

**SIEMENS**



## Configuration Manual

# Industrial Controls

## Load Feeders

### Configuring the SIRIUS Modular System -

Selection data for Fuseless and Fused Load Feeders

## Industrial Controls

### Load feeders Configuring the SIRIUS modular system

#### Configuration Manual

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### Warning notice system

This manual contains notices you have to observe in order to ensure your personal safety, as well as to prevent damage to property. The notices referring to your personal safety are highlighted in the manual by a safety alert symbol, notices referring only to property damage have no safety alert symbol. These notices shown below are graded according to the degree of danger.

#### DANGER

indicates that death or severe personal injury **will** result if proper precautions are not taken.

#### WARNING

indicates that death or severe personal injury **may** result if proper precautions are not taken.

#### CAUTION

indicates that minor personal injury can result if proper precautions are not taken.

#### NOTICE

indicates that property damage can result if proper precautions are not taken.

If more than one degree of danger is present, the warning notice representing the highest degree of danger will be used. A notice warning of injury to persons with a safety alert symbol may also include a warning relating to property damage.

### Qualified Personnel

The product/system described in this documentation may be operated only by **personnel qualified** for the specific task in accordance with the relevant documentation, in particular its warning notices and safety instructions.

Qualified personnel are those who, based on their training and experience, are capable of identifying risks and avoiding potential hazards when working with these products/systems.

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#### WARNING

Siemens products may only be used for the applications described in the catalog and in the relevant technical documentation. If products and components from other manufacturers are used, these must be recommended or approved by Siemens. Proper transport, storage, installation, assembly, commissioning, operation and maintenance are required to ensure that the products operate safely and without any problems. The permissible ambient conditions must be complied with. The information in the relevant documentation must be observed.

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### Disclaimer of Liability

We have reviewed the contents of this publication to ensure consistency with the hardware and software described. Since variance cannot be precluded entirely, we cannot guarantee full consistency. However, the information in this publication is reviewed regularly and any necessary corrections are included in subsequent editions.

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# Introduction

## SIRIUS modular system

The SIRIUS modular system comprises devices for use in switching, starting, protecting, and monitoring, as well as combinations thereof.

Device	Performance range / adjustable current range
3RT contactors	3 ... 250 kW (P / AC-3 / 400 V)
3RH contactor relays	Switching in the control circuit
3RF solid-state switching devices	2.2 ... 7.5 kW (P / U <sub>e</sub> / 400 V)
3RW soft starters	1.5 ... 250 kW (P / U <sub>e</sub> / 400 V)
3RV motor starter protectors	0.11 ... 100 A
3RU thermal overload relays	0.11 ... 100 A
3RB electronic overload relays	0.1 ... 630 A
3RR current monitoring relays	1.6 ... 80 A

The devices named above are supplemented for the main circuit by devices for the control circuit: 3RA28 function modules for mounting on 3RT2 contactors and 3RA27 function modules for connection to the higher-level control.

## Switching and starting

Table 1- 1 Function - switching and starting - contactors

Size						
S00	S0	S2	S3	S6	S10	S12
						

Table 1- 2 Function - switching and starting - solid-state switching devices

Size	
S00	S0
	

Table 1- 3 Function - switching and starting - soft starters

Size					
S00	S0	S2	S3	S6	S10 / S12
					

## Protecting

Table 1- 4 Function - protecting - motor starter protectors

Size						
S00	S0	S2	S3	S6	S10	S12
				—	—	—

Table 1- 5 Function - protecting - electronic overload relays

Size					
S00	S0	S2	S3	S6	S10 / S12
					

Table 1- 6 Function - protecting - thermal overload relays

Size						
S00	S0	S2	S3	S6	S10	S12
				—	—	—

## Monitoring

Table 1- 7 Function - monitoring - current monitoring relays

<b>Size</b>						
S00	S0	S2	S3	S6	S10	S12
			—	—	—	—

## Feeders

Table 1- 8 Function - Feeders - pre-assembled load feeders

<b>Size</b>						
S00	S0	S2	S3	S6	S10	S12
			—	—	—	—

Table 1- 9 Function - feeders - compact starters

Size	
S00	S0
	

Table 1- 10 Function modules

Components	Size						
	S00	S0	S2	S3	S6	S10	S12
Function modules for mounting on contactors					—	—	—
Function modules for connection to the automation level					—	—	—

Highlights	
	<ul style="list-style-type: none"> <li>• Load feeders: Up to 250 kW / 400 V <ul style="list-style-type: none"> <li>• Comprehensive variety of starter technologies: electromechanical, semiconductors, soft starters</li> <li>• Short-circuit breaking capacity up to 150 kA</li> </ul> </li> </ul>
	<ul style="list-style-type: none"> <li>• Modular design: Coordinated components ensure combinability</li> </ul>
	<ul style="list-style-type: none"> <li>• Variants and sizes: Economical and flexible with 7 sizes and a broader performance range</li> </ul>
	<ul style="list-style-type: none"> <li>• Accessories: Optimum variance with uniform accessories</li> </ul>
	<ul style="list-style-type: none"> <li>• Type of construction: Space-saving design with small device width and butt-mounting type of construction up to 60°C</li> </ul>
	<ul style="list-style-type: none"> <li>• Setup: Fast startup, short setting-up times, and simple wiring</li> </ul>
	<ul style="list-style-type: none"> <li>• Communication: Optional connection to AS-Interface or IO-Link with function modules</li> </ul>
	<ul style="list-style-type: none"> <li>• Maintenance: Extremely durable, low maintenance, and reliable</li> </ul>
	<ul style="list-style-type: none"> <li>• Approvals: Global approvals and certifications, such as UL, CSA, CCC, shipbuilding ...</li> </ul>
	<ul style="list-style-type: none"> <li>• Mounting: Permanently secure mounting, screw or snap fitting</li> </ul>
	<ul style="list-style-type: none"> <li>• Spring-loaded connection technology: Quick and secure connection, vibration-proof, and maintenance-free</li> </ul>
	<ul style="list-style-type: none"> <li>• Environment: Environment friendly production and materials, recycling capability, low power loss</li> </ul>
	<ul style="list-style-type: none"> <li>• Design: Clear-cut, ergonomic design (winner of the iF Product Design Award)</li> </ul>

# General information

# 2

## General criteria for the selection of devices

The motor starter protectors, contactors, solid-state switching devices, soft starters and overload relays in the following tables are all specified in their basic versions with screw terminals, i.e. (in particular) without accessories. Where available, of course, versions with spring-loaded terminals or ring cable lug connections as well as accessories such as auxiliary switches, auxiliary trip units etc. can be used.

The contactors listed have a rated control supply voltage  $U_s$  of 230 V AC, 50 Hz. Versions with other voltages can also be used.

The 3RU21 thermal overload relay and the 3RB30 / 3RB31 electronic overload relays can be directly mounted onto the contactor. The 3RB22 / 3RB23 / 3RB24 electronic overload relay and the SIMOCODE pro 3UF7 motor protection and control device are essentially used for stand-alone installation. In their basic version, these devices are specified with a rated control supply voltage of 230 V AC.

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### Note

When designing a system, comply with all valid national installation specifications and standards.

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## Mounting the combinations

When mounting the devices, specific arcing spaces must be maintained so that short-circuits can be cleared safely and reliably. The appropriate installation guidelines can be found in Section Installation guidelines (Page 232).

The technical data of the individual devices must be taken into account when selecting a device.

### 400 V / 500 V / 690 V AC

The tables below are primarily structured for the 400 V, 500 V and 690 V line voltages for grounded networks (at 50 and 60 Hz) generally found in IEC regions.

Tests are carried out with a test voltage which lies 10% above these values (further details can be found in the test reports). Thus, the specified combinations can also be used for other networks as long as their maximum voltage does not exceed the test voltage. This means, for instance, the combinations for 400 V can also be used for 415 V networks that have a line supply tolerance of +5%.

The tables shown in this document are always based on certificates of compliance with the order and on test reports.

If more detailed information is required, these can be downloaded from the Siemens Industry Online Support (<https://support.industry.siemens.com/cs/ww/en/ps>) portal.

## Ambient conditions

A maximum ambient temperature of 60°C applies to all electromechanical controlgear, and 40°C to soft starters and solid-state contactors. Higher temperatures are possible with derating. For details, refer to the System Manual or contact Technical Assistance.

A maximum installation height of 2000 m applies to electromechanical controlgear, and 1000 m to soft starters and solid-state contactors.

Higher installation altitudes are also possible with derating. For details refer to the appropriate manuals.

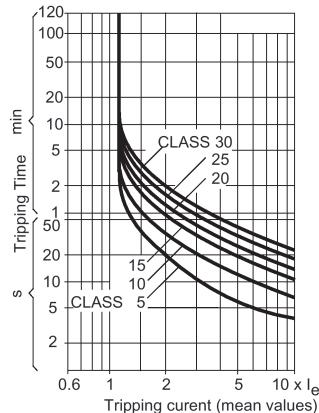
## Trip classes

### CLASS 5, CLASS 10, CLASS 20, CLASS 30 and CLASS 40

Trip classes, according to IEC 60947-4-1, define the time intervals within which the protection equipment (overload release of a motor starter protector or overload relay) must trip from the cold state, for a symmetrical, three-phase load with a 7.2-fold set current  $I_e$ .

The tripping times are as follows:

- CLASS 5 and CLASS 10 between 2 s and 10 s,
- CLASS 20 between 4 s and 20 s,
- CLASS 30 between 9 s and 30 s,
- CLASS 40 between 30 s and 40 s.



In practice, devices with trip CLASS 5 and CLASS 10 are generally used. These devices are designed for standard applications. CLASS 5 and CLASS 10 are often referred to as normal starting.

Combinations for CLASS 20, CLASS 30 and CLASS 40 are available for applications where a higher starting current is required for a prolonged period. In this case, using standard devices of CLASS 5 and CLASS 10 would result in unwanted tripping. CLASS 20, CLASS 30 and CLASS 40 are also known as heavy starting devices. Large fan motors are an example of this type of application.

As well as the overload protection devices, the contactors and short-circuit protection devices must also be designed for these long starting times. This is why combinations acc. to CLASS 5 and CLASS 10 are generally more cost-effective. CLASS 20, CLASS 30 and CLASS 40 are only generally used if genuinely necessitated by the application.

### Type of coordination 1 or 2

When selecting the combinations, in many cases, either coordination type 1 or 2 can be selected. According to IEC 60947-4-1, the coordination type defines the permissible degree of damage for a device following a short-circuit.

- **Type of coordination 1:**

After a short-circuit, it is permissible for the starter to be inoperative, in particular, damage to the contactor, solid-state switching devices and overload relay is permissible.

- **Type of coordination 2:**

The starter is still operative. There must be no signs of damage to the devices, with the exception of slightly welded contactor contacts if these can be easily separated again without any noticeable deformation.

In both cases, the short-circuit is reliably and safely cleared. Combinations of coordination type 2 are therefore of a higher quality and are rapidly available for reuse after a short-circuit. In the case of solid-state switching devices, the same applies as for type of coordination 2, that the short-circuit is cleared without any damage to the power semiconductors. Combinations of coordination type 1 are generally the more favorably priced solution. Combinations of coordination type 2 automatically fulfill the requirements of coordination type 1.

### Tests

All of the specified combinations are tested in compliance with IEC 60947-4-1.

### With or without overload relay

In addition to the combinations comprising a motor starter protector (for motor protection) and contactor, combinations are also available with motor starter protector (for starter protection), contactor and overload relay.

In the first case, the motor starter protector assumes the dual function of overload protection and short-circuit protection, while in the second case, the motor starter protector assumes only the short-circuit protection function and the overload relay the overload protection function. The tripping behavior of both solutions under overload and short-circuit conditions is technically comparable.

For fuseless load feeders with electronic overload relays, and for higher trip classes, CLASS 20, CLASS 30 and CLASS 40 in particular, a motor starter protector is often used instead of an MSP for starter combinations. This is due to the following: from the point of view of thermal destruction limits, MSPs for starter combinations are generally designed for CLASS 10 motor starts. The current measurement of electronic overload relays usually moves into saturation upwards of a 10-fold rated current, so that the intrinsic protection of the motor starter protector is no longer guaranteed for higher trip classes. In order to ensure thermal intrinsic protection, it is advisable to use a motor starter protector/circuit breaker that protects itself over the overload release. The motor starter protector/circuit breaker is selected so that the point at which the characteristic curve of the overload relay intersects with the a-tripping characteristic of the motor starter protector/circuit breaker is more than 10 x the set current. This ensures that, in the case of motor faults, such as overload or blocking, the overload relay always trips and not the motor starter protector.

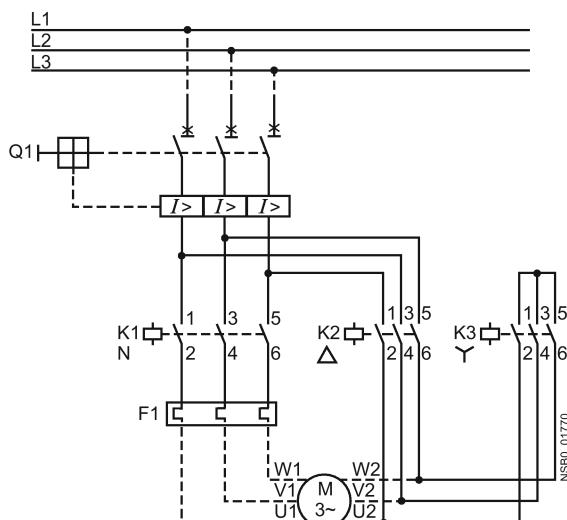
In this situation, combinations with motor starter protector and contactor offer the most cost-effective solution. However, combinations with overload relays offer distinct advantages for certain applications:

- 3RB30 / 3RB31 and 3RB22 / 3RB23 / 3RB24 electronic overload relays or SIMOCODE pro 3UF7 can be used to achieve not only trip CLASS 5 and CLASS 10 but also solutions for heavy starting, such as CLASS 20, CLASS 30, and CLASS 40.
- Using electronic overload relays offers a wide setting range of 1:4 or 1:10. This offers advantages during configuration (e.g. if the exact motor current is not known) and enables us to reduce the number of variants required.
- Overload and short-circuit protection are carried out separately and can also be signaled separately. Alternatively, the 3RV2921-1M signaling block can be used for the 3RV motor starter protector instead of the overload relay. This also supports the separate signaling of overloads and short-circuits.
- Setting of the overload relay to "Automatic Reset" can also save a walk to the control cabinet in the case of overload tripping, as a manual reset in the control cabinet is not required. Alternatively, this function can also be implemented with the "3RV21 motor starter protector with overload relay function". These devices can be used in the motor starter protector + contactor tables instead of the 3RV20 motor starter protector.

### Star(wye)(Y)-delta function( $\Delta$ ) starting

In order to keep the current peaks in the line supply as low as possible, contactor assembly are frequently used as star(wye)-delta starters to start three-phase motors. However, to make worthwhile use of Y $\Delta$  starting, a low load torque is required during starting. Only then can the motor approximately reach its rated speed in the Y stage before switching to  $\Delta$  operation.

An overload relay should be used for motor overload protection. Normally, this is located directly in the motor feeder cable U1, V1, W1, as shown in the circuit diagram. Using this arrangement, the overload protection is effective in both the Y and  $\Delta$  circuit. The overload relay should be set for 58% of the rated motor current.



Circuit diagram main circuit for Y $\Delta$  circuit

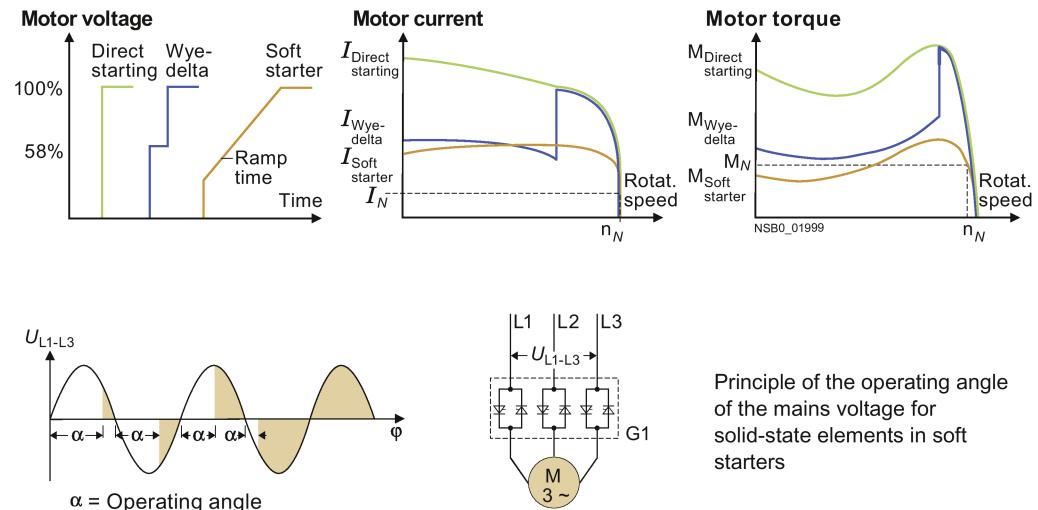
The control current wiring and switching from Y to  $\Delta$  are implemented with plug-on function modules for the SIRIUS innovations. The switching time can be set between 1 and 100 s. The function modules thus perform the function of the timing relay.

In the tables, circuit breakers are used for starter combinations (without overload releases). However, 3RV20 motor starter protectors for motor protection with the same rated current can also be used instead. In this case, the rated motor current of the motor starter protector must be set to the maximum value. This prevents a simultaneous tripping of the motor starter protector and overload relay.

## Soft starting with soft starters

What is the basic principle of a soft starter?

Soft starters limit the starting current and starting torque. This reliably prevents mechanical stress and mains voltage dips. The motor voltage is reduced using phase control and is increased from an adjustable starting voltage up to the mains voltage within a specific ramp time. Soft starting and stopping reduces the stress on connected equipment, thus ensuring prolonged smooth and trouble-free production.



- 3RW30 soft starters for the soft starting of three-phase asynchronous motors for simple applications
  - performance range: up to 55 kW at 400 V (75 hp at 460 V)
- 3RW40 soft starters with integrated functions; electronic motor overload and intrinsic device protection and adjustable current limiting
  - performance range: up to 250 kW at 400 V (300 hp at 460 V)
- The 3RW44 solid-state soft starters offer the following:
  - soft starting and stopping
  - electronic motor overload and intrinsic device protection
  - adjustable current limiting
  - numerous functions for higher-level requirements
  - performance range:
    - up to 710 kW at 400 V in standard circuit
    - up to 1200 kW at 400 V (1700 hp at 460 V) in the inside-delta circuit

More information can be found on the Internet (<http://www.siemens.com/softstarter>).

For the correct dimensioning of soft starters for motors with high starting current ratios ( $I/I_e \geq 8$ ), we recommend our “Simulation Tool for Soft Starters (STS)”:

- Download (<http://support.automation.siemens.com/WW/view/en/101494917>)
- Readme (<http://support.automation.siemens.com/WW/view/en/101494773>)

#### **Load feeders with soft starters**

Soft starters can also be used to prevent current peaks in the line supply instead of the star(wye)-delta starting combinations. Three versions of these soft starters are available:

- 3RW30
- 3RW40
- 3RW44

The 3RW4 soft starters come as standard with an integrated solid-state overload relay. This means that, in fuseless combinations, a motor starter protector is only required for short-circuit protection. In the case of 3RW30 soft starters, the motor starter protector must also cover the overload protection.

### 3RB22 / 23 / 24 overload relays and SIMOCODE pro

The modular, electronic overload relays with external power supply type 3RB22 / 23/ 24 for high-feature applications up to 630 A have been designed for inverse-time delayed protection of loads with normal and heavy starting against excessive temperature rises due to overload, phase unbalance or phase failure.

SIMOCODE pro is a flexible, modular motor management system for motors with constant speeds in the low-voltage performance range. It provides the intelligent, communication-capable interface between the higher-level automation system and the motor feeder.

A configuration with 3RB22 / 23 / 24 overload relays and with SIMOCODE pro requires in each case a basic unit, a connection cable, and a current measuring module. The article numbers of the current measuring modules are listed in the tables. Details of the basic units and connection cables are given in the following:

#### 3RB22 / 23 / 24

- Basic unit (= evaluation module)
  - Monostable, screw: 3RB2283-4AA1
  - Bistable, screw: 3RB2383-4AA1
  - Monostable, spring-loaded: 3RB2283-4AC1
  - Bistable, spring-loaded: 3RB2383-4AC1
  - Monostable, screw: 3RB2483-4AA1
  - Monostable, spring-loaded: 3RB2483-4AC1
- Connection cable
  - 0.1 m (S00-S3): 3RB2987-2B
  - 0.5 m (S00-S12): 3RB2987-2D
- For other accessories for 3RB22 / 23 / 24 overload relays see Catalog IC 10 Chapter 7.

### **SIMOCODE pro**

- SIMOCODE pro C, Basic Unit 1

PROFIBUS DP interface, 12 Mbit/s, RS485 4I / 3O freely assignable, input for thermistor connection, monostable relay outputs

- 24 V DC: 3UF7000-1AB00-0
- 110 ... 240 V AC / DC: 3UF7000-1AU00-0

- SIMOCODE pro V, Basic Unit 2

PROFIBUS DP interface, 12 Mbit/s, RS485 4I / 3O freely assignable, input for thermistor connection, monostable relay outputs, can be expanded by expansion modules

- 24 V DC: 3UF7010-1AB00-0
- 110 ... 240 V AC / DC: 3UF7010-1AU00-0

- SIMOCODE pro C

PROFIBUS DP interface, 12 Mbps, RS485 4I / 3O freely assignable, input for thermistor connection, monostable relay outputs

- 24 V DC: 3UF7000-1AB00-0
- 110 ... 240 V AC/DC: 3UF7000-1AU00-0

- SIMOCODE pro S

PROFIBUS DP interface, 15 Mbps, RS485 4I / 2O freely assignable, input for thermistor connection, monostable relay outputs, can be expanded by multifunction module

- 24 V DC: 3UF7020-1AB01-0
- 110 ... 240 V AC/DC: 3UF7020-1AU01-0

- SIMOCODE pro V

PROFIBUS DP interface, 12 Mbps, RS485 4I / 3O freely assignable, input for thermistor connection, monostable relay outputs, can be expanded by expansion modules

- 24 V DC: 3UF7010-1AB00-0
- 110 ... 240 V AC/DC: 3UF7010-1AU00-0

- SIMOCODE pro V PROFINET  
ETHERNET/PROFINET IO, OPC UA server and web server, 100 Mbps, 2 x connection to bus through RJ45, PROFINET system redundancy, media redundancy protocol, 4 I/3 O freely assignable, input for thermistor connection, monostable relay outputs, can be expanded by expansion modules, web server in German/English/Chinese/Russian
  - 24 V DC: UF7011-1AB00-0
  - 110 ... 240 V AC/DC: 3UF7011-1AU00-0
- SIMOCODE pro V Modbus RTU  
Modbus RTU interface, 57.6 Mbps, RS485 4I / 3O freely assignable, input for thermistor connection, monostable relay outputs, can be expanded by expansion modules
  - 24 V DC: 3UF7012-1AB00-0
  - 110 ... 240 V AC/DC: 3UF7012-1AU00-0
- Connection cable
  - 0.1 m, flat: 3UF7931-0AA00-0
  - 0.3 m, flat: 3UF7935-0AA00-0
  - 0.5 m, flat: 3UF7932-0AA00-0
  - 0.5 m, round: 3UF7932-0BA00-0
  - 1.0 m, round: 3UF7937-0BA00-0
  - 2.5 m, round: 3UF7933-0BA00-0
- For other accessories and software for SIMOCODE pro see Catalog IC 10 Chapter 10.

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**Note**

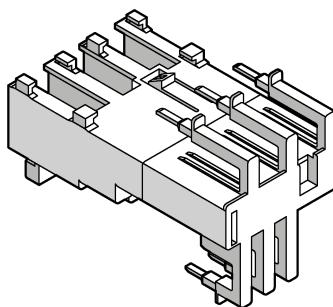
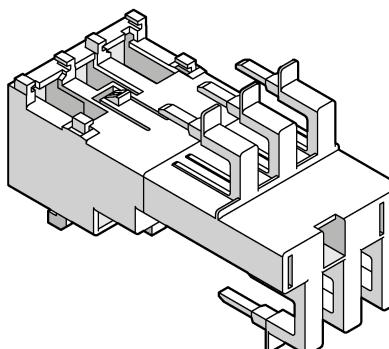
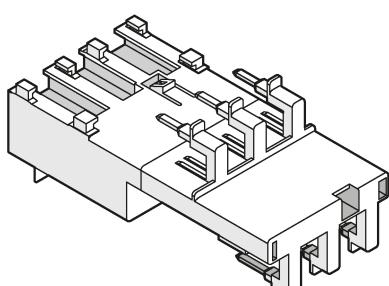
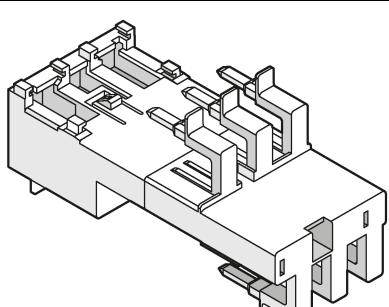
The coordination tests with SIMOCODE pro current measuring modules 3UF710 apply to the same extent for current measuring modules / voltage measuring modules 3UF711.. of the same rated current range.

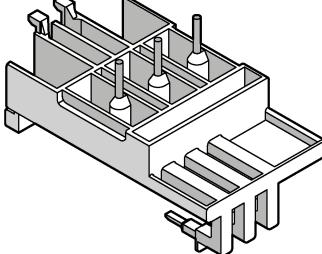
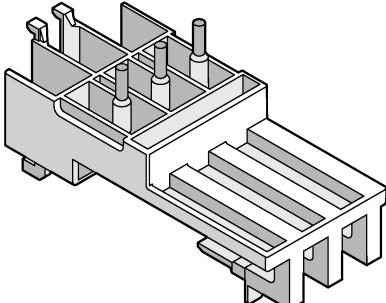
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## Link modules

Table 2- 1 Link module versions

Connection system	Link module version	Article number
Screw-type connection system	Motor starter protector – contactor in size S00	3RA1921-1DA00
	Motor starter protector – contactor in size S0 AC	3RA2921-1AA00
	Motor starter protector – contactor in size S0 DC	3RA2921-1BA00
	Motor starter protector – soft starter in size S00	3RA2921-1BA00
	Motor starter protector – soft starter in size S0	3RA2921-1BA00
	Motor starter protector – solid-state contactor	3RA2931-1AA00
	Motor starter protector – contactor in size S2	3RA2931-1AA00
	Motor starter protector – soft starter in size S2	3RA2931-1AA00
	Motor starter protector – contactor in size S3	3RA1941-1AA00

Connection system	Link module version	Article number
Spring-loaded connection system	Motor starter protector – contactor in size S00	
	Motor starter protector – contactor in size S0	
	Motor starter protector – soft starter in size S00	
	Motor starter protector – soft starter in size S0	

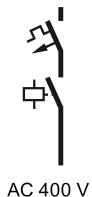
Connection system	Link module version	Article number
Hybrid connection system <sup>1)</sup>	Motor starter protector – contactor in size S00	 A 3D-style line drawing of a Link module. It features a rectangular housing with a slot for a motor starter protector. A vertical contactor is inserted into the slot. The module has several terminals and mounting holes.
	Motor starter protector – contactor in size S0	 A 3D-style line drawing of a Link module. It features a rectangular housing with a slot for a motor starter protector. A vertical contactor is inserted into the slot. The module has several terminals and mounting holes, similar to the S00 version but with a slightly different profile.

<sup>1)</sup> The motor starter protector has a screw terminal. The contactor has a spring-loaded terminal.

