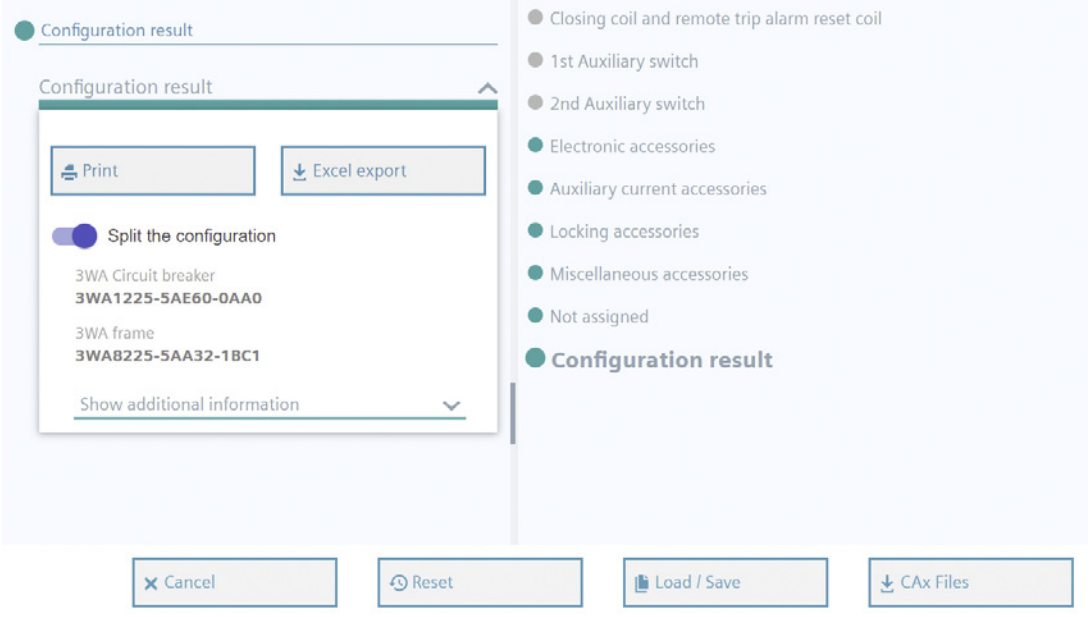
www.siemens.com/lowvoltage/3wa-configurator

Graphical display

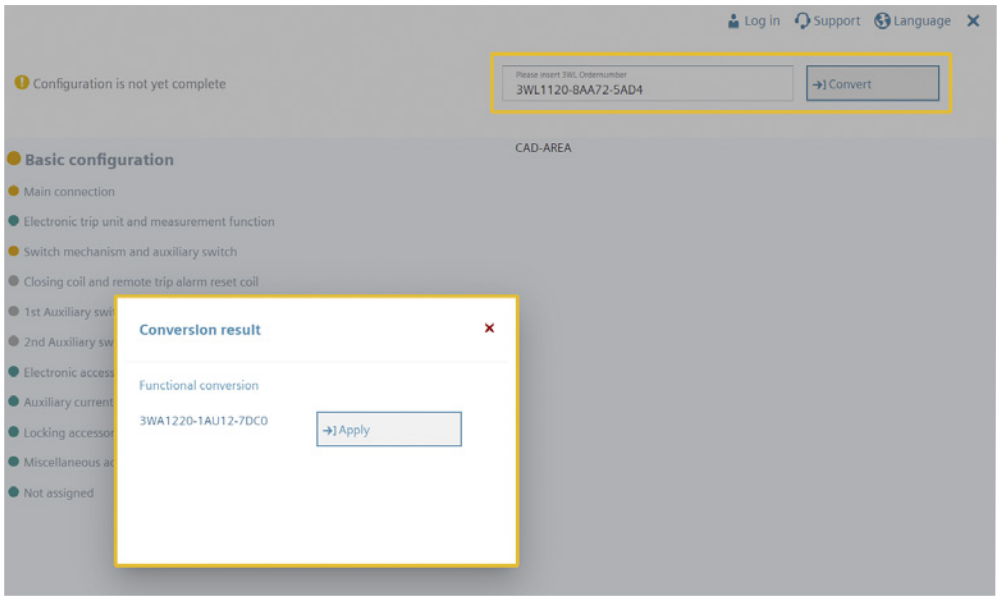
- Integration of the legend as a color system
  - Orange: still to be selected
  - Petrol: already selected
  - Gray: preselected (default)
- Graphical highlighting of the individual configuration steps: "What you see is what you get"



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

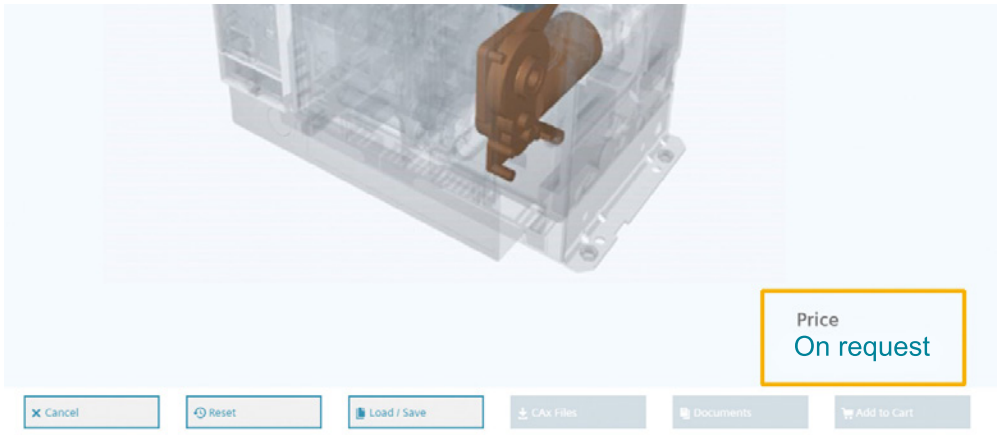


Direct conversion of a 3WL article number to a 3WA article number in the configurator



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

Dynamic customer price during configuration



Structure of the article numbers

Protective and metering functions for 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

Digit	1–7	–	8	9	10	11	12	–	13	14	15	16	–	17	Price difference in € per PU	Price group
		–						–					–			

Electronic trip units

	SZ 1	SZ 2	SZ 3				
ETU300	■	■	■	**LSI**	**B**		1CE
	■	■	■	**LSIG**	**C**		1CE
ETU600	■	■	■	**LSI**	**E**		1CE
	■	■	■	**LSIG**	**F**		1CE
	–	■	■	**LSIG Hi-Z**	**G**		1CE

Application packages with protective and metering functions for circuit breakers

ETU300/ ETU600	**Protective function/Current metering**			**A**		1CE
ETU600	**Current metering, ready4COM feature**			**C**		1CE
	For AC non-automatic circuit breakers up to 690 V (with metering function, internal voltage tap in the circuit breaker, power supply of the ETU600 via the VTM680 voltage tap module and ready4COM)	PMF-I Energy efficiency	Voltage tap at top	**L**		1CE
			Voltage tap at bottom	**E**		1CE
		PMF-II Basic Power Monitoring	Voltage tap at top	**M**		1CE
			Voltage tap at bottom	**F**		1CE
		PMF-III Advanced Power Monitoring	Voltage tap at top	**N**		1CE
			Voltage tap at bottom	**G**		1CE
	For AC circuit breakers for higher voltages and in the 690-V IT system (with metering function, internal voltage tap in the circuit breaker, VTM640 voltage tap module and ready4COM)	PMF-I Energy efficiency	Voltage tap at top	**U**		1CE
			Voltage tap at bottom	**Q**		1CE
		PMF-II Basic Power Monitoring	Voltage tap at top	**V**		1CE
			Voltage tap at bottom	**R**		1CE
		PMF-III Advanced Power Monitoring	Voltage tap at top	**W**		1CE
			Voltage tap at bottom	**S**		1CE

Note:

- Protective function LSI
  - Incl. LSI option plug (can be upgraded to LSIG using LSIG option plug)
- Protective function LSIG
  - Incl. LSI option plug
- Protective function LSIG Hi-Z
  - Version incl. second tripping solenoid (F6) with reclosing lockout and incl. external trip controller ETC600
- ETU600 current metering:
  - Electronic trip unit with protective function, without communication function/BSS200 (BSS200 retrofittable), without metering function and without enhanced protective functions (functions retrofittable: voltage tap (only at the bottom), voltage tap module and metering/protective functions required as licenses, see accessories and spare parts)
- Function ready4COM:
  - Circuit breaker including BSS200 breaker status sensor
- PMF Level:
  - Electronic trip unit including metering function according to IEC 61557-12 and enhanced protective functions (for more information, see ETU600 electronic trip unit, page 1/20)
  - Incl. voltage tap module VTM and voltage tap
  - Inkl. Breaker Status Sensor BSS200 (ready4COM)

For subsequent upgrading to PMF level, measuring accuracy according to manufacturer's specifications.

Quick selection guide, pages 1/18

Non-automatic circuit breakers with and without ready4COM

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

Digit	1–7	–	8	9	10	11	12	–	13	14	15	16	–	17	Price difference in € per PU	Price group
AC non-automatic circuit breakers																
AC non-automatic circuit breakers				A	A											1CE
AC non-automatic circuit breakers, ready4COM				C	A											1CE
DC non-automatic circuit breakers																
DC non-automatic circuit breakers				A	U											1CE
DC non-automatic circuit breakers, ready4COM				C	U											1CE

Note:

- Function ready4COM:
  - Circuit breaker including BSS200 breaker status sensor (can be retrofitted)

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Structure of the article numbers

Operating mechanism, auxiliary switch and auxiliary release

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

Digit	1–7	–	8	9	10	11	12	–	13	14	15	16	–	17	Price difference in € per PU	Price group

Operating mechanisms and auxiliary switches

			13	14	15	16	17	Price difference in € per PU	Price group
Manual recharging of the stored energy mechanism	Without spring charging motor	2 NO, 2 NC	0						1CE
		4 NO, 4 NC	1						1CE
Recharging of the stored energy mechanism by spring charging motor (M)	24 ... 30 V DC	2 NO, 2 NC	2						1CE
		4 NO, 4 NC	5						1CE
	48 ... 60 V DC	4 NO, 4 NC	6						1CE
	110 ... 127 V AC/ 110 ... 125 V DC	2 NO, 2 NC	3						1CE
		4 NO, 4 NC	7						1CE
	208 ... 240 V AC/ 220 ... 250 V DC	2 NO, 2 NC	4						1CE
		4 NO, 4 NC	8						1CE

Closing coils and remote trip alarm reset coils [1)2)]

			13	14	15	16	17	Price difference in € per PU	Price group
Without closing coil	Without remote trip alarm reset coil			A					1CE
With closing coil (CC/CC-COM) [3)] for uninterrupted duty, 100% OP	Without remote trip alarm reset coil	24 ... 30 V DC		B					1CE
		48 ... 60 V DC		C					1CE
		110 ... 127 V AC/110 ... 125 V DC		D					1CE
		208 ... 240 V AC/220 ... 250 V DC		E					1CE
	With remote trip alarm reset coil (RR) for momentary duty 1% OP	24 ... 30 V DC		F					1CE
		48 ... 60 V DC		G					1CE
		110 ... 127 V AC/110 ... 125 V DC		H					1CE
		208 ... 240 V AC/220 ... 250 V DC		J					1CE
With closing coil (CC) for momentary duty, 5% OP	Without remote trip alarm reset coil	24 ... 30 V DC		K					1CE
		48 ... 60 V DC		L					1CE
		110 ... 127 V AC/110 ... 125 V DC		M					1CE
		208 ... 240 V AC/220 ... 250 V DC		N					1CE
	With remote trip alarm reset coil (RR) for momentary duty 1% OP	24 ... 30 V DC		P					1CE
		48 ... 60 V DC		Q					1CE
		110 ... 127 V AC/110 ... 125 V DC		R					1CE
		208 ... 240 V AC/220 ... 250 V DC		S					1CE

[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.
[3)] If the ready4COM feature is provided, the communication-capable closing coils (CC-COM) and/or shunt trips (ST-COM) are installed at the factory.

Quick selection guide, pages 1/4

Digit	1–7	–	8	9	10	11	12	–	13	14	15	16	–	17	Price difference in € per PU	Price group
2nd auxiliary releases																
Without 2nd auxiliary release											A					1CE
With shunt trip (ST), uninterrupted duty 100% OP	24 … 30 V DC										B					1CE
	48 … 60 V DC										C					1CE
	110 … 127 V AC/110 … 125 V DC										D					1CE
	208 … 240 V AC/220 … 250 V DC										E					1CE
With shunt trip (ST), momentary duty 5% OP	24 … 30 V DC										F					1CE
	48 … 60 V DC										G					1CE
	110 … 127 V AC/110 … 125 V DC										H					1CE
	208 … 240 V AC/220 … 250 V DC										J					1CE
With undervoltage release (UVR) [1], instantaneous (≤ 0.08 s) and short-time delayed (≤ 0.2 s)	24 … 30 V DC										L					1CE
	48 … 60 V DC										N					1CE
	110 … 127 V AC/110 … 125 V DC										P					1CE
	208 … 240 V AC/220 … 250 V DC										Q					1CE
	380 … 415 V AC										R					1CE
With undervoltage release (UVR-t), adjustable delay 0.2 … 3.2 s	48 V DC										S					1CE
	60 V DC										T					1CE
	110 … 127 V AC/110 … 125 V DC										U					1CE
	208 … 240 V AC/220 … 250 V DC										V					1CE
	380 … 415 V AC										W					1CE
1st auxiliary releases																
Without 1st auxiliary release												0				1CE
With shunt trip (ST/ST-COM) [2], uninterrupted duty 100% OP	24 … 30 V DC											1				1CE
	48 … 60 V DC											2				1CE
	110 … 127 V AC/110 … 125 V DC											3				1CE
	208 … 240 V AC/220 … 250 V DC											4				1CE
With shunt trip (ST), momentary duty 5% OP	24 … 30 V DC											5				1CE
	48 … 60 V DC											6				1CE
	110 … 127 V AC/110 … 125 V DC											7				1CE
	208 … 240 V AC/220 … 250 V DC											8				1CE

[1] UVR instantaneous for 30 V DC and 60 V DC can only be supplied separately.
Please order as follows: for 30 V DC 3WL9111-0AE02-0AA0; for 60 V DC 3WL9111-0AE07-0AA0.

[2] If the ready4COM feature is provided, the communication-capable closing coils (CC-COM) and/or shunt trips (ST-COM) are installed at the factory.