# Selection tables 400 V AC

## 3.1 Motor starter protector + contactor

CLASS 10, type of coordination 1,  
short-circuit breaking capacity  $I_q = 150 \text{ kA}$



Standard three-phase motor 4-pole at 400 V AC <sup>1)</sup>		Motor starter protector for motor protection <sup>4)</sup> Maximum permitted setting range overload release			Contactor <sup>2)</sup>	Size
Standard output P	Motor current I	IE1 / IE2 motors	IE3 / IE4 motors			
kW	A	A	A	Article No.	Article No.	
0.04	0.16	0.11 ... 0.16	0.11 ... 0.14	3RV2011-0AA10	3RT2015-1AP01	S00/S00
0.06	0.2	0.14 ... 0.20	0.14 ... 0.18	3RV2011-0BA10	3RT2015-1AP01	S00/S00
0.06	0.2	0.18 ... 0.25	0.18 ... 0.22	3RV2011-0CA10	3RT2015-1AP01	S00/S00
0.09	0.3	0.22 ... 0.32	0.22 ... 0.28	3RV2011-0DA10	3RT2015-1AP01	S00/S00
0.09	0.3	0.28 ... 0.40	0.28 ... 0.35	3RV2011-0EA10	3RT2015-1AP01	S00/S00
0.12	0.4	0.35 ... 0.50	0.35 ... 0.45	3RV2011-0FA10	3RT2015-1AP01	S00/S00
0.18	0.6	0.45 ... 0.63	0.45 ... 0.55	3RV2011-0GA10	3RT2015-1AP01	S00/S00
0.18	0.6	0.55 ... 0.80	0.55 ... 0.7	3RV2011-0HA10	3RT2015-1AP01	S00/S00
0.25	0.85	0.70 ... 1.00	0.7 ... 0.9	3RV2011-0JA10	3RT2015-1AP01	S00/S00
0.37	1.1	0.90 ... 1.25	0.9 ... 1.1	3RV2011-0KA10	3RT2015-1AP01	S00/S00
0.55	1.5	1.1 ... 1.6	1.1 ... 1.4	3RV2011-1AA10	3RT2015-1AP01	S00/S00
0.75	1.9	1.4 ... 2.0	1.4 ... 1.8	3RV2011-1BA10	3RT2015-1AP01	S00/S00
0.75	1.9	1.8 ... 2.5	1.8 ... 2.2	3RV2011-1CA10	3RT2015-1AP01	S00/S00
1.1	2.7	2.2 ... 3.2	2.2 ... 2.8	3RV2011-1DA10	3RT2015-1AP01	S00/S00
1.5	3.6	2.8 ... 4.0	2.8 ... 3.5	3RV2011-1EA10	3RT2015-1AP01	S00/S00
1.5	3.6	3.5 ... 5.0	3.5 ... 4.5	3RV2011-1FA10	3RT2015-1AP01	S00/S00
2.2	5	4.5 ... 6.3	4.5 ... 5.5	3RV2011-1GA10	3RT2015-1AP01	S00/S00
3	6.5	5.5 ... 8.0	5.5 ... 7	3RV2011-1HA10	3RT2015-1AP01	S00/S00
4	8.5	7.0 ... 10.0	7 ... 9	3RV2011-1JA10	3RT2016-1AP01	S00/S00
5.5	11.5	9.0 ... 12.5	9 ... 10	3RV2011-1KA10	3RT2017-1AP01	S00/S00
7.5	15.5	10 ... 16	10 ... 13	3RV2011-4AA10	3RT2018-1AP01	S00/S00

## Selection tables 400 V AC

### 3.1 Motor starter protector + contactor

Standard three-phase motor 4-pole at 400 V AC <sup>1)</sup>		Motor starter protector for motor protection <sup>4)</sup> Maximum permitted setting range overload release			Contactor <sup>2)</sup>	Size
Standard output P	Motor current I	IE1 / IE2 motors	IE3 / IE4 motors			
kW	A	A	A	Article No.	Article No.	
7.5	15.5	13 ... 20	13 ... 16	3RV2021-4BA10	3RT2025-1AP00	S0/S0
11	22	16 ... 22	16 ... 18	3RV2021-4CA10	3RT2026-1AP00	S0/S0
11	22	18 ... 25	18 ... 23	3RV2021-4DA10	3RT2026-1AP00	S0/S0
15	29	23 ... 28	23 ... 27	3RV2021-4NA10	3RT2027-1AP00	S0/S0
15	29	27 ... 32	27 ... 30 (up to 256 A starting current)	3RV2021-4EA10	3RT2027-1AP00	S0/S0
18.5 <sup>3)</sup>	35	30 ... 36	Use size S2	3RV2021-4PA10	3RT2028-1AP00	S0/S0
18.5 <sup>3)</sup>	35	34 ... 40	Use size S2	3RV2021-4FA10	3RT2028-1AP00	S0/S0
18.5	35	28 ... 36	28 ... 32	3RV2032-4PA10	3RT2035-1AP00	S2/S2
18.5	35	32 ... 40	32 ... 35	3RV2032-4UA10	3RT2035-1AP00	S2/S2
22	41	35 ... 45	35 ... 42	3RV2032-4VA10	3RT2036-1AP00	S2/S2
22	41	42 ... 50	42 ... 49	3RV2032-4WA10	3RT2036-1AP00	S2/S2
30	55	49 ... 59	49 ... 54	3RV2032-4XA10	3RT2037-1AP00	S2/S2
30	55	54 ... 65	54 ... 62	3RV2032-4JA10	3RT2037-1AP00	S2/S2
37	66	62 ... 73	62 ... 70	3RV2032-4KA10	3RT2038-1AP00	S2/S2
45	80	70 ... 80	70 ... 77 (up to 720 A starting current)	3RV2032-4RA10	3RT2038-1AP00	S2/S2
45	80	65 ... 84	65 ... 80	3RV2042-4RA10	3RT2045-1AP00	S3/S3
45	80	65 ... 84	65 ... 80	3RV2042-4RA10	3RT2046-1AP00	S3/S3
45	80	75 ... 93	75 ... 93	3RV2042-4YA10	3RT2046-1AP00	S3/S3
55	97	80 ... 100	80 ... 100	3RV2042-4MA10	3RT2047-1AP00	S3/S3

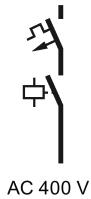
Standard three-phase motor 4-pole at 400 V AC <sup>1)</sup>		Motor starter protector for motor protection <sup>4)</sup> Maximum permitted setting range overload release			Contactor <sup>2)</sup>	Size
Standard output P	Motor current I	IE1 / IE2 motors	IE3 / IE4 motors			
kW	A	A	A	Article No.	Article No.	
55	97	63 ... 115	63 ... 115	3VA2216-7MN32	3RT1054-6AP36	-/S6
75	132	63 ... 150	63 ... 140	3VA2216-7MN32	3RT1055-6AP36	-/S6
90	160	80 ... 185	80 ... 175	3VA2220-7MN32	3RT1056-6AP36	-/S6
110	195	100 ... 225	100 ... 225	3VA2325-7MN32	3RT1064-6AP36	-/S10
110	195	100 ... 225	100 ... 225	3VA2325-7MN32	3RT1264-6AP36	-/S10V
132	230	160 ... 265	160 ... 265	3VA2440-7MN32	3RT1065-6AP36	-/S10
132	230	160 ... 265	160 ... 265	3VA2440-7MN32	3RT1265-6AP36	-/S10V
160	280	160 ... 300	160 ... 300	3VA2440-7MN32	3RT1066-6AP36	-/S10
160	280	160 ... 300	160 ... 300	3VA2440-7MN32	3RT1266-6AP36	-/S10V
200	350	200 ... 400	200 ... 400	3VA2450-7MN32	3RT1075-6AP36	-/S12
200	350	200 ... 400	200 ... 400	3VA2450-7MN32	3RT1275-6AP36	-/S12V
250	430	200 ... 500	200 ... 440	3VA2450-7MN32	3RT1076-6AP36	-/S12
250	430	200 ... 500	200 ... 440	3VA2450-7MN32	3RT1276-6AP36	-/S12V

Article numbers for basic versions with screw terminals and spring-loaded terminals also possible.

- <sup>1)</sup> Guide value for 4-pole standard motors at 400 V AC, 50 Hz. Selection depends on the concrete startup and rated data of the protected motor.
- <sup>2)</sup> Rated control supply voltage 230 V AC, 50 Hz, other control voltages possible.
- <sup>3)</sup> Discrete mounting only without a link module, short-circuit breaking capacity  $I_q = 55 \text{ kA}$
- <sup>4)</sup> Motor switching operations with circuit breaker 3VA are not allowed.

## 3.1 Motor starter protector + contactor

**CLASS 10, type of coordination 2,  
short-circuit breaking capacity  $I_q = 150 \text{ kA}$**



Standard three-phase motor 4-pole at 400 V AC <sup>1)</sup>		Motor starter protector for motor protection <sup>3)</sup> Maximum permitted setting range overload release			Contactor <sup>2)</sup>	Size
Standard output P	Motor current (guide value) I	IE1 / IE2 motors	IE3 / IE4 motors			
kW	A	A	A	Article No.	Article No.	
0.04	0.16	0.11 ... 0.16	0.11 ... 0.14	3RV2011-0AA10	3RT2015-1AP01	S00/S00
0.06	0.2	0.14 ... 0.20	0.14 ... 0.18	3RV2011-0BA10	3RT2015-1AP01	S00/S00
0.06	0.2	0.18 ... 0.25	0.18 ... 0.22	3RV2011-0CA10	3RT2015-1AP01	S00/S00
0.09	0.3	0.22 ... 0.32	0.22 ... 0.28	3RV2011-0DA10	3RT2015-1AP01	S00/S00
0.09	0.3	0.28 ... 0.40	0.28 ... 0.35	3RV2011-0EA10	3RT2015-1AP01	S00/S00
0.12	0.4	0.35 ... 0.50	0.35 ... 0.45	3RV2011-0FA10	3RT2015-1AP01	S00/S00
0.18	0.6	0.45 ... 0.63	0.45 ... 0.55	3RV2011-0GA10	3RT2015-1AP01	S00/S00
0.18	0.6	0.55 ... 0.80	0.55 ... 0.7	3RV2011-0HA10	3RT2015-1AP01	S00/S00
0.25	0.85	0.70 ... 1.00	0.7 ... 0.9	3RV2011-0JA10	3RT2015-1AP01	S00/S00
0.37	1.1	0.90 ... 1.25	0.9 ... 1.1	3RV2011-0KA10	3RT2015-1AP01	S00/S00
0.55	1.5	1.1 ... 1.6	1.1 ... 1.4	3RV2011-1AA10	3RT2015-1AP01	S00/S00
0.75	1.9	1.4 ... 2.0	1.4 ... 1.8	3RV2011-1BA10	3RT2015-1AP01	S00/S00
0.75	1.9	1.8 ... 2.5	1.8 ... 2.2	3RV2011-1CA10	3RT2015-1AP01	S00/S00
1.1	2.7	2.2 ... 3.2	2.2 ... 2.8	3RV2011-1DA10	3RT2015-1AP01	S00/S00
1.5	3.6	2.8 ... 4.0	2.8 ... 3.5	3RV2011-1EA10	3RT2015-1AP01	S00/S00
1.5	3.6	3.5 ... 5.0	3.5 ... 4.5	3RV2011-1FA10	3RT2024-1AP00	S00/S0
2.2	5	4.5 ... 6.3	4.5 ... 5.5	3RV2011-1GA10	3RT2024-1AP00	S00/S0
3	6.5	5.5 ... 8.0	5.5 ... 7	3RV2011-1HA10	3RT2024-1AP00	S00/S0
4	8.5	7.0 ... 10.0	7 ... 9	3RV2011-1JA10	3RT2024-1AP00	S00/S0
5.5	11.5	9.0 ... 12.5	9 ... 10	3RV2011-1KA10	3RT2024-1AP00	S00/S0
7.5	15.5	10 ... 16	10 ... 13	3RV2011-4AA10	3RT2026-1AP00	S00/S0
7.5	15.5	13 ... 20	13 ... 16	3RV2021-4BA10	3RT2027-1AP00	S0/S0
11	22	16 ... 22	16 ... 18	3RV2021-4CA10	3RT2027-1AP00	S0/S0
11	22	18 ... 25	18 ... 23	3RV2021-4DA10	3RT2027-1AP00	S0/S0
15	29	23 ... 28	23 ... 27	3RV2021-4NA10	3RT2027-1AP00	S0/S0
15	29	27 .. 32	27 ... 30 (up to 256 A starting current)	3RV2021-4EA10	3RT2027-1AP00	S0/S0

Standard three-phase motor 4-pole at 400 V AC <sup>1)</sup>		Motor starter protector for motor protection <sup>3)</sup> Maximum permitted setting range overload release			Contactor <sup>2)</sup>	Size
Standard output P	Motor current (guide value) I	IE1 / IE2 motors	IE3 / IE4 motors			
kW	A	A	A	Article No.	Article No.	
15	29	22 ... 32	22 ... 28	3RV2032-4EA10	3RT2035-1AP00	S2/S2
18.5	35	28 ... 36	28 ... 32	3RV2032-4PA10	3RT2035-1AP00	S2/S2
18.5	35	32 ... 40	32 ... 35	3RV2032-4UA10	3RT2035-1AP00	S2/S2
22	41	35 ... 45	35 ... 42	3RV2032-4VA10	3RT2036-1AP00	S2/S2
22	41	42 ... 50	42 ... 49	3RV2032-4WA10	3RT2036-1AP00	S2/S2
30	55	49 ... 59	49 ... 54	3RV2032-4XA10	3RT2037-1AP00	S2/S2
30	55	54 ... 65	54 ... 62	3RV2032-4JA10	3RT2037-1AP00	S2/S2
37	66	62 ... 73	62 ... 70	3RV2032-4KA10	3RT2038-1AP00	S2/S2
45	80	70 ... 80	70 ... 77 (up to 720 A starting current)	3RV2032-4RA10	3RT2038-1AP00	S2/S2
45	80	65 ... 84	65 ... 80	3RV2042-4RA10	3RT2045-1AP00	S3/S3
45	80	65 ... 84	65 ... 84	3RV2042-4RA10	3RT2046-1AP00	S3/S3
45	80	75 ... 93	75 ... 93	3RV2042-4YA10	3RT2046-1AP00	S3/S3
55	97	80 ... 100	80 ... 100	3RV2042-4MA10	3RT2047-1AP00	S3/S3
55	97	63 ... 115	63 ... 115	3VA2216-7MN32	3RT1054-6AP36	-/S6
75	132	63 ... 150	63 ... 140	3VA2216-7MN32	3RT1055-6AP36	-/S6
90	160	80 ... 185	80 ... 175	3VA2220-7MN32	3RT1056-6AP36	-/S6
110	195	100 ... 225	100 ... 225	3VA2325-7MN32	3RT1064-6AP36	-/S10
110	195	100 ... 225	100 ... 225	3VA2325-7MN32	3RT1264-6AP36	-/S10V
132	230	160 ... 265	160 ... 265	3VA2440-7MN32	3RT1065-6AP36	-/S10
132	230	160 ... 265	160 ... 265	3VA2440-7MN32	3RT1265-6AP36	-/S10V
160	280	160 ... 300	160 ... 300	3VA2440-7MN32	3RT1066-6AP36	-/S10
160	280	160 ... 300	160 ... 300	3VA2440-7MN32	3RT1266-6AP36	-/S10V
200	350	200 ... 400	200 ... 400	3VA2450-7MN32	3RT1075-6AP36	-/S12
200	350	200 ... 400	200 ... 400	3VA2450-7MN32	3RT1275-6AP36	-/S12V
250	430	200 ... 500	200 ... 440	3VA2450-7MN32	3RT1076-6AP36	-/S12
250	430	200 ... 500	200 ... 440	3VA2450-7MN32	3RT1276-6AP36	-/S12V

Article numbers for basic versions with screw terminals and spring-loaded terminals also possible.

<sup>1)</sup> Guide value for 4-pole standard motors at 400 V AC, 50 Hz. Selection depends on the concrete startup and rated data of the protected motor.

<sup>2)</sup> Rated control supply voltage 230 V AC, 50 Hz, other control voltages possible.

<sup>3)</sup> Motor switching operations with circuit breaker 3VA are not allowed.

### 3.2 Motor starter protector + contactor + thermal overload relay 3RU21

**CLASS 10, type of coordination 1,  
short-circuit breaking capacity  $I_q = 150 \text{ kA}$**



Standard three-phase motor 4-pole at 400 V AC <sup>1)</sup>		Motor starter protector Starter protection	Contactor <sup>2)</sup>	Size	Overload relay (thermal) <sup>3)</sup> Maximum permitted setting range overload release		
Standard output P	Motor current I					IE1 / IE2 motors	IE3 / IE4 motors
kW	A	Article No.	Article No.	Size	Article No.	A	A
0.06	0.2	3RV2311-0BC10	3RT2015-1AP01	S00/S00/S00	3RU2116-0BB0	0.14 ... 0.20	0.14 ... 0.18
0.06	0.2	3RV2311-0CC10	3RT2015-1AP01	S00/S00/S00	3RU2116-0CB0	0.18 ... 0.25	0.18 ... 0.22
0.09	0.3	3RV2311-0DC10	3RT2015-1AP01	S00/S00/S00	3RU2116-0DB0	0.22 ... 0.32	0.22 ... 0.28
0.09	0.3	3RV2311-0EC10	3RT2015-1AP01	S00/S00/S00	3RU2116-0EB0	0.28 ... 0.40	0.28 ... 0.35
0.12	0.4	3RV2311-0FC10	3RT2015-1AP01	S00/S00/S00	3RU2116-0FB0	0.35 ... 0.50	0.35 ... 0.45
0.18	0.6	3RV2311-0GC10	3RT2015-1AP01	S00/S00/S00	3RU2116-0GB0	0.45 ... 0.63	0.45 ... 0.55
0.18	0.6	3RV2311-0HC10	3RT2015-1AP01	S00/S00/S00	3RU2116-0HB0	0.55 ... 0.80	0.55 ... 0.7
0.25	0.85	3RV2311-0JC10	3RT2015-1AP01	S00/S00/S00	3RU2116-0JB0	0.70 ... 1.00	0.7 ... 0.9
0.37	1.1	3RV2311-0KC10	3RT2015-1AP01	S00/S00/S00	3RU2116-0KB0	0.90 ... 1.25	0.9 ... 1.1
0.55	1.5	3RV2311-1AC10	3RT2015-1AP01	S00/S00/S00	3RU2116-1AB0	1.1 ... 1.6	1.1 ... 1.4
0.75	1.9	3RV2311-1BC10	3RT2015-1AP01	S00/S00/S00	3RU2116-1BB0	1.4 ... 2.0	1.4 ... 1.8
0.75	1.9	3RV2311-1CC10	3RT2015-1AP01	S00/S00/S00	3RU2116-1CB0	1.8 ... 2.5	1.8 ... 2.2
1.1	2.7	3RV2311-1DC10	3RT2015-1AP01	S00/S00/S00	3RU2116-1DB0	2.2 ... 3.2	2.2 ... 2.8
1.5	3.6	3RV2311-1EC10	3RT2015-1AP01	S00/S00/S00	3RU2116-1EB0	2.8 ... 4.0	2.8 ... 3.5

## 3.2 Motor starter protector + contactor + thermal overload relay 3RU21

Standard three-phase motor 4-pole at 400 V AC <sup>1)</sup>		Motor starter protector Starter protection	Contactor <sup>2)</sup>	Size	Overload relay (thermal) <sup>3)</sup> Maximum permitted setting range overload release		
Standard output P	Motor current I					IE1 / IE2 motors	IE3 / IE4 motors
kW	A	Article No.	Article No.	Size	Article No.	A	A
1.5	3.6	3RV2311-1FC10	3RT2015-1AP01	S00/S00/S00	3RU2116-1FB0	3.5 ... 5.0	3.5 ... 4.5
2.2	5	3RV2311-1GC10	3RT2015-1AP01	S00/S00/S00	3RU2116-1GB0	4.5 ... 6.3	4.5 ... 5.5
3	6.5	3RV2311-1HC10	3RT2015-1AP01	S00/S00/S00	3RU2116-1HB0	5.5 ... 8.0	5.5 ... 7
4	8.5	3RV2311-1JC10	3RT2016-1AP01	S00/S00/S00	3RU2116-1JB0	7.0 ... 10.0	7 ... 9
5.5	11.5	3RV2311-1KC10	3RT2017-1AP01	S00/S00/S00	3RU2116-1KB0	9.0 ... 12.5	9 ... 11
7.5	15.5	3RV2311-4AC10	3RT2018-1AP01	S00/S00/S00	3RU2116-4AB0	11 ... 16	11 ... 13
7.5	15.5	3RV2321-4AC10	3RT2025-1AP00	S0/S0/S0	3RU2126-4AB0	11 ... 16	11 ... 14
7.5	15.5	3RV2321-4BC10	3RT2025-1AP00	S0/S0/S0	3RU2126-4BB0	14 ... 20	14 ... 17
11	22	3RV2321-4CC10	3RT2026-1AP00	S0/S0/S0	3RU2126-4CB0	17 ... 22	17 ... 20
11	22	3RV2321-4DC10	3RT2026-1AP00	S0/S0/S0	3RU2126-4DB0	20 ... 25	20 ... 23
15	29	3RV2321-4NC10	3RT2027-1AP00	S0/S0/S0	3RU2126-4NB0	23 ... 28	23 ... 27
15	29	3RV2321-4EC10	3RT2027-1AP00	S0/S0/S0	3RU2126-4EB0	27 ... 32	27 ... 30 (up to 256 A starting current)

## Selection tables 400 V AC

### 3.2 Motor starter protector + contactor + thermal overload relay 3RU21

Standard three-phase motor 4-pole at 400 V AC <sup>1)</sup>		Motor starter protector Starter protection	Contactor <sup>2)</sup>	Size	Overload relay (thermal) <sup>3)</sup> Maximum permitted setting range overload release		
Standard output P	Motor current I					IE1 / IE2 motors	IE3 / IE4 motors
kW	A	Article No.	Article No.	Size	Article No.	A	A
15	29	3RV2332-4EC10	3RT2035-1AP00	S2/S2/S2	3RU2136-4EB0	22 ... 32	22 ... 28
18.5	35	3RV2332-4PC10	3RT2035-1AP00	S2/S2/S2	3RU2136-4FB0	28 ... 40	28 ... 32
18.5	35	3RV2332-4UC10	3RT2035-1AP00	S2/S2/S2	3RU2136-4FB0	28 ... 40	28 ... 36
22	41	3RV2332-4VC10	3RT2036-1AP00	S2/S2/S2	3RU2136-4GB0	36 ... 45	36 ... 42
22	41	3RV2332-4WC10	3RT2036-1AP00	S2/S2/S2	3RU2136-4HB0	40 ... 50	40 ... 47
30	55	3RV2332-4XC10	3RT2037-1AP00	S2/S2/S2	3RU2136-4QB0	47 ... 57	47 ... 54
30	55	3RV2332-4JC10	3RT2037-1AP00	S2/S2/S2	3RU2136-4JB0	54 ... 65	54 ... 62
37	66	3RV2332-4KC10	3RT2038-1AP00	S2/S2/S2	3RU2136-4KB0	62 ... 73	62 ... 70
45	80	3RV2332-4RC10	3RT2038-1AP00	S2/S2/S2	3RU2136-4RB0	70 ... 80 (up to 720 A)	70 ... 77 (up to 720 A starting current)
45	80	3RV2342-4RC10	3RT2045-1AP00	S3/S3/S3	3RU2146-4LB0	70 ... 90	70 ... 80
45	80	3RV2342-4RC10	3RT2046-1AP00	S3/S3/S3	3RU2146-4LB0	70 ... 90	70 ... 84
45	80	3RV2342-4YC10	3RT2046-1AP00	S3/S3/S3	3RU2146-4LB0	70 ... 90	70 ... 90
55	97	3RV2342-4MC10	3RT2047-1AP00	S3/S3/S3	3RU2146-4MB0	80 ... 100	80 ... 100

Article numbers for basic versions with screw terminals and spring-loaded terminals also possible.

- <sup>1)</sup> Guide value for 4-pole standard motors at 400 V AC, 50 Hz. Selection depends on the concrete startup and rated data of the protected motor.
- <sup>2)</sup> Rated control supply voltage 230 V AC, 50 Hz, other control voltages possible.
- <sup>3)</sup> Assembled combinations of three are not permitted.

**CLASS 10, type of coordination 2,  
short-circuit breaking capacity  $I_q = 150 \text{ kA}$**



Standard three-phase motor 4-pole at 400 V AC <sup>1)</sup>		Motor starter protector Starter protection	Contactor <sup>2)</sup>	Size	Overload relay (thermal) <sup>3)</sup> Maximum permitted setting range overload release		
Standard output P	Motor current I					IE1 / IE2 motors	IE3 / IE4 motors
kW	A	Article No.	Article No.		Article No.	A	A
0.06	0.2	3RV2311-0BC10	3RT2015-1AP01	S00/S00/S00	3RU2116-0BB0	0.14 ... 0.20	0.14 ... 0.18
0.06	0.2	3RV2311-0CC10	3RT2015-1AP01	S00/S00/S00	3RU2116-0CB0	0.18 ... 0.25	0.18 ... 0.22
0.09	0.3	3RV2311-0DC10	3RT2015-1AP01	S00/S00/S00	3RU2116-0DB0	0.22 ... 0.32	0.22 ... 0.28
0.09	0.3	3RV2311-0EC10	3RT2015-1AP01	S00/S00/S00	3RU2116-0EB0	0.28 ... 0.40	0.28 ... 0.35
0.12	0.4	3RV2311-0FC10	3RT2015-1AP01	S00/S00/S00	3RU2116-0FB0	0.35 ... 0.50	0.35 ... 0.45
0.18	0.6	3RV2311-0GC10	3RT2015-1AP01	S00/S00/S00	3RU2116-0GB0	0.45 ... 0.63	0.45 ... 0.55
0.18	0.6	3RV2311-0HC10	3RT2015-1AP01	S00/S00/S00	3RU2116-0HB0	0.55 ... 0.80	0.55 ... 0.70
0.25	0.85	3RV2311-0JC10	3RT2015-1AP01	S00/S00/S00	3RU2116-0JB0	0.70 ... 1.00	0.70 ... 0.90
0.37	1.1	3RV2311-0KC10	3RT2015-1AP01	S00/S00/S00	3RU2116-0KB0	0.90 ... 1.25	0.90 ... 1.1
0.55	1.5	3RV2311-1AC10	3RT2015-1AP01	S00/S00/S00	3RU2116-1AB0	1.1 ... 1.6	1.1 ... 1.4
0.75	1.9	3RV2311-1BC10	3RT2015-1AP01	S00/S00/S00	3RU2116-1BB0	1.4 ... 2.0	1.4 ... 1.8
0.75	1.9	3RV2311-1CC10	3RT2015-1AP01	S00/S00/S00	3RU2116-1CB0	1.8 ... 2.5	1.8 ... 2.2
1.1	2.7	3RV2311-1DC10	3RT2015-1AP01	S00/S00/S00	3RU2116-1DB0	2.2 ... 3.2	2.2 ... 2.8
1.5	3.6	3RV2311-1EC10	3RT2015-1AP01	S00/S00/S00	3RU2116-1EB0	2.8 ... 4.0	2.8 ... 3.5
1.5	3.6	3RV2311-1FC10	3RT2024-1AP00	S00/S0/S00	3RU2116-1FB0	3.5 ... 5.0	3.5 ... 4.5
2.2	5	3RV2311-1GC10	3RT2024-1AP00	S00/S0/S0	3RU2126-1GB0 <sup>4)</sup>	4.5 ... 6.3	4.5 ... 5.5

*Selection tables 400 V AC*

*3.2 Motor starter protector + contactor + thermal overload relay 3RU21*

Standard three-phase motor 4-pole at 400 V AC <sup>1)</sup>		Motor starter protector Starter protection	Contactor <sup>2)</sup>	Size	Overload relay (thermal) <sup>3)</sup> Maximum permitted setting range overload release		
Standard output P	Motor current I					IE1 / IE2 motors	IE3 / IE4 motors
kW	A	Article No.	Article No.		Article No.	A	A
3	6.5	3RV2311-1HC10	3RT2024-1AP00	S00/S0/S0	3RU2126-1HB0 <sup>4)</sup>	5.5 ... 8.0	5.5 ... 7.0
4	8.5	3RV2311-1JC10	3RT2024-1AP00	S00/S0/S0	3RU2126-1JB0 <sup>4)</sup>	7.0 ... 10.0	7.0 ... 9.0
5.5	11.5	3RV2311-1KC10	3RT2024-1AP00	S00/S0/S0	3RU2126-1KB0 <sup>4)</sup>	9.0 ... 12.5	9.0 ... 11.0
7.5	15.5	3RV2311-4AC10	3RT2026-1AP00	S00/S0/S0	3RU2126-4AB0 <sup>4)</sup>	11 ... 16	11 ... 14
7.5	15.5	3RV2321-4BC10	3RT2027-1AP00	S0/S0/S0	3RU2126-4BB0	14 ... 20	14 ... 17
11	22	3RV2321-4CC10	3RT2027-1AP00	S0/S0/S0	3RU2126-4CB0	17 ... 22	17 ... 20
11	22	3RV2321-4DC10	3RT2027-1AP00	S0/S0/S0	3RU2126-4DB0	20 ... 25	20 ... 23
15	29	3RV2321-4NC10	3RT2027-1AP00	S0/S0/S0	3RU2126-4NB0	23 ... 28	23 ... 27
15	29	3RV2321-4EC10	3RT2027-1AP00	S0/S0/S0	3RU2126-4EB0	27 ... 32	27 ... 30 (up to 256 A starting current)
15	29	3RV2332-4EC10	3RT2035-1AP00	S2/S2/S2	3RU2136-4EB0	22 ... 32	22 ... 28
18.5	35	3RV2332-4PC10	3RT2035-1AP00	S2/S2/S2	3RU2136-4FB0	28 ... 40	28 ... 32
18.5	35	3RV2332-4UC10	3RT2035-1AP00	S2/S2/S2	3RU2136-4FB0	28 ... 40	28 ... 36
22	41	3RV2332-4VC10	3RT2036-1AP00	S2/S2/S2	3RU2136-4GB0	36 ... 45	36 ... 42
22	41	3RV2332-4WC10	3RT2036-1AP00	S2/S2/S2	3RU2136-4HB0	40 ... 50	40 ... 47
30	55	3RV2332-4XC10	3RT2037-1AP00	S2/S2/S2	3RU2136-4QB0	47 ... 57	47 ... 54
30	55	3RV2332-4JC10	3RT2037-1AP00	S2/S2/S2	3RU2136-4JB0	54 ... 65	54 ... 62
37	66	3RV2332-4KC10	3RT2038-1AP00	S2/S2/S2	3RU2136-4KB0	62 ... 73	62 ... 70
45	80	3RV2332-4RC10	3RT2038-1AP00	S2/S2/S2	3RU2136-4RB0	70 ... 80 (up to 720 A starting current)	70 ... 77 (up to 720 A starting current)

## 3.2 Motor starter protector + contactor + thermal overload relay 3RU21

Standard three-phase motor 4-pole at 400 V AC <sup>1)</sup>		Motor starter protector Starter protection	Contactor <sup>2)</sup>	Size	Overload relay (thermal) <sup>3)</sup> Maximum permitted setting range overload release		
Standard output P	Motor current I					IE1 / IE2 motors	IE3 / IE4 motors
kW	A	Article No.	Article No.	Article No.	A	A	A
45	80	3RV2342-4RC10	3RT2045-1AP00	S3/S3/S3	3RU2146-4LB0	70 ... 90	70 ... 80
45	80	3RV2342-4RC10	3RT2046-1AP00	S3/S3/S3	3RU2146-4LB0	70 ... 90	70 ... 84
45	80	3RV2342-4YC10	3RT2046-1AP00	S3/S3/S3	3RU2146-4LB0	70 ... 90	70 ... 90
55	97	3RV2342-4MC10	3RT2047-1AP00	S3/S3/S3	3RU2146-4MB0	80 ... 100	80 ... 100

Article numbers for basic versions with screw terminals and spring-loaded terminals also possible.

- <sup>1)</sup> Guide value for 4-pole standard motors at 400 V AC, 50 Hz. Selection depends on the concrete startup and rated data of the protected motor.
- <sup>2)</sup> Rated control supply voltage 230 V AC, 50 Hz, other control voltages possible.
- <sup>3)</sup> Assembled combinations of three are not permitted.
- <sup>4)</sup> Can also be used in size S00 (3RU2116).