Quick selection guide, pages 1/4

Structure of the article numbers

Basic configuration for AC circuit breakers, fixed-mounted, size 1

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

Size	Short-circuit breaking capacity I_{cu}/I_{cs}	Max. rated current $I_{n\,max}$	Digit	1–7	–	8	9	10	11		12					–	13	14	15	16	–	17
						Short-circuit breaking capacity I_{cu}	Application packages	ETU and basic protective functions	3-pole	4-pole, Neutral left	Vertical	Horizontal	Front double hole	Vertical on top/horizontal at the bottom	Horizontal on top/vertical at the bottom							
											Connection											
Up to 690 V																						
1	55/42 kA at 500 V/690 V N	630 A	3WA1106			2	A	E	0	1	1	2	3	5	6		0	A	A	0		Z...
		800 A	3WA1108			2	A	E	0	1	1	2	3	5	6		0	A	A	0		Z...
		1000 A	3WA1110			2	A	E	0	1	1	2	3	5	6		0	A	A	0		Z...
		1250 A	3WA1112			2	A	E	0	1	1	2	3	5	6		0	A	A	0		Z...
		1600 A	3WA1116			2	A	E	0	1	1	2	3	5	6		0	A	A	0		Z...
		2000 A	3WA1120			2	A	E	0	1	1	2	3	5	6		0	A	A	0		Z...
		2500 A	3WA1125			2	A	E	0	1	1	2		5	6		0	A	A	0		Z...
1	66/50 kA at 500 V/690 V S	630 A	3WA1106			3	A	E	0	1	1	2	3	5	6		0	A	A	0		Z...
		800 A	3WA1108			3	A	E	0	1	1	2	3	5	6		0	A	A	0		Z...
		1000 A	3WA1110			3	A	E	0	1	1	2	3	5	6		0	A	A	0		Z...
		1250 A	3WA1112			3	A	E	0	1	1	2	3	5	6		0	A	A	0		Z...
		1600 A	3WA1116			3	A	E	0	1	1	2	3	5	6		0	A	A	0		Z...
		2000 A	3WA1120			3	A	E	0	1	1	2	3	5	6		0	A	A	0		Z...
		2500 A	3WA1125			3	A	E	0	1	1	2		5	6		0	A	A	0		Z...
1	85/66 kA at 500 V/690 V M	630 A	3WA1106			4	A	E	0	1	1	2	3	5	6		0	A	A	0		Z...
		800 A	3WA1108			4	A	E	0	1	1	2	3	5	6		0	A	A	0		Z...
		1000 A	3WA1110			4	A	E	0	1	1	2	3	5	6		0	A	A	0		Z...
		1250 A	3WA1112			4	A	E	0	1	1	2	3	5	6		0	A	A	0		Z...
		1600 A	3WA1116			4	A	E	0	1	1	2	3	5	6		0	A	A	0		Z...
		2000 A	3WA1120			4	A	E	0	1	1	2	3	5	6		0	A	A	0		Z...
		2500 A	3WA1125			4	A	E	0	1	1	2		5	6		0	A	A	0		Z...
For higher voltages and in the 690-V IT system																						
1	85/50 kA at 690 V/1000 V E	630 A	3WA1106			8	A	E	0	1	1	2	3	5	6		0	A	A	0		Z...
		800 A	3WA1108			8	A	E	0	1	1	2	3	5	6		0	A	A	0		Z...
		1000 A	3WA1110			8	A	E	0	1	1	2	3	5	6		0	A	A	0		Z...
		1250 A	3WA1112			8	A	E	0	1	1	2	3	5	6		0	A	A	0		Z...
		1600 A	3WA1116			8	A	E	0	1	1	2	3	5	6		0	A	A	0		Z...
		2000 A	3WA1120			8	A	E	0	1	1	2	3	5	6		0	A	A	0		Z...
		2500 A	3WA1125			8	A	E	0	1	1	2		5	6		0	A	A	0		Z...

Reduction of the rated current up to I_n = 250 A possible with option plug (Z = B02 – B20)

Protective and metering functions for circuit breakers, from page 1/34 onwards
Operating mechanism, auxiliary switch and auxiliary release, from page 1/36 onwards

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

The structure shown below shows how the price is formed depending on digits 11 and 12 of the article number (price group 1CE). You will find varying price changes updated on a daily basis in SiePortal www.siemens.com/lowvoltage/product-catalog

	3-pole Digit 11 = 0				4-pole, Neutral left Digit 11 = 1			
Digit	12				12			
Value	1	2	3	5/6	1	2	3	5/6
Prices in €								

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

Structure of the article numbers

Basic configuration for AC circuit breakers, fixed-mounted, size 2

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

Size	Short-circuit breaking capacity I_{cu}/I_{cs}	Max. rated current $I_{n\,max}$		1–7	–	8 Short-circuit breaking capacity I_{cu}	9 Application packages	10 ETU and basic protective functions	11 3-pole / 4-pole, Neutral left	12 Connection: Vertical / Horizontal / Front double hole / Vertical on top/horizontal at the bottom / Horizontal on top/vertical at the bottom	–	13	14	15	16	–	17
Digit																	
Up to 690 V																	
2	66/50 kA at 500 V/690 V S	2000 A	3WA1220			3	A	E	0	1	1 2 3 5 6		0	A	A	0	Z...
		2500 A	3WA1225			3	A	E	0	1	1 2 3 5 6		0	A	A	0	Z...
		3200 A	3WA1232			3	A	E	0	1	1 2 3 5 6		0	A	A	0	Z...
		4000 A	3WA1240			3	A	E	0	1	1		0	A	A	0	Z...
2	85/66 kA at 500 V/690 V M	2000 A	3WA1220			4	A	E	0	1	1 2 3 5 6		0	A	A	0	Z...
		2500 A	3WA1225			4	A	E	0	1	1 2 3 5 6		0	A	A	0	Z...
		3200 A	3WA1232			4	A	E	0	1	1 2 3 5 6		0	A	A	0	Z...
		4000 A	3WA1240			4	A	E	0	1	1		0	A	A	0	Z...
2	100/85 kA at 500 V/690 V H	2000 A	3WA1220			5	A	E	0	1	1 2 3 5 6		0	A	A	0	Z...
		2500 A	3WA1225			5	A	E	0	1	1 2 3 5 6		0	A	A	0	Z...
		3200 A	3WA1232			5	A	E	0	1	1 2 3 5 6		0	A	A	0	Z...
		4000 A	3WA1240			5	A	E	0	1	1		0	A	A	0	Z...
2	130/100 kA at 500 V/690 V C	2000 A	3WA1220			6	A	E	0	1	1 2 5 6		0	A	A	0	Z...
		2500 A	3WA1225			6	A	E	0	1	1 2 5 6		0	A	A	0	Z...
		3200 A	3WA1232			6	A	E	0	1	1 2 5 6		0	A	A	0	Z...
For higher voltages and in the 690-V IT system																	
2	85/85/50 kA at 690 V/1000 V/1150 V E	2000 A	3WA1220			8	A	E	0	1	1 2 3 5 6		0	A	A	0	Z...
		2500 A	3WA1225			8	A	E	0	1	1 2 3 5 6		0	A	A	0	Z...
		3200 A	3WA1232			8	A	E	0	1	1 2 3 5 6		0	A	A	0	Z...
		4000 A	3WA1240			8	A	E	0	1	1		0	A	A	0	Z...

Reduction of the rated current up to I_n = 250 A possible with option plug (Z = B02 – B20)

Protective and metering functions for circuit breakers, **from page 1/34 onwards**
Operating mechanism, auxiliary switch and auxiliary release, **from page 1/36 onwards**

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

The structure shown below shows how the price is formed depending on digits 11 and 12 of the article number (price group 1CE). You will find varying price changes updated on a daily basis in SiePortal www.siemens.com/lowvoltage/product-catalog

	3-pole Digit 11 = 0				4-pole, Neutral left Digit 11 = 1			
Digit	12				12			
Value	1	2	3	5/6	1	2	3	5/6
Prices in €								

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

Structure of the article numbers

Basic configuration for AC circuit breakers, fixed-mounted, size 3

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

Size	Short-circuit breaking capacity I_{cu}/I_{cs}	Max. rated current $I_{n\,max}$		Digit	1–7		8	9	10	11		12						13	14	15	16		17
							Short-circuit breaking capacity I_{cu}	Application packages	ETU and basic protective functions	3-pole	4-pole, Neutral left	Vertical	Horizontal	Front double hole	Vertical on top/horizontal at the bottom	Horizontal on top/vertical at the bottom	Connection						
Up to 690 V																							
3	100/85 kA at 500 V/690 V H	4000 A			3WA1340		5	A	E	0	1	1	2	3	5	6		0	A	A	0		Z...
		5000 A			3WA1350		5	A	E	0	1	1	2		5	6		0	A	A	0		Z...
		6300 A			3WA1363		5	A	E	0	1	1						0	A	A	0		Z...
3	3-pole: 150/150 kA at 500 V/690 V 4-pole: 130/130 kA at 500 V/690 V C	4000 A			3WA1340		6	A	E	0	1	1	2		5	6		0	A	A	0		Z...
		5000 A			3WA1350		6	A	E	0	1	1	2		5	6		0	A	A	0		Z...
		6300 A			3WA1363		6	A	E	0	1	1						0	A	A	0		Z...
For higher voltages and in the 690-V IT system																							
3	3-pole: 150/125/70 kA at 690 V/1000 V/1150 V 4-pole: 130/125/70 kA at 690 V/1000 V/1150 V E	4000 A			3WA1340		8	A	E	0	1	1	2		5	6		0	A	A	0		Z...
		5000 A			3WA1350		8	A	E	0	1	1	2		5	6		0	A	A	0		Z...
		6300 A			3WA1363		8	A	E	0	1	1						0	A	A	0		Z...

Reduction of the rated current up to I_n = 250 A possible with option plug (Z = B02 – B20)

Protective and metering functions for circuit breakers, from page 1/34 onwards
Operating mechanism, auxiliary switch and auxiliary release, from page 1/36 onwards

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

The structure shown below shows how the price is formed depending on digits 11 and 12 of the article number (price group 1CE). You will find varying price changes updated on a daily basis in SiePortal www.siemens.com/lowvoltage/product-catalog

	3-pole Digit 11 = 0				4-pole, Neutral left Digit 11 = 1			
Digit	12				12			
Value	1	2	3	5/6	1	2	3	5/6
Prices in €								

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

Structure of the article numbers

Basic configuration for AC circuit breakers, withdrawable, size 1

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

Size	Short-circuit breaking capacity I_{cu}/I_{cs}	Max. rated current $I_{n\,max}$		Short-circuit breaking capacity I_{cu}	Application packages	ETU and basic protective functions	3-pole, without PSS	3-pole, with PSS	4-pole, Neutral left, without PSS	4-pole, Neutral left, with PSS	Connection: Without guide frame	Vertical	Horizontal	Front double hole	Flange	Vertical on top/horizontal at the bottom	Horizontal on top/vertical at the bottom	Flange on top/horizontal at the bottom	Horizontal on top/flange at the bottom					
Digit			1–7		8	9	10	11				12									13	14	15	16	17
Up to 690 V																									
1	55/42 kA at 500 V/690 V N	630 A	3WA1106	–	2	A	E	3	6	4	7	0	1	2	3	4	5	6	7	8	0	A	A	0	Z...
		800 A	3WA1108		2	A	E	3	6	4	7	0	1	2	3	4	5	6	7	8	0	A	A	0	Z...
		1000 A	3WA1110		2	A	E	3	6	4	7	0	1	2	3	4	5	6	7	8	0	A	A	0	Z...
		1250 A	3WA1112		2	A	E	3	6	4	7	0	1	2	3	4	5	6	7	8	0	A	A	0	Z...
		1600 A	3WA1116		2	A	E	3	6	4	7	0	1	2	3	4	5	6	7	8	0	A	A	0	Z...
		2000 A	3WA1120		2	A	E	3	6	4	7	0	1	2	3	4	5	6	7	8	0	A	A	0	Z...
		2500 A	3WA1125		2	A	E	3	6	4	7	0	1								0	A	A	0	Z...
1	66/50 kA at 500 V/690 V S	630 A	3WA1106		3	A	E	3	6	4	7	0	1	2	3	4	5	6	7	8	0	A	A	0	Z...
		800 A	3WA1108		3	A	E	3	6	4	7	0	1	2	3	4	5	6	7	8	0	A	A	0	Z...
		1000 A	3WA1110		3	A	E	3	6	4	7	0	1	2	3	4	5	6	7	8	0	A	A	0	Z...
		1250 A	3WA1112		3	A	E	3	6	4	7	0	1	2	3	4	5	6	7	8	0	A	A	0	Z...
		1600 A	3WA1116		3	A	E	3	6	4	7	0	1	2	3	4	5	6	7	8	0	A	A	0	Z...
		2000 A	3WA1120		3	A	E	3	6	4	7	0	1	2	3	4	5	6	7	8	0	A	A	0	Z...
		2500 A	3WA1125		3	A	E	3	6	4	7	0	1								0	A	A	0	Z...
1	85/66 kA at 500 V/690 V M	630 A	3WA1106		4	A	E	3	6	4	7	0	1	2	3	4	5	6	7	8	0	A	A	0	Z...
		800 A	3WA1108		4	A	E	3	6	4	7	0	1	2	3	4	5	6	7	8	0	A	A	0	Z...
		1000 A	3WA1110		4	A	E	3	6	4	7	0	1	2	3	4	5	6	7	8	0	A	A	0	Z...
		1250 A	3WA1112		4	A	E	3	6	4	7	0	1	2	3	4	5	6	7	8	0	A	A	0	Z...
		1600 A	3WA1116		4	A	E	3	6	4	7	0	1	2	3	4	5	6	7	8	0	A	A	0	Z...
		2000 A	3WA1120		4	A	E	3	6	4	7	0	1	2	3	4	5	6	7	8	0	A	A	0	Z...
		2500 A	3WA1125		4	A	E	3	6	4	7	0	1								0	A	A	0	Z...
For higher voltages and in the 690-V IT system																									
1	85/50 kA at 690 V/1000 V E	630 A	3WA1106		8	A	E	3	6	4	7	0	1	2	3	4	5	6	7	8	0	A	A	0	Z...
		800 A	3WA1108		8	A	E	3	6	4	7	0	1	2	3	4	5	6	7	8	0	A	A	0	Z...
		1000 A	3WA1110		8	A	E	3	6	4	7	0	1	2	3	4	5	6	7	8	0	A	A	0	Z...
		1250 A	3WA1112		8	A	E	3	6	4	7	0	1	2	3	4	5	6	7	8	0	A	A	0	Z...
		1600 A	3WA1116		8	A	E	3	6	4	7	0	1	2	3	4	5	6	7	8	0	A	A	0	Z...
		2000 A	3WA1120		8	A	E	3	6	4	7	0	1	2	3	4	5	6	7	8	0	A	A	0	Z...
		2500 A	3WA1125		8	A	E	3	6	4	7	0	1								0	A	A	0	Z...

Reduction of the rated current up to I_n = 250 A possible with option plug (Z = B02 – B20)
Position signaling switch (PSS) for circuit breakers without ready4COM:
3 × connected position, 2 × test position, 1 × disconnected position
Position signaling switch (PSS) for circuit breakers with ready4COM:
1 × connected position, 1 × test position, 1 × disconnected position + message through communications interface for disconnected position and for "not available".