### 3.3 Motor starter protector + contactor + 3RB30 / 3RB31 and 3RB20 / 3RB21 solid-state overload relay

Type of coordination 1,  
short-circuit breaking capacity  $I_q = 150 \text{ kA}/100 \text{ kA}$



Standard three-phase motor 4-pole at 400 V AC <sup>1)</sup>		Circuit breaker Starter protection <sup>3)</sup>		Contactor <sup>2)</sup>	Size	Overload relay (electronic) Maximum permitted setting range overload release		
Stand- ard power P	Motor current <b>I</b>	Setting range Overload release Motor starter protector					IE1 / IE2 motors	IE3 / IE4 motors
kW	A	A	Article No.	Article No.	Article No.	A	A	A
<b>CLASS 10, short-circuit breaking capacity <math>I_q = 150 \text{ kA}</math></b>								
0.06	0.2	None	3RV2311-0CC10	3RT2015-1AP01	S00/S00/S00	3RB3016-1RB0	0.1 ... 0.23	0.1 ... 0.22
0.09	0.3	None	3RV2311-0DC10	3RT2015-1AP01	S00/S00/S00	3RB3016-1RB0	0.1 ... 0.32	0.1 ... 0.32
0.12	0.4	None	3RV2311-0HC10	3RT2015-1AP01	S00/S00/S00	3RB3016-1NB0	0.32 ... 0.72	0.32 ... 0.7
0.18	0.6	None	3RV2311-0JC10	3RT2015-1AP01	S00/S00/S00	3RB3016-1NB0	0.32 ... 1.0	0.32 ... 0.9
0.25	0.85	None	3RV2311-0KC10	3RT2015-1AP01	S00/S00/S00	3RB3016-1NB0	0.32 ... 1.1	0.32 ... 1.1
0.37	1.1	None	3RV2311-1AC10	3RT2015-1AP01	S00/S00/S00	3RB3016-1PB0	1 ... 1.5	1 ... 1.4
0.55	1.5	None	3RV2311-1BC10	3RT2015-1AP01	S00/S00/S00	3RB3016-1PB0	1 ... 2	1 ... 1.8
0.75	1.9	None	3RV2311-1BC10	3RT2015-1AP01	S00/S00/S00	3RB3016-1PB0	1 ... 2	1 ... 1.8
1.1	2.7	None	3RV2311-1DC10	3RT2015-1AP01	S00/S00/S00	3RB3016-1PB0	1 ... 3.2	1 ... 3
1.5	3.5	None	3RV2311-1EC10	3RT2015-1AP01	S00/S00/S00	3RB3016-1SB0	3 ... 4	3 ... 3.5

## 3.3 Motor starter protector + contactor + 3RB30 / 3RB31 and 3RB20 / 3RB21 solid-state overload relay

Standard three-phase motor 4-pole at 400 V AC <sup>1)</sup>		Circuit breaker Starter protection <sup>3)</sup>		Contactor <sup>2)</sup>	Size	Overload relay (electronic) Maximum permitted setting range overload release		
Standard power P	Motor current I	Setting range Overload release Motor starter protector					IE1 / IE2 motors	IE3 / IE4 motors
kW	A	A	Article No.	Article No.		Article No.	A	A
2.2	5	None	3RV2311-1GC10	3RT2015-1AP01	S00/S00/S00	3RB3016-1SB0	3 ... 6.3	3 ... 5.5
3	6.5	None	3RV2311-1HC10	3RT2015-1AP01	S00/S00/S00	3RB3016-1SB0	3 ... 7	3 ... 7
4	8.5	None	3RV2311-1JC10	3RT2016-1AP01	S00/S00/S00	3RB3016-1TB0	4 ... 9	4 ... 9
5.5	11.5	None	3RV2311-4AC10	3RT2024-1AP00	S00/S0/S0	3RB3026-1QB0	6 ... 12	6 ... 12
7.5	15.5	None	3RV2321-4BC10	3RT2025-1AP00	S0/S0/S0	3RB3026-1QB0	6 ... 16	6 ... 16
11	22	None	3RV2321-4EC10	3RT2027-1AP00	S0/S0/S0	3RB3026-1VB0	10 ... 24	10 ... 24 (up to 256 A starting current)
11	22	None	3RV2332-4EC10	3RT2035-1AP00	S2/S2/S2	3RB3036-1UB0	12.5 ... 24	12.5 ... 24
15	29	None	3RV2332-4VC10	3RT2036-1AP00	S2/S2/S2	3RB3036-1UB0	12.5 ... 31	12.5 ... 31
18.5	35	62 ... 73	3RV2032-4KA10	3RT2038-1AP00	S2/S2/S2	3RB3036-1UB0	12.5 ... 40	12.5 ... 40
22	41	70 ... 80	3RV2032-4RA10	3RT3038-1AP00	S2/S2/S2	3RB3036-1UB0	12.5 ... 42	12.5 ... 42
18.5	35	None	3RV2342-4FC10	3RT2045-1AP00	S3/S3/S3	3RB3046-1UB0	12.5 ... 40	12.5 ... 40
22	41	None	3RV2342-4HC10	3RT2045-1AP00	S3/S3/S3	3RB3046-1XB0	32 ... 45	32 ... 45
30	55	None	3RV2342-4JC10	3RT2045-1AP00	S3/S3/S3	3RB3046-1XB0	32 ... 61	32 ... 61
37	66	None	3RV2342-4KC10	3RT2045-1AP00	S3/S3/S3	3RB3046-1XB0	32 ... 73	32 ... 73
45	80	None	3RV2342-4RC10	3RT2046-1AP00	S3/S3/S3	3RB3046-1XB0	32 ... 84	32 ... 84
45	80	None	3RV2342-4YC10	3RT2046-1AP00	S3/S3/S3	3RB3046-1XB0	32 ... 87	32 ... 87

*Selection tables 400 V AC*

*3.3 Motor starter protector + contactor + 3RB30 / 3RB31 and 3RB20 / 3RB21 solid-state overload relay*

Standard three-phase motor 4-pole at 400 V AC <sup>1)</sup>		Circuit breaker Starter protection <sup>3)</sup>		Contactor <sup>2)</sup>	Size	Overload relay (electronic) Maximum permitted setting range overload release		
Stand- ard power P	Motor current I	Setting range Overload release	Motor starter protector			IE1 / IE2 motors	IE3 / IE4 motors	
kW	A	A	Article No.	Article No.	Article No.	A	A	
55	97	None	3VA2216-7MS32	3RT1054-6AP36	-/S6/S6	3RB2056-1FC2	50 ... 115	50 ... 115
75	132	None	3VA2216-7MS32	3RT1055-6AP36	-/S6/S6	3RB2056-1FC2	50 ... 150	50 ... 140
90	160	None	3VA2220-7MS32	3RT1056-6AP36	-/S6/S6	3RB2056-1FC2	50 ... 185	50 ... 175
110	195	None	3VA2325-7MS32	3RT1064-6AP36	-/S10/S10	3RB2066-1GC2	55 ... 225	55 ... 225
110	195	None	3VA2325-7MS32	3RT1264-6AP36	-/S10V/S10	3RB2066-1GC2	55 ... 225	55 ... 225
132	230	None	3VA2440-7MS32	3RT1065-6AP36	-/S10/S10	3RB2066-1GC2	55 ... 250	55 ... 250
132	230	None	3VA2440-7MS32	3RT1265-6AP36	-/S10V/S10	3RB2066-1GC2	55 ... 250	55 ... 250
160	280	None	3VA2440-7MS32	3RT1066-6AP36	-/S10/S10	3RB2066-1MC2	160 ... 300	160 ... 300
160	280	None	3VA2440-7MS32	3RT1266-6AP36	-/S10V/S10	3RB2066-1MC2	160 ... 300	160 ... 300
200	350	None	3VA2450-7MS32	3RT1075-6AP36	-/S12/S12	3RB2066-1MC2	160 ... 400	160 ... 400
200	350	None	3VA2450-7MS32	3RT1275-6AP36	-/S12V/S12	3RB2066-1MC2	160 ... 400	160 ... 400
250	430	None	3VA2450-7MS32	3RT1076-6AP36	-/S12/S12	3RB2066-1MC2	160 ... 500	160 ... 440
250	430	None	3VA2450-7MS32	3RT1276-6AP36	-/S12V/S12	3RB2066-1MC2	160 ... 500	160 ... 440

## 3.3 Motor starter protector + contactor + 3RB30 / 3RB31 and 3RB20 / 3RB21 solid-state overload relay

Standard three-phase motor 4-pole at 400 V AC <sup>1)</sup>		Circuit breaker Starter protection <sup>3)</sup>		Contactor <sup>2)</sup>	Size	Overload relay (electronic) Maximum permitted setting range overload release		
Standard power P	Motor current I	Setting range Overload release Motor starter protector					IE1 / IE2 motors	IE3 / IE4 motors
kW	A	A	Article No.	Article No.	Article No.	A	A	
<b>CLASS 10, short-circuit breaking capacity <math>I_q = 100 \text{ kA}</math></b>								
11	22	None	3RV2331-4EC10	3RT2035-1AP00	S2/S2/S2	3RB3036-1UB0	12.5 ... 24	12.5 ... 24
15	29	None	3RV2331-4VC10	3RT2036-1AP00	S2/S2/S2	3RB3036-1UB0	12.5 ... 31	12.5 ... 31
18.5	35	35 ... 45	3RV2031-4VB10	3RT2036-1AP00	S2/S2/S2	3RB3036-1UB0	12.5 ... 40.5	12.5 ... 40.5
22	41	42 ... 52	3RV2031-4WB10	3RT2036-1AP00	S2/S2/S2	3RB3036-1WB0	20 ... 47	12.5 ... 47
30	55	54 ... 65	3RV2031-4JB10	3RT2037-1AP00	S2/S2/S2	3RB3036-1WB0	20 ... 58.5	12.5 ... 58.5
18.5	35	None	3RV2341-4FC10	3RT2045-1AP00	S3/S3/S3	3RB3046-1UB0	12.5 ... 40	12.5 ... 40
22	41	None	3RV2341-4HC10	3RT2045-1AP00	S3/S3/S3	3RB3046-1XB0	32 ... 45	32 ... 45
30	55	None	3RV2341-4JC10	3RT2045-1AP00	S3/S3/S3	3RB3046-1XB0	32 ... 61	32 ... 61
37	66	None	3RV2341-4KC10	3RT2045-1AP00	S3/S3/S3	3RB3046-1XB0	32 ... 73	32 ... 73
45	80	None	3RV2341-4RC10	3RT2046-1AP00	S3/S3/S3	3RB3046-1XB0	32 ... 84	32 ... 84
45	80	None	3RV2341-4YC10	3RT2046-1AP00	S3/S3/S3	3RB3046-1XB0	32 ... 87	32 ... 87
55	97	None	3VA1112-5MH32	3RT1054-1AP36	-/S6/S6	3RB2056-1FC2	50 ... 115	50 ... 103
75	132	None	3VA1216-5MH32	3RT1055-6AP36	-/S6/S6	3RB2056-1FC2	50 ... 150	50 ... 132
90	160	None	3VA1220-5MH32	3RT1056-6AP36	-/S6/S6	3RB2056-1FC2	50 ... 185	50 ... 165

Article numbers for basic versions with screw terminals and spring-loaded terminals also possible. 3RA2921-1BA00 link module can only be used with screw terminals.

<sup>1)</sup> Guide value for 4-pole standard motors at 400 V AC, 50 Hz. Selection depends on the concrete startup and rated data of the protected motor.

<sup>2)</sup> Rated control supply voltage 230 V AC, 50 Hz, other control voltages possible.

<sup>3)</sup> The motor starter protector is to be set to maximum current value.

Type of coordination 2,  
short-circuit breaking capacity  $I_q = 150 \text{ kA}/100 \text{ kA}$



Standard three-phase motor 4-pole at 400 V AC <sup>1)</sup>		Motor starter protector Starter protection <sup>3)</sup>		Contactor <sup>2)</sup>	Size	Overload relay (electronic) Maximum permitted setting range overload release		
Stand- ard power P	Motor current I	Setting range Overload release	Motor starter protector				IE1 / IE2 motors	IE3 / IE4 motors
kW	A	A	Article No.	Article No.	Article No.	A	A	
<b>CLASS 5, short-circuit breaking capacity <math>I_q = 150 \text{ kA}</math></b>								
0.06	0.2	None	3RV2311-0CC10	3RT2015-1AP01	S00/S00/S00	3RB3113-4RB0	0.1 ... 0.25	0.1 ... 0.22
0.09	0.3	None	3RV2311-0DC10	3RT2015-1AP01	S00/S00/S00	3RB3113-4RB0	0.1 ... 0.32	0.1 ... 0.32
0.12	0.4	None	3RV2311-0FC10	3RT2015-1AP01	S00/S00/S00	3RB3113-4NB0	0.32 ... 0.5	0.32 ... 0.45
0.18	0.6	None	3RV2311-0HC10	3RT2015-1AP01	S00/S00/S00	3RB3113-4NB0	0.32 ... 0.8	0.32 ... 0.7
0.25	0.85	None	3RV2311-0JC10	3RT2015-1AP01	S00/S00/S00	3RB3113-4NB0	0.32 ... 1	0.32 ... 0.9
0.37	1.1	None	3RV2311-0KC10	3RT2015-1AP01	S00/S00/S00	3RB3113-4PB0	1 ... 1.25	1 ... 1.1
0.55	1.5	None	3RV2311-1AC10	3RT2015-1AP01	S00/S00/S00	3RB3113-4PB0	1 ... 1.6	1 ... 1.4
0.75	1.9	None	3RV2311-1BC10	3RT2015-1AP01	S00/S00/S00	3RB3113-4PB0	1 ... 2	1 ... 1.8
1.1	2.7	None	3RV2311-1DC10	3RT2015-1AP01	S00/S00/S00	3RB3113-4PB0	1 ... 3.2	1 ... 3
1.5	3.5	None	3RV2311-1EC10	3RT2015-1AP01	S00/S00/S00	3RB3113-4SB0	3 ... 4	3 ... 3.5
2.2	5	None	3RV2321-1GC10	3RT2024-1AP00	S0/S0/S0	3RB3123-4SB0	3 ... 6.3	3 ... 5.5
3	6.5	None	3RV2321-1HC10	3RT2024-1AP00	S0/S0/S0	3RB3123-4SB0	3 ... 8	3 ... 7
4	8.5	None	3RV2321-1JC10	3RT2024-1AP00	S0/S0/S0	3RB3123-4QB0	6 ... 10	6 ... 9

## 3.3 Motor starter protector + contactor + 3RB30 / 3RB31 and 3RB20 / 3RB21 solid-state overload relay

Standard three-phase motor 4-pole at 400 V AC <sup>1)</sup>		Motor starter protector Starter protection <sup>3)</sup>		Contactor <sup>2)</sup>	Size	Overload relay (electronic) Maximum permitted setting range overload release		
Standard power P	Motor current I	Setting range Overload release	Motor starter protector				IE1 / IE2 motors	IE3 / IE4 motors
kW	A	A	Article No.	Article No.		Article No.	A	A
5.5	11.5	None	3RV2321-1KC10	3RT2024-1AP00	S0/S0/S0	3RB3123-4QB0	6 ... 12	6 ... 11
7.5	15.5	None	3RV2321-4AC10	3RT2026-1AP00	S0/S0/S0	3RB3123-4QB0	6 ... 16	6 ... 12
11	22	None	3RV2321-4CC10	3RT2027-1AP00	S0/S0/S0	3RB3123-4VB0	10 ... 22	10 ... 20
15	29	None	3RV2321-4EC10	3RT2027-1AP00	S0/S0/S0	3RB3123-4VB0	10 ... 32	10 ... 30 (up to 256 A starting current)
15	29	None	3RV2332-4EC10	3RT2035-1AP00	S2/S2/S2	3RB3133-4UB0	12.5 ... 32	12.5 ... 32
18.5	35	None	3RV2332-4UC10	3RT2035-1AP00	S2/S2/S2	3RB3133-4UB0	12.5 ... 38	12.5 ... 38
22	41	None	3RV2332-4VC10	3RT2036-1AP00	S2/S2/S2	3RB3133-4UB0	12.5 ... 45	12.5 ... 45
30	55	62 ... 73	3RV2032-4KA10	3RT2038-1AP00	S2/S2/S2	3RB3133-4WB0	20 ... 60	20 ... 60
22	41	None	3RV2342-4HC10	3RT2045-1AP00	S3/S3/S3	3RB3143-4UB0	12.5 ... 50	12.5 ... 50
30	55	None	3RV2342-4JC10	3RT2045-1AP00	S3/S3/S3	3RB3143-4XB0	32 ... 63	32 ... 63
37	66	None	3RV2342-4KC10	3RT2045-1AP00	S3/S3/S3	3RB3143-4XB0	32 ... 75	32 ... 75
45	80	None	3RV2342-4RC10	3RT2046-1AP00	S3/S3/S3	3RB3143-4XB0	32 ... 84	32 ... 84
45	80	None	3RV2342-4YC10	3RT2046-1AP00	S3/S3/S3	3RB3143-4XB0	32 ... 93	32 ... 93
55	97	None	3RV2342-4MC10	3RT2047-1AP00	S3/S3/S3	3RB3143-4XB0	32 ... 100	32 ... 100

*Selection tables 400 V AC*

*3.3 Motor starter protector + contactor + 3RB30 / 3RB31 and 3RB20 / 3RB21 solid-state overload relay*

Standard three-phase motor 4-pole at 400 V AC <sup>1)</sup>		Motor starter protector Starter protection <sup>3)</sup>		Contactor <sup>2)</sup>	Size	Overload relay (electronic) Maximum permitted setting range overload release		
Stand- ard power P	Motor current I	Setting range Overload release	Motor starter protector				IE1 / IE2 motors	IE3 / IE4 motors
kW	A	A	Article No.	Article No.	Article No.	A	A	A
<b>CLASS 5, short-circuit breaking capacity I<sub>q</sub> = 100 kA</b>								
15	29	None	3RV2331-4EC10	3RT2035-1AP00	S2/S2/S2	3RB3133-4UB0	12.5 ... 32	12.5 ... 32
18.5	35	None	3RV2331-4PC10	3RT2035-1AP00	S2/S2/S2	3RB3133-4UB0	12.5 ... 36	12.5 ... 36
22	41	None	3RV2331-4JC10	3RT2037-1AP00	S2/S2/S2	3RB3133-4WB0	20 ... 52	20 ... 52
30	55	54 ... 65	3RV2031-4JB10	3RT2037-1AP00	S2/S2/S2	3RB3133-4WB0	20 ... 58.5	20 ... 58.5
22	41	None	3RV2341-4HC10	3RT2045-1AP00	S3/S3/S3	3RB3143-4UB0	12.5 ... 50	12.5 ... 50
30	55	None	3RV2341-4JC10	3RT2045-1AP00	S3/S3/S3	3RB3143-4XB0	32 ... 63	32 ... 63
37	66	None	3RV2341-4KC10	3RT2045-1AP00	S3/S3/S3	3RB3143-4XB0	32 ... 75	32 ... 75
45	80	None	3RV2341-4RC10	3RT2046-1AP00	S3/S3/S3	3RB3143-4XB0	32 ... 84	32 ... 84
45	80	None	3RV2341-4YC10	3RT2046-1AP00	S3/S3/S3	3RB3143-4XB0	32 ... 93	32 ... 93
55	97	None	3RV2341-4MC10	3RT2047-1AP00	S3/S3/S3	3RB3143-4XB0	32 ... 100	32 ... 100
<b>CLASS 10, short-circuit breaking capacity I<sub>q</sub> = 150 kA</b>								
0.06	0.2	None	3RV2311-0CC10	3RT2015-1AP01	S00/S00/S00	3RB3016-1RB0	0.1 ... 0.23	0.1 ... 0.22
0.09	0.3	None	3RV2311-0DC10	3RT2015-1AP01	S00/S00/S00	3RB3016-1RB0	0.1 ... 0.32	0.1 ... 0.32
0.12	0.4	None	3RV2311-0HC10	3RT2015-1AP01	S00/S00/S00	3RB3016-1NB0	0.32 ... 0.72	0.32 ... 0.7
0.18	0.6	None	3RV2311-0JC10	3RT2015-1AP01	S00/S00/S00	3RB3016-1NB0	0.32 ... 1	0.32 ... 0.9
0.25	0.85	None	3RV2311-0KC10	3RT2015-1AP01	S00/S00/S00	3RB3016-1NB0	0.32 ... 1.1	0.32 ... 1.1
0.37	1.1	None	3RV2311-1AC10	3RT2015-1AP01	S00/S00/S00	3RB3016-1PB0	1 ... 1.5	1 ... 1.4
0.55	1.5	None	3RV2311-1BC10	3RT2015-1AP01	S00/S00/S00	3RB3016-1PB0	1 ... 2	1 ... 1.8

## 3.3 Motor starter protector + contactor + 3RB30 / 3RB31 and 3RB20 / 3RB21 solid-state overload relay

Standard three-phase motor 4-pole at 400 V AC <sup>1)</sup>		Motor starter protector Starter protection <sup>3)</sup>		Contactor <sup>2)</sup>	Size	Overload relay (electronic) Maximum permitted setting range overload release		
Standard power P	Motor current I	Setting range Overload release	Motor starter protector				IE1 / IE2 motors	IE3 / IE4 motors
kW	A	A	Article No.	Article No.		Article No.	A	A
0.75	1.9	None	3RV2311-1BC10	3RT2015-1AP01	S00/S00/S00	3RB3016-1PB0	1 ... 2	1 ... 1.8
1.1	2.7	None	3RV2311-1DC10	3RT2015-1AP01	S00/S00/S00	3RB3016-1PB0	1 ... 3.2	1 ... 3
1.5	3.5	None	3RV2311-1EC10	3RT2015-1AP01	S00/S00/S00	3RB3016-1SB0	3 ... 4	3 ... 3.5
2.2	5	None	3RV2321-1GC10	3RT2024-1AP00	S0/S0/S0	3RB3026-1SB0	3 ... 6.3	3 ... 5.5
3	6.5	None	3RV2321-1HC10	3RT2024-1AP00	S0/S0/S0	3RB3026-1SB0	3 ... 8	3 ... 7
4	8.5	None	3RV2321-1JC10	3RT2024-1AP00	S0/S0/S0	3RB3026-1QB0	6 ... 10	6 ... 9
5.5	11.5	None	3RV2321-4AC10	3RT2026-1AP00	S0/S0/S0	3RB3026-1QB0	6 ... 13	6 ... 13
7.5	15.5	None	3RV2321-4BC10	3RT2027-1AP00	S0/S0/S0	3RB3026-1QB0	6 ... 16	6 ... 16
11	22	None	3RV2321-4EC10	3RT2027-1AP00	S0/S0/S0	3RB3026-1VB0	10 ... 24 (up to 256 A starting current)	10 ... 24 (up to 256 A starting current)
11	22	None	3RV2332-4EC10	3RT2035-1AP00	S2/S2/S2	3RB3036-1UB0	12.5 ... 24	12.5 ... 24
15	29	None	3RV2332-4VC10	3RT2036-1AP00	S2/S2/S2	3RB3036-1UB0	12.5 ... 31	12.5 ... 31
18.5	35	62 ... 73	3RV2032-4KA10	3RT2038-1AP00	S2/S2/S2	3RB3036-1UB0	12.5 ... 40	12.5 ... 40
22	41	70 ... 80	3RV2032-4RA10	3RT2038-1AP00	S2/S2/S2	3RB3036-1UB0	12.5 ... 42	12.5 ... 42
18.5	35	None	3RV2342-4FC10	3RT2045-1AP00	S3/S3/S3	3RB3046-1UB0	12.5 ... 40	12.5 ... 40
22	41	None	3RV2342-4HC10	3RT2045-1AP00	S3/S3/S3	3RB3046-1XB0	32 ... 45	32 ... 45
30	55	None	3RV2342-4JC10	3RT2045-1AP00	S3/S3/S3	3RB3046-1XB0	32 ... 61	32 ... 61
37	66	None	3RV2342-4KC10	3RT2045-1AP00	S3/S3/S3	3RB3046-1XB0	32 ... 73	32 ... 73

*Selection tables 400 V AC*

*3.3 Motor starter protector + contactor + 3RB30 / 3RB31 and 3RB20 / 3RB21 solid-state overload relay*

Standard three-phase motor 4-pole at 400 V AC <sup>1)</sup>		Motor starter protector Starter protection <sup>3)</sup>		Contactor <sup>2)</sup>	Size	Overload relay (electronic) Maximum permitted setting range overload release		
Stand- ard power P	Motor current I	Setting range Overload release	Motor starter protector				IE1 / IE2 motors	IE3 / IE4 motors
kW	A	A	Article No.	Article No.	Article No.	A	A	
45	80	None	3RV2342-4RC10	3RT2046-1AP00	S3/S3/S3	3RB3046-1XB0	32 ... 84	32 ... 84
45	80	None	3RV2342-4YC10	3RT2046-1AP00	S3/S3/S3	3RB3046-1XB0	32 ... 87	32 ... 87
55	97	None	3VA2216-7MS32	3RT1054-6AP36	-/S6/S6	3RB2056-1FC2	50 ... 115	50 ... 115
75	132	None	3VA2216-7MS32	3RT1055-6AP36	-/S6/S6	3RB2056-1FC2	50 ... 150	50 ... 140
90	160	None	3VA2220-7MS32	3RT1056-6AP36	-/S6/S6	3RB2056-1FC2	50 ... 185	50 ... 175
110	195	None	3VA2325-7MS32	3RT1064-6AP36	-/S10/S10	3RB2066-1GC2	55 ... 225	55 ... 225
110	195	None	3VA2325-7MS32	3RT1264-6AP36	-/S10V/S10	3RB2066-1GC2	55 ... 225	55 ... 225
132	230	None	3VA2440-7MS32	3RT1065-6AP36	-/S10/S10	3RB2066-1GC2	55 ... 250	55 ... 250
132	230	None	3VA2440-7MS32	3RT1265-6AP36	-/S10V/S10	3RB2066-1GC2	55 ... 250	55 ... 250
160	280	None	3VA2440-7MS32	3RT1066-6AP36	-/S10/S10	3RB2066-1MC2	160 ... 300	160 ... 300
160	280	None	3VA2440-7MS32	3RT1266-6AP36	-/S10V/S10	3RB2066-1MC2	160 ... 300	160 ... 300
200	350	None	3VA2450-7MS32	3RT1075-6AP36	-/S12/S12	3RB2066-1MC2	160 ... 400	160 ... 400
200	350	None	3VA2450-7MS32	3RT1275-6AP36	-/S12V/S12	3RB2066-1MC2	160 ... 400	160 ... 400
250	430	None	3VA2450-7MS32	3RT1076-6AP36	-/S12/S12	3RB2066-1MC2	160 ... 500	160 ... 440
250	430	None	3VA2450-7MS32	3RT1276-6AP36	-/S12V/S12	3RB2066-1MC2	160 ... 500	160 ... 440

## 3.3 Motor starter protector + contactor + 3RB30 / 3RB31 and 3RB20 / 3RB21 solid-state overload relay

Standard three-phase motor 4-pole at 400 V AC <sup>1)</sup>		Motor starter protector Starter protection <sup>3)</sup>		Contactor <sup>2)</sup>	Size	Overload relay (electronic) Maximum permitted setting range overload release		
Standard power P	Motor current I	Setting range Overload release	Motor starter protector			IE1 / IE2 motors	IE3 / IE4 motors	
kW	A	A	Article No.	Article No.	Article No.	A	A	
<b>CLASS 10, short-circuit breaking capacity <math>I_q = 100 \text{ kA}</math></b>								
11	22	None	3RV2331-4EC10	3RT2035-1AP00	S2/S2/S2	3RB3036-1UB0	12.5 ... 24	12.5 ... 24
15	29	None	3RV2331-4VC10	3RT2036-1AP00	S2/S2/S2	3RB3036-1UB0	12.5 ... 31	12.5 ... 31
18.5	35	35 ... 45	3RV2031-4VB10	3RT2036-1AP00	S2/S2/S2	3RB3036-1UB0	12.5 ... 40.5	12.5 ... 40.5
22	41	42 ... 52	3RV2031-4WB10	3RT2036-1AP00	S2/S2/S2	3RB3036-1WB0	20 ... 47	20 ... 47
30	55	54 ... 65	3RV2031-4JB10	3RT2037-1AP00	S2/S2/S2	3RB3036-1WB0	20 ... 58.5	20 ... 58.5
18.5	35	None	3RV2341-4FC10	3RT2045-1AP00	S3/S3/S3	3RB3046-1UB0	12.5 ... 40	12.5 ... 40
22	41	None	3RV2341-4HC10	3RT2045-1AP00	S3/S3/S3	3RB3046-1XB0	32 ... 45	32 ... 45
30	55	None	3RV2341-4JC10	3RT2045-1AP00	S3/S3/S3	3RB3046-1XB0	32 ... 61	32 ... 61
37	66	None	3RV2341-4KC10	3RT2045-1AP00	S3/S3/S3	3RB3046-1XB0	32 ... 73	32 ... 73
45	80	None	3RV2341-4RC10	3RT2046-1AP00	S3/S3/S3	3RB3046-1XB0	32 ... 84	32 ... 84
45	80	None	3RV2341-4YC10	3RT2046-1AP00	S3/S3/S3	3RB3046-1XB0	32 ... 87	32 ... 87
55	97	None	3VA1112-5MH32	3RT1054-6AP36	-/S6/S6	3RB2056-1FC2	50 ... 115	50 ... 103
75	132	None	3VA1216-5MH32	3RT1055-6AP36	-/S6/S6	3RB2056-1FC2	50 ... 150	50 ... 132
90	160	None	3VA1220-5MH32	3RT1056-6AP36	-/S6/S6	3RB2056-1FC2	50 ... 185	50 ... 165

*Selection tables 400 V AC*

*3.3 Motor starter protector + contactor + 3RB30 / 3RB31 and 3RB20 / 3RB21 solid-state overload relay*