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

The structure shown below shows how the price is formed depending on digits 11 and 12 of the article number (price group 1CE). You will find varying price changes updated on a daily basis in SiePortal www.siemens.com/lowvoltage/product-catalog

	3-pole without PSS Digit 11 = 3					3-pole with PSS Digit 11 = 6				4-pole, Neutral left, without PSS Digit 11 = 4					4-pole, Neutral left, with PSS Digit 11 = 7			
Digit	12					12				12					12			
Value	0	1	2/4/7/8	3	5/6	1	2/4/7/8	3	5/6	0	1	2/4/7/8	3	5/6	1	2/4/7/8	3	5/6
Prices in €																		

Protective and metering functions for circuit breakers, from page 1/34 onwards
Operating mechanism, auxiliary switch and auxiliary release, from page 1/36 onwards

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

Structure of the article numbers

Basic configuration for AC circuit breakers, withdrawable, size 2

**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

Size	Short-circuit breaking capacity I_{cu}/I_{cs}	Max. rated current $I_{n\,max}$		Short-circuit breaking capacity I_{cu}	Application packages	ETU and basic protective functions	3-pole, without PSS	3-pole, with PSS	4-pole, Neutral left, without PSS	4-pole, Neutral left, with PSS	Connection: Without guide frame	Vertical	Horizontal	Front double hole	Flange	Vertical on top/horizontal at the bottom	Horizontal on top/vertical at the bottom	Flange on top/horizontal at the bottom	Horizontal on top/flange at the bottom					
Digit			1–7		8	9	10	11				12									13	14	15	16	17
Up to 690 V																									
2	66/50 kA at 500 V/690 V S	2000 A	3WA1220	–	3	A	E	3	6	4	7	0	1	2	3	4	5	6	7	8	0	A	A	0	Z...
		2500 A	3WA1225	–	3	A	E	3	6	4	7	0	1	2	3	4	5	6	7	8	0	A	A	0	Z...
		3200 A	3WA1232	–	3	A	E	3	6	4	7	0	1	2	3	4	5	6	7	8	0	A	A	0	Z...
		4000 A	3WA1240	–	3	A	E	3	6	4	7	0	1								0	A	A	0	Z...
2	85/66 kA at 500 V/690 V M	2000 A	3WA1220	–	4	A	E	3	6	4	7	0	1	2	3	4	5	6	7	8	0	A	A	0	Z...
		2500 A	3WA1225	–	4	A	E	3	6	4	7	0	1	2	3	4	5	6	7	8	0	A	A	0	Z...
		3200 A	3WA1232	–	4	A	E	3	6	4	7	0	1	2	3	4	5	6	7	8	0	A	A	0	Z...
		4000 A	3WA1240	–	4	A	E	3	6	4	7	0	1								0	A	A	0	Z...
2	100/85 kA at 500 V/690 V H	2000 A	3WA1220	–	5	A	E	3	6	4	7	0	1	2	3	4	5	6	7	8	0	A	A	0	Z...
		2500 A	3WA1225	–	5	A	E	3	6	4	7	0	1	2	3	4	5	6	7	8	0	A	A	0	Z...
		3200 A	3WA1232	–	5	A	E	3	6	4	7	0	1	2	3	4	5	6	7	8	0	A	A	0	Z...
		4000 A	3WA1240	–	5	A	E	3	6	4	7	0	1								0	A	A	0	Z...
2	130/100 kA at 500 V/690 V C	2000 A	3WA1220	–	6	A	E	3	6	4	7	0	1	2			5	6			0	A	A	0	Z...
		2500 A	3WA1225	–	6	A	E	3	6	4	7	0	1	2			5	6			0	A	A	0	Z...
		3200 A	3WA1232	–	6	A	E	3	6	4	7	0	1	2			5	6			0	A	A	0	Z...
For higher voltages and in the 690-V IT system																									
2	85/85/50 kA at 690 V/ 1000 V/ 1150 V E	2000 A	3WA1220	–	8	A	E	3	6	4	7	0	1	2	3	4	5	6	7	8	0	A	A	0	Z...
		2500 A	3WA1225	–	8	A	E	3	6	4	7	0	1	2	3	4	5	6	7	8	0	A	A	0	Z...
		3200 A	3WA1232	–	8	A	E	3	6	4	7	0	1	2	3	4	5	6	7	8	0	A	A	0	Z...
		4000 A	3WA1240	–	8	A	E	3	6	4	7	0	1								0	A	A	0	Z...

Reduction of the rated current up to I_n = 250 A possible with option plug (Z = B02 – B20)
Position signaling switch (PSS) for circuit breakers without ready4COM:
3 × connected position, 2 × test position, 1 × disconnected position
Position signaling switch (PSS) for circuit breakers with ready4COM:
1 × connected position, 1 × test position, 1 × disconnected position + message through communications interface for disconnected position and for "not available".

Protective and metering functions for circuit breakers, from page 1/34 onwards
Operating mechanism, auxiliary switch and auxiliary release, from page 1/36 onwards

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

The structure shown below shows how the price is formed depending on digits 11 and 12 of the article number (price group 1CE). You will find varying price changes updated on a daily basis in SiePortal www.siemens.com/lowvoltage/product-catalog

	3-pole without PSS Digit 11 = 3					3-pole with PSS Digit 11 = 6				4-pole, Neutral left, without PSS Digit 11 = 4					4-pole, Neutral left, with PSS Digit 11 = 7			
Digit	12					12				12					12			
Value	0	1	2/4/7/8	3	5/6	1	2/4/7/8	3	5/6	0	1	2/4/7/8	3	5/6	1	2/4/7/8	3	5/6
Prices in €																		

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

Structure of the article numbers

Basic configuration for AC circuit breakers, withdrawable, size 3

**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

Size	Short-circuit breaking capacity I_{cu}/I_{cs}	Max. rated current $I_{n\,max}$		Short-circuit breaking capacity I_{cu}	Application packages	ETU and basic protective functions	3-pole, without PSS	3-pole, with PSS	4-pole, Neutral left, without PSS	4-pole, Neutral left, with PSS	Connection: Without guide frame	Vertical	Horizontal	Front double hole	Flange	Vertical on top/horizontal at the bottom	Horizontal on top/vertical at the bottom	Flange on top/horizontal at the bottom	Horizontal on top/flange at the bottom					
Digit			1–7		8	9	10		11				12									13	14	15	16	17
Up to 690 V																										
3	100/85 kA at 500 V/690 V H	4000 A	3WA1340	–	5	A	E	3	6	4	7	0	1	2	3	4	5	6	7	8	0	A	A	0	Z...
		5000 A	3WA1350	–	5	A	E	3	6	4	7	0	1	2			5	6			0	A	A	0	Z...
		6300 A	3WA1363	–	5	A	E	3	6	4	7	0	1								0	A	A	0	Z...
3	3-pole: 150/150 kA at 500 V/690 V 4-pole: 130/130 kA at 500 V/690 V C	4000 A	3WA1340	–	6	A	E	3	6	4	7	0	1	2			5	6			0	A	A	0	Z...
		5000 A	3WA1350	–	6	A	E	3	6	4	7	0	1	2			5	6			0	A	A	0	Z...
		6300 A	3WA1363	–	6	A	E	3	6	4	7	0	1								0	A	A	0	Z...
For higher voltages and in the 690-V IT system																										
3	3-pole: 150/125/70 kA at 690 V/ 1000 V/1150 V 4-pole: 130/125/70 kA at 690 V/ 1000 V/1150 V E	4000 A	3WA1340	–	8	A	E	3	6	4	7	0	1	2			5	6			0	A	A	0	Z...
		5000 A	3WA1350	–	8	A	E	3	6	4	7	0	1	2			5	6			0	A	A	0	Z...
		6300 A	3WA1363	–	8	A	E	3	6	4	7	0	1								0	A	A	0	Z...

Reduction of the rated current up to I_n = 250 A possible with option plug (Z = B02 – B20)
Position signaling switch (PSS) for circuit breakers without ready4COM:
3 × connected position, 2 × test position, 1 × disconnected position
Position signaling switch (PSS) for circuit breakers with ready4COM:
1 × connected position, 1 × test position, 1 × disconnected position + message through communications interface for disconnected position and for "not available".

Protective and metering functions for circuit breakers, from page 1/34 onwards
Operating mechanism, auxiliary switch and auxiliary release, from page 1/36 onwards

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

The structure shown below shows how the price is formed depending on digits 11 and 12 of the article number (price group 1CE). You will find varying price changes updated on a daily basis in SiePortal www.siemens.com/lowvoltage/product-catalog

	3-pole without PSS Digit 11 = 3					3-pole with PSS Digit 11 = 6				4-pole, Neutral left, without PSS Digit 11 = 4					4-pole, Neutral left, with PSS Digit 11 = 7			
Digit	12					12				12					12			
Value	0	1	2/4/7/8	3	5/6	1	2/4/7/8	3	5/6	0	1	2/4/7/8	3	5/6	1	2/4/7/8	3	5/6
Prices in €																		

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

Structure of the article numbers

Basic configuration for AC non-automatic circuit breakers, fixed-mounted, size 1

**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**

Size	Short-circuit breaking capacity I_{cu}/I_{cs}	Max. rated current $I_{n\,max}$		Digit	1–7	–	8	9	10	11		12					–	13	14	15	16	–	17
							Rated conditional short-circuit current I_{cc}	Communication capability	AC non-automatic circuit breakers	3-pole	4-pole, Neutral left	Vertical	Horizontal	Front double hole	Vertical on top/horizontal at the bottom	Horizontal on top/vertical at the bottom	Connection						
Up to 690 V																							
1	55/42 kA at 500 V/690 V N	630 A			3WA1106		2	A	A	0	1	1	2	3	5	6		0	A	A	0		Z...
		800 A			3WA1108		2	A	A	0	1	1	2	3	5	6		0	A	A	0		Z...
		1000 A			3WA1110		2	A	A	0	1	1	2	3	5	6		0	A	A	0		Z...
		1250 A			3WA1112		2	A	A	0	1	1	2	3	5	6		0	A	A	0		Z...
		1600 A			3WA1116		2	A	A	0	1	1	2	3	5	6		0	A	A	0		Z...
		2000 A			3WA1120		2	A	A	0	1	1	2	3	5	6		0	A	A	0		Z...
		2500 A			3WA1125		2	A	A	0	1	1	2		5	6		0	A	A	0		Z...
1	66/50 kA at 500 V/690 V S	630 A			3WA1106		3	A	A	0	1	1	2	3	5	6		0	A	A	0		Z...
		800 A			3WA1108		3	A	A	0	1	1	2	3	5	6		0	A	A	0		Z...
		1000 A			3WA1110		3	A	A	0	1	1	2	3	5	6		0	A	A	0		Z...
		1250 A			3WA1112		3	A	A	0	1	1	2	3	5	6		0	A	A	0		Z...
		1600 A			3WA1116		3	A	A	0	1	1	2	3	5	6		0	A	A	0		Z...
		2000 A			3WA1120		3	A	A	0	1	1	2	3	5	6		0	A	A	0		Z...
		2500 A			3WA1125		3	A	A	0	1	1	2		5	6		0	A	A	0		Z...
1	85/66 kA at 500 V/690 V M	630 A			3WA1106		4	A	A	0	1	1	2	3	5	6		0	A	A	0		Z...
		800 A			3WA1108		4	A	A	0	1	1	2	3	5	6		0	A	A	0		Z...
		1000 A			3WA1110		4	A	A	0	1	1	2	3	5	6		0	A	A	0		Z...
		1250 A			3WA1112		4	A	A	0	1	1	2	3	5	6		0	A	A	0		Z...
		1600 A			3WA1116		4	A	A	0	1	1	2	3	5	6		0	A	A	0		Z...
		2000 A			3WA1120		4	A	A	0	1	1	2	3	5	6		0	A	A	0		Z...
		2500 A			3WA1125		4	A	A	0	1	1	2		5	6		0	A	A	0		Z...
For higher voltages and in the 690-V IT system																							
1	85/50 kA at 690 V/1000 V E	630 A			3WA1106		8	A	A	0	1	1	2	3	5	6		0	A	A	0		Z...
		800 A			3WA1108		8	A	A	0	1	1	2	3	5	6		0	A	A	0		Z...
		1000 A			3WA1110		8	A	A	0	1	1	2	3	5	6		0	A	A	0		Z...
		1250 A			3WA1112		8	A	A	0	1	1	2	3	5	6		0	A	A	0		Z...
		1600 A			3WA1116		8	A	A	0	1	1	2	3	5	6		0	A	A	0		Z...
		2000 A			3WA1120		8	A	A	0	1	1	2	3	5	6		0	A	A	0		Z...
		2500 A			3WA1125		8	A	A	0	1	1	2		5	6		0	A	A	0		Z...

Non-automatic circuit breakers with and without ready4COM, from page 1/35 onwards
Operating mechanism, auxiliary switch and auxiliary release, from page 1/36 onwards

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

The structure shown below shows how the price is formed depending on digits 11 and 12 of the article number (price group 1CE). You will find varying price changes updated on a daily basis in SiePortal www.siemens.com/lowvoltage/product-catalog

	3-pole Digit 11 = 0				4-pole, Neutral left Digit 11 = 1			
Digit	12				12			
Value	1	2	3	5/6	1	2	3	5/6
Prices in €								

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

Structure of the article numbers

Basic configuration for AC non-automatic circuit breakers, fixed-mounted, size 2

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

Size	Short-circuit breaking capacity I_{cu}/I_{cs}	Max. rated current $I_{n\,max}$		Digit	1–7		8	9	10	11		12						13	14	15	16		17
							Rated conditional short-circuit current I_{cc}	Communication capability	AC non-automatic circuit breakers	3-pole	4-pole, Neutral left	Vertical	Horizontal	Front double hole	Vertical on top/horizontal at the bottom	Horizontal on top/vertical at the bottom	Connection						
Up to 690 V																							
2	66/50 kA at 500 V/690 V S	2000 A			3WA1220		3	A	A	0	1	1	2	3	5	6		0	A	A	0		Z...
		2500 A			3WA1225		3	A	A	0	1	1	2	3	5	6		0	A	A	0		Z...
		3200 A			3WA1232		3	A	A	0	1	1	2	3	5	6		0	A	A	0		Z...
		4000 A			3WA1240		3	A	A	0	1	1						0	A	A	0		Z...
2	85/66 kA at 500 V/690 V M	2000 A			3WA1220		4	A	A	0	1	1	2	3	5	6		0	A	A	0		Z...
		2500 A			3WA1225		4	A	A	0	1	1	2	3	5	6		0	A	A	0		Z...
		3200 A			3WA1232		4	A	A	0	1	1	2	3	5	6		0	A	A	0		Z...
		4000 A			3WA1240		4	A	A	0	1	1						0	A	A	0		Z...
2	100/85 kA at 500 V/690 V H	2000 A			3WA1220		5	A	A	0	1	1	2	3	5	6		0	A	A	0		Z...
		2500 A			3WA1225		5	A	A	0	1	1	2	3	5	6		0	A	A	0		Z...
		3200 A			3WA1232		5	A	A	0	1	1	2	3	5	6		0	A	A	0		Z...
		4000 A			3WA1240		5	A	A	0	1	1						0	A	A	0		Z...
2	130/100 kA at 500 V/690 V C	2000 A			3WA1220		6	A	A	0	1	1	2		5	6		0	A	A	0		Z...
		2500 A			3WA1225		6	A	A	0	1	1	2		5	6		0	A	A	0		Z...
		3200 A			3WA1232		6	A	A	0	1	1	2		5	6		0	A	A	0		Z...
For higher voltages and in the 690-V IT system																							
2	85/85/50 kA at 690 V/1000 V/1150 V E	2000 A			3WA1220		8	A	A	0	1	1	2	3	5	6		0	A	A	0		Z...
		2500 A			3WA1225		8	A	A	0	1	1	2	3	5	6		0	A	A	0		Z...
		3200 A			3WA1232		8	A	A	0	1	1	2	3	5	6		0	A	A	0		Z...
		4000 A			3WA1240		8	A	A	0	1	1						0	A	A	0		Z...

Non-automatic circuit breakers with and without ready4COM, from page 1/35 onwards
Operating mechanism, auxiliary switch and auxiliary release, from page 1/36 onwards

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

The structure shown below shows how the price is formed depending on digits 11 and 12 of the article number (price group 1CE). You will find varying price changes updated on a daily basis in SiePortal www.siemens.com/lowvoltage/product-catalog

	3-pole Digit 11 = 0				4-pole, Neutral left Digit 11 = 1			
Digit	12				12			
Value	1	2	3	5/6	1	2	3	5/6
Prices in €								

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

Structure of the article numbers

Basic configuration for AC non-automatic circuit breakers, withdrawable, size 3

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

Size	Short-circuit breaking capacity I_{cu}/I_{cs}	Max. rated current $I_{n\,max}$		Digit	1–7		8	9	10	11		12						13	14	15	16		17
							Rated conditional short-circuit current I_{cc}	Communication capability	AC non-automatic circuit breakers	3-pole	4-pole, Neutral left	Connection: Vertical	Horizontal	Front double hole	Vertical on top/horizontal at the bottom	Horizontal on top/vertical at the bottom							
Up to 690 V																							
3	100/85 kA at 500 V/690 V H	4000 A			3WA1340		5	A	A	0	1	1	2	3	5	6		0	A	A	0		Z...
		5000 A			3WA1350		5	A	A	0	1	1	2		5	6		0	A	A	0		Z...
		6300 A			3WA1363		5	A	A	0	1	1						0	A	A	0		Z...
3	3-pole: 130/130 kA at 500 V/690 V 4-pole: 120/120 kA at 500 V/690 V C	4000 A			3WA1340		6	A	A	0	1	1	2		5	6		0	A	A	0		Z...
		5000 A			3WA1350		6	A	A	0	1	1	2		5	6		0	A	A	0		Z...
		6300 A			3WA1363		6	A	A	0	1	1						0	A	A	0		Z...
For higher voltages and in the 690-V IT system																							
3	3-pole: 130/125/70 kA at 690 V/1000 V/1150 V 4-pole: 120/120/70 kA at 690 V/1000 V/1150 V E	4000 A			3WA1340		8	A	A	0	1	1	2		5	6		0	A	A	0		Z...
		5000 A			3WA1350		8	A	A	0	1	1	2		5	6		0	A	A	0		Z...
		6300 A			3WA1363		8	A	A	0	1	1						0	A	A	0		Z...

Non-automatic circuit breakers with and without ready4COM, from page 1/35 onwards
Operating mechanism, auxiliary switch and auxiliary release, from page 1/36 onwards

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

The structure shown below shows how the price is formed depending on digits 11 and 12 of the article number (price group 1CE). You will find varying price changes updated on a daily basis in SiePortal www.siemens.com/lowvoltage/product-catalog

	3-pole Digit 11 = 0				4-pole, Neutral left Digit 11 = 1			
Digit	12				12			
Value	1	2	3	5/6	1	2	3	5/6
Prices in €								

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

Structure of the article numbers

Basic configuration for AC non-automatic circuit breakers, withdrawable, size 1

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

Size	Short-circuit breaking capacity I_{cu}/I_{cs}	Max. rated current $I_{n\ max}$	Digit 1–7	8: Short-circuit breaking capacity I_{cu}	9: Communication capability	10: AC non-automatic circuit breakers	11: 3-pole, without PSS	11: 3-pole, with PSS	11: 4-pole, without PSS	11: 4-pole, with PSS	12 Connection: Without guide frame	12: Vertical	12: Horizontal	12: Front double hole	12: Flange	12: Vertical on top/horizontal at the bottom	12: Horizontal on top/vertical at the bottom	12: Flange on top/horizontal at the bottom	12: Horizontal on top/flange at the bottom	– 13	14	15	16	– 17
Up to 690 V																								
1	55/42 kA at 500 V/690 V N	630 A	3WA1106	2	A	A	3	6	4	7	0	1	2	3	4	5	6	7	8	0	A	A	0	Z...
		800 A	3WA1108	2	A	A	3	6	4	7	0	1	2	3	4	5	6	7	8	0	A	A	0	Z...
		1000 A	3WA1110	2	A	A	3	6	4	7	0	1	2	3	4	5	6	7	8	0	A	A	0	Z...
		1250 A	3WA1112	2	A	A	3	6	4	7	0	1	2	3	4	5	6	7	8	0	A	A	0	Z...
		1600 A	3WA1116	2	A	A	3	6	4	7	0	1	2	3	4	5	6	7	8	0	A	A	0	Z...
		2000 A	3WA1120	2	A	A	3	6	4	7	0	1	2	3	4	5	6	7	8	0	A	A	0	Z...
		2500 A	3WA1125	2	A	A	3	6	4	7	0	1								0	A	A	0	Z...
1	66/50 kA at 500 V/690 V S	630 A	3WA1106	3	A	A	3	6	4	7	0	1	2	3	4	5	6	7	8	0	A	A	0	Z...
		800 A	3WA1108	3	A	A	3	6	4	7	0	1	2	3	4	5	6	7	8	0	A	A	0	Z...
		1000 A	3WA1110	3	A	A	3	6	4	7	0	1	2	3	4	5	6	7	8	0	A	A	0	Z...
		1250 A	3WA1112	3	A	A	3	6	4	7	0	1	2	3	4	5	6	7	8	0	A	A	0	Z...
		1600 A	3WA1116	3	A	A	3	6	4	7	0	1	2	3	4	5	6	7	8	0	A	A	0	Z...
		2000 A	3WA1120	3	A	A	3	6	4	7	0	1	2	3	4	5	6	7	8	0	A	A	0	Z...
		2500 A	3WA1125	3	A	A	3	6	4	7	0	1								0	A	A	0	Z...
1	85/66 kA at 500 V/690 V M	630 A	3WA1106	4	A	A	3	6	4	7	0	1	2	3	4	5	6	7	8	0	A	A	0	Z...
		800 A	3WA1108	4	A	A	3	6	4	7	0	1	2	3	4	5	6	7	8	0	A	A	0	Z...
		1000 A	3WA1110	4	A	A	3	6	4	7	0	1	2	3	4	5	6	7	8	0	A	A	0	Z...
		1250 A	3WA1112	4	A	A	3	6	4	7	0	1	2	3	4	5	6	7	8	0	A	A	0	Z...
		1600 A	3WA1116	4	A	A	3	6	4	7	0	1	2	3	4	5	6	7	8	0	A	A	0	Z...
		2000 A	3WA1120	4	A	A	3	6	4	7	0	1	2	3	4	5	6	7	8	0	A	A	0	Z...
		2500 A	3WA1125	4	A	A	3	6	4	7	0	1								0	A	A	0	Z...
For higher voltages and in the 690-V IT system																								
1	85/50 kA at 690 V/1000 V E	630 A	3WA1106	8	A	A	3	6	4	7	0	1	2	3	4	5	6	7	8	0	A	A	0	Z...
		800 A	3WA1108	8	A	A	3	6	4	7	0	1	2	3	4	5	6	7	8	0	A	A	0	Z...
		1000 A	3WA1110	8	A	A	3	6	4	7	0	1	2	3	4	5	6	7	8	0	A	A	0	Z...
		1250 A	3WA1112	8	A	A	3	6	4	7	0	1	2	3	4	5	6	7	8	0	A	A	0	Z...
		1600 A	3WA1116	8	A	A	3	6	4	7	0	1	2	3	4	5	6	7	8	0	A	A	0	Z...
		2000 A	3WA1120	8	A	A	3	6	4	7	0	1	2	3	4	5	6	7	8	0	A	A	0	Z...
		2500 A	3WA1125	8	A	A	3	6	4	7	0	1								0	A	A	0	Z...

Position signaling switch (PSS) for circuit breakers without ready4COM:
3 × connected position, 2 × test position, 1 × disconnected position
Position signaling switch (PSS) for circuit breakers with ready4COM:
1 × connected position, 1 × test position, 1 × disconnected position + message through communications interface for disconnected position and for "not available".

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

The structure shown below shows how the price is formed depending on digits 11 and 12 of the article number (price group 1CE). You will find varying price changes updated on a daily basis in SiePortal www.siemens.com/lowvoltage/product-catalog

	3-pole without PSS Digit 11 = 3					3-pole with PSS Digit 11 = 6				4-pole, without PSS Digit 11 = 4					4-pole, with PSS Digit 11 = 7			
Digit	12					12				12					12			
Value	0	1	2/4/7/8	3	5/6	1	2/4/7/8	3	5/6	0	1	2/4/7/8	3	5/6	1	2/4/7/8	3	5/6
Prices in €																		

Non-automatic circuit breakers with and without ready4COM, from page 1/35 onwards
Operating mechanism, auxiliary switch and auxiliary release, from page 1/36 onwards

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

Structure of the article numbers

Basic configuration for AC non-automatic circuit breakers, withdrawable, size 2

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

Size	Short-circuit breaking capacity I_{cu}/I_{cs}	Max. rated current $I_{n\,max}$		Short-circuit breaking capacity I_{cu}	Communication capability	AC non-automatic circuit breakers	3-pole, without PSS	3-pole, with PSS	4-pole, without PSS	4-pole, with PSS	Connection: Without guide frame	Vertical	Horizontal	Front double hole	Flange	Vertical on top/horizontal at the bottom	Horizontal on top/vertical at the bottom	Flange on top/horizontal at the bottom	Horizontal on top/flange at the bottom
Digit			1–7	8	9	10	11				12								

Up to 690 V

Size	Short-circuit breaking capacity I_{cu}/I_{cs}	Max. rated current $I_{n\,max}$	1–7	8	9	10	11				12									13	14	15	16	17
2	66/50 kA at 500 V/690 V S	2000 A	3WA1220	3	A	A	3	6	4	7	0	1	2	3	4	5	6	7	8	0	A	A	0	Z...
		2500 A	3WA1225	3	A	A	3	6	4	7	0	1	2	3	4	5	6	7	8	0	A	A	0	Z...
		3200 A	3WA1232	3	A	A	3	6	4	7	0	1	2	3	4	5	6	7	8	0	A	A	0	Z...
		4000 A	3WA1240	3	A	A	3	6	4	7	0	1								0	A	A	0	Z...
2	85/66 kA at 500 V/690 V M	2000 A	3WA1220	4	A	A	3	6	4	7	0	1	2	3	4	5	6	7	8	0	A	A	0	Z...
		2500 A	3WA1225	4	A	A	3	6	4	7	0	1	2	3	4	5	6	7	8	0	A	A	0	Z...
		3200 A	3WA1232	4	A	A	3	6	4	7	0	1	2	3	4	5	6	7	8	0	A	A	0	Z...
		4000 A	3WA1240	4	A	A	3	6	4	7	0	1								0	A	A	0	Z...
2	100/85 kA at 500 V/690 V H	2000 A	3WA1220	5	A	A	3	6	4	7	0	1	2	3	4	5	6	7	8	0	A	A	0	Z...
		2500 A	3WA1225	5	A	A	3	6	4	7	0	1	2	3	4	5	6	7	8	0	A	A	0	Z...
		3200 A	3WA1232	5	A	A	3	6	4	7	0	1	2	3	4	5	6	7	8	0	A	A	0	Z...
		4000 A	3WA1240	5	A	A	3	6	4	7	0	1								0	A	A	0	Z...
2	130/100 kA at 500 V/690 V C	2000 A	3WA1220	6	A	A	3	6	4	7	0	1	2			5	6			0	A	A	0	Z...
		2500 A	3WA1225	6	A	A	3	6	4	7	0	1	2			5	6			0	A	A	0	Z...
		3200 A	3WA1232	6	A	A	3	6	4	7	0	1	2			5	6			0	A	A	0	Z...

For higher voltages and in the 690-V IT system

Size	Short-circuit breaking capacity I_{cu}/I_{cs}	Max. rated current $I_{n\,max}$	1–7	8	9	10	11				12									13	14	15	16	17
2	85/85/50 kA at 690 V/1000 V/ 1150 V E	2000 A	3WA1220	8	A	A	3	6	4	7	0	1	2	3	4	5	6	7	8	0	A	A	0	Z...
		2500 A	3WA1225	8	A	A	3	6	4	7	0	1	2	3	4	5	6	7	8	0	A	A	0	Z...
		3200 A	3WA1232	8	A	A	3	6	4	7	0	1	2	3	4	5	6	7	8	0	A	A	0	Z...
		4000 A	3WA1240	8	A	A	3	6	4	7	0	1								0	A	A	0	Z...

Position signaling switch (PSS) for circuit breakers without ready4COM:
3 × connected position, 2 × test position, 1 × disconnected position
Position signaling switch (PSS) for circuit breakers with ready4COM:
1 × connected position, 1 × test position, 1 × disconnected position + message through communications interface for disconnected position and for "not available".

Non-automatic circuit breakers with and without ready4COM, from page 1/35 onwards
Operating mechanism, auxiliary switch and auxiliary release, from page 1/36 onwards

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

The structure shown below shows how the price is formed depending on digits 11 and 12 of the article number (price group 1CE). You will find varying price changes updated on a daily basis in SiePortal www.siemens.com/lowvoltage/product-catalog

	3-pole without PSS Digit 11 = 3					3-pole with PSS Digit 11 = 6				4-pole, without PSS Digit 11 = 4					4-pole, with PSS Digit 11 = 7			
Digit	12					12				12					12			
Value	0	1	2/4/7/8	3	5/6	1	2/4/7/8	3	5/6	0	1	2/4/7/8	3	5/6	1	2/4/7/8	3	5/6
Prices in €																		

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

Structure of the article numbers

Basic configuration for AC non-automatic circuit breakers, withdrawable, size 3

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

Size	Short-circuit breaking capacity I_{cu}/I_{cs}	Max. rated current $I_{n\,max}$		Short-circuit breaking capacity I_{cu}	Communication capability	AC non-automatic circuit breakers	3-pole, without PSS	3-pole, with PSS	4-pole, without PSS	4-pole, with PSS	Connection: Without guide frame	Vertical	Horizontal	Front double hole	Flange	Vertical on top/horizontal at the bottom	Horizontal on top/vertical at the bottom	Flange on top/horizontal at the bottom	Horizontal on top/flange at the bottom					
Digit			1–7		8	9	10	11				12										13	14	15	16	17
Up to 690 V																										
3	100/85 kA at 500 V/690 V kA H	4000 A	3WA1340	–	5	A	A	3	6	4	7	0	1	2	3	4	5	6	7	8		0	A	A	0	Z...
		5000 A	3WA1350		5	A	A	3	6	4	7	0	1	2			5	6				0	A	A	0	Z...
		6300 A	3WA1363		5	A	A	3	6	4	7	0	1									0	A	A	0	Z...
3	3-pole: 130/130 kA at 500 V/690 V 4-pole: 120/120 kA at 500 V/690 V H	4000 A	3WA1340		6	A	A	3	6	4	7	0	1	2			5	6				0	A	A	0	Z...
		5000 A	3WA1350		6	A	A	3	6	4	7	0	1	2			5	6				0	A	A	0	Z...
		6300 A	3WA1363		6	A	A	3	6	4	7	0	1									0	A	A	0	Z...
For higher voltages and in the 690-V IT system																										
3	3-pole: 130/125/70 kA at 690 V/1000 V/1150 V 4-pole: 120/120/70 kA at 690 V/1000 V/1150 V E	4000 A	3WA1340		8	A	A	3	6	4	7	0	1	2			5	6				0	A	A	0	Z...
		5000 A	3WA1350		8	A	A	3	6	4	7	0	1	2			5	6				0	A	A	0	Z...
		6300 A	3WA1363		8	A	A	3	6	4	7	0	1									0	A	A	0	Z...

Position signaling switch (PSS) for circuit breakers without ready4COM:
3 × connected position, 2 × test position, 1 × disconnected position
Position signaling switch (PSS) for circuit breakers with ready4COM:
1 × connected position, 1 × test position, 1 × disconnected position + message through communications interface for disconnected position and for "not available".