Standard three-phase motor 4-pole at 400 V AC <sup>1)</sup>		Motor starter protector Starter protection <sup>3)</sup>		Contactor <sup>2)</sup>	Size	Overload relay (electronic) Maximum permitted setting range overload release		
Stand- ard power P	Motor current I	Setting range Overload release Motor starter protector					IE1 / IE2 motors	IE3 / IE4 motors
kW	A	A	Article No.	Article No.		Article No.	A	A
<b>CLASS 20, short-circuit breaking capacity I<sub>q</sub> = 150 kA</b>								
0.06	0.2	0.35 ... 0.5	3RV2011-0FA10	3RT2015-1AP01	S00/S00/S00	3RB3016-2RB0	0.1 ... 0.21	0.1 ... 0.21
0.09	0.3	0.55 ... 0.8	3RV2011-0HA10	3RT2015-1AP01	S00/S00/S00	3RB3016-2RB0	0.1 ... 0.37	0.1 ... 0.37
0.12	0.4	0.7 ... 1	3RV2011-0JA10	3RT2015-1AP01	S00/S00/S00	3RB3016-2NB0	0.32 ... 0.42	0.32 ... 0.42
0.18	0.6	1.1 ... 1.6	3RV2011-1AA10	3RT2015-1AP01	S00/S00/S00	3RB3016-2NB0	0.32 ... 0.75	0.32 ... 0.75
0.25	0.85	1.4 ... 2	3RV2011-1BA10	3RT2015-1AP01	S00/S00/S00	3RB3016-2NB0	0.32 ... 0.97	0.32 ... 0.97
0.37	1.1	1.8 ... 2.5	3RV2011-1CA10	3RT2015-1AP01	S00/S00/S00	3RB3016-2PB0	1 ... 1.2	1 ... 1.2
0.55	1.5	2.2 ... 3.2	3RV2011-1DA10	3RT2015-1AP01	S00/S00/S00	3RB3016-2PB0	1 ... 1.53	1 ... 1.53
0.75	1.9	3.5 ... 5	3RV2021-1FA10	3RT2024-1AP00	S0/S0/S0	3RB3026-2PB0	1 ... 2.3	1 ... 2.3
1.1	2.7	4.5 ... 6.3	3RV2021-1GA10	3RT2024-1AP00	S0/S0/S0	3RB3026-2PB0	1 ... 3	1 ... 3
1.5	3.5	5.5 ... 8	3RV2021-1HA10	3RT2024-1AP00	S0/S0/S0	3RB3026-2PB0	1 ... 3.8	1 ... 3.8
2.2	5	7 ... 10	3RV2021-1JA10	3RT2024-1AP00	S0/S0/S0	3RB3026-2SB0	3 ... 6	3 ... 6
3	6.5	11 ... 16	3RV2021-4AA10	3RT2026-1AP00	S0/S0/S0	3RB3026-2QB0	6 ... 7.3	6 ... 7.3
4	8.5	14 ... 20	3RV2021-4BA10	3RT2027-1AP00	S0/S0/S0	3RB3026-2QB0	6 ... 9.2	6 ... 9.2
5.5	11.5	20 ... 25	3RV2021-4DA10	3RT2027-1AP00	S0/S0/S0	3RB3026-2QB0	6 ... 12.8	6 ... 12.8
7.5	15.5	None	3RV2332-4XC10	3RT2037-1AP00	S2/S2/S2	3RB3036-2UB0	12.5 ... 16	12.5 ... 16
11	22	49 ... 59	3RV2032-4XA10	3RT2037-1AP00	S2/S2/S2	3RB3036-2UB0	12.5 ... 22	12.5 ... 22
15	29	70 ... 80	3RV2032-4RA10	3RT2038-1AP00	S2/S2/S2	3RB3036-2UB0	12.5 ... 32	12.5 ... 32
11	22	28 ... 40	3RV2042-4FB10	3RT2045-1AP00	S3/S3/S3	3RB3046-2UB0	12.5 ... 28	12.5 ... 28

## 3.3 Motor starter protector + contactor + 3RB30 / 3RB31 and 3RB20 / 3RB21 solid-state overload relay

Standard three-phase motor 4-pole at 400 V AC <sup>1)</sup>		Motor starter protector Starter protection <sup>3)</sup>		Contactor <sup>2)</sup>	Size	Overload relay (electronic) Maximum permitted setting range overload release		
Standard power P	Motor current I	Setting range Overload release Motor starter protector					IE1 / IE2 motors	IE3 / IE4 motors
kW	A	A	Article No.	Article No.		Article No.	A	A
15	29	36 ... 50	3RV2042-4HB10	3RT2045-1AP00	S3/S3/S3	3RB3046-2UB0	12.5 ... 32	12.5 ... 32
18.5	35	45 ... 63	3RV2042-4JB10	3RT2045-1AP00	S3/S3/S3	3RB3046-2UB0	12.5 ... 40	12.5 ... 40
22	41	57 ... 75	3RV2042-4KB10	3RT2045-1AP00	S3/S3/S3	3RB3046-2XB0	32 ... 45	32 ... 45
30	55	65 ... 84	3RV2042-4RB10	3RT2046-1AP00	S3/S3/S3	3RB3046-2XB0	32 ... 61	32 ... 61
37	66	75 ... 93	3RV2042-4YB10	3RT1054-1AP36	S3/S6/S3	3RB3046-2XW1	32 ... 73	32 ... 73
30	55	None	3VA2163-7MS32	3RT1054-6AP36	-/S6/S6	3RB2056-2FC2	50 ... 63	50 ... 63
37 / 45	66 / 80	None	3VA2110-7MS32	3RT1054-6AP36	-/S6/S6	3RB2056-2FC2	50 ... 80	50 ... 80
45	80	None	3VA2216-7MS32	3RT1055-6AP36	-/S6/S6	3RB2056-2FC2	50 ... 90	50 ... 90
55	97	None	3VA2216-7MS32	3RT1056-6AP36	-/S6/S6	3RB2056-2FC2	50 ... 120	50 ... 120
75	132	None	3VA2216-7MS32	3RT1064-6AP36	-/S10/S10	3RB2066-2GC2	55 ... 140	55 ... 140
90	160	None	3VA2220-7MS32	3RT1064-6AP36	-/S10/S10	3RB2066-2GC2	55 ... 150	55 ... 150
90	160	None	3VA2325-7MS32	3RT1264-6AP36	-/S10V/S10	3RB2066-2GC2	55 ... 180	55 ... 180
90	160	None	3VA2325-7MS32	3RT1065-6AP36	-/S10/S10	3RB2066-2GC2	55 ... 180	55 ... 180
110	195	None	3VA2325-7MS32	3RT1264-6AP36	-/S10V/S10	3RB2066-2MC2	160 ... 225	160 ... 225
110	195	None	3VA2325-7MS32	3RT1066-6AP36	-/S10/S10	3RB2066-2MC2	160 ... 210	160 ... 210
132	230	None	3VA2325-7MS32	3RT1075-6AP36	-/S12/S12	3RB2066-2MC2	160 ... 250	160 ... 250
132	230	None	3VA2325-7MS32	3RT1265-6AP36	-/S10V/S10	3RB2066-2MC2	160 ... 250	160 ... 250
160	280	None	3VA2440-7MS32	3RT1266-6AP36	-/S10V/S10	3RB2066-2MC2	160 ... 300	160 ... 300

*Selection tables 400 V AC*

*3.3 Motor starter protector + contactor + 3RB30 / 3RB31 and 3RB20 / 3RB21 solid-state overload relay*

Standard three-phase motor 4-pole at 400 V AC <sup>1)</sup>		Motor starter protector Starter protection <sup>3)</sup>		Contactor <sup>2)</sup>	Size	Overload relay (electronic) Maximum permitted setting range overload release		
Stand- ard power P	Motor current I	Setting range Overload release Motor starter protector					IE1 / IE2 motors	IE3 / IE4 motors
kW	A	A	Article No.	Article No.		Article No.	A	A
200	350	None	3VA2440-7MS32	3RT1076-6AP36	-/S12/S12	3RB2066-2MC2	160 ... 350	160 ... 350
200	350	None	3VA2450-7MN32	3RT1275-6AP36	-/S12V/S12	3RB2066-2MC2	160 ... 370	160 ... 370
250	430	None	3VA2450-7MN32	3RT1276-6AP36	-/S12V/S12	3RB2066-2MC2	160 ... 440	160 ... 440
<b>CLASS 20, short-circuit breaking capacity I<sub>q</sub> = 100 kA</b>								
7.5	15.5	28 ... 36	3RV2031-4PB10	3RT2035-1AP00	S2/S2/S2	3RB3036-2UB0	12.5 ... 27	12.5 ... 27
11	22	28 ... 36	3RV2031-4PB10	3RT2035-1AP00	S2/S2/S2	3RB3036-2UB0	12.5 ... 27	12.5 ... 27
15	29	32 ... 40	3RV2031-4UB10	3RT2035-1AP00	S2/S2/S2	3RB3036-2UB0	12.5 ... 30	12.5 ... 30
18.5	35	42 ... 52	3RV2031-4WB10	3RT2036-1AP00	S2/S2/S2	3RB3036-2UB0	12.5 ... 39	12.5 ... 39
22	41	49 ... 59	3RV2031-4XB10	3RT2037-1AP00	S2/S2/S2	3RB3036-2UB0	12.5 ... 44	12.5 ... 44
<b>CLASS 30, short-circuit breaking capacity I<sub>q</sub> = 150 kA</b>								
0.06	0.2	0.55 ... 0.8	3RV2011-0HA10	3RT2015-1AP01	S00/S00/S00	3RB3113-4RB0	0.1 ... 0.28	0.1 ... 0.28
0.09	0.3	0.7 ... 1	3RV2011-0JA10	3RT2015-1AP01	S00/S00/S00	3RB3113-4RB0	0.1 ... 0.37	0.1 ... 0.37
0.12	0.4	1.1 ... 1.6	3RV2011-1AA10	3RT2015-1AP01	S00/S00/S00	3RB3113-4NB0	0.32 ... 0.58	0.32 ... 0.58
0.18	0.6	1.4 ... 2	3RV2011-1BA10	3RT2015-1AP01	S00/S00/S00	3RB3113-4NB0	0.32 ... 0.75	0.32 ... 0.75
0.25	0.85	1.8 ... 2.5	3RV2011-1CA10	3RT2015-1AP01	S00/S00/S00	3RB3113-4NB0	0.32 ... 0.97	0.32 ... 0.97
0.37	1.1	2.2 ... 3.2	3RV2011-1DA10	3RT2015-1AP01	S00/S00/S00	3RB3113-4PB0	1 ... 1.17	1 ... 1.17
0.55	1.5	3.5 ... 5	3RV2021-1FA10	3RT2024-1AP00	S0/S0/S0	3RB3123-4PB0	1 ... 1.8	1 ... 1.8
0.75	1.9	4.5 ... 6.3	3RV2021-1GA10	3RT2024-1AP00	S0/S0/S0	3RB3123-4PB0	1 ... 2.3	1 ... 2.3
1.1	2.7	5.5 ... 8	3RV2021-1HA10	3RT2024-1AP00	S0/S0/S0	3RB3123-4PB0	1 ... 3	1 ... 3

## 3.3 Motor starter protector + contactor + 3RB30 / 3RB31 and 3RB20 / 3RB21 solid-state overload relay

Standard three-phase motor 4-pole at 400 V AC <sup>1)</sup>		Motor starter protector Starter protection <sup>3)</sup>		Contactor <sup>2)</sup>	Size	Overload relay (electronic) Maximum permitted setting range overload release		
Standard power P	Motor current I	Setting range Overload release	Motor starter protector			IE1 / IE2 motors	IE3 / IE4 motors	
kW	A	A	Article No.	Article No.	Article No.	A	A	
1.5	3.5	7 ... 10	3RV2021-1JA10	3RT2024-1AP00	S0/S0/S0	3RB3123-4SB0	3 ... 3.8	3 ... 3.8
2.2	5	11 ... 16	3RV2021-4AA10	3RT2026-1AP00	S0/S0/S0	3RB3123-4SB0	3 ... 6	3 ... 6
3	6.5	14 ... 20	3RV2021-4BA10	3RT2027-1AP00	S0/S0/S0	3RB3123-4QB0	6 ... 7.4	6 ... 7.4
4	8.5	20 ... 25	3RV2021-4DA10	3RT2027-1AP00	S0/S0/S0	3RB3123-4QB0	6 ... 9.7	6 ... 9.7
5.5	11.5	27 ... 32	3RV2021-4EA10	3RT2027-1AP00	S0/S0/S0	3RB3123-4QB0	6 ... 12.5	6 ... 12.5 (up to 256 A starting current)
7.5	15.5	62 ... 73	3RV2032-4KA10	3RT2038-1AP00	S2/S2/S2	3RB3133-4UB0	12.5 ... 24	12.5 ... 24
11	22	62 ... 73	3RV2032-4KA10	3RT2038-1AP00	S2/S2/S2	3RB3133-4UB0	12.5 ... 24	12.5 ... 24
7.5	15.5	28 ... 40	3RV2042-4FB10	3RT2045-1AP00	S3/S3/S3	3RB3143-4UB0	12.5 ... 19	12.5 ... 19
11	22	36 ... 50	3RV2042-4HB10	3RT2045-1AP00	S3/S3/S3	3RB3143-4UB0	12.5 ... 24	12.5 ... 24
15	29	45 ... 63	3RV2042-4JB10	3RT2045-1AP00	S3/S3/S3	3RB3143-4UB0	12.5 ... 32	12.5 ... 32
18.5	35	57 ... 75	3RV2042-4KB10	3RT2045-1AP00	S3/S3/S3	3RB3143-4UB0	12.5 ... 38	12.5 ... 38
22	41	65 ... 84	3RV2042-4RB10	3RT2046-1AP00	S3/S3/S3	3RB3143-4XB0	32 ... 45	32 ... 45
30	55	75 ... 93	3RV2042-4YB10	3RT2046-1AP00	S3/S3/S3	3RB3143-4XB0	32 ... 55	32 ... 55
37	66	80 ... 100	3RV2042-4MB10	3RT1054-1AP36	S3/S6/S3	3RB3143-4XW1	32 ... 61	32 ... 61
37	66	None	3VA2110-7MS32	3RT1054-6AP36	-/S6/S6	3RB2153-4FC2	50 ... 69	50 ... 69
45	80	None	3VA2110-7MS32	3RT1055-6AP36	-/S6/S6	3RB2153-4FC2	50 ... 80	50 ... 80
45	80	None	3VA2216-7MS32	3RT1055-6AP36	-/S6/S6	3RB2153-4FC2	50 ... 90	50 ... 90
55	97	None	3VA2216-7MS32	3RT1056-6AP36	-/S6/S6	3RB2153-4FC2	50 ... 111	50 ... 111

## Selection tables 400 V AC

### 3.3 Motor starter protector + contactor + 3RB30 / 3RB31 and 3RB20 / 3RB21 solid-state overload relay

Standard three-phase motor 4-pole at 400 V AC <sup>1)</sup>		Motor starter protector Starter protection <sup>3)</sup>		Contactor <sup>2)</sup>	Size	Overload relay (electronic) Maximum permitted setting range overload release		
Stand- ard power P	Motor current I	Setting range Overload release	Motor starter protector				IE1 / IE2 motors	IE3 / IE4 motors
kW	A	A	Article No.	Article No.		Article No.	A	A
75	132	None	3VA2220-7MS32	3RT1065-6AP36	-/S10/S10	3RB2163-4GC2	55 ... 150	55 ... 150
90	160	None	3VA2325-7MS32	3RT1066-6AP36	-/S10/S10	3RB2163-4GC2	55 ... 180	55 ... 180
90	160	None	3VA2325-7MS32	3RT1265-6AP36	-/S10V/S10	3RB2163-4GC2	55 ... 190	55 ... 190
110	195	None	3VA2325-7MS32	3RT1075-6AP36	-/S12/S12	3RB2163-4MC2	160 ... 220	160 ... 220
110	195	None	3VA2325-7MS32	3RT1266-6AP36	-/S10V/S10	3RB2163-4MC2	160 ... 225	160 ... 225
132	230	None	3VA2325-7MS32	3RT1076-6AP36	-/S12/S12	3RB2163-4MC2	160 ... 250	160 ... 250
160	280	None	3VA2440-7MS32	3RT1076-6AP36	-/S12/S12	3RB2163-4MC2	160 ... 300	160 ... 300
160	280	None	3VA2440-7MS32	3RT1275-6AP36	-/S12V/S12	3RB2163-4MC2	160 ... 316	160 ... 316
200	350	None	3VA2450-7MQ32	3RT1276-6AP36	-/S12V/S12	3RB2163-4MC2	160 ... 370	160 ... 370
<b>CLASS 30, short-circuit breaking capacity I<sub>q</sub> = 100 kA</b>								
7.5	15.5	22 ... 32	3RV2031-4EB10	3RT2035-1AP00	S2/S2/S2	3RB3133-4UB0	12.5 ... 17	12.5 ... 17
11	22	35 ... 45	3RV2031-4VB10	3RT2036-1AP00	S2/S2/S2	3RB3133-4UB0	12.5 ... 25	12.5 ... 25
15	29	49 ... 59	3RV2031-4XB10	3RT2037-1AP00	S2/S2/S2	3RB3133-4WB0	20 ... 31	20 ... 31

Article numbers for basic versions with screw terminals and spring-loaded terminals also possible. 3RA2921-1BA00 link module can only be used with screw terminals.

- 1) Guide value for 4-pole standard motors at 400 V AC, 50 Hz. Selection depends on the concrete startup and rated data of the protected motor.
- 2) Rated control supply voltage 230 V AC, 50 Hz, other control voltages possible.
- 3) The motor starter protector is to be set to maximum current value.

### 3.4 Motor starter protector + contactor + 3RB22, 3RB23, 3RB24 electronic overload relays, or 3UF7

Type of coordination 1,  
short-circuit breaking capacity  $I_q = 150 \text{ kA}$



Standard three-phase motor 4-pole at 400 V AC <sup>1)</sup>		Setting range Overload release	Motor starter protector Starter protection <sup>3)</sup>	Contactor <sup>2)</sup>	Size	Overload relay (electronic) or current measuring module <sup>4)</sup> Maximum permitted setting range overload release		
Stand- ard output P	Motor current I					IE1 / IE2 motors	IE3 / IE4 motors	
kW	A	A	Article No.	Article No.	Article No.	A	A	
<b>CLASS 10, short-circuit breaking capacity <math>I_q = 150 \text{ kA}</math></b>								
0.09	0.3	None	3RV2311-0DC10	3RT2015-1AP01	S00/S00/-	3UF71x0-1AA00-0/ 3RB2906-2BG1	0.3 ... 0.32	0.3 ... 0.32
0.12	0.4	None	3RV2311-0FC10	3RT2015-1AP01	S00/S00/-	3UF71x0-1AA00-0/ 3RB2906-2BG1	0.3 ... 0.5	0.3 ... 0.45
0.18	0.6	None	3RV2311-0HC10	3RT2015-1AP01	S00/S00/-	3UF71x0-1AA00-0/ 3RB2906-2BG1	0.3 ... 0.8	0.3 ... 0.7
0.25	0.85	None	3RV2311-0JC10	3RT2015-1AP01	S00/S00/-	3UF71x0-1AA00-0/ 3RB2906-2BG1	0.3 ... 1	0.3 ... 0.9
0.37	1.1	None	3RV2311-0KC10	3RT2015-1AP01	S00/S00/-	3UF71x0-1AA00-0/ 3RB2906-2BG1	0.3 ... 1.25	0.3 ... 1.1
0.55	1.5	None	3RV2311-1AC10	3RT2015-1AP01	S00/S00/-	3UF71x0-1AA00-0/ 3RB2906-2BG1	0.3 ... 1.6	0.3 ... 1.4

*Selection tables 400 V AC*

*3.4 Motor starter protector + contactor + 3RB22, 3RB23, 3RB24 electronic overload relays, or 3UF7*

Standard three-phase motor 4-pole at 400 V AC <sup>1)</sup>		Setting range Overload release Motor starter protector	Motor starter protector Starter protection <sup>3)</sup>	Contactor <sup>2)</sup>	Size	Overload relay (electronic) or current measuring module <sup>4)</sup> Maximum permitted setting range overload release		
Stand- ard output P	Motor current I					Article No.	Article No.	IE1 / IE2 motors
kW	A	A	Article No.	Article No.	Article No.	A	A	A
0.75	1.9	None	3RV2311-1BC10	3RT2015-1AP01	S00/S00/-	3UF71x0-1AA00-0/ 3RB2906-2BG1	0.3 ... 2	0.3 ... 1.8
1.1	2.7	None	3RV2311-1DC10	3RT2015-1AP01	S00/S00/-	3UF71x1-1AA00-0/ 3RB2906-2DG1	2.4 ... 3.2	2.4 ... 2.8
1.5	3.5	None	3RV2311-1EC10	3RT2015-1AP01	S00/S00/-	3UF71x1-1AA00-0/ 3RB2906-2DG1	2.4 ... 4	2.4 ... 3.5
2.2	5	None	3RV2311-1GC10	3RT2015-1AP01	S00/S00/-	3UF71x1-1AA00-0/ 3RB2906-2DG1	2.4 ... 6.3	2.4 ... 5.5
3	6.5	None	3RV2311-1HC10	3RT2015-1AP01	S00/S00/-	3UF71x1-1AA00-0/ 3RB2906-2DG1	2.4 ... 7	2.4 ... 7
4	8.5	None	3RV2311-1JC10	3RT2016-1AP01	S00/S00/-	3UF71x1-1AA00-0/ 3RB2906-2DG1	2.4 ... 9	2.4 ... 9
5.5	11.5	None	3RV2321-4AC10	3RT2024-1AP00	S0/S0/-	3UF71x1-1AA00-0/ 3RB2906-2DG1	2.4 ... 12	2.4 ... 12
7.5	15.5	None	3RV2321-4CC10	3RT2026-1AP00	S0/S0/-	3UF71x1-1AA00-0/ 3RB2906-2DG1	2.4 ... 16	2.4 ... 16
11	22	None	3RV2321-4EC10	3RT2027-1AP00	S0/S0/-	3UF71x2-1AA00-0/ 3RB2906-2JG1	10 ... 24	10 ... 24 (up to 256 A starting current)
11	22	None	3RV2332-4EC10	3RT2035-1AP00	S2/S2/-	3UF71x2-1AA00-0/ 3RB2906-2JG1	10 ... 24	10 ... 24

## 3.4 Motor starter protector + contactor + 3RB22, 3RB23, 3RB24 electronic overload relays, or 3UF7

Standard three-phase motor 4-pole at 400 V AC <sup>1)</sup>		Setting range Overload release	Motor starter protector Starter protection <sup>3)</sup>	Contactor <sup>2)</sup>	Size	Overload relay (electronic) or current measuring module <sup>4)</sup> Maximum permitted setting range overload release		
Stand-ard output P	Motor current I						IE1 / IE2 motors	IE3 / IE4 motors
kW	A	A	Article No.	Article No.		Article No.	A	A
15	29	None	3RV2332-4VC10	3RT2036-1AP00	S2/S2/-	3UF71x2-1AA00-0/ 3RB2906-2JG1	10 ... 31	10 ... 31
18.5	35	49 ... 59	3RV2032-4XA10	3RT2037-1AP00	S2/S2/-	3UF71x2-1AA00-0/ 3RB2906-2JG1	10 ... 39	10 ... 39
22	41	70 ... 80	3RV2032-4RA10	3RT2038-1AP00	S2/S2/-	3UF71x2-1AA00-0/ 3RB2906-2JG1	10 ... 42	10 ... 42
18.5	35	None	3RV2342-4FC10	3RT2045-1AP00	S3/S3/-	3UF71x2-1AA00-0/ 3RB2906-2JG1	10 ... 40	10 ... 40
22	41	None	3RV2342-4HC10	3RT2045-1AP00	S3/S3/-	3UF71x2-1AA00-0/ 3RB2906-2JG1	10 ... 45	10 ... 45
30	55	None	3RV2342-4JC10	3RT2045-1AP00	S3/S3/-	3UF71x2-1AA00-0/ 3RB2906-2JG1	10 ... 61	10 ... 61
37	66	None	3RV2342-4KC10	3RT2045-1AP00	S3/S3/-	3UF71x2-1AA00-0/ 3RB2906-2JG1	10 ... 73	10 ... 73
45	80	None	3RV2342-4RC10	3RT2046-1AP00	S3/S3/-	3UF71x2-1AA00-0/ 3RB2906-2JG1	10 ... 84	10 ... 84
45	80	None	3RV2342-4YC10	3RT2046-1AP00	S3/S3/-	3UF71x2-1AA00-0/ 3RB2906-2JG1	10 ... 87	10 ... 87
55	97	None	3VA2216-7MS32	3RT1054-6AP36	-/S6/S6	3UF71x3-1xA00-0/ 3RB2956-2Tx2	20 ... 115	20 ... 115

*Selection tables 400 V AC*

*3.4 Motor starter protector + contactor + 3RB22, 3RB23, 3RB24 electronic overload relays, or 3UF7*

Standard three-phase motor 4-pole at 400 V AC <sup>1)</sup>		Setting range Overload release Motor starter protector	Motor starter protector Starter protection <sup>3)</sup>	Contactor <sup>2)</sup>	Size	Overload relay (electronic) or current measuring module <sup>4)</sup> Maximum permitted setting range overload release		
Stand-ard output P	Motor current I						IE1 / IE2 motors	IE3 / IE4 motors
kW	A	A	Article No.	Article No.		Article No.	A	A
75	132	None	3VA2216-7MS32	3RT1055-6AP36	-/S6/S6	3UF71x3-1xA00-0/ 3RB2956-2Tx2	20 ... 150	20 ... 140
90	160	None	3VA2220-7MS32	3RT1056-6AP36	-/S6/S6	3UF71x3-1xA00-0/ 3RB2956-2Tx2	20 ... 185	20 ... 175
110	195	None	3VA2325-7MS32	3RT1064-6AP36	-/S10/S10	3UF71x4-1BA00-0/ 3RB2966-2WH2	63 ... 225	63 ... 225
110	195	None	3VA2325-7MS32	3RT1264-6AP36	-/S10V/S10	3UF71x4-1BA00-0/ 3RB2966-2WH2	63 ... 225	63 ... 225
132	230	None	3VA2440-7MS32	3RT1065-6AP36	-/S10/S10	3UF71x4-1BA00-0/ 3RB2966-2WH2	63 ... 265	63 ... 265
132	230	None	3VA2440-7MS32	3RT1265-6AP36	-/S10V/S10	3UF71x4-1BA00-0/ 3RB2966-2WH2	63 ... 265	63 ... 265
160	280	None	3VA2440-7MS32	3RT1066-6AP36	-/S10/S10	3UF71x4-1BA00-0/ 3RB2966-2WH2	63 ... 300	63 ... 300
160	280	None	3VA2440-7MS32	3RT1266-6AP36	-/S10V/S10	3UF71x4-1BA00-0/ 3RB2966-2WH2	63 ... 300	63 ... 300

## 3.4 Motor starter protector + contactor + 3RB22, 3RB23, 3RB24 electronic overload relays, or 3UF7

Standard three-phase motor 4-pole at 400 V AC <sup>1)</sup>		Setting range Overload release	Motor starter protector Starter protection <sup>3)</sup>	Contactor <sup>2)</sup>	Size	Overload relay (electronic) or current measuring module <sup>4)</sup> Maximum permitted setting range overload release		
Stand- ard output P	Motor current I						IE1 / IE2 motors	IE3 / IE4 motors
kW	A	A	Article No.	Article No.		Article No.	A	A
200	350	None	3VA2450-7MS32	3RT1075-6AP36	-/S12/S12	3UF71x4-1BA00-0/3RB2966-2WH2	63 ... 400	63 ... 400
200	350	None	3VA2450-7MS32	3RT1275-6AP36	-/S12V/S12	3UF71x4-1BA00-0/3RB2966-2WH2	63 ... 400	63 ... 400
250	430	None	3VA2450-7MS32	3RT1076-6AP36	-/S12/S12	3UF71x4-1BA00-0/3RB2966-2WH2	63 ... 500	63 ... 440
250	430	None	3VA2450-7MS32	3RT1276-6AP36	-/S12V/S12	3UF71x4-1BA00-0/3RB2966-2WH2	63 ... 500	63 ... 440

Article numbers for basic versions with screw terminals and spring-loaded terminals also possible. 3RA2921-1BA00 link module can only be used with screw terminals.

- <sup>1)</sup> Guide value for 4-pole standard motors at 400 V AC, 50 Hz. Selection depends on the concrete startup and rated data of the protected motor.
- <sup>2)</sup> Rated control supply voltage 230 V AC, 50 Hz, other control voltages possible.
- <sup>3)</sup> The motor starter protector is to be set to maximum current value.
- <sup>4)</sup> The necessary current measuring modules ( $x = 0$ ) or the current measuring modules / voltage measuring modules ( $x = 1$ ) are specified. The corresponding basic units 3RB22 / 3RB23 / 3RB24 and 3UF7 are additionally required.

Type of coordination 2,  
short-circuit breaking capacity  $I_q = 150 \text{ kA}/100 \text{ kA}$



AC 400V

Standard three-phase motor 4-pole at 400 V AC <sup>1)</sup>		Setting range Overload release Motor starter protector	Motor starter protector Starter protection <sup>3)</sup>	Contactor <sup>2)</sup>	Size	Overload relay (electronic) or current measuring module <sup>4)</sup> Maximum permitted setting range overload release		
Stand- ard output P	Motor cur- rent I					IE1 / IE2 motors	IE3 / IE4 motors	
kW	A	A	Article No.	Article No.	Article No.	A	A	
<b>CLASS 5, short-circuit breaking capacity <math>I_q = 150 \text{ kA}</math></b>								
0.09	0.3	None	3RV2311-0DC10	3RT2015-1AP01	S00/S00/-	3UF71x0-1AA00-0/ 3RB2906-2BG1	0.3 ... 0.32	
0.12	0.4	None	3RV2311-0FC10	3RT2015-1AP01	S00/S00/-	3UF71x0-1AA00-0/ 3RB2906-2BG1	0.3 ... 0.5	
0.18	0.6	None	3RV2311-0HC10	3RT2015-1AP01	S00/S00/-	3UF71x0-1AA00-0/ 3RB2906-2BG1	0.3 ... 0.8	
0.25	0.85	None	3RV2311-0JC10	3RT2015-1AP01	S00/S00/-	3UF71x0-1AA00-0/ 3RB2906-2BG1	0.3 ... 1	
0.37	1.1	None	3RV2311-0KC10	3RT2015-1AP01	S00/S00/-	3UF71x0-1AA00-0/ 3RB2906-2BG1	0.3 ... 1.25	
0.55	1.5	None	3RV2311-1AC10	3RT2015-1AP01	S00/S00/-	3UF71x0-1AA00-0/ 3RB2906-2BG1	0.3 ... 1.6	
0.75	1.9	None	3RV2311-1BC10	3RT2015-1AP01	S00/S00/-	3UF71x0-1AA00-0/ 3RB2906-2BG1	0.3 ... 2	
1.1	2.7	None	3RV2311-1DC10	3RT2015-1AP01	S00/S00/-	3UF71x0-1AA00-0/ 3RB2906-2BG1	0.3 ... 3	
1.5	3.5	None	3RV2311-1EC10	3RT2015-1AP01	S00/S00/-	3UF71x1-1AA00-0/ 3RB2906-2DG1	2.4 ... 4	
2.2	5	None	3RV2321-1GC10	3RT2024-1AP00	S0/S0/-	3UF71x1-1AA00-0/ 3RB2906-2DG1	2.4 ... 6.3	
3	6.5	None	3RV2321-1HC10	3RT2024-1AP00	S0/S0/-	3UF71x1-1AA00-0/ 3RB2906-2DG1	2.4 ... 8	
4	8.5	None	3RV2321-1JC10	3RT2024-1AP00	S0/S0/-	3UF71x1-1AA00-0/ 3RB2906-2DG1	2.4 ... 10	
5.5	11.5	None	3RV2321-1KC10	3RT2024-1AP00	S0/S0/-	3UF71x1-1AA00-0/ 3RB2906-2DG1	2.4 ... 12	
7.5	15.5	None	3RV2321-4AC10	3RT2026-1AP00	S0/S0/-	3UF71x1-1AA00-0/ 3RB2906-2DG1	2.4 ... 16	
							2.4 ... 13	

## 3.4 Motor starter protector + contactor + 3RB22, 3RB23, 3RB24 electronic overload relays, or 3UF7

Standard three-phase motor 4-pole at 400 V AC <sup>1)</sup>		Setting range Overload release	Motor starter protector Starter protection <sup>3)</sup>	Contactor <sup>2)</sup>	Size	Overload relay (electronic) or current measuring module <sup>4)</sup> Maximum permitted setting range overload release		
Stand- ard out- put P	Motor cur- rent I						IE1 / IE2 motors	IE3 / IE4 motors
kW	A	A	Article No.	Article No.		Article No.	A	A
11	22	None	3RV2321-4CC10	3RT2027-1AP00	S0/S0/-	3UF71x1-1AA00-0/ 3RB2906-2DG1	2.4 ... 22	2.4 ... 18
15	29	None	3RV2321-4EC10	3RT2027-1AP01	S0/S0/-	3UF71x2-1AA00-0/ 3RB2906-2JG1	10 ... 32	10 ... 30 (up to 256 A starting current)
15	29	None	3RV2332-4EC10	3RT2035-1AP00	S2/S2/-	3UF71x2-1AA00-0/ 3RB2906-2JG1	10 ... 32	10 ... 32
18.5	35	None	3RV2332-4UC10	3RT2035-1AP00	S2/S2/-	3UF71x2-1AA00-0/ 3RB2906-2JG1	10 ... 40	10 ... 40
22	41	None	3RV2332-4VC10	3RT2036-1AP00	S2/S2/-	3UF71x2-1AA00-0/ 3RB2906-2JG1	10 ... 45	10 ... 45
30	55	62 ... 73	3RV2032-4KA10	3RT2038-1AP00	S2/S2/-	3UF71x2-1AA00-0/ 3RB2906-2JG1	10 ... 60	10 ... 60
22	41	None	3RV2342-4HC10	3RT2045-1AP00	S3/S3/-	3UF71x2-1AA00-0/ 3RB2906-2JG1	10 ... 50	10 ... 50
30	55	None	3RV2342-4JC10	3RT2045-1AP00	S3/S3/-	3UF71x2-1AA00-0/ 3RB2906-2JG1	10 ... 63	10 ... 63
37	66	None	3RV2342-4KC10	3RT2045-1AP00	S3/S3/-	3UF71x2-1AA00-0/ 3RB2906-2JG1	10 ... 75	10 ... 75
45	80	None	3RV2342-4RC10	3RT2046-1AP00	S3/S3/-	3UF71x2-1AA00-0/ 3RB2906-2JG1	10 ... 84	10 ... 84
45	80	None	3RV2342-4YC10	3RT2046-1AP00	S3/S3/-	3UF71x2-1AA00-0/ 3RB2906-2JG1	10 ... 93	10 ... 93
55	97	None	3RV2342-4MC10	3RT2047-1AP00	S3/S3/-	3UF71x2-1AA00-0/ 3RB2906-2JG1	10 ... 100	10 ... 100

*Selection tables 400 V AC*

*3.4 Motor starter protector + contactor + 3RB22, 3RB23, 3RB24 electronic overload relays, or 3UF7*

Standard three-phase motor 4-pole at 400 V AC <sup>1)</sup>		Setting range Overload release Motor starter protector	Motor starter protector Starter protection <sup>3)</sup>	Contactor <sup>2)</sup>	Size	Overload relay (electronic) or current measuring module <sup>4)</sup> Maximum permitted setting range overload release		
Stand- ard output P	Motor cur- rent I					IE1 / IE2 motors	IE3 / IE4 motors	
kW	A	A	Article No.	Article No.	Article No.	A	A	
<b>CLASS 5, short-circuit breaking capacity I<sub>q</sub> = 100 kA</b>								
15	29	None	3RV2331-4EC10	3RT2035-1AP00	S2/S2/-	3UF71x2-1AA00-0/ 3RB2906-2JG1	10 ... 32	10 ... 32
18.5	35	None	3RV2331-4UC10	3RT2035-1AP00	S2/S2/-	3UF71x2-1AA00-0/ 3RB2906-2JG1	10 ... 40	10 ... 40
22	41	None	3RV2331-4WC10	3RT2036-1AP00	S2/S2/-	3UF71x2-1AA00-0/ 3RB2906-2JG1	10 ... 51	10 ... 51
30	55	54 ... 65	3RV2031-4JB10	3RT2037-1AP00	S2/S2/-	3UF71x2-1AA00-0/ 3RB2906-2JG1	10 ... 58.5	10 ... 58.5
22	41	None	3RV2341-4HC10	3RT2045-1AP00	S3/S3/-	3UF71x2-1AA00-0/ 3RB2906-2JG1	10 ... 50	10 ... 50
30	55	None	3RV2341-4JC10	3RT2045-1AP00	S3/S3/-	3UF71x2-1AA00-0/ 3RB2906-2JG1	10 ... 63	10 ... 63
37	66	None	3RV2341-4KC10	3RT2045-1AP00	S3/S3/-	3UF71x2-1AA00-0/ 3RB2906-2JG1	10 ... 75	10 ... 75
45	80	None	3RV2341-4RC10	3RT2046-1AP00	S3/S3/-	3UF71x2-1AA00-0/ 3RB2906-2JG1	10 ... 84	10 ... 84
45	80	None	3RV2341-4YC10	3RT2046-1AP00	S3/S3/-	3UF71x2-1AA00-0/ 3RB2906-2JG1	10 ... 93	10 ... 93
55	97	None	3RV2341-4MC10	3RT2047-1AP00	S3/S3/-	3UF71x2-1AA00-0/ 3RB2906-2JG1	10 ... 100	10 ... 100
<b>CLASS 10, short-circuit breaking capacity I<sub>q</sub> = 150 kA</b>								
0.09	0.3	None	3RV2311-0DC10	3RT2015-1AP01	S00/S00/-	3UF71x0-1AA00-0/ 3RB2906-2BG1	0.3 ... 0.32	0.3 ... 0.32
0.12	0.4	None	3RV2311-0FC10	3RT2015-1AP01	S00/S00/-	3UF71x0-1AA00-0/ 3RB2906-2BG1	0.3 ... 0.5	0.3 ... 0.45
0.18	0.6	None	3RV2311-0HC10	3RT2015-1AP01	S00/S00/-	3UF71x0-1AA00-0/ 3RB2906-2BG1	0.3 ... 72	0.3 ... 0.7
0.25	0.85	None	3RV2311-0JC10	3RT2015-1AP01	S00/S00/-	3UF71x0-1AA00-0/ 3RB2906-2BG1	0.3 ... 1	0.3 ... 0.9
0.37	1.1	None	3RV2311-0KC10	3RT2015-1AP01	S00/S00/-	3UF71x0-1AA00-0/ 3RB2906-2BG1	0.3 ... 1.25	0.3 ... 1.1
0.55	1.5	None	3RV2311-1AC10	3RT2015-1AP01	S00/S00/-	3UF71x0-1AA00-0/ 3RB2906-2BG1	0.3 ... 1.6	0.3 ... 1.4
0.75	1.9	None	3RV2311-1BC10	3RT2015-1AP01	S00/S00/-	3UF71x0-1AA00-0/ 3RB2906-2BG1	0.3 ... 2	0.3 ... 1.8
1.1	2.7	None	3RV2311-1DC10	3RT2015-1AP01	S00/S00/-	3UF71x1-1AA00-0/ 3RB2906-2DG1	2.4 ... 3.2	2.4 ... 2.8

## 3.4 Motor starter protector + contactor + 3RB22, 3RB23, 3RB24 electronic overload relays, or 3UF7

Standard three-phase motor 4-pole at 400 V AC <sup>1)</sup>		Setting range Overload release	Motor starter protector Starter protection <sup>3)</sup>	Contactor <sup>2)</sup>	Size	Overload relay (electronic) or current measuring module <sup>4)</sup> Maximum permitted setting range overload release		
Stand- ard output P	Motor cur- rent I	Motor starter protector					IE1 / IE2 motors	IE3 / IE4 motors
kW	A	A	Article No.	Article No.		Article No.	A	A
1.5	3.5	None	3RV2311-1EC10	3RT2015-1AP01	S00/S00/-	3UF71x1-1AA00-0/3RB2906-2DG1	2.4 ... 4	2.4 ... 3.5
2.2	5	None	3RV2321-1GC10	3RT2024-1AP00	S0/S0/-	3UF71x1-1AA00-0/3RB2906-2DG1	2.4 ... 6.3	2.4 ... 5.5
3	6.5	None	3RV2321-1HC10	3RT2024-1AP00	S0/S0/-	3UF71x1-1AA00-0/3RB2906-2DG1	2.4 ... 8	2.4 ... 7
4	8.5	None	3RV2321-1JC10	3RT2024-1AP00	S0/S0/-	3UF71x1-1AA00-0/3RB2906-2DG1	2.4 ... 10	2.4 ... 9
5.5	11.5	None	3RV2321-4AC10	3RT2026-1AP00	S0/S0/-	3UF71x1-1AA00-0/3RB2906-2DG1	2.4 ... 12.8	2.4 ... 12.8
7.5	15.5	None	3RV2321-4CC10	3RT2027-1AP00	S0/S0/-	3UF71x1-1AA00-0/3RB2906-2DG1	2.4 ... 16	2.4 ... 16
11	22	None	3RV2321-4EC10	3RT2027-1AP00	S0/S0/-	3UF71x2-1AA00-0/3RB2906-2JG1	10 ... 24	10 ... 24 (up to 256 A starting current)
11	22	None	3RV2332-4EC10	3RT2035-1AP00	S2/S2/-	3UF71x2-1AA00-0/3RB2906-2JG1	10 ... 24	10 ... 24
15	29	None	3RV2332-4VC10	3RT2036-1AP00	S2/S2/-	3UF71x2-1AA00-0/3RB2906-2JG1	10 ... 31	10 ... 31
18.5	35	49 ... 59	3RV2032-4XA10	3RT2037-1AP00	S2/S2/-	3UF71x2-1AA00-0/3RB2906-2JG1	10 ... 39	10 ... 39
22	41	70 ... 80	3RV2032-4RA10	3RT2038-1AP00	S2/S2/-	3UF71x2-1AA00-0/3RB2906-2JG1	10 ... 42	10 ... 42
18.5	35	None	3RV2342-4FC10	3RT2045-1AP00	S3/S3/-	3UF71x2-1AA00-0/3RB2906-2JG1	10 ... 40	10 ... 40
22	41	None	3RV2342-4HC10	3RT2045-1AP00	S3/S3/-	3UF71x2-1AA00-0/3RB2906-2JG1	10 ... 45	10 ... 45
30	55	None	3RV2342-4JC10	3RT2045-1AP00	S3/S3/-	3UF71x2-1AA00-0/3RB2906-2JG1	10 ... 61	10 ... 61
37	66	None	3RV2342-4KC10	3RT2045-1AP00	S3/S3/-	3UF71x2-1AA00-0/3RB2906-2JG1	10 ... 73	10 ... 73
45	80	None	3RV2342-4RC10	3RT2046-1AP00	S3/S3/-	3UF71x2-1AA00-0/3RB2906-2JG1	10 ... 84	10 ... 84
45	80	None	3RV2342-4YC10	3RT2046-1AP00	S3/S3/-	3UF71x2-1AA00-0/3RB2906-2JG1	10 ... 87	10 ... 87
55	97	None	3VA2216-7MS32	3RT1054-6AP36	-S6/S6	3UF71x3-1xA00-0/3RB2956-2Tx2	20 ... 115	20 ... 115
75	132	None	3VA2216-7MS32	3RT1055-6AP36	-S6/S6	3UF71x3-1xA00-0/3RB2956-2Tx2	20 ... 150	20 ... 140

*Selection tables 400 V AC*

*3.4 Motor starter protector + contactor + 3RB22, 3RB23, 3RB24 electronic overload relays, or 3UF7*

Standard three-phase motor 4-pole at 400 V AC <sup>1)</sup>		Setting range Overload release Motor starter protector	Motor starter protector Starter protection <sup>3)</sup>	Contactor <sup>2)</sup>	Size	Overload relay (electronic) or current measuring module <sup>4)</sup> Maximum permitted setting range overload release		
Stand- ard output P	Motor cur- rent I						IE1 / IE2 motors	IE3 / IE4 motors
kW	A	A	Article No.	Article No.	Article No.	A	A	
90	160	None	3VA2220-7MS32	3RT1056-6AP36	-/S6/S6	3UF71x3-1xA00-0/ 3RB2956-2Tx2	20 ... 185	20 ... 175
110	195	None	3VA2325-7MS32	3RT1064-6AP36	-/S10/S10	3UF71x4-1BA00-0/ 3RB2966-2WH2	63 ... 225	63 ... 225
110	195	None	3VA2325-7MS32	3RT1264-6AP36	-/S10V/S10	3UF71x4-1BA00-0/ 3RB2966-2WH2	63 ... 225	63 ... 225
132	230	None	3VA2440-7MS32	3RT1065-6AP36	-/S10/S10	3UF71x4-1BA00-0/ 3RB2966-2WH2	63 ... 265	63 ... 265
132	230	None	3VA2440-7MS32	3RT1265-6AP36	-/S10V/S10	3UF71x4-1BA00-0/ 3RB2966-2WH2	63 ... 265	63 ... 265
160	280	None	3VA2440-7MS32	3RT1066-6AP36	-/S10/S10	3UF71x4-1BA00-0/ 3RB2966-2WH2	63 ... 300	63 ... 300
160	280	None	3VA2440-7MS32	3RT1266-6AP36	-/S10V/S10	3UF71x4-1BA00-0/ 3RB2966-2WH2	63 ... 300	63 ... 300
200	350	None	3VA2450-7MS32	3RT1075-6AP36	-/S12/S12	3UF71x4-1BA00-0/ 3RB2966-2WH2	63 ... 400	63 ... 400
200	350	None	3VA2450-7MS32	3RT1275-6AP36	-/S12V/S12	3UF71x4-1BA00-0/ 3RB2966-2WH2	63 ... 400	63 ... 400
250	430	None	3VA2450-7MS32	3RT1076-6AP36	-/S12/S12	3UF71x4-1BA00-0/ 3RB2966-2WH2	63 ... 500	63 ... 440
250	430	None	3VA2450-7MS32	3RT1276-6AP36	-/S12V/S12	3UF71x4-1BA00-0/ 3RB2966-2WH2	63 ... 500	63 ... 440
<b>CLASS 10, short-circuit breaking capacity I<sub>q</sub> = 100 kA</b>								
11	22	None	3RV2331-4EC10	3RT2035-1AP00	S2/S2/-	3UF71x2-1AA00-0/ 3RB2906-2JG1	10 ... 24	10 ... 24
15	29	None	3RV2031-4VC10	3RT2036-1AP00	S2/S2/-	3UF71x2-1AA00-0/ 3RB2906-2JG1	10 ... 31	10 ... 31
18.5	35	32 ... 40	3RV2031-4UB10	3RT2035-1AP00	S2/S2/-	3UF71x2-1AA00-0/ 3RB2906-2JG1	10 ... 36	10 ... 36
22	41	42 ... 52	3RV2031-4WB10	3RT2036-1AP00	S2/S2/-	3UF71x2-1AA00-0/ 3RB2906-2JG1	10 ... 47	10 ... 47
18.5	35	None	3RV2341-4FC10	3RT2045-1AP00	S3/S3/-	3UF71x2-1AA00-0/ 3RB2906-2JG1	10 ... 40	10 ... 40
22	41	None	3RV2341-4HC10	3RT2045-1AP00	S3/S3/-	3UF71x2-1AA00-0/ 3RB2906-2JG1	10 ... 45	10 ... 45
30	55	None	3RV2341-4JC10	3RT2045-1AP00	S3/S3/-	3UF71x2-1AA00-0/ 3RB2906-2JG1	10 ... 61	10 ... 61
37	66	None	3RV2341-4KC10	3RT2045-1AP00	S3/S3/-	3UF71x2-1AA00-0/ 3RB2906-2JG1	10 ... 73	10 ... 73

## 3.4 Motor starter protector + contactor + 3RB22, 3RB23, 3RB24 electronic overload relays, or 3UF7

Standard three-phase motor 4-pole at 400 V AC <sup>1)</sup>		Setting range Overload release	Motor starter protector Starter protection <sup>3)</sup>	Contactor <sup>2)</sup>	Size	Overload relay (electronic) or current measuring module <sup>4)</sup> Maximum permitted setting range overload release		
Stand- ard output P	Motor cur- rent I	Motor starter protector					IE1 / IE2 motors	IE3 / IE4 motors
kW	A	A	Article No.	Article No.		Article No.	A	A
45	80	None	3RV2341-4RC10	3RT2046-1AP00	S3/S3/-	3UF71x2-1AA00-0/ 3RB2906-2JG1	10 ... 84	10 ... 84
45	80	None	3RV2341-4YC10	3RT2046-1AP00	S3/S3/-	3UF71x2-1AA00-0/ 3RB2906-2JG1	10 ... 87	10 ... 87
<b>CLASS 20, short-circuit breaking capacity <math>I_q = 150 \text{ kA}</math></b>								
0.09	0.3	0.55 ... 0.8	3RV2011-0HA10	3RT2015-1AP01	S00/S00/-	3UF71x0-1AA00-0/ 3RB2906-2BG1	0.3 ... 0.38	0.3 ... 0.7
0.12	0.4	0.7 ... 1	3RV2011-0JA10	3RT2015-1AP01	S00/S00/-	3UF71x0-1AA00-0/ 3RB2906-2BG1	0.3 ... 0.43	0.3 ... 0.43
0.18	0.6	1.1 ... 1.6	3RV2011-1AA10	3RT2015-1AP01	S00/S00/-	3UF71x0-1AA00-0/ 3RB2906-2BG1	0.3 ... 0.77	0.3 ... 0.77
0.25	0.85	1.4 ... 2	3RV2011-1BA10	3RT2015-1AP01	S00/S00/-	3UF71x0-1AA00-0/ 3RB2906-2BG1	0.3 ... 0.98	0.3 ... 0.98
0.37	1.1	1.8 ... 2.5	3RV2011-1CA10	3RT2015-1AP01	S00/S00/-	3UF71x0-1AA00-0/ 3RB2906-2BG1	0.3 ... 1.25	0.3 ... 1.25
0.55	1.5	2.2 ... 3.2	3RV2011-1DA10	3RT2015-1AP01	S00/S00/-	3UF71x0-1AA00-0/ 3RB2906-2BG1	0.3 ... 1.55	0.3 ... 1.55
0.75	1.9	3.5 ... 5	3RV2021-1FA10	3RT2024-1AP00	S0/S0/-	3UF71x0-1AA00-0/ 3RB2906-2BG1	0.3 ... 2.4	0.3 ... 2.4
1.1	2.7	4.5 ... 6.3	3RV2021-1GA10	3RT2024-1AP00	S0/S0/-	3UF71x0-1AA00-0/ 3RB2906-2BG1	0.3 ... 3	0.3 ... 3
1.1	2.7	None	3RV2321-1GC10	3RT2024-1AP00	S0/S0/-	3UF71x1-1AA00-0/ 3RB2906-2DG1	2.4 ... 3.9	2.4 ... 3.9
1.5	3.5	None	3RV2321-1HC10	3RT2024-1AP00	S0/S0/-	3UF71x1-1AA00-0/ 3RB2906-2DG1	2.4 ... 4.4	2.4 ... 4.4
2.2	5	None	3RV2321-1JC10	3RT2024-1AP00	S0/S0/-	3UF71x1-1AA00-0/ 3RB2906-2DG1	2.4 ... 5.2	2.4 ... 5.2
3	6.5	10 ... 16	3RV2021-4AA10	3RT2026-1AP00	S0/S0/-	3UF71x1-1AA00-0/ 3RB2906-2DG1	2.4 ... 7.4	2.4 ... 7.4
4	8.5	13 ... 20	3RV2021-4BA10	3RT2027-1AP00	S0/S0/-	3UF71x1-1AA00-0/ 3RB2906-2DG1	2.4 ... 9.3	2.4 ... 9.3
5.5	11.5	18 ... 25	3RV2021-4DA10	3RT2027-1AP00	S0/S0/-	3UF71x1-1AA00-0/ 3RB2906-2DG1	2.4 ... 12.8	2.4 ... 12.8
5.5	11.5	None	3RV2332-4PC10	3RT2035-1AP00	S2/S2/-	3UF71x2-1AA00-0/ 3RB2906-2JG1	10 ... 13.5	10 ... 13.5
7.5	15.5	None	3RV2332-4XC10	3RT2037-1AP00	S2/S2/-	3UF71x2-1AA00-0/ 3RB2906-2JG1	10 ... 16	10 ... 16
11	22	49 ... 59	3RV2032-4XA10	3RT2037-1AP00	S2/S2/-	3UF71x2-1AA00-0/ 3RB2906-2JG1	10 ... 25	10 ... 25

*Selection tables 400 V AC*

*3.4 Motor starter protector + contactor + 3RB22, 3RB23, 3RB24 electronic overload relays, or 3UF7*

Standard three-phase motor 4-pole at 400 V AC <sup>1)</sup>		Setting range Overload release Motor starter protector	Motor starter protector Starter protection <sup>3)</sup>	Contactor <sup>2)</sup>	Size	Overload relay (electronic) or current measuring module <sup>4)</sup> Maximum permitted setting range overload release		
Stand- ard output P	Motor cur- rent I						IE1 / IE2 motors	IE3 / IE4 motors
kW	A	A	Article No.	Article No.	Article No.	A	A	
15	29	70 ... 80	3RV2032-4RA10	3RT2038-1AP00	S2/S2/-	3UF71x2-1AA00-0/ 3RB2906-2JG1	10 ... 32	10 ... 32
11	22	28 ... 40	3RV2042-4FB10	3RT2045-1AP00	S3/S3/-	3UF71x2-1AA00-0/ 3RB2906-2JG1	10 ... 28	10 ... 28
15	29	36 ... 50	3RV2042-4HB10	3RT2045-1AP00	S3/S3/-	3UF71x2-1AA00-0/ 3RB2906-2JG1	10 ... 32	10 ... 32
18.5	35	45 ... 63	3RV2042-4JB10	3RT2045-1AP00	S3/S3/-	3UF71x2-1AA00-0/ 3RB2906-2JG1	10 ... 40	10 ... 40
22	41	57 ... 75	3RV2042-4KB10	3RT2045-1AP00	S3/S3/-	3UF71x2-1AA00-0/ 3RB2906-2JG1	10 ... 45	10 ... 45
30	55	65 ... 84	3RV2042-4RB10	3RT2046-1AP00	S3/S3/-	3UF71x2-1AA00-0/ 3RB2906-2JG1	10 ... 61	10 ... 61
37	66	75 ... 93	3RV2042-4YB10	3RT1054-1AP36	S6/S3/-	3UF71x2-1AA00-0/ 3RB2906-2JG1	10 ... 73	10 ... 73
30	55	None	3VA2163-7MS32	3RT1054-6AP36	-/S6/S6	3UF71x3-1xA00-0/ 3RB2956-2Tx2	20 ... 63	20 ... 63
37	66	None	3VA2110-7MS32	3RT1054-6AP36	-/S6/S6	3UF71x3-1xA00-0/ 3RB2956-2Tx2	20 ... 80	20 ... 80
45	80	None	3VA2216-7MS32	3RT1055-6AP36	-/S6/S6	3UF71x3-1xA00-0/ 3RB2956-2Tx2	20 ... 90	20 ... 90
55	97	None	3VA2216-7MS32	3RT1056-6AP36	-/S6/S6	3UF71x3-1xA00-0/ 3RB2956-2Tx2	20 ... 120	20 ... 120
75	132	None	3VA2216-7MS32	3RT1064-6AP36	-/S10/S10	3UF71x4-1BA00-0/ 3RB2966-2WH2	63 ... 140	63 ... 140
90	160	None	3VA2220-7MS32	3RT1064-6AP36	-/S10/S10	3UF71x4-1BA00-0/ 3RB2966-2WH2	63 ... 150	63 ... 150
90	160	None	3VA2325-7MS32	3RT1264-6AP36	-/S10V/S10	3UF71x4-1BA00-0/ 3RB2966-2WH2	63 ... 180	63 ... 180
90	160	None	3VA2325-7MS32	3RT1065-6AP36	-/S10/S10	3UF71x4-1BA00-0/ 3RB2966-2WH2	63 ... 180	63 ... 180
110	195	None	3VA2325-7MS32	3RT1264-6AP36	-/S10V/S10	3UF71x4-1BA00-0/ 3RB2966-2WH2	63 ... 225	63 ... 225
110	195	None	3VA2325-7MS32	3RT1066-6AP36	-/S10/S10	3UF71x4-1BA00-0/ 3RB2966-2WH2	63 ... 210	63 ... 210
132	230	None	3VA2325-7MS32	3RT1075-6AP36	-/S12/S12	3UF71x4-1BA00-0/ 3RB2966-2WH2	63 ... 250	63 ... 250
132	230	None	3VA2325-7MS32	3RT1265-6AP36	-/S10V/S10	3UF71x4-1BA00-0/ 3RB2966-2WH2	63 ... 250	63 ... 250

## 3.4 Motor starter protector + contactor + 3RB22, 3RB23, 3RB24 electronic overload relays, or 3UF7

Standard three-phase motor 4-pole at 400 V AC <sup>1)</sup>		Setting range Overload release	Motor starter protector Starter protection <sup>3)</sup>	Contactor <sup>2)</sup>	Size	Overload relay (electronic) or current measuring module <sup>4)</sup> Maximum permitted setting range overload release		
Stand- ard output P	Motor cur- rent I	Motor starter protector					IE1 / IE2 motors	IE3 / IE4 motors
kW	A	A	Article No.	Article No.		Article No.	A	A
160	280	None	3VA2440-7MS32	3RT1266-6AP36	-/S10V/S10	3UF71x4-1BA00-0/ 3RB2966-2WH2	63 ... 300	63 ... 300
200	350	None	3VA2440-7MS32	3RT1076-6AP36	-/S12/S12	3UF71x4-1BA00-0/ 3RB2966-2WH2	63 ... 350	63 ... 350
200	350	None	3VA2450-7MN32 <sup>5)</sup>	3RT1275-6AP36	-/S12V/S12	3UF71x4-1BA00-0/ 3RB2966-2WH2	63 ... 370	63 ... 370
250	430	None	3VA2450-7MN32 <sup>5)</sup>	3RT1276-6AP36	-/S12V/S12	3UF71x4-1BA00-0/ 3RB2966-2WH2	63 ... 440	63 ... 440
<b>CLASS 20, short-circuit breaking capacity I<sub>q</sub> = 100 kA</b>								
5.5	11.5	None	3RV2331-4PC10	3RT2035-1AP00	S2/S2/-	3UF71x1-1AA00-0/ 3RB2906-2DG1	2.4 ... 12.5	2.4 ... 12.5
7.5	15.5	18 ... 25	3RV2031-4DB10	3RT2035-1AP00	S2/S2/-	3UF71x1-1AA00-0/ 3RB2906-2DG1	2.4 ... 18	2.4 ... 18
11	22	22 ... 32	3RV2031-4EB10	3RT2035-1AP00	S2/S2/-	3UF71x2-1AA00-0/ 3RB2906-2JG1	10 ... 23	10 ... 23
15	29	32 ... 40	3RV2031-4UB10	3RT2035-1AP00	S2/S2/-	3UF71x2-1AA00-0/ 3RB2906-2JG1	10 ... 30	10 ... 30
18.5	35	42 ... 52	3RV2031-4WB10	3RT2036-1AP00	S2/S2/-	3UF71x2-1AA00-0/ 3RB2906-2JG1	10 ... 39	10 ... 39
22	41	49 ... 59	3RV2031-4XB10	3RT2037-1AP00	S2/S2/-	3UF71x2-1AA00-0/ 3RB2906-2JG1	10 ... 44	10 ... 44
<b>CLASS 30, short-circuit breaking capacity I<sub>q</sub> = 150 kA</b>								
0.09	0.3	0.7 ... 1	3RV2011-0JA10	3RT2015-1AP01	S00/S00/-	3UF71x0-1AA00-0/ 3RB2906-2BG1	0.3 ... 0.35	0.3 ... 0.35
0.12	0.4	1.1 ... 1.6	3RV2011-1AA10	3RT2015-1AP01	S00/S00/-	3UF71x0-1AA00-0/ 3RB2906-2BG1	0.3 ... 0.6	0.3 ... 0.6
0.18	0.6	1.4 ... 2	3RV2011-1BA10	3RT2015-1AP01	S00/S00/-	3UF71x0-1AA00-0/ 3RB2906-2BG1	0.3 ... 0.76	0.3 ... 0.76
0.25	0.85	1.8 ... 2.5	3RV2011-1CA10	3RT2015-1AP01	S00/S00/-	3UF71x0-1AA00-0/ 3RB2906-2BG1	0.3 ... 0.93	0.3 ... 0.93
0.37	1.1	2.2 ... 3.2	3RV2011-1DA10	3RT2015-1AP01	S00/S00/-	3UF71x0-1AA00-0/ 3RB2906-2BG1	0.3 ... 1.2	0.3 ... 1.2
0.55	1.5	3.5 ... 5	3RV2021-1FA10	3RT2024-1AP00	S0/S0/-	3UF71x0-1AA00-0/ 3RB2906-2BG1	0.3 ... 1.85	0.3 ... 1.85
0.75	1.9	4.5 ... 6.3	3RV2021-1GA10	3RT2024-1AP00	S0/S0/-	3UF71x0-1AA00-0/ 3RB2906-2BG1	0.3 ... 2.3	0.3 ... 2.3
1.1	2.7	5.5 ... 8	3RV2021-1HA10	3RT2024-1AP00	S0/S0/-	3UF71x0-1AA00-0/ 3RB2906-2BG1	0.3 ... 3	0.3 ... 3