Non-automatic circuit breakers with and without ready4COM, from page 1/35 onwards
Operating mechanism, auxiliary switch and auxiliary release, from page 1/36 onwards

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

The structure shown below shows how the price is formed depending on digits 11 and 12 of the article number (price group 1CE). You will find varying price changes updated on a daily basis in SiePortal www.siemens.com/lowvoltage/product-catalog

	3-pole without PSS Digit 11 = 3					3-pole with PSS Digit 11 = 6				4-pole, without PSS Digit 11 = 4					4-pole, with PSS Digit 11 = 7			
Digit	12					12				12					12			
Value	0	1	2/4/7/8	3	5/6	1	2/4/7/8	3	5/6	0	1	2/4/7/8	3	5/6	1	2/4/7/8	3	5/6
Prices in €																		

Structure of the article numbers

Basic configuration for DC non-automatic circuit breakers, fixed-mounted, size 2

**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**

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Baugröße	Bedingter Bemessungskurzschlussstrom I_{cc}	Max. rated current $I_{n\,max}$		Digit	1–7		8	9	10	11		12						13	14	15	16		17
							Rated conditional short-circuit current I_{cc}	Communication capability	DC non-automatic circuit breakers	3-pole	4-pole, Neutral left	Vertical	Horizontal	Front double hole	Vertical on top/horizontal at the bottom	Horizontal on top/vertical at the bottom	Connection						
2	25 kA at 600 V D	1000 A			3WA1210		1	A	U	0	1	1	2	3	5	6		0	A	A	0		Z...
		2000 A			3WA1220		1	A	U	0	1	1	2	3	5	6		0	A	A	0		Z...
		4000 A			3WA1240		1	A	U	0	1	1	2		5	6		0	A	A	0		Z...
2	20 kA at 1000 V E 20 kA at 1500 V [1]	1000 A			3WA1210		8	A	U	0	1	1	2	3	5	6		0	A	A	0		Z...
		2000 A			3WA1220		8	A	U	0	1	1	2	3	5	6		0	A	A	0		Z...
		4000 A			3WA1240		8	A	U	0	1	1	2		5	6		0	A	A	0		Z...

[1] 1500 V DC only for 4-pole circuit breakers and for breaking capacity E

Non-automatic circuit breakers with and without ready4COM, from page 1/35 onwards
Operating mechanism, auxiliary switch and auxiliary release, from page 1/36 onwards

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

The structure shown below shows how the price is formed depending on digits 11 and 12 of the article number (price group 1CE). You will find varying price changes updated on a daily basis in SiePortal www.siemens.com/lowvoltage/product-catalog

	3-pole Digit 11 = 0				4-pole, Neutral left Digit 11 = 1			
Digit	12				12			
Value	1	2	3	5/6	1	2	3	5/6
Prices in €								

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

Structure of the article numbers

Basic configuration for DC non-automatic circuit breakers, withdrawable, size 2

**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**

Digit	1–7		8	9	10	11				12									13	14	15	16		17
	Size / Short-circuit breaking capacity I_{cu} / I_{cs}	Max. rated current $I_{n\,max}$	Short-circuit breaking capacity I_{cu}	Communication capability	DC non-automatic circuit breakers	3-pole, without PSS	3-pole, with PSS	4-pole, without PSS	4-pole, with PSS	Connection: Without guide frame	Vertical	Horizontal	Front double hole	Flange	Vertical on top/horizontal at the bottom	Horizontal on top/vertical at the bottom	Flange on top/horizontal at the bottom	Horizontal on top/flange at the bottom						
Withdrawable, 3 and 4-pole																								
2	25 kA at 600 V D	1000 A	3WA1210	1	A	U	3	6	4	7	0	1	2	3	4	5	6	7	8	0	A	A	0	Z...
		2000 A	3WA1220	1	A	U	3	6	4	7	0	1	2	3	4	5	6	7	8	0	A	A	0	Z...
		4000 A	3WA1240	1	A	U	3	6	4	7	0	1	2		4	5	6	7	8	0	A	A	0	Z...
2	20 kA at 1000 V E 20 kA at 1500 V [1]	1000 A	3WA1210	8	A	U	3	6	4	7	0	1	2	3	4	5	6	7	8	0	A	A	0	Z...
		2000 A	3WA1220	8	A	U	3	6	4	7	0	1	2	3	4	5	6	7	8	0	A	A	0	Z...
		4000 A	3WA1240	8	A	U	3	6	4	7	0	1	2		4	5	6	7	8	0	A	A	0	Z...

[1] 1500 V DC only for 4-pole circuit breakers and for breaking capacity E

Position signaling switch (PSS) for circuit breakers without ready4COM:
3 × connected position, 2 × test position, 1 × disconnected position
Position signaling switch (PSS) for circuit breakers with ready4COM:
1 × connected position, 1 × test position, 1 × disconnected position + message through communications interface for disconnected position and for "not available".

Non-automatic circuit breakers with and without ready4COM, from page 1/35 onwards
Operating mechanism, auxiliary switch and auxiliary release, from page 1/36 onwards

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

The structure shown below shows how the price is formed depending on digits 11 and 12 of the article number (price group 1CE). You will find varying price changes updated on a daily basis in SiePortal www.siemens.com/lowvoltage/product-catalog

	3-pole without PSS Digit 11 = 3					3-pole with PSS Digit 11 = 6				4-pole, without PSS Digit 11 = 4					4-pole, without PSS Digit 11 = 4			
Digit	12					12				12					12			
Value	0	1	2/4/7/8	3	5/6	1	2/4/7/8	3	5/6	0	1	2/4/7/8	3	5/6	1	2/4/7/8	3	5/6
Prices in €																		

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

Accessory options

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

1

To specify the options, add "-Z" to the complete article number and indicate the appropriate order code(s).

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

		SZ1	SZ2	SZ3		Order code	Surcharge in € per PU	Price group
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 $I_{n\,max}$.								
	Rated current I_n							
Option plug	250 A	■	■	–		**B02**		1CE
	315 A	■	■	–		**B03**		1CE
	400 A	■	■	–		**B04**		1CE
	500 A	■	■	–		**B05**		1CE
	630 A	■	■	–		**B06**		1CE
	800 A	■	■	■		**B08**		1CE
	1000 A	■	■	■		**B10**		1CE
	1250 A	■	■	■		**B12**		1CE
	1600 A	■	■	■		**B16**		1CE
	2000 A	■	■	■		**B20**		1CE
	2500 A	–	■	■		**B25**		1CE
	3200 A	–	■	■		**B32**		1CE
	4000 A	–	–	■		**B40**		1CE
	5000 A	–	–	■		**B50**		1CE
IOM230 digital input/output module [1]								
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 DIN rail.					**F23**		1CE
ZSI200 zone-selective interlocking module [1]								
Zone-selective interlocking with ETU600	A module, circuit breaker internal. Module including adapter for mounting on the secondary disconnect terminal system of the circuit breaker, connecting cables and **Cubicle**BUS^2 terminating resistor.					**F20**		1CE
COM190 communications module [1] [2]								
• The precondition for connection is a circuit breaker or non-automatic circuit breaker with the "ready4COM" feature								
PROFINET IO/Modbus TCP [2]	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 communications modules can be run at the same time. The second communications module must be ordered separately as 3WA9111-0EC13.					**F19**		1CE
COM150 communications module [1]								
• The precondition for connection is a circuit breaker or non-automatic circuit breaker with the "ready4COM" feature								
Modbus RTU	A module with terminal connection and optional internal terminating resistor, 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 communications modules can be run at the same time. The second communications module must be ordered separately as 3WA9111-0EC15.					**F15**		1CE

[1] When ordering this option for a circuit breaker or a non-automatic air circuit breaker of the installation type "withdrawable version without guide frame", this must be used as the order option for the guide frame.

[2] For connecting the Ethernet cable, connectors angled 90° to the right are recommended, e.g. PROFINET connector 6GK1901-1BB20-2AA0.

System overview, page 1/30

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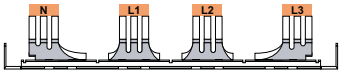
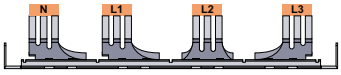
To specify the options, add "-Z" to the complete article number and indicate the appropriate order code(s).

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

			Order code	Surcharge in € per PU	Price group
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.		K01		1CE
Special approval according to UL 489b in addition to IEC 60947					
DC non-automatic circuit breakers up to 1500 V	Sizes 2, 4-pole, 2000 A with I_{cc} = 20 kA		U09		
	Available for:	3WA1220-8AU12-_ _ _ _			1CE
		3WA1220-8AU42-_ _ _ _			1CE
		3WA1220-8AU72-_ _ _ _			1CE
		3WA1220-8CU12-_ _ _ _			1CE
		3WA1220-8CU42-_ _ _ _			1CE
		3WA1220-8CU72-_ _ _ _			1CE
Rear vertical main connections (top and bottom) with equal pole spacing of the phases					
AC circuit breakers/AC non-automatic circuit breakers and AC guide frames	Sizes 2, 4-pole, 4000 A breaking capacity S/M/H/E		D04		
		Standard L1 – N 160 mm			1CE
		L1 – L2 130 mm			1CE
		L1 – L3 160 mm			1CE
		Option L1 – N 130 mm			1CE
		L1 – L2 160 mm			1CE
		L2 – L3 160 mm			1CE
Tinned version of the main circuit connections on the guide frame					
• Only for circuit breakers 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	Size 1, 2, 3	3-pole	D08		1CE
		4-pole			1CE
	Size 2	3-pole			1CE
		4-pole			1CE
	Size 3	3-pole			1CE
		4-pole			1CE
Broadened vertical main circuit connection					
• Only possible on complete order for a withdrawable circuit breaker or when ordering the guide frame separately					
Main circuit connection	For 3WA1, 4000 A, size 2	Compatible with 3WL1240 for retrofit	D01		1CE
Circuit breakers without Bluetooth function					
Circuit breakers without Bluetooth function	In this version of the circuit breaker, Bluetooth is not provided. Neither can Bluetooth be retrofitted by replacing the electronic trip unit.		D80		1CE

System overview, page 1/30

Accessory options

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

1

To specify the options, add "-Z" to the complete article number and indicate the appropriate order code(s). **3WA....-.....-.... -Z**				Order code	Surcharge in € per PU	Price group
Secondary disconnect terminal system • Can be ordered for circuit breakers with guide frames and for guide frames						
Manual connector with screw terminal	With screw connection instead of push-in connection (standard)			N03		1CE
Manual connector for ring lugs	With screw connection for ring lugs instead of push-in connection (standard)			N05		1CE
Mechanical operating cycles counters						
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			C01		1CE
Signaling switches						
Trip alarm switch	2nd trip alarm switch (S25) 1st trip alarm switch included as standard for circuit breakers Can only be used with circuit breakers with an electronic trip unit without ready4COM.		1 NO	K06		1CE
Pushbuttons/disconnect switches/closing lockouts/special packaging/ arc chute cover						
Emergency OPEN button	Mushroom pushbutton instead of the mechanical OFF pushbutton			C25		1CE
Local electric close on 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	C11		1CE
			With CES lock	C12		1CE
Motor disconnect switch on operator panel (S12)	This prevents automatic charging of the stored energy mechanism by the spring charging motor			C24		1CE
Cardboard packaging with water-repellent coating on corrugated cardboard (moisture protection)				P61		1CE
Arc chute cover mounted on the guide frame Not available for: • Fixed-mounted • Breaking capacity C, E and D • 4000 A size 2	Size 1	3-pole		R10		1CE
		4-pole				1CE
	Size 2	3-pole				1CE
		4-pole				1CE
	Size 3	3-pole				1CE
		4-pole				1CE
Cover for electronic trip unit	Top cover with safety lock (The lower sealable cover of the rotary coding switch is included in the scope of supply of the circuit breaker)			F40		1CE
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 ETU600 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 – If option Z = K60 is provided, an optional metering function PMF-I to PMF-III according to IEC 61557-12 is not technically feasible.						
Internal current sensors	Size 1 new, 2, 3			K60		1CE
Mechanical interlocks • Interlocking module with Bowden cable 2 m						
Mechanical interlocks	For fixed-mounted breakers			S55		1CE
	For withdrawable circuit breakers with guide frame			R55		1CE
	For guide frames (ordered separately)			R56		1CE
	For withdrawable circuit breakers (ordered separately)			R57		1CE

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

To specify the options, add "-Z" to the complete article number and indicate the appropriate order code(s).			3WA....-.....-.... -Z	Order code	Surcharge in € per PU	Price group
Locking provisions (for fixed-mounted and withdrawable circuit breakers)						
Locking provisions	Against unauthorized closing from 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		S01		1CE
		Made by IKON		S03		1CE
		Assembly kit FORTRESS or CASTELL [1]		S05		1CE
		Assembly kit for padlocks [2]		S07		1CE
		Made by RONIS		S08		1CE
		Made by PROFALUX		S09		1CE
Locking provisions	For charging handle with padlock [2]			S33		1CE
Locking provisions (for withdrawable circuit breaker)						
Locking provision to prevent movement of the withdrawable circuit breaker	Safety lock for mounting onto the circuit breaker	Made by CES		S71		1CE
		Made by PROFALUX		S75		1CE
		Made by RONIS		S76		1CE
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 possible in combination with order code "R81", "R85" or "R86". • Only possible on complete order for a withdrawable circuit breaker or when ordering the guide frame separately						
Made by CES				R61		1CE
Made by RONIS				R68		1CE
Made by PROFALUX				R60		1CE
Locking mechanisms • R30 and R50 not possible 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			S30		1CE
For withdrawable circuit breakers	To prevent opening of the control cabinet door in connected position			R30		1CE
	To prevent activation when the control cabinet door is open [3]			R40		1CE
	To prevent movement when the control cabinet door is open [4]			R50		1CE
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 possible in combination with order code "R30", "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				R81		1CE
Made by PROFALUX				R85		1CE
Made by RONIS				R86		1CE
Increased degree of protection for installation in a control cabinet						
Door sealing frame for degree of protection IP41				T40		1CE

[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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Accessory options

Further technical specifications

Manual operating mechanism	3WA11 – 3WA13
Switching on/charging energy store	
Maximum force required to operate the hand lever	≤ 230 N
Required number of strokes on the hand lever	9

Closing coils (CC/CC-COM)		3WA11 – 3WA13	
Rated operational voltage			
Rated control supply voltage U_s		24 ... 30 V DC	
		48 ... 60 V DC	
		110 ... 127 V AC/110 ... 125 V DC	
		208 ... 240 V AC/220 ... 250 V DC	
Primary operating range			
Primary operating range (acc. to IEC 60947-2)		85 ... 110% U_s	
Extended operating range for battery operation		85 ... 126% U_s	
Integrated freewheeling diode		Yes	
Operation			
Version		100% OP	5% OP
Opening power	AC/ DC	40 W/40 VA	≤ 60 V: 200 VA/200 W ≥ 110 V: 250 VA/250 W
Continuous power	AC/ DC	8 W/8 VA	–
Minimum command duration at 100% U_s		60 ms	60 ms
Maximum command duration at 100% U_s		–	2000 ms
Make time of the circuit breaker at 100% U_s		80 ms	50 ms
Fuse protection of the control circuit at U_s for closing coil			
Fuse gG	24 ... 30 V DC, 48 ... 60 V DC	2 A	10 A
	110 ... 125 V DC/110 ... 127 V AC	1 A	4 A
	220 ... 250 V DC/208 ... 240 V AC	1 A	2 A
Automatic circuit breaker with C characteristic	24 ... 30 V DC, 48 ... 60 V DC	2 A	10 A
	110 ... 125 V DC/110 ... 127 V AC	1 A	4 A
	220 ... 250 V DC/208 ... 240 V AC	1 A	2 A
Fuse protection of the control circuit at U_s for spring charging motor + closing coil [1]			
Fuse gG	24 ... 30 V DC, 48 ... 60 V DC	6 A	10 A
	110 ... 125 V DC/110 ... 127 V AC	2 A	4 A
	220 ... 250 V DC/208 ... 240 V AC	2 A	2 A
Automatic circuit breaker with C characteristic	24 ... 30 V DC, 48 ... 60 V DC	6 A	10 A
	110 ... 125 V DC/110 ... 127 V AC	2 A	4 A
	220 ... 250 V DC/208 ... 240 V AC	2 A	2 A