*Selection tables 400 V AC*

*3.4 Motor starter protector + contactor + 3RB22, 3RB23, 3RB24 electronic overload relays, or 3UF7*

Standard three-phase motor 4-pole at 400 V AC <sup>1)</sup>		Setting range Overload release Motor starter protector	Motor starter protector Starter protection <sup>3)</sup>	Contactor <sup>2)</sup>	Size	Overload relay (electronic) or current measuring module <sup>4)</sup> Maximum permitted setting range overload release		
Stand- ard output P	Motor cur- rent I						IE1 / IE2 motors	IE3 / IE4 motors
kW	A					Article No.	A	A
1.1	2.7	None	3RV2321-1HC10	3RT2024-1AP00	S0/S0/-	3UF71x1-1AA00-0/ 3RB2906-2DG1	2.4 ... 2.8	2.4 ... 2.8
1.5	3.5	7 ... 10	3RV2021-1JA10	3RT2024-1AP00	S0/S0/-	3UF71x1-1AA00-0/ 3RB2906-2DG1	2.4 ... 3.8	2.4 ... 3.8
2.2	5	11 ... 16	3RV2021-4AA10	3RT2026-1AP00	S0/S0/-	3UF71x1-1AA00-0/ 3RB2906-2DG1	2.4 ... 5.7	2.4 ... 5.7
3	6.5	14 ... 20	3RV2021-4BA10	3RT2027-1AP00	S0/S0/-	3UF71x1-1AA00-0/ 3RB2906-2DG1	2.4 ... 7.5	2.4 ... 7.5
4	8.5	20 ... 25	3RV2021-4DA10	3RT2027-1AP00	S0/S0/-	3UF71x1-1AA00-0/ 3RB2906-2DG1	2.4 ... 9.3	2.4 ... 9.3
5.5	11.5	27 ... 32	3RV2021-4EA10	3RT2027-1AP00	S0/S0/-	3UF71x1-1AA00-0/ 3RB2906-2DG1	2.4 ... 12.4	2.4 ... 12.4 (up to 256 A starting current)
5.5	11.5	28 ... 36	3RV2032-4PA10	3RT2035-1AP00	S2/S2/-	3UF71x1-1AA00-0/ 3RB2906-2DG1	2.4 ... 13	2.4 ... 13
7.5	15.5	62 ... 73	3RV2032-4KA10	3RT2038-1AP00	S2/S2/-	3UF71x2-1AA00-0/ 3RB2906-2JG1	10 ... 24	10 ... 24
11	22	62 ... 73	3RV2032-4KA10	3RT2038-1AP00	S2/S2/-	3UF71x2-1AA00-0/ 3RB2906-2JG1	10 ... 24	10 ... 24
7.5	15.5	28 ... 40	3RV2042-4FB10	3RT2045-1AP00	S3/S3/-	3UF71x2-1AA00-0/ 3RB2906-2JG1	10 ... 19	10 ... 19
11	22	36 ... 50	3RV2042-4HB10	3RT2045-1AP00	S3/S3/-	3UF71x2-1AA00-0/ 3RB2906-2JG1	10 ... 24	10 ... 24
15	29	45 ... 63	3RV2042-4JB10	3RT2045-1AP00	S3/S3/-	3UF71x2-1AA00-0/ 3RB2906-2JG1	10 ... 32	10 ... 32
18.5	35	57 ... 75	3RV2042-4KB10	3RT2045-1AP00	S3/S3/-	3UF71x2-1AA00-0/ 3RB2906-2JG1	10 ... 38	10 ... 38
22	41	65 ... 84	3RV2042-4RB10	3RT2046-1AP00	S3/S3/-	3UF71x2-1AA00-0/ 3RB2906-2JG1	10 ... 45	10 ... 45
30	55	75 ... 93	3RV2042-4YB10	3RT2046-1AP00	S3/S3/-	3UF71x2-1AA00-0/ 3RB2906-2JG1	10 ... 55	10 ... 55
37	66	80 ... 100	3RV2042-4MB10	3RT1054-1AP36	S3/S6/-	3UF71x2-1AA00-0/ 3RB2906-2JG1	10 ... 61	10 ... 61
37	66	None	3VA2110-7MS32	3RT1054-6AP36	-/S6/S6	3UF71x3-1xA00-0/ 3RB2956-2Tx2	20 ... 69	20 ... 69
45	80	None	3VA2110-7MS32	3RT1055-6AP36	-/S6/S6	3UF71x3-1xA00-0/ 3RB2956-2Tx2	20 ... 80	20 ... 80
45	80	None	3VA2216-7MS32	3RT1055-6AP36	-/S6/S6	3UF71x3-1xA00-0/ 3RB2956-2Tx2	20 ... 90	20 ... 90

## 3.4 Motor starter protector + contactor + 3RB22, 3RB23, 3RB24 electronic overload relays, or 3UF7

Standard three-phase motor 4-pole at 400 V AC <sup>1)</sup>		Setting range Overload release	Motor starter protector Starter protection <sup>3)</sup>	Contactor <sup>2)</sup>	Size	Overload relay (electronic) or current measuring module <sup>4)</sup> Maximum permitted setting range overload release		
Stand- ard output P	Motor cur- rent I	Motor starter protector					IE1 / IE2 motors	IE3 / IE4 motors
kW	A	A	Article No.	Article No.		Article No.	A	A
55	97	None	3VA2216-7MS32	3RT1056-6AP36	-/S6/S6	3UF71x3-1xA00-0/3RB2956-2Tx2	20 ... 111	20 ... 111
75	132	None	3VA2220-7MS32	3RT1065-6AP36	-/S10/S10	3UF71x4-1BA00-0/3RB2966-2WH2	63 ... 150	63 ... 150
90	160	None	3VA2325-7MS32	3RT1066-6AP36	-/S10/S10	3UF71x4-1BA00-0/3RB2966-2WH2	63 ... 180	63 ... 180
90	160	None	3VA2325-7MS32	3RT1265-6AP36	-/S10V/S10	3UF71x4-1BA00-0/3RB2966-2WH2	63 ... 190	63 ... 190
110	195	None	3VA2325-7MS32	3RT1075-6AP36	-/S12/S12	3UF71x4-1BA00-0/3RB2966-2WH2	63 ... 220	63 ... 220
110	195	None	3VA2325-7MS32	3RT1266-6AP36	-/S10V/S10	3UF71x4-1BA00-0/3RB2966-2WH2	63 ... 225	63 ... 225
132	230	None	3VA2325-7MS32	3RT1076-6AP36	-/S12/S12	3UF71x4-1BA00-0/3RB2966-2WH2	63 ... 250	63 ... 250
160	280	None	3VA2440-7MS32	3RT1076-6AP36	-/S12/S12	3UF71x4-1BA00-0/3RB2966-2WH2	63 ... 300	63 ... 300
160	280	None	3VA2440-7MS32	3RT1275-6AP36	-/S12V/S12	3UF71x4-1BA00-0/3RB2966-2WH2	63 ... 316	63 ... 316
200	350	None	3VA2450-7MQ32 <sup>5)</sup>	3RT1276-6AP36	-/S12V/S12	3UF71x4-1BA00-0/3RB2966-2WH2	63 ... 370	63 ... 370
<b>CLASS 30, short-circuit breaking capacity I<sub>q</sub> = 100 kA</b>								
5.5	11.5	28 ... 36	3RV2031-4PA10	3RT2035-1AP00	S2/S2/-	3UF71x1-1AA00-0/3RB2906-2DG1	2.4 ... 13	2.4 ... 13
7.5	15.5	22 ... 32	3RV2031-4EB10	3RT2035-1AP00	S2/S2/-	3UF71x1-1AA00-0/3RB2906-2DG1	2.4 ... 17	2.4 ... 17
11	22	35 ... 45	3RV2031-4VB10	3RT2036-1AP00	S2/S2/-	3UF71x2-1AA00-0/3RB2906-2JG1	10 ... 25	10 ... 25
15	29	54 ... 65	3RV2031-4JB10	3RT2037-1AP00	S2/S2/-	3UF71x2-1AA00-0/3RB2906-2JG1	10 ... 35	10 ... 35
<b>CLASS 40, short-circuit breaking capacity I<sub>q</sub> = 150 kA</b>								
0.09	0.3	1.1 ... 1.6	3RV2011-1AA10	3RT2015-1AP01	S00/S00/-	3UF71x0-1AA00-0	0.3 ... 0.5	0.3 ... 0.5
0.12	0.4	1.1 ... 1.6	3RV2011-1AA10	3RT2015-1AP01	S00/S00/-	3UF71x0-1AA00-0	0.3 ... 0.64	0.3 ... 0.64
0.18	0.6	1.4 ... 2	3RV2011-1BA10	3RT2015-1AP01	S00/S00/-	3UF71x0-1AA00-0	0.3 ... 0.77	0.3 ... 0.77
0.25	0.85	2.2 ... 3.2	3RV2011-1DA10	3RT2015-1AP01	S00/S00/-	3UF71x0-1AA00-0	0.3 ... 1	0.3 ... 1

*Selection tables 400 V AC*

*3.4 Motor starter protector + contactor + 3RB22, 3RB23, 3RB24 electronic overload relays, or 3UF7*

Standard three-phase motor 4-pole at 400 V AC <sup>1)</sup>		Setting range Overload release Motor starter protector	Motor starter protector Starter protection <sup>3)</sup>	Contactor <sup>2)</sup>	Size	Overload relay (electronic) or current measuring module <sup>4)</sup> Maximum permitted setting range overload release		
Stand- ard output P	Motor cur- rent I						IE1 / IE2 motors	IE3 / IE4 motors
kW	A	A	Article No.	Article No.	Article No.	A	A	
0.37	1.1	3.5 ... 5	3RV2021-1FA10	3RT2024-1AP00	S0/S0/-	3UF71x0-1AA00-0	0.3 ... 1.6	0.3 ... 1.6
0.55	1.5	3.5 ... 5	3RV2021-1FA10	3RT2024-1AP00	S0/S0/-	3UF71x0-1AA00-0	0.3 ... 2	0.3 ... 2
0.75	1.9	4.5 ... 6.3	3RV2021-1GA10	3RT2024-1AP00	S0/S0/-	3UF71x0-1AA00-0	0.3 ... 2.5	0.3 ... 2.5
1.1	2.7	7 ... 10	3RV2021-1JA10	3RT2024-1AP00	S0/S0/-	3UF71x0-1AA00-0	0.3 ... 3.2	0.3 ... 3.2
1.1	2.7	7 ... 10	3RV2021-1JA10	3RT2024-1AP00	S0/S0/-	3UF71x1-1AA00-0	2.4 ... 3.2	2.4 ... 3.2
1.5	3.5	11 ... 16	3RV2021-4AA10	3RT2026-1AP00	S0/S0/-	3UF71x1-1AA00-0	2.4 ... 5	2.4 ... 5
2.2	5	11 ... 16	3RV2021-4AA10	3RT2026-1AP00	S0/S0/-	3UF71x1-1AA00-0	2.4 ... 6.3	2.4 ... 6.3
3	6.5	20 ... 25	3RV2021-4DA10	3RT2027-1AP00	S0/S0/-	3UF71x1-1AA00-0	2.4 ... 8.1	2.4 ... 8.1
4	8.5	27 ... 32	3RV2021-4EA10	3RT2027-1AP00	S0/S0/-	3UF71x1-1AA00-0	2.4 ... 9.6	2.4 ... 9.6
5.5	11.5	28 ... 40	3RV2042-4FB10	3RT2045-1AP00	S3/S3/-	3UF71x2-1AA00-0	10 ... 19	10 ... 19
7.5	15.5	28 ... 40	3RV2042-4FB10	3RT2045-1AP00	S3/S3/-	3UF71x2-1AA00-0	10 ... 19	10 ... 19
11	22	36 ... 50	3RV2042-4HB10	3RT2045-1AP00	S3/S3/-	3UF71x2-1AA00-0	10 ... 22	10 ... 22
11	22	45 ... 63	3RV2042-4JB10	3RT2045-1AP00	S3/S3/-	3UF71x2-1AA00-0	10 ... 25	10 ... 25
15	29	57 ... 75	3RV2042-4KB10	3RT2045-1AP00	S3/S3/-	3UF71x2-1AA00-0	10 ... 30	10 ... 30
15	29	65 ... 84	3RV2042-4RB10	3RT2046-1AP00	S3/S3/-	3UF71x2-1AA00-0	10 ... 34	10 ... 34
18.5	35	65 ... 84	3RV2042-4RB10	3RT2046-1AP00	S3/S3/-	3UF71x2-1AA00-0	10 ... 38	10 ... 38
22	41	75 ... 93	3RV2042-4YB10	3RT2046-1AP00	S3/S3/-	3UF71x2-1AA00-0	10 ... 45	10 ... 45
30	55	None	3VA2110-7MS32	3RT1055-6AP36	-/S6/S6	3UF71x3-1xA00-0	20 ... 65	20 ... 65
37	66	None	3VA2110-7MS32	3RT1055-6AP36	-/S6/S6	3UF71x3-1xA00-0	20 ... 74	20 ... 74

## 3.4 Motor starter protector + contactor + 3RB22, 3RB23, 3RB24 electronic overload relays, or 3UF7

Standard three-phase motor 4-pole at 400 V AC <sup>1)</sup>		Setting range Overload release	Motor starter protector Starter protection <sup>3)</sup>	Contactor <sup>2)</sup>	Size	Overload relay (electronic) or current measuring module <sup>4)</sup> Maximum permitted setting range overload release		
Stand- ard output P	Motor cur- rent I	Motor starter protector					IE1 / IE2 motors	IE3 / IE4 motors
kW	A	A	Article No.	Article No.		Article No.	A	A
45	80	None	3VA2216-7MS32	3RT1056-6AP36	-/S6/S6	3UF71x3-1xA00-0	20 ... 93	20 ... 93
55	97	None	3VA2216-7MS32	3RT1064-6AP36	-/S10/S6	3UF71x3-1xA00-0	20 ... 105	20 ... 105
75	132	None	3VA2325-7MS32	3RT1066-6AP36	-/S10/S10	3UF71x4-1BA00-0	63 ... 150	63 ... 150
90	160	None	3VA2325-7MS32	3RT1075-6AP36	-/S12/S12	3UF71x4-1BA00-0	63 ... 190	63 ... 190
110	195	None	3VA2325-7MS32	3RT1276-6AP36	-/S12V/S12	3UF71x4-1BA00-0	63 ... 210	63 ... 210
132	230	None	3VA2440-7MS32	3RT1076-6AP36	-/S12/S12	3UF71x4-1BA00-0	63 ... 250	63 ... 250
160	280	None	3VA2440-7MS32	3RT1276-6AP36	-/S12V/S12	3UF71x4-1BA00-0	63 ... 316	63 ... 316
160	280	None	3VA2440-7MS32	3RT1076-6AP36	-/S12/S12	3UF71x4-1BA00-0	63 ... 316	63 ... 316
<b>CLASS 40, short-circuit breaking capacity <math>I_q = 100 \text{ kA}</math></b>								
5.5	11.5	28 ... 36	3RV2031-4PB10	3RT2035-1AP00	S2/S2/-	3UF71x1-1AA00-0	2.4 ... 15	2.4 ... 15
7.5	15.5	32 ... 40	3RV2031-4UB10	3RT2035-1AP00	S2/S2/-	3UF71x1-1AA00-0	2.4 ... 17.5	2.4 ... 17.5
11	22	49 ... 59	3RV2031-4XB10	3RT2037-1AP00	S2/S2/-	3UF71x2-1AA00-0	10 ... 26	10 ... 26
15	29	54 ... 65	3RV2031-4JB10	3RT2037-1AP00	S2/S2/-	3UF71x2-1AA00-0	10 ... 30	10 ... 30

Article numbers for basic versions with screw terminals and spring-loaded terminals also possible. 3RA2921-1BA00 link module can only be used with screw terminals.

- <sup>1)</sup> Guide value for 4-pole standard motors at 400 V AC, 50 Hz. Selection depends on the concrete startup and rated data of the protected motor.
- <sup>2)</sup> Rated control supply voltage 230 V AC, 50 Hz, other control voltages possible.
- <sup>3)</sup> The motor starter protector is to be set to maximum current value.
- <sup>4)</sup> The necessary current measuring modules ( $x = 0$ ) or the current measuring modules / voltage measuring modules ( $x = 1$ ) are specified. The corresponding basic units 3RB22 / 3RB23 / 3RB24 and 3UF7 are additionally required.
- <sup>5)</sup> Only when  $I_r$  is set to maximum.

## 3.5 Motor starter protector + solid-state contactor

### Restriction

In accordance with the product standard DIN IEC 60947-4-2, the solid-state switching devices are designed for motors with a maximum starting current ratio of 8 times the rated current ( $I/I_{e} \leq 8$ ).

For dimensioning for motors with higher starting current conditions (typically  $I/I_{e} > 8$ ), the maximum permissible rated operational current has to be reduced in accordance with the following table:

Starting current ratio	Maximum permissible rated operational current [A]			
	Solid-state contactors			
	3RF3405-.BB..	3RF3410-.BB..	3RF3412-.BB..	3RF3416-.BB..
<= 8 times	5.2	9.2	12.5	16.0
8.5 times	4.9	8.7	11.8	15.1
9 times	4.6	8.2	11.1	14.2
9.5 times	4.4	7.7	10.5	13.5
10 times	4.2	7.4	10.0	12.8

**CLASS 10, type of coordination 1,  
short-circuit breaking capacity  $I_q \geq 5 \text{ kA} / 50 \text{ kA}$**



Standard three-phase motor 4-pole at 400 V AC <sup>1)</sup>		Motor starter protector Motor protection Maximum permitted setting range overload release			Size	Solid-state contactor <sup>2)</sup>	
Standard output P	Motor current (guide value) I	IE1 / IE2 motors	IE3 / IE4 motors			Mounting with lateral clearance of 20 mm	Butt-mounting <sup>3)</sup>
kW	A	A	A	Article No.		Article No.	Article No.
<b>Short-circuit breaking capacity <math>I_q = 50 \text{ kA}</math></b>							
0.06	0.2	0.14 ... 0.20	0.14 ... 0.18	3RV2011-0BA10	S00	3RF3405-1BB04	3RF3405-1BB04
0.06	0.2	0.18 ... 0.25	0.18 ... 0.22	3RV2011-0CA10	S00		
0.09	0.3	0.22 ... 0.32	0.22 ... 0.28	3RV2011-0DA10	S00		
0.09	0.3	0.28 ... 0.40	0.28 ... 0.35	3RV2011-0EA10	S00		
0.12	0.4	0.35 ... 0.50	0.35 ... 0.45	3RV2011-0FA10	S00		
0.18	0.6	0.45 ... 0.63	0.45 ... 0.55	3RV2011-0GA10	S00		
0.25	0.85	0.55 ... 0.80	0.55 ... 0.70	3RV2011-0HA10	S00		
0.25	0.85	0.70 ... 1.00	0.70 ... 0.90	3RV2011-0JA10	S00		
0.37	1.1	0.90 ... 1.25	0.90 ... 1.10	3RV2011-0KA10	S00		
0.55	1.5	1.10 ... 1.60	1.10 ... 1.40	3RV2011-1AA10	S00		
0.75	1.9	1.40 ... 2.00	1.40 ... 1.80	3RV2011-1BA10	S00		
0.75	1.9	1.80 ... 2.50	1.80 ... 2.20	3RV2011-1CA10	S00		
1.1	2.7	2.20 ... 3.20	2.20 ... 2.80	3RV2011-1DA10	S00		
1.5	3.6	2.80 ... 4.00	2.80 ... 3.50	3RV2011-1EA10	S00		
1.5	3.6	3.50 ... 5.00	3.50 ... 4.50	3RV2011-1FA10	S00		
2.2	5	4.50 ... 6.30	4.50 ... 5.20	3RV2011-1GA10	S00		
<b>Short-circuit breaking capacity <math>I_q = 20 \text{ kA}</math></b>							
2.2	5	4.50 ... 6.30	4.50 ... 5.50	3RV2011-1GA10	S00	3RF3405-1BB04	3RF3410-1BB04
3	6.5	5.50 ... 8.00	5.50 ... 7.00	3RV2011-1HA10	S00	3RF3410-1BB04	3RF3410-1BB04
4	8.5	7.00 ... 10.0	7.00 ... 9.0	3RV2011-1JA10	S00		

## Selection tables 400 V AC

### 3.5 Motor starter protector + solid-state contactor

Standard three-phase motor 4-pole at 400 V AC <sup>1)</sup>		Motor starter protector Motor protection Maximum permitted setting range overload release			Size	Solid-state contactor <sup>2)</sup>	
Stand-ard output P	Motor current (guide value) I	IE1 / IE2 motors	IE3 / IE4 motors			Mounting with lateral clearance of 20 mm	Butt-mounting <sup>3)</sup>
kW	A	A	A	Article No.		Article No.	Article No.
<b>Short-circuit breaking capacity <math>I_q = 5 \text{ kA}</math></b>							
5.5	11.5	9.00 ... 12.5	9.00 ... 10.0	3RV2011-1KA10	S00	3RF3412-1BB04	3RF3412-1BB04
7.5	15.5	10.0 ... 16.0	10.0 ... 13.0	3RV2021-4AA10	S0	3RF3416-1BB04	3RF3416-1BB04
7.5	15.5	13.0 ... 20.0	13.0 ... 16.0	3RV2021-4BA10	S0		

Article numbers for basic versions with screw terminals and spring-loaded terminals also possible. 3RA2921-1BA00 link module can only be used with screw terminals.

- <sup>1)</sup> Guide value for 4-pole standard motors at 400 V AC, 50 Hz. Selection depends on the concrete startup and rated data of the protected motor.
- <sup>2)</sup> Rated currents taken into account at 40 °C ambient temperature. Rated control supply voltage 230 V AC, 50 Hz. Other control voltages are also possible.
- <sup>3)</sup> The rated currents must be reduced if the solid-state contactor is butt mounted. Detailed characteristic curves can be found in the SIRIUS Innovations manual - SIRIUS 3RF34 solid-state switching devices.

### See also

SIRIUS - SIRIUS 3RF34 solid-state switching devices  
[\(http://support.automation.siemens.com/WW/view/en/60298187\) manual](http://support.automation.siemens.com/WW/view/en/60298187)

## 3.6 Motor starter protector + solid-state reversing contactor

### Restriction

In accordance with the product standard DIN IEC 60947-4-2, the solid-state switching devices are designed for motors with a maximum starting current ratio of 8 times the rated current ( $I/I_{le} \leq 8$ ).

For dimensioning for motors with higher starting current conditions (typically  $I/I_{le} > 8$ ), the maximum permissible rated operational current has to be reduced in accordance with the following table:

Starting current ratio	Maximum permissible rated operational current [A]		
	Solid-state reversing contactor		
	3RF34 03-.BD.4	3RF34 05-.BD.4	3RF34 10-.BD.4
<= 8 times	3.8	5.4	7.4
8.5 times	3.6	5.1	7.0
9 times	3.4	4.8	6.6
9.5 times	3.2	4.5	6.2
10 times	3.0	4.3	5.9

## 3.6 Motor starter protector + solid-state reversing contactor

**CLASS 10, type of coordination 1,  
short-circuit breaking capacity  $I_q = 10 \text{ kA} / 50 \text{ kA}$**



Standard three-phase motor 4-pole at 400 V AC <sup>1)</sup>		Motor starter protector Motor protection Maximum permitted setting range overload release			Size	Solid-state reversing contactor <sup>2)</sup>	
Standard output P	Motor current (guide value) I	IE1 / IE2 motors	IE3 / IE4 motors			Mounting with lateral clearance of 20 mm	Butt-mounting <sup>3)</sup>
kW	A	A	A	Article No.		Article No.	Article No.
<b>Short-circuit breaking capacity <math>I_q = 50 \text{ kA}</math></b>							
0.06	0.2	0.14 ... 0.20	0.14 ... 0.18	3RV2011-0BA10	S00	3RF3403-1BD04	3RF3403-1BD04
0.06	0.2	0.18 ... 0.25	0.18 ... 0.22	3RV2011-0CA10	S00		
0.09	0.3	0.22 ... 0.32	0.22 ... 0.28	3RV2011-0DA10	S00		
0.09	0.3	0.28 ... 0.40	0.28 ... 0.35	3RV2011-0EA10	S00		
0.12	0.4	0.35 ... 0.50	0.35 ... 0.45	3RV2011-0FA10	S00		
0.18	0.6	0.45 ... 0.63	0.45 ... 0.55	3RV2011-0GA10	S00		
0.25	0.85	0.55 ... 0.80	0.55 ... 0.70	3RV2011-0HA10	S00		
0.25	0.85	0.70 ... 1.00	0.70 ... 0.90	3RV2011-0JA10	S00		
0.37	1.1	0.90 ... 1.25	0.90 ... 1.10	3RV2011-0KA10	S00		
0.55	1.5	1.10 ... 1.60	1.10 ... 1.40	3RV2011-1AA10	S00		
0.75	1.9	1.40 ... 2.00	1.40 ... 1.80	3RV2011-1BA10	S00		
0.75	1.9	1.80 ... 2.50	1.80 ... 2.20	3RV2011-1CA10	S00		
1.1	2.7	2.20 ... 3.20	2.20 ... 2.80	3RV2011-1DA10	S00		

## 3.7 Motor starter protector + star (wye)-delta starting + 3RU21 thermal overload relay

Standard three-phase motor 4-pole at 400 V AC <sup>1)</sup>		Motor starter protector Motor protection Maximum permitted setting range overload release			Size	Solid-state reversing contactor <sup>2)</sup>	
Standard output P	Motor current (guide value) I	IE1 / IE2 motors	IE3 / IE4 motors			Mounting with lateral clearance of 20 mm	Butt-mounting <sup>3)</sup>
kW	A	A	A	Article No.		Article No.	Article No.
1.5	3.6	2.80 ... 4.00	2.80 ... 3.50	3RV2011-1EA10	S00		3RF3405-1BD04
1.5	3.6	3.50 ... 5.00	3.50 ... 4.50	3RV2011-1FA10	S00		
2.2	5	4.50 ... 6.30	4.50 ... 5.20	3RV2011-1GA10	S00	3RF3405-1BD04	—
<b>Short-circuit breaking capacity <math>I_q = 10 \text{ kA}</math></b>							
2.2	5	4.50 ... 6.30	4.50 ... 5.50	3RV2011-1GA10	S00	3RF3405-1BD04	3RF3410-1BD04
3	6.5	5.50 ... 8.00	5.50 ... 7.00	3RV2011-1HA10	S00	3RF3410-1BD04	

Article numbers for basic versions with screw terminals and spring-loaded terminals also possible. 3RA2921-1BA00 link module can only be used with screw terminals.

- 1) Guide value for 4-pole standard motors at 400 V AC, 50 Hz. Selection depends on the concrete startup and rated data of the protected motor.
- 2) Rated currents taken into account at 40 °C ambient temperature. Rated control supply voltage 230 V AC, 50 Hz. Other control voltages are also possible.
- 3) The rated currents must be reduced if the solid-state contactor is butt mounted. Detailed characteristic curves can be found in the SIRIUS Innovations manual - SIRIUS 3RF34 solid-state switching devices.