[1] With the same control circuit for the closing coil and spring charging motor

Spring charging motors		3WA11 – 3WA13
Rated operational voltage		
Rated control supply voltage U_s		24 V DC
		30 V DC
		48 V DC
		60 V DC
		110 ... 125 V DC/110 ... 127 V AC
		220 ... 250 V DC/208 ... 240 V AC
Primary operating range		
Primary operating range		85 ... 110% U_s
Extended operating range for battery operation		85 ... 126% U_s
Operation		
Opening power	AC/DC	135 VA/135 W
Continuous power	AC/DC	135 VA/135 W
Charging time at 100% U_s		≤ 10 s

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Spring charging motors

		3WA11 – 3WA13
Fuse protection of the control circuit at U_s spring charging motors		
Fuse gG	24 ... 30 V DC, 48 ... 60 V DC	6 A
	110 ... 125 V DC/110 ... 127 V AC 220 ... 250 V DC/208 ... 240 V AC	2 A
Automatic circuit breaker with C characteristic	24 ... 30 V DC, 48 ... 60 V DC	6 A
	110 ... 125 V DC/110 ... 127 V AC 220 ... 250 V DC/208 ... 240 V AC	2 A

Undervoltage releases UVR and UVR-*t*

		3WA11 – 3WA13
Rated voltage		
Rated control supply voltage U_s		24 ... 30 V DC (UVR)
		48 ... 60 V DC (UVR)
		48 V DC (UVR-t)
		60 V DC (UVR-t)
		110 ... 127 V AC/110 ... 125 V DC
		208 ... 240 V AC/220 ... 250 V DC
		380 ... 415 V AC
Operating range		
Response values	Pickup	≥ 0.85 × U_s (circuit breaker can be closed)
	Dropout	0.35 ... 0.7 × U_s (circuit breaker is opened)
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
Integrated freewheeling diode		Yes
Operation		
Closing power	AC/DC	50 VA/50 W
Continuous power	AC/DC	5 VA/5 W
Break time		
U_s = 0 with UVR instantaneous		80 ms
U_s = 0 with UVR short-time delayed		≤ 200 ms
U_s = 0 with UVR-t delayed		0.2 ... 3.2 s
With UVR-t by disconnection at terminals X5.13 and X5.14 (EMERGENCY-STOP circuit)		≤ 100 ms
Fuse protection of the control circuit		
Fuse gG	24 ... 30 V DC (UVR)	2A
	48 ... 60 V DC (UVR)	2A
	48 V DC (UVR-t)	2A
	60 V DC (UVR-t)	2A
	110 ... 127 V AC/110 ... 125 V DC	2A
	208 ... 240 V AC/220 ... 250 V DC	2A
	380 ... 415 V AC	2A
Automatic circuit breaker with C characteristic	24 ... 30 V DC (UVR)	4A
	48 ... 60 V DC (UVR)	4A
	48 V DC (UVR-t)	4A
	60 V DC (UVR-t)	4A
	110 ... 127 V AC/110 ... 125 V DC	4A
	208 ... 240 V AC/220 ... 250 V DC	6A
	380 ... 415 V AC	6A
Automatic circuit breaker with D characteristic	24 ... 30 V DC (UVR)	2A
	48 ... 60 V DC (UVR)	2A
	48 V DC (UVR-t)	2A
	60 V DC (UVR-t)	2A
	110 ... 127 V AC/110 ... 125 V DC	2A
	208 ... 240 V AC/220 ... 250 V DC	4A
	380 ... 415 V AC	4A

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Accessory options

Further technical specifications

Shunt trip (ST/ST-COM/ST2)		3WA11 – 3WA13	
Rated operational voltage			
Rated control supply voltage U_s		24 ... 30 V DC	
		48 ... 60 V DC	
		110 ... 127 V AC/DC 110 ... 125 V DC	
		208 ... 240 V AC/DC 220 ... 250 V DC	
Primary operating range			
Primary operating range (acc. to IEC 60947-2)		85 ... 110% U_s	
Extended operating range for battery operation		85 ... 126% U_s	
Integrated freewheeling diode		Yes	
Operation			
Version		100% OP	5% OP
Opening power	AC/DC	40 VA/40 W	≤ 60 V: 200 VA/200 W ≥ 110 V: 250 VA/250 W
Continuous power	AC/DC	8 VA/8 W	–
Minimum command duration at 100% U_s		60 ms	60 ms
Maximum command duration at 100% U_s		–	2000 ms
Opening time of the circuit breaker at U_s = 100%		80 ms	50 ms
Fuse protection of the control circuit			
Fuse gG	24 ... 30 V DC, 48 ... 60 V DC	2 A	10 A
	110 ... 127 V AC/110 ... 125 V DC	1 A	4 A
	208 ... 240 V AC/220 ... 250 V DC	1 A	2 A
Automatic circuit breaker with C characteristic	24 ... 30 V DC, 48 ... 60 V DC	2 A	10 A
	110 ... 127 V AC/110 ... 125 V DC	1 A	4 A
	208 ... 240 V AC/220 ... 250 V DC	1 A	2 A

Remote reset magnet for mechanical tripped indicator (F7)		3WA11 – 3WA13
Rated operational voltage		
Rated control supply voltage U_s		24 ... 30 V DC
		48 ... 60 V DC
		110 ... 125 V DC/110 ... 127 V AC
		220 ... 250 V DC/208 ... 240 V AC
Primary operating range		
Primary operating range (acc. to IEC 60947-2)		85 ... 110% U_s
Extended operating range for battery operation		70 ... 126% U_s
Integrated freewheeling diode		Yes
Operation		
Power consumption	AC/DC	60 VA/60 W
Minimum command time at 1 × U_s		60 ms
Fuse protection of the control circuit		
Fuse gG	24 ... 60 V DC	2 A
	100 V AC/> 100 V DC	1 A
Automatic circuit breaker with C characteristic	24 ... 60 V DC	2 A
	100 V AC/> 100 V DC	1 A

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Contact position-driven auxiliary switches (S1 to S8)

		3WA11 – 3WA13	
Type		NO or NC	
Contact reliability		From 1 mA at 5 V DC	
Rated insulation voltage U_i		500 V DC/500 V 50 AC/60 Hz	
Rated impulse withstand voltage U_{imp}		4 kV	
Breaking capacity			
Rated operational current I_e	DC12	24 V	10 A
		30 V	4 A
		48 V	2.5 A
		60 V	1 A
		110 V	0.4 A
		220/240 V	0.2 A
	DC13	24 V	3 A
		30 V	2.5 A
		48 V	1 A
		60 V	0.4 A
		110 V	0.2 A
		220/240 V	0.1 A
	AC12	≤ 440 V	10 A
	AC13	< 220 V	8 A
		220 ... 240 V	4 A
		320 ... 440 V	3 A

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

		3WA11 – 3WA13	
Type		NO contact	
Contact reliability		From 1 mA at 5 V DC [1]	
Rated insulation voltage U_i		250 V DC/250 V AC	
Breaking capacity			
Rated operational current I_e	DC12	24 V	5 A
		30 V	2.5 A
		48 V	2.5 A
		60 V	0.4 A
		110/127 V	0.4 A
		220/240 V	0.2 A
	DC13	24 V	2.5 A
		30 V	1 A
		48 V	1 A
		60 V	0.22 A
		110/127 V	0.22 A
		220/240 V	0.1 A
	AC12	≤ 240 V	6 A
	AC13	110 ... 127 V	5 A
		220 ... 240 V	4 A

[1] To ensure contact reliability at 1 mA, the contacts are gold-plated. If 1 mA is exceeded, the gold-plating is eroded. As a consequence, contact reliability at 1 mA can no longer be ensured.

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Accessory options

Further technical specifications

Trip alarm switches (S24, S25)		3WA11 – 3WA12	
1st trip alarm switch S24		CO contact	
2nd trip alarm switch S25		NO contact	
Contact reliability		From 1 mA at 5 V DC [1]	
Rated insulation voltage U_i		250 V DC/250 V 50 AC/60 Hz	
Breaking capacity			
Rated operational current I_e	DC12	24 V	5 A
		30 V	2.5 A
		48 V	2.5 A
		60 V	0.4 A
		110/127 V	0.4 A
		220/240 V	0.2 A
	DC13	24 V	2.5 A
		30 V	1 A
		48 V	1 A
		60 V	0.2 A
		110/127 V	0.2 A
		220/240 V	0.1 A
	AC12	≤ 240 V	6 A
	AC13	110 ... 127 V	5 A
		220 ... 240 V	4 A

[1] To ensure contact reliability at 1 mA, the contacts are gold-plated. If 1 mA is exceeded, the gold-plating is eroded. As a consequence, contact reliability at 1 mA can no longer be ensured.

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Position signaling switches on guide frame

		3WA11 – 3WA13	
Type		CO (not COM)	
Contact reliability		From 1 mA at 5 V DC [1]	
Rated insulation voltage U_i		250 V DC/250 V 50 AC/60 Hz	
Rated impulse withstand voltage U_{imp}		4 kV	
Connection type		Spring-loaded terminals	
Conductor cross-section that can be connected by customer		1 × 0.5 mm² (AWG 20) ... 1 × 2.5 mm² (AWG 14)	
Breaking capacity			
Rated operational current I_e	DC12	24 V	5 A
		30 V	2.5 A
		48 V	2.5 A
		60 V	0.4 A
		110/127 V	0.4 A
		220/240 V	0.2 A
	DC13	24 V	2.5 A
		30 V	1 A
		48 V	1 A
		60 V	0.22 A
		125 V	0.22 A
		250 V	0.1 A
	R300 DC	24 V	3 A
		30 V	2.5 A
		48 V	1 A
		60 V	0.4 A
		110 V	0.22 A
		220/240 V	0.11 A
	AC12	≤ 440 V	6 A
	AC13	< 220 V	5 A
		220 ... 240 V	4 A
		320 ... 440 V	3 A
	A300 AC	120 V	6 A
		240 V	3 A

The COM (X89) contacts may only be connected to the communications module.

[1] To ensure contact reliability at 1 mA, the contacts are gold-plated. If 1 mA is exceeded, the gold-plating is eroded. As a consequence, contact reliability at 1 mA can no longer be ensured.

ETU600

		3WA11 – 3WA13
Power supply		
Method of power supply		DC power supply unit
DC power supply unit		IEC 61558 SELV/PELV
Rated control supply voltage U_s	DC	24 V
Primary operating range		U_s ±20%
Power consumption		2.9 W
Max. current consumption		0.12 A
Max. starting current		0.35 A
Overvoltage category		CAT I
Integrated short-circuit protection		Yes
Protected against polarity reversal		Yes

System overview, page 1/30

Summary of power consumption data

Components	Voltage	Power consumption
ETU600	24 V DC	2.9 W
Closing coil CC/CC-COM 100% OP	24 ... 30 V DC 48 ... 60 V DC 110 ... 127 V AC/110 ... 125 V DC 208 ... 240 V AC/220 ... 250 V DC	40 W 40 W 40 VA/W 40 VA/W
Closing coil CC/CC-COM 5% OP	24 ... 30 V DC 48 ... 60 V DC 110 ... 127 V AC/110 ... 125 V DC 208 ... 240 V AC/220 ... 250 V DC	200 W 200 W 250 VA/W 250 VA/W
Shunt trip ST/ST-COM 100% OP	24 ... 30 V DC 48 ... 60 V DC 110 ... 127 V AC/110 ... 125 V DC 208 ... 240 V AC/220 ... 250 V DC	40 W 40 W 40 VA/W 40 VA/W
Shunt trip ST/ST-COM 5% OP	24 ... 30 V DC 48 ... 60 V DC 110 ... 127 V AC/110 ... 125 V DC 208 ... 240 V AC/220 ... 250 V DC	200 W 200 W 250 VA/W 250 VA/W
Spring charging motors	24 ... 30 V DC 48 ... 60 V DC 110 ... 127 V AC/110 ... 125 V DC 208 ... 240 V AC/220 ... 250 V DC	135 W 135 W 135 VA/W 135 VA/W
Remote reset magnets	24 ... 30 V DC 48 ... 60 V DC 110 ... 127 V AC/110 ... 125 V DC 208 ... 240 V AC/220 ... 250 V DC	60 W 60 W 60 VA/W 60 VA/W
Undervoltage releases (UVR/UVR-t)	24 V DC 30 V DC 48 V DC 60 V DC 110 ... 127 V AC/110 ... 125 V DC 208 ... 240 V AC/220 ... 250 V DC 380 ... 415 V AC	50 W 50 W 50 W 50 W 50 VA/W 50 VA/W 50 VA
IOM230	24 V DC	1 W
COM190/COM150	24 V DC	1 W

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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/3wa-configurator

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

Guide frames

			SZ 1	SZ 2	SZ 3				
Size	1					1			
	2					2			
	3					3			
Max. rated current $I_{n\,max}$ (Generate the selection of positions 6, 7 and 8 according to the list below)	630 ... 1000 A		■	–	–		1	0	
	1250 ... 1600 A		■	–	–		1	6	
	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} (Generate the selection of positions 6, 7 and 8 according to the list below)	At 500/690 V	N	■	–	–	55/42 kA			2
		S	■	■	–	66/50 kA			3
		M	■	■	–	85/66 kA			4
		H	–	■	■	100/85 kA			5
		C	–	■	–	130/100 kA			6
			–	–	■	3-pole: 150/150 kA 4-pole: 130/130 kA			6
	At 690/1000/1150 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			■	■ [2]	■	Vertical			1
			■ [1]	■ [3]	■ [5]	Horizontal			2
			■ [1]	■ [4]	■ [6]	Front			3
			■ [1]	■ [4]	■ [7]	Flange			4
			■ [1]	■ [3]	■ [5]	Vertical on top/horizontal at the bottom			5
			■ [1]	■ [3]	■ [5]	Horizontal on top/vertical at the bottom			6
			■ [1]	■ [4]	■ [6]	Flange on top/horizontal at the bottom			7
			■ [1]	■ [4]	■ [6]	Horizontal on top/flange at the bottom			8

[1] Only ≤ 2000 A is available for size 1
[2] 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.
[3] Only ≤ 3200 A is available for size 2
[4] Only ≤ 3200 A is available for size 2, not available for breaking capacity C
[5] Only ≤ 5000 A is available for size 3
[6] Only for 4000 A is available for size 3, breaking capacity H available
[7] For size 3, only 4000 A applicable at a short-circuit current of up to 100 kA

The following combinations of positions 6, 7 and 8 of the article number are technically feasible

Size	Breaking capacity at $I_{n\,max}$	630 A	800 A	1000 A	1250 A	1600 A	2000 A	2500 A	3200 A	4000 A	5000 A	6300 A
		Representation 6, 7, 8										
1	N	10-2	10-2	10-2	16-2	16-2	20-3	25-3	–	–	–	–
	S	10-3	10-3	10-3	16-3	16-3	20-3	25-3	–	–	–	–
	M	20-4	20-4	20-4	20-4	20-4	20-4	25-4	–	–	–	–
	E	20-8	20-8	20-8	20-8	20-8	20-8	25-8	–	–	–	–
2	S	–	–	–	–	–	20-5	25-5	32-5	40-5	–	–
	M	–	–	–	–	–	20-5	25-5	32-5	40-5	–	–
	H	–	–	–	–	–	20-5	25-5	32-5	40-5	–	–
	E	–	–	–	–	–	20-8	25-8	32-8	40-8	–	–
	C	–	–	–	–	–	32-6	32-6	32-6	–	–	–
3	H	–	–	–	–	–	–	–	–	40-5	50-5	63-5
	E	–	–	–	–	–	–	–	–	50-8	50-8	63-8
	C	–	–	–	–	–	–	–	–	50-8	50-8	63-8

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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/3wa-configurator**

1

	5	6	7	8		9	10	11	12		13	14	15	16
3WA8					–					–	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 (3 × connected position, 2 × test position, 1 × disconnected position)	C
	Position signaling switch PSS-COM (1 × connected position, 1 × test position, 1 × disconnected position) plus connection to a communications module	G

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

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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/3wa-configurator**

	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
		≤ 1500 V DC	20 kA at 1500 V DC [1]	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 (3 × connected position, 2 × test position, 1 × disconnected position)			C
	Position signaling switch PSS-COM (1 × connected position, 1 × test position, 1 × disconnected position) plus connection to a communications module			G

[1] 1500 V DC applications only for 4-pole circuit breakers and for breaking capacity E

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Accessories and spare parts

Accessories for electronic trip unit

Electronic trip unit

- **Note:** The electronic trip unit is supplied without an option plug. The option plug must be ordered separately. The range of functions of the ETU600 corresponds to the "Current metering" application package.

Basic Protective functions	Article No.	Price €
ETU300 LSI/LSIG	3WA9111-0EE32	
LSI/LSIG	3WA9111-0EE62	
LSIG Hi-Z	3WA9111-0EE63	

Spare part battery for ETU600

	Article No.	Price €
	3WA9111-0EE81	

Option plug

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

Function packages for ETU600

Protective and alarm functions	Article No.	Price €
Ground fault alarm (GF alarm)	3WA9111-0ES01	
Directional 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.**	**Price €**
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	
Underfrequency and overfrequency	3WA9111-0ES15	
Total harmonic distortion for current and voltage	3WA9111-0ES16	
Phase sequence detection	3WA9111-0ES17	
Functional expansions	**Article No.**	**Price €**
Second protection parameter set	3WA9111-0ES21	
Waveform memory	3WA9111-0ES24	
Extended metering function	**Article No.**	**Price €**
Upgrade to metering function PMF-II Basic Power Monitoring (metering values, see catalog page 1/25)	3WA9111-0ES52	
Upgrade to metering function PMF-III Advanced Power Monitoring (metering values, see catalog page 1/25)	3WA9111-0ES53	

Standard license to activate test function in SENTRON Powerconfig software

Version	Article No.	Price €
For testing the protective functions of SENTRON circuit breakers	7KN2720-0CE00-1YC1	

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Accessories for electronic trip unit

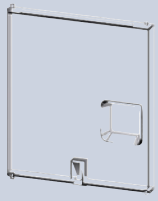
Upgrading to "ready4COM" feature through BSS200 breaker status sensor for ETU600

Version	Article No.	Price €
• Gathers information about the statuses of the circuit breaker via signaling switches and transmits it to the **Cubicle**BUS[2] • Controls the communication-capable CC-COM closing coil and the ST-COM shunt trip in a circuit breaker with the ready4COM feature • The BSS200 breaker status sensor is fitted in every circuit breaker with ETU600 of the ready4COM application package and with the PMF-I to PMF-III metering functions	3WA9111-0EC40	

External current sensors for the N conductor

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

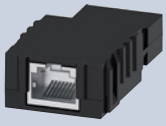
Cover for electronic trip unit



- The scope of supply includes both the top cover with safety lock and the sealable bottom cover of the rotary coding switches.

Accessory for	Article No.	Price €
ETU300	3WA9111-0EM21	
ETU600	3WA9111-0EM22	

Adapter for connecting the ETU300 to the TD400



Version	Article No.	Price €
Via the adapter, the ETU300 can be connected to the TD400 to supply it with an external voltage. There is no parameterization or documentation option via SENTRON Powerconfig.	3VW9011-0AT43	

Automatic reset of the reclosing lockout

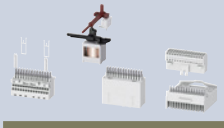
Version	Article No.	Price €
Spare part for option K01 or for retrofitting	3WA9111-0EM31	

Remote trip alarm reset coils

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

Voltage	Article No.	Price €
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 reclosing lockout



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

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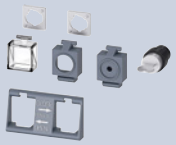
Accessories and spare parts

Locking provisions and interlocks

Interlocking sets for mechanical Open/Close



- 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.	Price €
Without safety lock	3WA9111-0BA21	
Made by CES	3WA9111-0BA22	
Made by IKON	3WA9111-0BA23	

Locking provision against unauthorized closing from the operator panel

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

Type	Scope of supply	Article No.	Price €
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

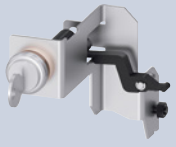
- The disconnector unit fulfills the requirements for main circuit breakers acc. to EN 60204-1
- Consisting of lock in the guide frame, active in connected position, function is retained when circuit breaker is replaced
- Spare part for option R60, R61, R68

Type	Scope of supply	Article No.	Price €
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 provisions for charging handle with padlock

Version	Scope of supply	Article No.	Price €
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

Type	Scope of supply	Article No.	Price €
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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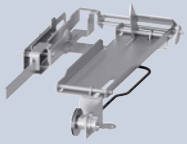
Locking provisions and interlocks

Interlocking 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

Type	Article No.	Price €
Made by CES	3WA9111-0BA43	

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



- Consisting of Bowden cable and the 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")

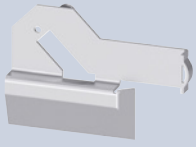
Type	Article No.	Price €
Made by CES	3WA9111-0BA81	
Made by IKON	3WA9111-0BA82	
Made by PROFALUX	3WA9111-0BA83	
Made by RONIS	3WA9111-0BA84	

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

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

Version		Article No.	Price €
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 mechanisms to prevent movement of the withdrawable circuit breakers in the disconnected position" (order codes "R81", "R85" or "R86").

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

Mechanical interlocks

- 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.	Price €
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.	Price €
	3WA9111-0BB31	

Bowden cable for mutual mechanical interlocking

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

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Accessories and spare parts

Indicators and control elements

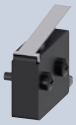
Ready-to-close signaling switches (S20)

Version	Article No.	Price €
Spare part for signaling switch installed as standard	3WA9111-0AH01	

1st trip alarm switch (S24)

Version	Article No.	Price €
Spare part for signaling switch installed as standard	3WA9111-0AH02	

2nd trip alarm switch (S25)



- Can only be used with a circuit breaker with an electronic trip unit without ready4COM
- The 1st trip alarm switch (1 changeover contact) is installed in every circuit breaker with a trip unit as standard

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

Mechanical operating cycles counter (5-digit)

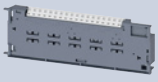
Version	For circuit breakers/non-automatic circuit breakers	Article No.	Price €
Spare part for option C01	With manual operating mechanism	3WA9111-0AH04	
	With spring charging motor	3WA9111-0AH05	

Spring charge 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 charge signaling switch can also be retrofitted

Contacts	Article No.	Price €
1 NO	3WA9111-0AH06	

Position signaling switch for withdrawable circuit breakers



- All conventional contacts are implemented as changeover contacts

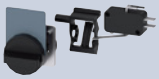
Contacts		Article No.	Price €
PSS321	3 × connected position, 2 × test position, 1 × disconnected position	3WA9111-0AH11	
PSS111-COM	1 × connected position, 1 × test position, 1 × disconnected position and option for connection to a communications module COM (Signal: "disconnected position" and "absent")	3WA9111-0AH12	
PSS400-COM	4 × connected position and option for connection to a communications module COM (Signal: "disconnected position" and "absent")	3WA9111-0AH13	
PSS600	6 × connected position	3WA9111-0AH14	

Local electric close (S10) for operator panel

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

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

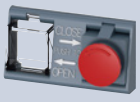
Motor disconnect switch (S12)



- 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.	Price €
Spare part for option C25	3WA9111-0AH24	

Emergency OPEN button



- Mushroom pushbutton instead of local mechanical open

Version	Article No.	Price €
Spare part for option C24	3WA9111-0AH25	

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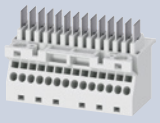
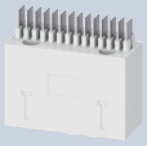
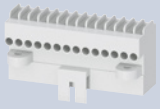
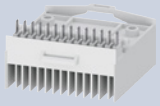
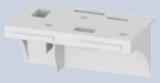
Secondary disconnect terminals for circuit breakers and guide frames

- 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
  - Circuit breakers with ETU600 LSI or LSIG with 4 blocks
  - Circuit breakers with ETU600 LSIG-HiZ with 5 blocks

Secondary disconnect terminal

	Version	Type	Article No.	Price €
	Base part (1)		3WA9111-0AB01	
	1000 V extension [1]		3WA9111-0AB02	
	Manual connector (2)	Screw connection	3WA9111-0AB03	
		Push-in connection	3WA9111-0AB04	
		Ring lug connection	3WA9111-0AB05	
	Coding kits (3)	For secondary disconnect terminal blocks X5 to X9 for fixed-mounted circuit breakers	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 uninterrupted duty

Version	Voltage	Article No.	Price €
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-COM)/shunt trip (ST-COM)

- Suitable for uninterrupted duty

Version	Voltage	Article No.	Price €
For circuit breakers and non-automatic circuit breakers with the "ready4com" feature 100% OP Switching time ≦ 80 ms Switching time via COM ≦ 120 ms	24 ... 30 V DC	3WA9111-0AD32	
	48 ... 60 V DC	3WA9111-0AD34	
	110 ... 125 V DC/110 ... 127 V AC	3WA9111-0AD35	
	220 ... 250 V DC/208 ... 240 V AC	3WA9111-0AD36	

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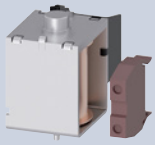
Accessories and spare parts

Auxiliary releases

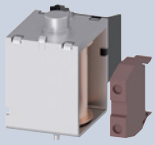
Closing coils (CC)



- For momentary duty, with cut-off switch S15 (NC)

Version	Voltage	Article No.	Price €
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	

Shunt trips (ST)



- For momentary duty, with cut-off switch S14 (NO)

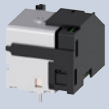
Version	Voltage	Article No.	Price €
5% OP Switching time 50 ms	24 ... 30 V DC	3WA9111-0AD22	
	48 ... 60 V DC	3WA9111-0AD24	
	110 ... 125 V DC/110 ... 127 V AC	3WA9111-0AD25	
	220 ... 250 V DC/208 ... 240 V AC	3WA9111-0AD26	

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 trips

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

Undervoltage release (UVR)



Version	Voltage	Article No.	Price €
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) [1], 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	

[1] The maximum allowable cable length to the EMERGENCY-OFF actuator (quick shutdown) is currently < 50 m (maximum allowable cable length between the terminals < 100 m).

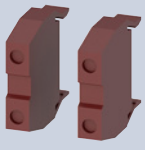
Operating mechanism

Spring charging motor to charge the stored energy mechanism

Voltage	Article No.	Price €
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.	Price €
2 NO + 2 NC	3WA9111-0AG01	
2 NO	3WA9111-0AG02	
1 NO + 1 NC	3WA9111-0AG03	

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Door sealing frame, protective cover

Door sealing frame

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

Protective covers IP55

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

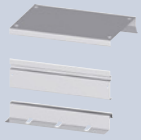
	Article No.	Price €
	3WA9111-0AP03	

Arc chute, arc chute cover

Arc chute

Voltage	Size	Breaking capacity		Article No.	Price €
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	For fixed-mounted breakers	3WA9111-0AS04	
			For withdrawable circuit breakers	3WA9111-0AS05	
	2	E		3WA9111-0AS12	
	3	E		3WA9111-0AS18	
600 V DC	2	D		3WA9111-0AS13	
1000 V DC	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.	Price €
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.	Price €
1, 2	3WA9111-0AR11	
3	3WA9111-0AR12	

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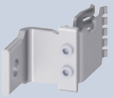
Accessories and spare parts

Grounding connection

Grounding connection between the guide frame and the circuit breaker



- Up to 30 kA or 60 kA ground-fault current
- 2 modules must be used for up to 60 kA ground-fault current

Contact module	Size	Number of poles	Article No.	Price €
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	
		4-pole [1]	3WA9111-0BG22	
	3	3-pole [2]	3WA9111-0BG13	
		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 bracket

Support bracket

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

Article No.	Price €
3WA9111-0BB50	

Modules of the **Cubicle**BUS²

COM190 PROFINET IO/Modbus TCP communications module [1]

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

COM150 communications module Modbus RTU

Version	Article No.	Price €
Including adapter for mounting on the secondary disconnect terminal system of the circuit breaker, adapter for mounting on DIN rail, connecting cables and terminating resistor for **Cubicle**BUS²	3WA9111-0EC15	

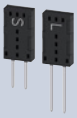
IOM230 digital input/output module (2 inputs and 3 outputs)

Version	Article No.	Price €
Including adapter for mounting on the secondary disconnect terminal system of the circuit breaker, adapter for mounting on DIN rail, connecting cables and terminating resistor for **Cubicle**BUS² • Type of output contact: NO • Maximum uninterrupted current of an output at 110 ... 230 V AC: 0.2 A	3WA9111-0EC11	

IOM350 digital input/output module (3 inputs and 5 outputs)

Version	Article No.	Price €
For mounting on DIN rail, including connecting cables and terminating resistor for **Cubicle**BUS² • Type of output contact: CO • Maximum uninterrupted current of an output at 110 ... 230 V AC: 10 A	3WA9111-0EC12	

Terminating resistor for CubicleBUS²



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

Adapters

Version	Article No.	Price €
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 DIN rail	3WA9111-0EC61	

ZSI200 Zone-selective interlocking module

Version	Article No.	Price €
Including adapter for mounting on the secondary disconnect terminal system of the circuit breaker, adapter for mounting on DIN rail, connecting cables and terminating resistor for **Cubicle**BUS²	3WA9111-0EC10	

[1] For connecting the Ethernet cable, connectors angled 90° to the right are recommended, e.g. PROFINET connector 6GK1901-1BB20-2AA0.