### See also

SIRIUS - SIRIUS 3RF34 solid-state switching devices  
[\(http://support.automation.siemens.com/WW/view/en/60298187\) manual](http://support.automation.siemens.com/WW/view/en/60298187)

### 3.7 Motor starter protector + star (wye)-delta starting + 3RU21 thermal overload relay

**CLASS 10, types of coordination 1 and 2,  
short-circuit breaking capacity  $I_q = 150 \text{ kA}$**



AC 400V

Standard three-phase motor 4-pole at 400 V AC <sup>1)</sup>		Motor starter protector	Contactors <sup>2)</sup>		Size	Overload relay (thermal)	Setting range Overload release Overload relay
Stand- ard output P	Motor current I		Line contactor + delta contactor	Star contactor			
kW	A	Article No.	Article No.	Article No.		Article No.	A
<b>Type of coordination 1</b>							
5.5	11.5	3RV2311-1KC10	3RT2015-1AP01	3RT2015-1AP01	S00/S00/S00/S00	3RU2116-1HB0	5.5 ... 8.0
7.5	15.5	3RV2311-4AC10	3RT2016-1AP01	3RT2015-1AP01	S00/S00/S00/S00	3RU2116-1JB0	7.0 ... 10.0
7.5	15.5	3RV2321-4AC10	3RT2016-1AP01	3RT2015-1AP01	S00/S00/S00/S00	3RU2116-1JB0	7.0 ... 10.0
7.5	15.5	3RV2321-4AC10	3RT2024-1AP00	3RT2024-1AP00	S0/S0/S0/S0	3RU2126-1JB0	7.0 ... 10.0
11	22	3RV2321-4DC10	3RT2025-1AP00	3RT2024-1AP00	S0/S0/S0/S0	3RU2126-4AB0	11.0 ... 16.0
15	29	3RV2321-4EC10	3RT2025-1AP00	3RT2024-1AP00	S0/S0/S0/S0	3RU2126-4BB0	14.0 ... 20.0
15	29	3RV2332-4EC10	3RT2035-1AP00	3RT2026-1AP00	S2/S2/S0/S2	3RU2136-4BB0	14 ... 20
15	29	3RV2332-4PC10	3RT2035-1AP00	3RT2027-1AP00	S2/S2/S0/S2	3RU2136-4BB0	14 ... 20
18.5	35	3RV2332-4PC10	3RT2035-1AP00	3RT2027-1AP00	S2/S2/S0/S2	3RU2136-4DB0	18 ... 25
18.5	35	3RV2332-4UC10	3RT2035-1AP00	3RT2027-1AP00	S2/S2/S0/S2	3RU2136-4DB0	18 ... 25
22	41	3RV2332-4VC10	3RT2036-1AP00	3RT2027-1AP00	S2/S2/S0/S2	3RU2136-4EB0	22 ... 32
22	41	3RV2332-4WC10	3RT2037-1AP00	3RT2027-1AP00	S2/S2/S0/S2	3RU2136-4EB0	22 ... 32
30	55	3RV2332-4XC10	3RT2037-1AP00	3RT2035-1AP00	S2/S2/S2/S2	3RU2136-4FB0	28 ... 40

## 3.7 Motor starter protector + star (wye)-delta starting + 3RU21 thermal overload relay

Standard three-phase motor 4-pole at 400 V AC <sup>1)</sup>		Motor starter protector	Contactors <sup>2)</sup>		Size	Overload relay (thermal)	Setting range Overload release Overload relay
Stand- ard output P	Motor current I		Line contactor + delta contactor	Star contactor			
kW	A	Article No.	Article No.	Article No.	Article No.	A	
30	55	3RV2332-4JC10	3RT2037-1AP00	3RT2035-1AP00	S2/S2/S2/S2	3RU2136-4FB0	28 ... 40
37	66	3RV2332-4KC10	3RT2038-1AP00	3RT2035-1AP00	S2/S2/S2/S2	3RU2136-4GB0	36 ... 45
37	66	3RV2332-4KC10	3RT2038-1AP00	3RT2035-1AP00	S2/S2/S2/S2	3RU2136-4HB0	40 ... 50
45	80	3RV2332-4RC10	3RT2038-1AP00	3RT2035-1AP00	S2/S2/S2/S2	3RU2136-4QB0	47 ... 57
30	55	3RV2342-4JC10	3RT2045-1AP00	3RT2026-1AP00	S3/S3/S0/S3	3RU2146-4FB0	28 ... 40
37	66	3RV2342-4KC10	3RT2045-1AP00	3RT2027-1AP00	S3/S3/S0/S3	3RU2146-4FB0	28 ... 40
37	66	3RV2342-4KC10	3RT2045-1AP00	3RT2027-1AP00	S3/S3/S0/S3	3RU2146-4HB0	36 ... 50
45	80	3RV2342-4YC10	3RT2046-1AP00	3RT2028-1AP00	S3/S3/S0/S3	3RU2146-4HB0	36 ... 50
45	80	3RV2342-4YC10	3RT2046-1AP00	3RT2028-1AP00	S3/S3/S0/S3	3RU2146-4JB0	45 ... 63
55 <sup>3)</sup>	97	3RV2342-4MC10	3RT2047-1AP00	3RT2035-1AP00	S3/S3/S3/S3	3RU2146-4JB0	45 ... 63
55 <sup>3)</sup>	97	3RV2342-4MC10	3RT2047-1AP00	3RT2035-1AP00	S3/S3/S3/S3	3RU2146-4KB0	57 ... 75
<b>Type of coordination 2</b>							
5.5	11.5	3RV2321-4AC10	3RT2026-1AP00	3RT2015-1AP01	S0/S0/S00/S0	3RU2126-1HB0	5.5 ... 8.0
7.5	15.5	3RV2321-4AC10	3RT2026-1AP00	3RT2015-1AP01	S0/S0/S00/S0	3RU2126-1JB0	7.0 ... 10.0
11	22	3RV2321-4DC10	3RT2027-1AP00	3RT2024-1AP00	S0/S0/S0/S0	3RU2126-4AB0	11.0 ... 16.0
15	29	3RV2321-4EC10	3RT2027-1AP00	3RT2024-1AP00	S0/S0/S0/S0	3RU2126-4BB0	14.0 ... 20.0
15	29	3RV2332-4EC10	3RT2035-1AP00	3RT2026-1AP00	S2/S2/S0/S2	3RU2136-4BB0	14 ... 20
15	29	3RV2332-4PC10	3RT2035-1AP00	3RT2027-1AP00	S2/S2/S0/S2	3RU2136-4BB0	14 ... 20
18.5	35	3RV2332-4PC10	3RT2035-1AP00	3RT2027-1AP00	S2/S2/S0/S2	3RU2136-4DB0	18 ... 25
18.5	35	3RV2332-4UC10	3RT2035-1AP00	3RT2027-1AP00	S2/S2/S0/S2	3RU2136-4DB0	18 ... 25

## Selection tables 400 V AC

### 3.7 Motor starter protector + star (wye)-delta starting + 3RU21 thermal overload relay

Standard three-phase motor 4-pole at 400 V AC <sup>1)</sup>		Motor starter protector	Contactors <sup>2)</sup>		Size	Overload relay (thermal)	Setting range Overload release Overload relay
Stand- ard output P	Motor current I		Line contactor + delta contactor	Star contactor			
kW	A	Article No.	Article No.	Article No.		Article No.	A
22	41	3RV2332-4VC10	3RT2036-1AP00	3RT2027-1AP00	S2/S2/S0/S2	3RU2136-4EB0	22 ... 32
22	41	3RV2332-4WC10	3RT2037-1AP00	3RT2027-1AP00	S2/S2/S0/S2	3RU2136-4EB0	22 ... 32
30	55	3RV2332-4XC10	3RT2037-1AP00	3RT2035-1AP00	S2/S2/S2/S2	3RU2136-4FB0	28 ... 40
30	55	3RV2332-4JC10	3RT2037-1AP00	3RT2035-1AP00	S2/S2/S2/S2	3RU2136-4FB0	28 ... 40
37	66	3RV2332-4KC10	3RT2038-1AP00	3RT2035-1AP00	S2/S2/S2/S2	3RU2136-4GB0	36 ... 45
37	66	3RV2332-4KC10	3RT2038-1AP00	3RT2035-1AP00	S2/S2/S2/S2	3RU2136-4HB0	40 ... 50
45	80	3RV2332-4RC10	3RT2038-1AP00	3RT2035-1AP00	S2/S2/S2/S2	3RU2136-4QB0	47 ... 57
30	55	3RV2342-4JC10	3RT2045-1AP00	3RT2026-1AP00	S3/S3/S0/S3	3RU2146-4FB0	28 ... 40
37	66	3RV2342-4KC10	3RT2045-1AP00	3RT2027-1AP00	S3/S3/S0/S3	3RU2146-4FB0	28 ... 40
37	66	3RV2342-4KC10	3RT2045-1AP00	3RT2027-1AP00	S3/S3/S0/S3	3RU2146-4HB0	36 ... 50
45	80	3RV2342-4YC10	3RT2046-1AP00	3RT2028-1AP00	S3/S3/S0/S3	3RU2146-4HB0	36 ... 50
45	80	3RV2342-4YC10	3RT2046-1AP00	3RT2028-1AP00	S3/S3/S0/S3	3RU2146-4JB0	45 ... 63
55 <sup>3)</sup>	97	3RV2342-4MC10	3RT2047-1AP00	3RT2035-1AP00	S3/S3/S3/S3	3RU2146-4JB0	45 ... 63
55 <sup>3)</sup>	97	3RV2342-4MC10	3RT2047-1AP00	3RT2035-1AP00	S3/S3/S3/S3	3RU2146-4KB0	57 ... 75

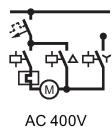
Article numbers for basic versions with screw terminals and spring-loaded terminals also possible.

- <sup>1)</sup> Guide value for 4-pole standard motors at 400 V AC, 50 Hz. Selection depends on the concrete startup and rated data of the protected motor.
- <sup>2)</sup> Rated control supply voltage 230 V AC, 50 Hz. Other control voltages are also possible.
- <sup>3)</sup> Suitable for use with IE3 motors with a maximum starting current of 780 A.

**3.8 Motor starter protector + contactor assembly for star-delta (wye-delta) start + 3RB3, 3RB22, 3RB23, 3RB24 electronic overload relay, or 3UF7**

### 3.8 Motor starter protector + contactor assembly for star-delta (wye-delta) start + 3RB3, 3RB22, 3RB23, 3RB24 electronic overload relay, or 3UF7

**CLASS 10, types of coordination 1 and 2,  
short-circuit breaking capacity  $I_q = 150 \text{ kA} / 100 \text{ kA}$**



AC 400V

Standard three-phase motor 4-pole at 400 V AC <sup>1)</sup>		Motor starter protector	Contactors <sup>2)</sup>		Size	Overload relay (electronic) or current measuring module <sup>3)</sup>	Setting range Overload release Overload relay
Stand- ard output P	Motor current I		Line contactor + delta contactor	Star contactor			
kW	A	Article No.	Article No.	Article No.	Article No.	Article No.	A
<b>Type of coordination 1 with 3RB3, short-circuit breaking capacity <math>I_q = 150 \text{ kA}</math></b>							
5.5	11.5	3RV2311-4AC10	3RT2016-1AP01	3RT2015-1AP01	S00/S00/S00/S0	3RB3026-1QB0	6 ... 25
5.5	11.5	3RV2321-4AC10	3RT2016-1AP01	3RT2015-1AP01	S0/S00/S00/S0	3RB3026-1QB0	6 ... 25
5.5	11.5	3RV2321-4AC10	3RT2024-1AP00	3RT2024-1AP00	S0/S0/S0/S0	3RB3026-1QB0	6 ... 25
7.5	15.5	3RV2321-4BC10	3RT2025-1AP00	3RT2024-1AP00	S0/S0/S0/S0	3RB3026-1QB0	6 ... 25
11	22	3RV2321-4EC10	3RT2025-1AP00	3RT2024-1AP00	S0/S0/S0/S0	3RB3026-1VB0	10 ... 40
11	22	3RV2332-4EC10	3RT2035-1AP00	3RT2026-1AP00	S2/S2/S0/S2	3RB3036-1UB0	12.5 ... 50
15	29	3RV2332-4PC10	3RT2035-1AP00	3RT2027-1AP00	S2/S2/S0/S2	3RB3036-1UB0	12.5 ... 50
18.5	35	3RV2332-4UC10	3RT2035-1AP00	3RT2027-1AP00	S2/S2/S0/S2	3RB3036-1UB0	12.5 ... 50
30	55	3RV2342-4JC10	3RT2045-1AP00	3RT2026-1AP00	S3/S3/S0/S3	3RB3046-1UB0	12.5 ... 50
37	66	3RV2342-4RC10	3RT2046-1AP00	3RT2027-1AP00	S3/S3/S0/S3	3RB3046-1UB0	12.5 ... 50
45	80	3RV2042-4YB10	3RT2046-1AP00	3RT2028-1AP00	S3/S3/S0/S3	3RB3046-1XB0	32 ... 115
55 <sup>4)</sup>	97	3RV2042-4MB10	3RT2047-1AP00	3RT2035-1AP00	S3/S3/S2/S3	3RB3046-1XB0	32 ... 115

Configuring the SIRIUS modular system

Configuration Manual, 09/2017, A8E56203880102A/RS-AB/006

## Selection tables 400 V AC

**3.8 Motor starter protector + contactor assembly for star-delta (wye-delta) start + 3RB3, 3RB22, 3RB23, 3RB24 electronic overload relay, or 3UF7**

Standard three-phase motor 4-pole at 400 V AC <sup>1)</sup>		Motor starter protector	Contactors <sup>2)</sup>		Size	Overload relay (electronic) or current measuring module <sup>3)</sup>	Setting range Overload release Overload relay
Stand- ard output P	Motor current I		Line contactor + delta contactor	Star contactor			
kW	A	Article No.	Article No.	Article No.		Article No.	A
55	97	3VA2216-7MS32	3RT1054-6AP36	3RT1044-1AP00	-/S6/S3/S6	3RB2056-1FC2	50 ... 200
75	132	3VA2216-7MS32	3RT1054-6AP36	3RT1044-1AP00	-/S6/S3/S6	3RB2056-1FC2	50 ... 200
90	160	3VA2220-7MS32	3RT1056-6AP36	3RT1045-1AP00	-/S6/S3/S6	3RB2056-1FC2	50 ... 200
110	195	3VA2325-7MS32	3RT1064-6AP36	3RT1054-6AP36	-/S10/S6/S10	3RB2066-1GC2	55 ... 250
110	195	3VA2325-7MS32	3RT1264-6AP36	3RT1054-6AP36	-/S10V/S6/S10	3RB2066-1GC2	55 ... 250
132	230	3VA2440-7MS32	3RT1065-6AP36	3RT1054-6AP36	-/S10/S6/S10	3RB2066-1GC2	55 ... 250
132	230	3VA2440-7MS32	3RT1265-6AP36	3RT1054-6AP36	-/S10V/S6/S10	3RB2066-1GC2	55 ... 250
160	280	3VA2440-7MS32	3RT1065-6AP36	3RT1054-6AP36	-/S10/S6/S10	3RB2066-1MC2	160 ... 630
160	280	3VA2440-7MS32	3RT1265-6AP36	3RT1054-6AP36	-/S10V/S6/S10	3RB2066-1MC2	160 ... 630
200	350	3VA2450-7MS32	3RT1075-6AP36	3RT1064-6AP36	-/S12/S10/S10	3RB2066-1MC2	160 ... 630
200	350	3VA2450-7MS32	3RT1275-6AP36	3RT1064-6AP36	-/S12V/S10/S10	3RB2066-1MC2	160 ... 630
250	430	3VA2450-7MS32	3RT1075-6AP36	3RT1064-6AP36	-/S12/S10/S10	3RB2066-1MC2	160 ... 630
250	430	3VA2450-7MS32	3RT1275-6AP36	3RT1064-6AP36	-/S12V/S10/S10	3RB2066-1MC2	160 ... 630

**3.8 Motor starter protector + contactor assembly for star-delta (wye-delta) start + 3RB3, 3RB22, 3RB23, 3RB24 electronic overload relay, or 3UF7**

Standard three-phase motor 4-pole at 400 V AC <sup>1)</sup>		Motor starter protector	Contactors <sup>2)</sup>		Size	Overload relay (electronic) or current measuring module <sup>3)</sup>	Setting range Overload release Overload relay
Stand- ard output P	Motor current I		Line contactor + delta contactor	Star contactor			
kW	A	Article No.	Article No.	Article No.	Article No.	Article No.	Article No.

Type of coordination 1 with 3RB3, short-circuit breaking capacity  $I_q = 100 \text{ kA}$

11	22	3RV2331-4EC10	3RT2035-1AP00	3RT2026-1AP00	S2/S2/S0/S2	3RB3036-1UB0	12.5 ... 50
15	29	3RV2331-4PC10	3RT2035-1AP00	3RT2027-1AP00	S2/S2/S0/S2	3RB3036-1UB0	12.5 ... 50
18.5	35	3RV2331-4UC10	3RT2035-1AP00	3RT2027-1AP00	S2/S2/S0/S2	3RB3036-1UB0	12.5 ... 50
22	41	3RV2031-4VB10	3RT2036-1AP00	3RT2027-1AP00	S2/S2/S0/S2	3RB3036-1UB0	12.5 ... 50
30	55	3RV2031-4XB10	3RT2037-1AP00	3RT2035-1AP00	S2/S2/S2/S2	3RB3036-1UB0	12.5 ... 50
30	55	3RV2031-4JB10	3RT2037-1AP00	3RT2035-1AP00	S2/S2/S2/S2	3RB3036-1UB0	12.5 ... 50
30	55	3RV2341-4JC10	3RT2045-1AP00	3RT2026-1AP00	S3/S3/S0/S3	3RB3046-1UB0	12.5 ... 50
37	66	3RV2341-4RC10	3RT2046-1AP00	3RT2027-1AP00	S3/S3/S0/S3	3RB3046-1UB0	12.5 ... 50

Type of coordination 1 with 3RB22 / 3RB23 / 3RB24 or 3UF7, short-circuit breaking capacity  $I_q = 150 \text{ kA}$

5.5	11.5	3RV2311-4AC10	3RT2016-1AP01	3RT2015-1AP01	S00/S00/S00/-	3UF71x1-1AA00-0/3RB2906-2DG1	2.4 ... 25
5.5	11.5	3RV2321-4AC10	3RT2016-1AP01	3RT2015-1AP01	S0/S00/S00/-	3UF71x1-1AA00-0/3RB2906-2DG1	2.4 ... 25
5.5	11.5	3RV2321-4AC10	3RT2024-1AP00	3RT2024-1AP00	S0/S0/S0/-	3UF71x1-1AA00-0/3RB2906-2DG1	2.4 ... 25
7.5	15.5	3RV2321-4CC10	3RT2025-1AP00	3RT2024-1AP00	S0/S0/S0/-	3UF71x1-1AA00-0/3RB2906-2DG1	2.4 ... 25
11	22	3RV2321-4EC10	3RT2025-1AP00	3RT2024-1AP00	S0/S0/S0/-	3UF71x2-1AA00-0/3RB2906-2JG1	10 ... 100
11	22	3RV2332-4EC10	3RT2035-1AP00	3RT2026-1AP00	S2/S2/S0/-	3UF71x2-1AA00-0/3RB2906-2JG1	10 ... 100
15	29	3RV2332-4PC10	3RT2035-1AP00	3RT2027-1AP00	S2/S2/S0/-	3UF71x2-1AA00-0/3RB2906-2JG1	10 ... 100
18.5	35	3RV2332-4UC10	3RT2035-1AP00	3RT2027-1AP00	S2/S2/S0/-	3UF71x2-1AA00-0/3RB2906-2JG1	10 ... 100
30	55	3RV2342-4JC10	3RT2045-1AP00	3RT2026-1AP00	S3/S3/S0/-	3UF71x2-1AA00-0/3RB2906-2JG1	10 ... 100
37	66	3RV2342-4RC10	3RT2046-1AP00	3RT2027-1AP00	S3/S3/S0/-	3UF71x2-1AA00-0/3RB2906-2JG1	10 ... 100

## Selection tables 400 V AC

**3.8 Motor starter protector + contactor assembly for star-delta (wye-delta) start + 3RB3, 3RB22, 3RB23, 3RB24 electronic overload relay, or 3UF7**

Standard three-phase motor 4-pole at 400 V AC <sup>1)</sup>		Motor starter protector	Contactors <sup>2)</sup>		Size	Overload relay (electronic) or current measuring module <sup>3)</sup>	Setting range Overload release Overload relay
Stand- ard output P	Motor current I		Line contactor + delta contactor	Star contactor			
kW	A	Article No.	Article No.	Article No.		Article No.	A
45	80	3RV2042-4YB10	3RT2046-1AP00	3RT2028-1AP00	S3/S3/S0/-	3UF71x2-1AA00-0/ 3RB2906-2JG1	10 ... 100
55 <sup>4)</sup>	97	3RV2042-4MB10	3RT2047-1AP00	3RT2035-1AP00	S3/S3/S2/-	3UF71x2-1AA00-0/ 3RB2906-2JG1	10 ... 100
55	97	3VA2216-7MS32	3RT1054-6AP36	3RT1044-1AP00	-/S6/S3/-	3UF71x3-1xA00-0/ 3RB2956-2Tx2	20 ... 200
75	132	3VA2216-7MS32	3RT1054-6AP36	3RT1044-1AP00	-/S6/S3/-	3UF71x3-1xA00-0/ 3RB2956-2Tx2	20 ... 200
90	160	3VA2220-7MS32	3RT1056-6AP36	3RT1045-1AP00	-/S6/S3/-	3UF71x3-1xA00-0/ 3RB2956-2Tx2	20 ... 200
110	195	3VA2325-7MS32	3RT1064-6AP36	3RT1054-6AP36	-/S10/S6/S10	3UF71x4-1BA00-0/ 3RB2966-2WH2	63 ... 630
110	195	3VA2325-7MS32	3RT1264-6AP36	3RT1054-6AP36	-/S10V/S6/S10	3UF71x4-1BA00-0/ 3RB2966-2WH2	63 ... 630
132	230	3VA2440-7MS32	3RT1065-6AP36	3RT1054-6AP36	-/S10/S6/S10	3UF71x4-1BA00-0/ 3RB2966-2WH2	63 ... 630
132	230	3VA2440-7MS32	3RT1265-6AP36	3RT1054-6AP36	-/S10V/S6/S10	3UF71x4-1BA00-0/ 3RB2966-2WH2	63 ... 630
160	280	3VA2440-7MS32	3RT1065-6AP36	3RT1054-6AP36	-/S10/S6/S10	3UF71x4-1BA00-0/ 3RB2966-2WH2	63 ... 630
160	280	3VA2440-7MS32	3RT1265-6AP36	3RT1054-6AP36	-/S10V/S6/S10	3UF71x4-1BA00-0/ 3RB2966-2WH2	63 ... 630
200	350	3VA2450-7MS32	3RT1075-6AP36	3RT1064-6AP36	-/S12/S10/S10	3UF71x4-1BA00-0/ 3RB2966-2WH2	63 ... 630
200	350	3VA2450-7MS32	3RT1275-6AP36	3RT1064-6AP36	-/S12V/S10/S10	3UF71x4-1BA00-0/ 3RB2966-2WH2	63 ... 630
250	430	3VA2450-7MS32	3RT1075-6AP36	3RT1064-6AP36	-/S12/S10/S10	3UF71x4-1BA00-0/ 3RB2966-2WH2	63 ... 630
250	430	3VA2450-7MS32	3RT1275-6AP36	3RT1064-6AP36	-/S12V/S10/S10	3UF71x4-1BA00-0/ 3RB2966-2WH2	63 ... 630

**3.8 Motor starter protector + contactor assembly for star-delta (wye-delta) start + 3RB3, 3RB22, 3RB23, 3RB24 electronic overload relay, or 3UF7**

Standard three-phase motor 4-pole at 400 V AC <sup>1)</sup>		Motor starter protector	Contactors <sup>2)</sup>		Size	Overload relay (electronic) or current measuring module <sup>3)</sup>	Setting range Overload release Overload relay
Stand- ard output P	Motor current I		Line contactor + delta contactor	Star contactor			
kW	A	Article No.	Article No.	Article No.	Article No.	Article No.	Article No.

Type of coordination 1 with 3RB22 / 3RB23 / 3RB24 or 3UF7, short-circuit breaking capacity  $I_q = 100 \text{ kA}$

11	22	3RV2331-4EC10	3RT2035-1AP00	3RT2026-1AP00	S2/S2/S0/-	3UF71x2-1AA00-0/ 3RB2906-2JG1	10 ... 100
15	29	3RV2331-4PC10	3RT2035-1AP00	3RT2027-1AP00	S2/S2/S0/-	3UF71x2-1AA00-0/ 3RB2906-2JG1	10 ... 100
18.5	35	3RV2331-4UC10	3RT2035-1AP00	3RT2027-1AP00	S2/S2/S0/-	3UF71x2-1AA00-0/ 3RB2906-2JG1	10 ... 100
22	41	3RV2031-4VB10	3RT2036-1AP00	3RT2027-1AP00	S2/S2/S0/-	3UF71x2-1AA00-0/ 3RB2906-2JG1	10 ... 100
30	55	3RV2031-4XB10	3RT2037-1AP00	3RT2035-1AP00	S2/S2/S2/-	3UF71x2-1AA00-0/ 3RB2906-2JG1	10 ... 100
30	55	3RV2031-4JB10	3RT2037-1AP00	3RT2035-1AP00	S2/S2/S2/-	3UF71x2-1AA00-0/ 3RB2906-2JG1	10 ... 100
30	55	3RV2341-4UC10	3RT2045-1AP00	3RT2026-1AP00	S3/S3/S0/-	3UF71x2-1AA00-0/ 3RB2906-2JG1	10 ... 100
37	66	3RV2341-4YC10	3RT2046-1AP00	3RT2027-1AP00	S3/S3/S0/-	3UF71x2-1AA00-0/ 3RB2906-2JG1	10 ... 100

Type of coordination 2 with 3RB3, short-circuit breaking capacity  $I_q = 150 \text{ kA}$

5.5	11.5	3RV2321-4AC10	3RT2026-1AP00	3RT2015-1AP00	S0/S0/S00/S0	3RB3026-1QB0	6 ... 25
7.5	15.5	3RV2321-4BC10	3RT2027-1AP00	3RT2015-1AP00	S0/S0/S00/S0	3RB3026-1QB0	6 ... 25
11	22	3RV2321-4EC10	3RT2027-1AP00	3RT2024-1AP00	S0/S0/S0/S0	3RB3026-1VB0	10 ... 40
11	22	3RV2332-4EC10	3RT2035-1AP00	3RT2026-1AP00	S2/S2/S0	3RB3036-1UB0	12.5 ... 50
15	29	3RV2332-4PC10	3RT2035-1AP00	3RT2027-1AP00	S2/S2/S0	3RB3036-1UB0	12.5 ... 50
18.5	35	3RV2332-4UC10	3RT2035-1AP00	3RT2027-1AP00	S2/S2/S0	3RB3036-1UB0	12.5 ... 50
30	55	3RV2342-4JC10	3RT2045-1AP00	3RT2026-1AP00	S3/S3/S0/S3	3RB3046-1UB0	12.5 ... 50
37	66	3RV2342-4RC10	3RT2046-1AP00	3RT2027-1AP00	S3/S3/S0/S3	3RB3046-1UB0	12.5 ... 50
45	80	3RV2042-4YB10	3RT2046-1AP00	3RT2028-1AP00	S3/S3/S0/S3	3RB3046-1XB0	32 ... 115
55 <sup>4)</sup>	97	3RV2042-4MB10	3RT2047-1AP00	3RT2035-1AP00	S3/S3/S2/S3	3RB3046-1XB0	32 ... 115

## Selection tables 400 V AC

**3.8 Motor starter protector + contactor assembly for star-delta (wye-delta) start + 3RB3, 3RB22, 3RB23, 3RB24 electronic overload relay, or 3UF7**

Standard three-phase motor 4-pole at 400 V AC <sup>1)</sup>		Motor starter protector	Contactors <sup>2)</sup>		Size	Overload relay (electronic) or current measuring module <sup>3)</sup>	Setting range Overload release Overload relay
Stand- ard output P	Motor current I		Line contactor + delta contactor	Star contactor			
kW	A	Article No.	Article No.	Article No.		Article No.	A
55	97	3VA2216-7MS32	3RT1054-6AP36	3RT1044-1AP00	-/S6/S6/S3	3RB2056-1FC2	50 ... 200
75	132	3VA2216-7MS32	3RT1054-6AP36	3RT1044-1AP00	-/S6/S6/S3	3RB2056-1FC2	50 ... 200
90	160	3VA2220-7MS32	3RT1056-6AP36	3RT1045-1AP00	-/S6/S6/S3	3RB2056-1FC2	50 ... 200
110	195	3VA2325-7MS32	3RT1064-6AP36	3RT1054-6AP36	-/S10/S6/S6	3RB2066-1GC2	55 ... 250
110	195	3VA2325-7MS32	3RT1264-6AP36	3RT1054-6AP36	-/S10V/S6/S6	3RB2066-1GC2	55 ... 250
132	230	3VA2440-7MS32	3RT1065-6AP36	3RT1054-6AP36	-/S10/S6/S6	3RB2066-1GC2	55 ... 250
132	230	3VA2440-7MS32	3RT1265-6AP36	3RT1054-6AP36	-/S10V/S6/S6	3RB2066-1GC2	55 ... 250
160	280	3VA2440-7MS32	3RT1065-6AP36	3RT1054-6AP36	-/S10/S6/S6	3RB2066-1MC2	160 ... 630
160	280	3VA2440-7MS32	3RT1265-6AP36	3RT1054-6AP36	-/S10V/S6/S6	3RB2066-1MC2	160 ... 630
200	350	3VA2450-7MS32	3RT1075-6AP36	3RT1064-6AP36	-/S12/S10/S10	3RB2066-1MC2	160 ... 630
200	350	3VA2450-7MS32	3RT1275-6AP36	3RT1064-6AP36	-/S12V/S10/S10	3RB2066-1MC2	160 ... 630
250	430	3VA2450-7MS32	3RT1075-6AP36	3RT1064-6AP36	-/S12/S10/S10	3RB2066-1MC2	160 ... 630
250	430	3VA2450-7MS32	3RT1275-6AP36	3RT1064-6AP36	-/S12V/S10/S10	3RB2066-1MC2	160 ... 630

**3.8 Motor starter protector + contactor assembly for star-delta (wye-delta) start + 3RB3, 3RB22, 3RB23, 3RB24 electronic overload relay, or 3UF7**

Standard three-phase motor 4-pole at 400 V AC <sup>1)</sup>		Motor starter protector	Contactors <sup>2)</sup>		Size	Overload relay (electronic) or current measuring module <sup>3)</sup>	Setting range Overload release Overload relay
Stand- ard output P	Motor current I		Line contactor + delta contactor	Star contactor			
kW	A	Article No.	Article No.	Article No.			