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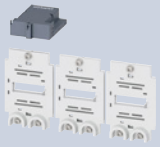
Internal voltage tap

Set of components for conversion of an existing internal voltage tap on the main conducting paths

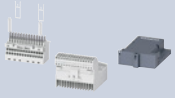
Conversion	Circuit breaker	Size	Article No.	Price €
From bottom to top	3-pole	1	3WA9111-0EK11	
		2	3WA9111-0EK12	
		3	3WA9111-0EK13	
	4-pole	1	3WA9111-0EK21	
		2	3WA9111-0EK22	
		3	3WA9111-0EK23	
From top to bottom	3-pole	1	3WA9111-0EK31	
		2	3WA9111-0EK32	
		3	3WA9111-0EK33	
	4-pole	1	3WA9111-0EK41	
		2	3WA9111-0EK42	
		3	3WA9111-0EK43	

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



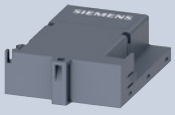
For breaking capacity	Set for circuit breaker	Size	Article No.	Price €
N, S, M, H, C with VTM680 voltage tap module, with power supply of ETU600	3-pole	1	3WA9111-0EK51	
		2	3WA9111-0EK52	
		3	3WA9111-0EK53	
	4-pole	1	3WA9111-0EK61	
		2	3WA9111-0EK62	
		3	3WA9111-0EK63	
E with VTM640 voltage tap module	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.	Price €
2, 3 including VTM640 voltage tap module and the necessary connection components	3WA9111-0EK81	

Voltage tap module



Version	For breaking capacity	Article No.	Price €
VTM680, with power supply of ETU600 [1]	N, S, M, H, C	3WA9111-0EM12	
VTM640	E	3WA9111-0EM11	

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.	Price €
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	4000 A AC (up to a max. short-circuit current of 100 kA)	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.	Price €
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	4000 A AC (up to a max. short-circuit current of 100 kA)	3WA9111-0AL32	

[1] When replacing the VTM680 voltage tap module in an 3WA air circuit breaker with an ID number lower than ID No. OE/230101500000, the internal cable harness of the voltage tap must also be replaced. In this case, the accessory "Retrofit of the internal voltage tap on the lower main conducting paths" is required.

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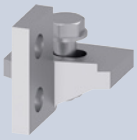
Accessories and spare parts

Main conductor connections, fixed-mounted versions

Rear vertical main connections



Size	Breaking capacity | Rated current I_n	Article No.	Price €
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	

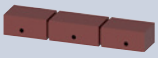
[1] In the case of vertical connection size 1 with breaking capacity N and S, up to 1000 A one 3WA9111-0AM11 vertical connection is required for each connection, from 1250 A to 2000 A or with breaking capacity M or E two 3WA9111-0AM11 vertical connections are required for each connection.
[2] In the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

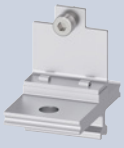


Number of poles	Size	Article No.	Price €
3-pole, set for 3 bars, top or bottom	1	3WA9111-0AN81	
	2	3WA9111-0AN82	
	3	3WA9111-0AN83	
4-pole, set for 4 bars, top or bottom	1	3WA9111-0AN84	
	2	3WA9111-0AN85	
	3	3WA9111-0AN86	

Rear vertical main connections

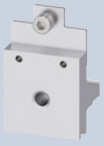
Size	Breaking capacity | Rated current I_n	Article No.	Price €
1	N, S | ≤ 1000 A AC	3WA9111-0AV11	
	N, S | 1250 ... 2000 A AC; M, E | ≤ 2000 A AC	3WA9111-0AV12	
2	S, M, H, E | 2000 A AC; D, E | ≤ 2000 A DC [2]	3WA9111-0AV21	
	S, M, H, E | 2500 A AC [2]	3WA9111-0AV22	
	S, M, H, E | 3200 A AC; D, E | 4000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

Connecting flange



Size	Breaking capacity | Rated current I_n	Article No.	Price €
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	

[1] When using front-accessible main connections (withdrawable circuit breakers) supports are required
[2] Not for circuit breakers with very high breaking capacity C

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Conversion kit

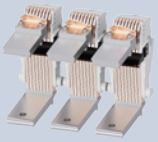
Conversion kit for converting fixed-mounted circuit breakers into withdrawable circuit breakers

- 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 breaking capacity E

Number of poles	Size	Article No.	Price €
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

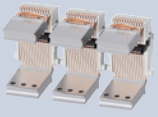
Main contact elements for AC circuit breakers



- **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.	Price €
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	
	2	S, M, H, E	2000 A	3WA9111-0AQ08	
			2500 A	3WA9111-0AQ11	
			3200 A	3WA9111-0AQ13	
			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	
	2	S	2000 A	3WA9111-0AQ58	
			2500 A	3WA9111-0AQ61	
			3200 A	3WA9111-0AQ63	
			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.	Price €
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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Accessories and spare parts

Interfaces

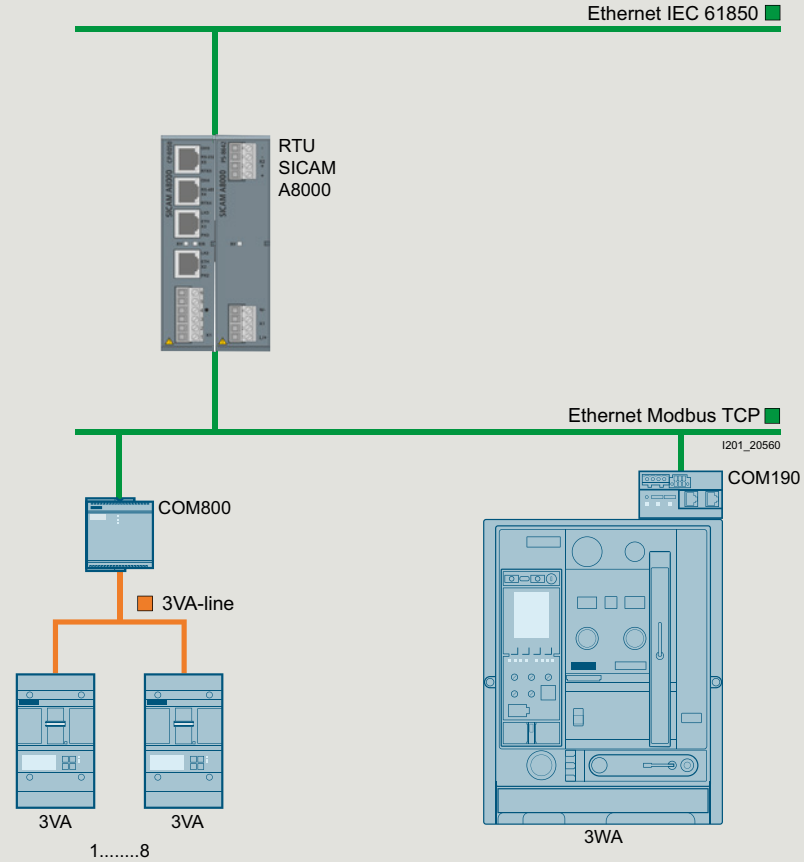
Interface to the IEC 61850

- The SICAM A8000 smart data concentrator 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	Operational voltage	Article No.	Price €
SICAM CP-8021 [1]	–	6MF2802-1AA00	
SICAM CP-8031 [2]	–	6MF2803-1AA00	
SICAM CP-8050 [3]	–	6MF2805-0AA00	
SICAM PS-8620	24 ... 60 V DC (12 W)	6MF2862-0AA00	
SICAM PS-8622	110 ... 220 V DC (12 W)	6MF2862-2AA00	

[1] Dimensioned for device quantities of max. 1 × 3WA and 1 × 3VA
[2] Dimensioned for device quantities of max. 1 × 3WA and 8 × 3VA
[3] Dimensioned for device quantities of max. 3 × 3WA and 8 × 3VA or 2 × 3WA and 8 × 3VA and 1 × PAC4200

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 via SiePortal www.siemens.com/lowvoltage/product-support (109816057).



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Appendix

Conditions of sale and delivery

1. General Provisions

By using this catalog you can purchase hard- and software products as well as services (together hereinafter referred to as "products") described therein from Siemens Aktiengesellschaft subject to the following Terms and Conditions of Sale and Delivery (hereinafter referred to as "T&C"). Note, for products purchased from any Siemens entity having a registered office outside of Germany, the respective terms and conditions of sale and delivery of the respective Siemens entity apply exclusively. The following T&C apply exclusively for orders placed with Siemens Aktiengesellschaft, Germany.

1.1 For customers with a seat or registered office in European Union

For customers with a seat or registered office in European Union, the following terms and conditions apply subordinate to T&C:

- for products, which include specific terms and conditions in the text of the product description, these specific terms and conditions shall apply and subordinate thereto,
- for stand-alone software products and software products forming a part of a product or project, the "General Conditions for Software Products for Infrastructure & Industry Business (German law)" [1] and/or
- for consulting services the "Allgemeine Geschäftsbedingungen für Beratungsleistungen für Infrastructure & Industry Geschäft (Deutsches Recht)" [1] (available only in German) and/or
- for other services, the "Supplementary Terms and Conditions for Services for Infrastructure & Industry Business (German Law) ("BL")" [1] and/or
- for other products the "General Conditions for the Supply of Products and Services of the Electrical and Electronics Industry" [1].
  In case such products should contain Open Source Software, the conditions of which shall prevail over the "General Conditions for the Supply of Products and Services of the Electrical and Electronics Industry" [1], the Product will be given a note as to which special conditions apply to this open source software. This shall apply mutatis mutandis for notices referring to other third-party software components.

1.2 For customers with a seat or registered office outside European Union

For customers with a seat or registered office outside European Union, the following terms and conditions apply subordinate to T&C:

- for products, which include specific terms and conditions in the description text, these specific terms and conditions shall apply and subordinate thereto,
- for consulting services the "Standard Terms and Conditions for Consulting Services for Infrastructure & Industry Business (Swiss Law)" [1] and/or
- for other services the "International Terms & Conditions for Services" [1] supplemented by "Software Licensing Conditions" [1] and/or
- for other products the "International Terms & Conditions for Products" [1] supplemented by "Software Licensing Conditions" [1]

1.3 For customers with master or framework agreement

To the extent products offered are covered by an existing master or framework agreement, the terms and conditions of that agreement shall apply instead of T&C.

2. Prices

The prices are in € (Euro) ex point of delivery, exclusive of packaging.

The sales tax (value added tax) is not included in the prices. It shall be charged separately at the respective rate according to the applicable statutory legal regulations.

Prices are subject to change without prior notice. We will charge the prices valid at the time of delivery.

To compensate for variations in the price of raw materials (e.g. silver, copper, aluminum, lead, gold, dysprosium and neodym), surcharges are calculated on a daily basis using the so-called metal factor for products containing these raw materials. A surcharge for the respective raw material is calculated as a supplement to the price of a product if the basic official price of the raw material in question is exceeded.

The metal factor of a product indicates the basic official price (for those raw materials concerned) as of which the surcharges on the price of the product are applied, and with what method of calculation. The metal factor, provided it is relevant, can be found in the respective product description.

An exact explanation of the metal factor can be downloaded at:

https://mall.industry.siemens.com/legal/ww/en/terms_of_trade_en.pdf

To calculate the surcharge (except in the cases of copper, dysprosium and neodym), the official price from the day prior to that on which the order was received or the release order was effected is used.

To calculate the surcharge applicable to copper, the official price from two days prior to that on which the order was received or the release order was effected is used.

To calculate the surcharge applicable to dysprosium and neodym ("rare earths"), the corresponding three-month basic average price in the quarter prior to that in which the order was received or the release order was effected is used with a onemonth buffer (details on the calculation can be found in the explanation of the metal factor).

[1] The text of the Terms and Conditions of Siemens AG can be downloaded at **https://mall.industry.siemens.com/legal/ww/en/terms_of_trade_en.pdf**

3. Additional Terms and Conditions

The dimensions are in mm. In Germany, according to the German law on units in measuring technology, data in inches apply only to devices for export.

Illustrations are not binding.

Insofar as there are no remarks on the individual pages of this catalog – especially with regard to data, dimensions and weights given – these are subject to change without prior notice.

4. Export Control and Sanctions Compliance

4.1 General

Customer shall comply with all applicable sanctions, embargoes and (re-)export control laws and regulations, and, in any event, with those of the European Union, the United States of America and any locally applicable jurisdiction (collectively "Export Regulations").

4.2 Checks for Products

Prior to any transaction by customer concerning products (including hardware, documentation and technology) delivered by Siemens, or products (including maintenance and technical support) performed by Siemens with a third party, customer shall check and certify by appropriate measures that

- (i) the customer's use, transfer, or distribution of such products, the brokering of contracts or the provision of other economic resources in connection with products will not be in violation of any Export Regulations, also taking into account any prohibitions to circumvent these (e.g., by undue diversion)
- (ii) the products are not intended or provided for prohibited or unauthorized non-civilian purposes (e.g. armaments, nuclear technology, weapons, or any other usage in the field of defense and military);
- (iii) customer has screened all direct and indirect parties involved in the receipt, use, transfer, or distribution of the products against all applicable restricted party lists of the Export Regulations concerning trading with entities, persons and organizations listed therein and
- (iv) products within the scope of items-related restrictions, as specified in the respective annexes to the Export Regulations, will not, unless permitted by the Export Regulations, be
- (a) exported, directly or indirectly (e.g., via Eurasian Economic Union (EAEU) countries), to Russia or Belarus, or
- (b) resold to any third party business partner that does not take a prior commitment not to export such products to Russia or Belarus.

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Customer shall not, unless permitted by the Export Regulations or respective governmental licenses or approvals,

- (i) download, install, access or use the products from or in any location prohibited by or subject to comprehensive sanctions or subject or to license requirements according to the Export Regulations;
- (ii) grant access to, transfer, (re-)export (including any "deemed (re-)exports"), or otherwise make available the products to any entity, person, or organization identified on a restricted party list of the Export Regulations;
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- (iv) upload to a products platform any customer content unless it is non-controlled (e.g. in the EU: AL = N; in the U.S.: ECCN = N or EAR99);
- (v) facilitate any of the afore mentioned activities by any user. Customer shall provide all users with all information necessary to ensure compliance with the Export Regulations.

4.4 Semiconductor Development

Customer will not, without advance written authorization from Siemens, use offerings for the development or production of integrated circuits at any semiconductor fabrication facility located in China meeting the criteria specified in the U.S. Export Administration Regulations, 15 C.F.R. 744.23.

4.5 Information

Upon request by Siemens, customer shall promptly provide Siemens with all information pertaining to users, the intended use and the location of use or the final destination (in the case of hardware, documentation and technology) of the products. Customer will notify Siemens prior to customer disclosing any information to Siemens that is defense-related or requires controlled or special data handling pursuant to applicable government regulations, and will use the disclosure tools and methods specified by Siemens.

4.6 Reservation

Siemens shall not be obligated to fulfill this agreement if such fulfillment is prevented by any impediments arising out of national or international foreign trade or customs requirements or any embargoes or other sanctions. Customer acknowledges that Siemens may be obliged under the Export Regulations to limit or suspend access by customer and/or users to products.

5. Miscellaneous

Errors excepted and subject to change without prior notice.

Link directory

Catalog LV 13

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DELTA

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3WA Air Circuit Breakers
SENTRON

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SiePortal
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sieportal.siemens.com

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SIRIUS

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Siemens TIA Selection Tool
for the selection, configuration and ordering of TIA products and devices

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Further information on low-voltage power distribution and electrical installation technology is available on the Internet at **www.siemens.com/lowvoltage**

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Siemens provides products and solutions with industrial cybersecurity functions that support the secure operation of plants, systems, machines and networks.

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