**Type of coordination 2 with 3RB3, short-circuit breaking capacity  $I_q = 100 \text{ kA}$**

11	22	3RV2331-4EC10	3RT2035-1AP00	3RT2026-1AP00	S2/S2/S0/S2	3RB3036-1UB0	12.5 ... 50
15	29	3RV2331-4PC10	3RT2035-1AP00	3RT2027-1AP00	S2/S2/S0/S2	3RB3036-1UB0	12.5 ... 50
18.5	35	3RV2331-4UC10	3RT2035-1AP00	3RT2027-1AP00	S2/S2/S0/S2	3RB3036-1UB0	12.5 ... 50
22	41	3RV2031-4VB10	3RT2036-1AP00	3RT2027-1AP00	S2/S2/S0/S2	3RB3036-1UB0	12.5 ... 50
30	55	3RV2031-4XB10	3RT2037-1AP00	3RT2035-1AP00	S2/S2/S2/S2	3RB3036-1UB0	12.5 ... 50
30	55	3RV2031-4JB10	3RT2037-1AP00	3RT2035-1AP00	S2/S2/S2/S2	3RB3036-1UB0	12.5 ... 50
30	55	3RV2341-4JC10	3RT2045-1AP00	3RT2026-1AP00	S3/S3/S0/S3	3RB3046-1UB0	12.5 ... 50
37	66	3RV2341-4RC10	3RT2046-1AP00	3RT2027-1AP00	S3/S3/S0/S3	3RB3046-1UB0	12.5 ... 50

**Type of coordination 2 with 3RB22 / 3RB23 / 3RB24 or 3UF7, short-circuit breaking capacity  $I_q = 150 \text{ kA}$**

5.5	11.5	3RV2321-4AC10	3RT2026-1AP00	3RT2015-1AP00	S0/S0/S00/-	3UF71x1-1AA00-0/3RB2906-2DG1	2.4 ... 25
7.5	15.5	3RV2321-4CC10	3RT2027-1AP00	3RT2015-1AP00	S0/S0/S00/-	3UF71x1-1AA00-0/3RB2906-2DG1	2.4 ... 25
11	22	3RV2321-4EC10	3RT2027-1AP00	3RT2024-1AP00	S0/S0/S0/-	3UF71x2-1AA00-0/3RB2906-2JG1	10 ... 100
11	22	3RV2332-4EC10	3RT2035-1AP00	3RT2026-1AP00	S2/S2/S0/-	3UF71x2-1AA00-0/3RB2906-2JG1	10 ... 100
15	29	3RV2332-4PC10	3RT2035-1AP00	3RT2027-1AP00	S2/S2/S0/-	3UF71x2-1AA00-0/3RB2906-2JG1	10 ... 100
18.5	35	3RV2332-4UC10	3RT2035-1AP00	3RT2027-1AP00	S2/S2/S0/-	3UF71x2-1AA00-0/3RB2906-2JG1	10 ... 100
30	55	3RV2342-4JC10	3RT2045-1AP00	3RT2026-1AP00	S3/S3/S0/-	3UF71x2-1AA00-0/3RB2906-2JG1	10 ... 100
37	66	3RV2342-4RC10	3RT2046-1AP00	3RT2027-1AP00	S3/S3/S0/-	3UF71x2-1AA00-0/3RB2906-2JG1	10 ... 100
45	80	3RV2042-4YB10	3RT2046-1AP00	3RT2028-1AP00	S3/S3/S0/-	3UF71x2-1AA00-0/3RB2906-2JG1	10 ... 100
55 <sup>4)</sup>	97	3RV2042-4MB10	3RT2047-1AP00	3RT2035-1AP00	S3/S3/S2/-	3UF71x2-1AA00-0/3RB2906-2JG1	10 ... 100

## Selection tables 400 V AC

**3.8 Motor starter protector + contactor assembly for star-delta (wye-delta) start + 3RB3, 3RB22, 3RB23, 3RB24 electronic overload relay, or 3UF7**

Standard three-phase motor 4-pole at 400 V AC <sup>1)</sup>		Motor starter protector	Contactors <sup>2)</sup>		Size	Overload relay (electronic) or current measuring module <sup>3)</sup>	Setting range Overload release Overload relay
Stand- ard output P	Motor current I		Line contactor + delta contactor	Star contactor			
kW	A	Article No.	Article No.	Article No.		Article No.	A
55	97	3VA2216-7MS32	3RT1054-6AP36	3RT1044-1AP00	-/S6/S3/-	3UF71x3-1xA00-0/ 3RB2956-2Tx2	20 ... 200
75	132	3VA2216-7MS32	3RT1054-6AP36	3RT1044-1AP00	-/S6/S3/-	3UF71x3-1xA00-0/ 3RB2956-2Tx2	20 ... 200
90	160	3VA2220-7MS32	3RT1056-6AP36	3RT1045-1AP00	-/S6/S3/-	3UF71x3-1xA00-0/ 3RB2956-2Tx2	20 ... 200
110	195	3VA2325-7MS32	3RT1064-6AP36	3RT1054-6AP36	-/S10/S6/S10	3UF71x4-1BA00-0/ 3RB2966-2WH2	63 ... 630
110	195	3VA2325-7MS32	3RT1264-6AP36	3RT1054-6AP36	-/S10V/S6/S10	3UF71x4-1BA00-0/ 3RB2966-2WH2	63 ... 630
132	230	3VA2440-7MS32	3RT1065-6AP36	3RT1054-6AP36	-/S10/S6/S10	3UF71x4-1BA00-0/ 3RB2966-2WH2	63 ... 630
132	230	3VA2440-7MS32	3RT1265-6AP36	3RT1054-6AP36	-/S10V/S6/S10	3UF71x4-1BA00-0/ 3RB2966-2WH2	63 ... 630
160	280	3VA2440-7MS32	3RT1065-6AP36	3RT1054-6AP36	-/S10/S6/S10	3UF71x4-1BA00-0/ 3RB2966-2WH2	63 ... 630
160	280	3VA2440-7MS32	3RT1265-6AP36	3RT1054-6AP36	-/S10V/S6/S10	3UF71x4-1BA00-0/ 3RB2966-2WH2	63 ... 630
200	350	3VA2450-7MS32	3RT1075-6AP36	3RT1064-6AP36	-/S12/S10/S10	3UF71x4-1BA00-0/ 3RB2966-2WH2	63 ... 630
200	350	3VA2450-7MS32	3RT1275-6AP36	3RT1064-6AP36	-/S12V/S10/S10	3UF71x4-1BA00-0/ 3RB2966-2WH2	63 ... 630
250	430	3VA2450-7MS32	3RT1075-6AP36	3RT1064-6AP36	-/S12/S10/S10	3UF71x4-1BA00-0/ 3RB2966-2WH2	63 ... 630
250	430	3VA2450-7MS32	3RT1275-6AP36	3RT1064-6AP36	-/S12V/S10/S10	3UF71x4-1BA00-0/ 3RB2966-2WH2	63 ... 630

**3.8 Motor starter protector + contactor assembly for star-delta (wye-delta) start + 3RB3, 3RB22, 3RB23, 3RB24 electronic overload relay, or 3UF7**

Standard three-phase motor 4-pole at 400 V AC <sup>1)</sup>		Motor starter protector	Contactors <sup>2)</sup>		Size	Overload relay (electronic) or current measuring module <sup>3)</sup>	Setting range Overload release Overload relay
Stand-ard output P	Motor current I		Line contactor + delta contactor	Star contactor			
kW	A		Article No.	Article No.		Article No.	Article No.
<b>Type of coordination 2 with 3RB22 / 3RB23 / 3RB24 or 3UF7, short-circuit breaking capacity <math>I_q = 100 \text{ kA}</math></b>							
11	22	3RV2331-4EC10	3RT2035-1AP00	3RT2026-1AP00	S2/S2/S0/-	3UF71x2-1AA00-0/3RB2906-2JG1	10 ... 100
15	29	3RV2331-4PC10	3RT2035-1AP00	3RT2027-1AP00	S2/S2/S0/-	3UF71x2-1AA00-0/3RB2906-2JG1	10 ... 100
18.5	35	3RV2331-4UC10	3RT2035-1AP00	3RT2027-1AP00	S2/S2/S0/-	3UF71x2-1AA00-0/3RB2906-2JG1	10 ... 100
22	41	3RV2031-4VB10	3RT2036-1AP00	3RT2027-1AP00	S2/S2/S0/-	3UF71x2-1AA00-0/3RB2906-2JG1	10 ... 100
30	55	3RV2031-4XB10	3RT2037-1AP00	3RT2035-1AP00	S2/S2/S2/-	3UF71x2-1AA00-0/3RB2906-2JG1	10 ... 100
30	55	3RV2031-4JB10	3RT2037-1AP00	3RT2035-1AP00	S2/S2/S2/-	3UF71x2-1AA00-0/3RB2906-2JG1	10 ... 100
30	55	3RV2341-4UC10	3RT2045-1AP00	3RT2026-1AP00	S3/S3/S0/-	3UF71x2-1AA00-0/3RB2906-2JG1	10 ... 100
37	66	3RV2341-4YC10	3RT2046-1AP00	3RT2027-1AP00	S3/S3/S0/-	3UF71x2-1AA00-0/3RB2906-2JG1	10 ... 100

Article numbers for basic versions with screw terminals and spring-loaded terminals also possible.

- <sup>1)</sup> Guide value for 4-pole standard motors at 400 V AC, 50 Hz. Selection depends on the concrete startup and rated data of the protected motor.
- <sup>2)</sup> Rated control supply voltage 230 V AC, 50 Hz. Other control voltages are also possible.
- <sup>3)</sup> The necessary current measuring modules ( $x = 0$ ) or the current measuring modules / voltage measuring modules ( $x = 1$ ) are specified. The corresponding basic units 3RB22 / 3RB23 / 3RB24 and 3UF7 are additionally required.
- <sup>4)</sup> Suitable for use with IE3 motors with a maximum starting current of 780 A.

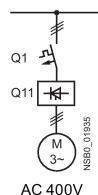
## 3.9 Motor starter protector + 3RW30 soft starter

### Restriction

The soft starters are dimensioned in accordance with IEC60947-4-2. In accordance with the device standard, the maximum motor current to be taken into account is 8 times the rated motor current (locked rotor current). For the correct dimensioning of soft starters for motors with high starting current ratios ( $I/I_e \geq 8$ ), we recommend our Simulation Tool for Soft Starters (STS):

- Download (<http://support.automation.siemens.com/WW/view/en/101494917>)
- Readme (<http://support.automation.siemens.com/WW/view/en/101494773>)

### CLASS 10, type of coordination 1



Standard three-phase motor 4-pole at 400 V AC <sup>1)</sup>		Setting range Overload release Motor starter protector	Motor starter protector Motor protection <sup>2)</sup>	Soft starter	Size MSP / 3RW30	
Standard output P	Permissible operational current (3RW) $I_e$					
kW	A	A	Article No.	Article No.		kA
1.1	3	2.8 ... 4.0	3RV2011-1EA10	3RW3003-1CB54	S00/- (22.5 mm)	50
1.5	3.6	3.5 ... 5.0	3RV2011-1FA10	3RW3013-1BB14	S00/S00	5
3	6.5	5.5 ... 8.0	3RV2011-1HA10	3RW3014-1BB14	S00/S00	5
4	9	7.0 ... 10.0	3RV2011-1JA10	3RW3016-1BB14	S00/S00	5
5.5	12.5	9.0 ... 12.5	3RV2011-1KA10	3RW3017-1BB14	S00/S00	5
7.5	17.6	14 ... 20	3RV2021-4BA10	3RW3018-1BB14	S0/S00	5
11	25	20 ... 25	3RV2021-4DA10	3RW3026-1BB14	S0/S0	55
15	32	27 ... 32	3RV2021-4EA10	3RW3027-1BB14	S0/S0	55
18.5 <sup>3)</sup>	38	34 ... 40	3RV2021-4FA10	3RW3028-1BB14	S0/S0	55
22	45	35 ... 45	3RV2031-4VA10	3RW3036-1BB14	S2/S2	20
22	45	42 ... 52	3RV2031-4WA10	3RW3036-1BB14	S2/S2	10
30	63	54 ... 65	3RV2031-4JA10	3RW3037-1BB14	S2/S2	10
37 <sup>3)</sup>	72	62 ... 73	3RV2031-4KA10	3RW3038-1BB14	S2/S2	10

Standard three-phase motor 4-pole at 400 V AC <sup>1)</sup>		Setting range Overload release Motor starter protector	Motor starter protector Motor protection <sup>2)</sup>	Soft starter	Size MSP / 3RW30	Short-circuit breaking capacity I <sub>q</sub>
Standard output P	Permissible operational current (3RW) I <sub>e</sub>					
kW	A	A	Article No.	Article No.		kA
45	80	65 ... 84	3RV2042-4RA10	3RW3046-1BB14	S3/S3	11
45	80	75 ... 93	3RV2042-4YA10	3RW3046-1BB14	S3/S3	11
55	100	80 ... 100	3RV2042-4MA10	3RW3047-1BB14	S3/S3	11
55	106	63 ... 160	3VA2216	3RW3047-1BB14	-/S3	5

Article numbers for basic versions with screw terminals and spring-loaded terminals also possible.

- <sup>1)</sup> Guide value for 4-pole standard motors at 400 V AC, 50 Hz. Selection depends on the concrete startup and rated data of the protected motor.
- <sup>2)</sup> Rated currents taken into account at 40 °C ambient temperature. Rated control supply voltage 230 V AC, 50 Hz. Other control voltages are also possible.
- <sup>3)</sup> Discrete mounting only, without a link module.

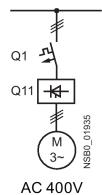
## 3.10 Motor starter protector + 3RW40 soft starter

### Restriction

The soft starters are dimensioned in accordance with IEC60947-4-2. In accordance with the device standard, the maximum motor current to be taken into account is 8 times the rated motor current (locked rotor current). For the correct dimensioning of soft starters for motors with high starting current ratios ( $I/I_e \geq 8$ ), we recommend our Simulation Tool for Soft Starters (STS):

- Download (<http://support.automation.siemens.com/WW/view/en/101494917>)
- Readme (<http://support.automation.siemens.com/WW/view/en/101494773>)

### CLASS 10, type of coordination 1



Standard three-phase motor 4-pole at 400 V AC <sup>1)</sup>		Setting range Overload release Motor starter protector	Motor starter protector Motor protection <sup>2)</sup>	Soft starter	Size MSP / 3RW40	Short-circuit breaking capacity $I_q$
Standard output P	Permissible operational current (3RW) $I_e$					
kW	A	A	Article No.	Article No.		kA
5.5	12.5	11 ... 16	3RV2021-4AA10	3RW4024-1BB14	S0/S0	55
11	25	20 ... 25	3RV2021-4DA10	3RW4026-1BB14	S0/S0	55
15	32	27 ... 32	3RV2021-4EA10	3RW4027-1BB14	S0/S0	55
18.5 <sup>3)</sup>	38	34 ... 40	3RV2021-4FA10	3RW4028-1BB14	S0/S0	55
22	45	35 ... 45	3RV2031-4VA10	3RW4036-1BB14	S2/S2	20
22	45	42 ... 52	3RV2031-4WA10	3RW4036-1BB14	S2/S2	10
30	63	54 ... 65	3RV2031-4JA10	3RW4037-1BB14	S2/S2	10
37 <sup>3)</sup>	72	62 ... 73	3RV2031-4KA10	3RW4038-1BB14	S2/S2	10
45	80	65 ... 84	3RV2042-4RA10	3RW4046-1BB14	S3/S3	11
45	80	75 ... 93	3RV2042-4YA10	3RW4046-1BB14	S3/S3	11
55	100	80 ... 100	3RV2042-4MA10	3RW4047-1BB14	S3/S3	11
55	106	63 ... 160	3VA2216-5MN32	3RW4047-1BB14	-/S3	5

Standard three-phase motor 4-pole at 400 V AC <sup>1)</sup>		Setting range Overload release Motor starter protector	Motor starter protector Motor protection <sup>2)</sup>	Soft starter	Size MSP / 3RW40	Short-circuit breaking capacity I <sub>q</sub>
Standard output P	Permissible operational current (3RW) I <sub>e</sub>					
kW	A	A	Article No.	Article No.		kA
75 <sup>3)</sup>	134	63 ... 160	3VA2216-5MN32	3RW4055	-/S6	55
75 <sup>3)</sup>	140	63 ... 160	3VA2216-5MN32	3RW4056	-/S6	55
90 <sup>3)</sup>	162	80 ... 200	3VA2220-5MN32	3RW4056	-/S6	55
90 <sup>3)</sup>	175	80 ... 200	3VA2220-5MN32	3RW4073	-/S12	100
132 <sup>3)</sup>	230	100 ... 250	3VA2325-7MN32	3RW4073	-/S12	100
132 <sup>3)</sup>	250	100 ... 250	3VA2325-7MN32	3RW4074	-/S12	110
160 <sup>3)</sup>	280	160 ... 400	3VA2440-7MN32	3RW4074	-/S12	110
200 <sup>3)</sup>	350	160 ... 400	3VA2440-7MN32	3RW4075	-/S12	110
200 <sup>3)</sup>	356	200 ... 500	3VA2450-7MN32	3RW4075	-/S12	110
250 <sup>3)</sup>	432	200 ... 500	3VA2450-7MN32	3RW4076	-/S12	110

Article numbers for basic versions with screw terminals and spring-loaded terminals also possible.

- 1) Guide value for 4-pole standard motors at 400 V AC, 50 Hz. Selection depends on the concrete startup and rated data of the protected motor.
- 2) Rated currents taken into account at 40 °C ambient temperature. Rated control supply voltage 230 V AC, 50 Hz. Other control voltages are also possible.
- 3) Discrete mounting only, without a link module.

## 3.11 Motor starter protector + 3RW44 soft starter

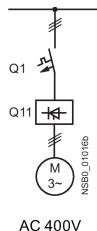
### Restriction

The soft starters are dimensioned in accordance with IEC60947-4-2. In accordance with the device standard, the maximum motor current to be taken into account is 8 times the rated motor current (locked rotor current).

For the correct dimensioning of soft starters for motors with high starting current ratios ( $I/I_e \geq 8$ ), we recommend our "Simulation Tool for Soft Starters (STS)":

- Download (<http://support.automation.siemens.com/WW/view/en/101494917>)
- Readme (<http://support.automation.siemens.com/WW/view/en/101494773>)

### CLASS 10, type of coordination 1



Standard three-phase motor 4-pole at 400 V AC <sup>1)</sup>		Setting range Overload release Motor starter protector	Motor starter protector Motor protection <sup>2)</sup>	Soft starter	Size MSP / 3RW44	Short-circuit breaking capacity $I_q$
Standard output P	Permissible operational current (3RW) $I_e$					
kW	A	A	Article No.	Article No.		kA
15 <sup>3)</sup>	29	27 ... 32	3RV2021-4EA10	3RW4422-1BC44	S0/size1	42
18.5 <sup>3)</sup>	36	34 ... 40	3RV2021-4FA10	3RW4423-1BC44	S0/size1	42
15 <sup>3)</sup>	29	22 ... 32	3RV2031-4EA10	3RW4422-1BC46	S2/FS1	32
18.5 <sup>3)</sup>	36	42 ... 52	3RV2031-4WA10	3RW4423-1BC46	S2/FS1	32
22 <sup>3)</sup>	47	42 ... 52	3RV2031-4WA10	3RW4424-1BC46	S2/FS1	32
30 <sup>3)</sup>	57	54 ... 65	3RV2031-4JA10	3RW4425-1BC46	S2/FS1	32
37 <sup>3)</sup>	77	70 ... 80	3RV2031-4RA10	3RW4426-1BC46	S2/FS1	32
37 <sup>3)</sup>	77	65 ... 84	3RV2042-4RA10	3RW4426-1BC44	S3/FS1	32
37 <sup>3)</sup>	77	75 ... 93	3RV2042-4YA10	3RW4426-1BC44	S3/FS1	32
45 <sup>3)</sup>	93	80 ... 100	3RV2042-4MA10	3RW4427-1BC44	S3/FS1	32

Standard three-phase motor 4-pole at 400 V AC <sup>1)</sup>		Setting range Overload release Motor starter protector	Motor starter protector Motor protection <sup>2)</sup>	Soft starter	Size MSP / 3RW44	Short-circuit breaking capacity I <sub>q</sub>
Standard output P	Permissible operational current (3RW) I <sub>e</sub>					
kW	A	A	Article No.	Article No.	kA	
55 <sup>3)</sup>	113	63 ... 160	3VA2216-5MN32	3RW4434	-/FS2	55
75 <sup>3)</sup>	134	63 ... 160	3VA2216-5MN32	3RW4435	-/FS2	55
75 <sup>3)</sup>	140	63 ... 160	3VA2216-5MN32	3RW4436	-/FS2	55
90 <sup>3)</sup>	162	80 ... 200	3VA2220-7MN32	3RW4436	-/FS2	55
90 <sup>3)</sup>	175	80 ... 200	3VA2220-7MN32	3RW4443	-/FS3	110
110 <sup>3)</sup>	203	100 ... 250	3VA2325-7MN32	3RW4443	-/FS3	110
132 <sup>3)</sup>	250	100 ... 250	3VA2325-7MN32	3RW4444	-/FS3	110
160 <sup>3)</sup>	313	160 ... 400	3VA2440-7MN32	3RW4445	-/FS3	110
200 <sup>3)</sup>	356	200 ... 500	3VA2450-7MN32	3RW4446	-/FS3	110
250 <sup>3)</sup>	432	200 ... 500	3VA2450-7MN32	3RW4447	-/FS3	110

Article numbers for basic versions with screw terminals and spring-loaded terminals also possible.

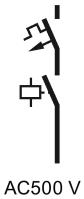
- 1) Guide value for 4-pole standard motors at 400 V AC, 50 Hz. Selection depends on the concrete startup and rated data of the protected motor.
- 2) Rated currents taken into account at 40 °C ambient temperature. Rated control supply voltage 230 V AC, 50 Hz. Other control voltages are also possible. Screw terminals or spring-loaded terminals can be selected.
- 3) Discrete mounting only, without a link module.

# 4

## Selection tables 500 V AC

### 4.1 Motor starter protector + contactor

CLASS 10, type of coordination 1,  
short-circuit breaking capacity  $I_q = 100 \text{ kA}$



Standard three-phase motor 4-pole at 500 V AC <sup>1)</sup>		Motor starter protector Motor protection Maximum permitted setting range overload release			Contactor <sup>2)</sup>	Size
Standard output P	Motor current I	IE1 / IE2 motors	IE3 / IE4 motors			
kW	A	A	A	Article No.	Article No.	
0.04	0.11	0.11 ... 0.16	0.11 ... 0.14	3RV2011-0AA10	3RT2015-1AP01	S00/S00
0.06	0.16	0.14 ... 0.20	0.14 ... 0.18	3RV2011-0BA10	3RT2015-1AP01	S00/S00
0.09	0.24	0.18 ... 0.25	0.18 ... 0.22	3RV2011-0CA10	3RT2015-1AP01	S00/S00
0.09	0.24	0.22 ... 0.32	0.22 ... 0.28	3RV2011-0DA10	3RT2015-1AP01	S00/S00
0.12	0.32	0.28 ... 0.40	0.28 ... 0.35	3RV2011-0EA10	3RT2015-1AP01	S00/S00
0.18	0.48	0.35 ... 0.50	0.35 ... 0.45	3RV2011-0FA10	3RT2015-1AP01	S00/S00
0.18	0.48	0.45 ... 0.63	0.45 ... 0.55	3RV2011-0GA10	3RT2015-1AP01	S00/S00
0.25	0.68	0.55 ... 0.80	0.55 ... 0.7	3RV2011-0HA10	3RT2015-1AP01	S00/S00
0.37	0.88	0.70 ... 1.00	0.7 ... 0.9	3RV2011-0JA10	3RT2015-1AP01	S00/S00
0.55	1.2	0.90 ... 1.25	0.9 ... 1.1	3RV2011-0KA10	3RT2015-1AP01	S00/S00
0.55	1.2	1.1 ... 1.6	1.1 ... 1.4	3RV2011-1AA10	3RT2015-1AP01	S00/S00
0.75	1.5	1.1 ... 1.6	1.1 ... 1.4	3RV2011-1AA10	3RT2015-1AP01	S00/S00
0.75	1.5	1.4 ... 2.0	1.4 ... 1.8	3RV2011-1BA10	3RT2015-1AP01	S00/S00
1.1	2.2	1.8 ... 2.5	1.8 ... 2.2	3RV2011-1CA10	3RT2015-1AP01	S00/S00
1.5	2.9	2.2 ... 3.2	2.2 ... 2.8	3RV2011-1DA10	3RT2015-1AP01	S00/S00
2.2	3.9	2.8 ... 4.0	2.8 ... 3.5	3RV2011-1EA10	3RT2015-1AP01	S00/S00
2.2	3.9	3.5 ... 5.0	3.5 ... 4.5	3RV2011-1FA10	3RT2015-1AP01	S00/S00
3	5.2	4.5 ... 6.3	4.5 ... 5.5	3RV2011-1GA10	3RT2015-1AP01	S00/S00
4	6.8	5.5 ... 8.0	5.5 ... 7.0	3RV2011-1HA10	3RT2016-1AP01	S00/S00
5.5	9.2	7.0 ... 10.0	7.0 ... 9.0	3RV2011-1JA10	3RT2017-1AP01	S00/S00

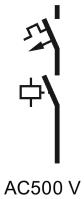
Standard three-phase motor 4-pole at 500 V AC <sup>1)</sup>		Motor starter protector Motor protection Maximum permitted setting range overload release			Contactor <sup>2)</sup>	Size
Standard output P	Motor current I	IE1 / IE2 motors	IE3 / IE4 motors			
kW	A	A	A	Article No.	Article No.	
7.5	12.4	9.0 ... 12.5	9.0 ... 10	3RV2011-1KA10	3RT2018-1AP01	S00/S00
7.5	12.4	11 ... 16	10 ... 13	3RV2011-4AA10	3RT2018-1AP01	S00/S00
11	17.6	14 ... 20	13 ... 16	3RV2021-4BA10	3RT2026-1AP00	S0/S0
11	17.6	17 ... 22	16 ... 18	3RV2021-4CA10	3RT2026-1AP00	S0/S0
15	23	20 ... 25	18 ... 23	3RV2021-4DA10	3RT2027-1AP00	S0/S0
18.5	28	23 ... 28	23 ... 27	3RV2021-4NA10	3RT2027-1AP00	S0/S0
18.5	28	27 ... 32	27 ... 30	3RV2021-4EA10	3RT2027-1AP00	S0/S0
18.5	28	22 ... 32	22 ... 28	3RV2032-4EA10	3RT2035-1AP00	S2/S2
22	33	28 ... 36	28 ... 32	3RV2032-4PA10	3RT2035-1AP00	S2/S2
22	33	32 ... 40	32 ... 35	3RV2032-4UA10	3RT2035-1AP00	S2/S2
30	44	35 ... 45	35 ... 42	3RV2032-4VA10	3RT2036-1AP00	S2/S2
30	44	42 ... 52	42 ... 49	3RV2032-4WA10	3RT2036-1AP00	S2/S2
37	53	49 ... 59	49 ... 54	3RV2032-4XA10	3RT2037-1AP00	S2/S2
45	64	54 ... 65	54 ... 62	3RV2032-4JA10	3RT2037-1AP00	S2/S2

Article numbers for basic versions with screw terminals and spring-loaded terminals also possible.

- <sup>1)</sup> Guide value for 4-pole standard motors at 500 V AC, 50 Hz. Selection depends on the concrete startup and rated data of the protected motor.
- <sup>2)</sup> Rated control supply voltage 230 V AC, 50 Hz, other possible.

## 4.1 Motor starter protector + contactor

**CLASS 10, type of coordination 2,  
short-circuit breaking capacity  $I_q = 100 \text{ kA}$**



AC500 V

Standard three-phase motor 4-pole at 500 V AC <sup>1)</sup>		Motor starter protector Motor protection Maximum permitted setting range overload release			Contactor <sup>2)</sup>	Size
Standard output P	Motor current I	IE1 / IE2 motors	IE3 / IE4 motors			
kW	A	A	A	Article No.	Article No.	
0.04	0.11	0.11 ... 0.16	0.11 ... 0.14	3RV2011-0AA10	3RT2015-1AP01	S00/S00
0.06	0.16	0.14 ... 0.20	0.14 ... 0.18	3RV2011-0BA10	3RT2015-1AP01	S00/S00
0.09	0.24	0.18 ... 0.25	0.18 ... 0.22	3RV2011-0CA10	3RT2015-1AP01	S00/S00
0.09	0.24	0.22 ... 0.32	0.22 ... 0.28	3RV2011-0DA10	3RT2015-1AP01	S00/S00
0.12	0.32	0.28 ... 0.40	0.28 ... 0.35	3RV2011-0EA10	3RT2015-1AP01	S00/S00
0.18	0.48	0.35 ... 0.50	0.35 ... 0.45	3RV2011-0FA10	3RT2015-1AP01	S00/S00
0.18	0.48	0.45 ... 0.63	0.45 ... 0.55	3RV2011-0GA10	3RT2015-1AP01	S00/S00
0.25	0.68	0.55 ... 0.80	0.55 ... 0.7	3RV2011-0HA10	3RT2015-1AP01	S00/S00
0.37	0.88	0.70 ... 1.00	0.7 ... 0.9	3RV2011-0JA10	3RT2015-1AP01	S00/S00
0.55	1.2	0.90 ... 1.25	0.9 ... 1.1	3RV2011-0KA10	3RT2015-1AP01	S00/S00
0.55	1.2	1.1 ... 1.6	1.1 ... 1.4	3RV2011-1AA10	3RT2015-1AP01	S00/S00
0.75	1.5	1.1 ... 1.6	1.1 ... 1.4	3RV2011-1AA10	3RT2015-1AP01	S00/S00
0.75	1.5	1.4 ... 2.0	1.4 ... 1.8	3RV2011-1BA10	3RT2015-1AP01	S00/S00
1.1	2.2	1.8 ... 2.5	1.8 ... 2.2	3RV2011-1CA10	3RT2015-1AP01	S00/S00
1.5	2.9	2.2 ... 3.2	2.2 ... 2.8	3RV2011-1DA10	3RT2015-1AP01	S00/S00
2.2	3.9	2.8 ... 4.0	2.8 ... 3.5	3RV2011-1EA10	3RT2024-1AP00	S00/S0
2.2	3.9	3.5 ... 5.0	3.5 ... 4.5	3RV2011-1FA10	3RT2024-1AP00	S00/S0
3	5.2	4.5 ... 6.3	4.5 ... 5.5	3RV2011-1GA10	3RT2024-1AP00	S00/S0
4	6.8	5.5 ... 8.0	5.5 ... 7.0	3RV2011-1HA10	3RT2026-1AP00	S00/S0
5.5	9.2	7.0 ... 10.0	7.0 ... 9.0	3RV2011-1JA10	3RT2026-1AP00	S00/S0
7.5	12.4	9.0 ... 12.5	9.0 ... 10	3RV2011-1KA10	3RT2026-1AP00	S00/S0
7.5	12.4	10 ... 16	10 ... 13	3RV2011-4AA10	3RT2026-1AP00	S00/S0
11	17.6	13 ... 20	13 ... 16	3RV2021-4BA10	3RT2027-1AP00	S0/S0
11	17.6	16 ... 22	16 ... 18	3RV2021-4CA10	3RT2027-1AP00	S0/S0
15	23	18 ... 25	18 ... 23	3RV2021-4DA10	3RT2027-1AP00	S0/S0
18.5	28	23 ... 28	23 ... 27	3RV2021-4NA10	3RT2027-1AP00	S0/S0
18.5	28	27 ... 32	27 ... 30	3RV2021-4EA10	3RT2027-1AP00	S0/S0

Standard three-phase motor 4-pole at 500 V AC <sup>1)</sup>		Motor starter protector Motor protection Maximum permitted setting range overload release			Contactor <sup>2)</sup>	Size
Standard output P	Motor current I	IE1 / IE2 motors	IE3 / IE4 motors			
kW	A	A	A	Article No.	Article No.	
18.5	28	22 ... 32	22 ... 28	3RV2032-4EA10	3RT2035-1AP00	S2/S2
22	33	28 ... 36	28 ... 32	3RV2032-4PA10	3RT2035-1AP00	S2/S2
22	33	32 ... 40	32 ... 35	3RV2032-4UA10	3RT2035-1AP00	S2/S2
30	44	35 ... 45	35 ... 42	3RV2032-4VA10	3RT2036-1AP00	S2/S2
30	44	42 ... 52	42 ... 49	3RV2032-4WA10	3RT2036-1AP00	S2/S2
37	53	49 ... 59	49 ... 54	3RV2032-4XA10	3RT2037-1AP00	S2/S2
45	64	54 ... 65	54 ... 62	3RV2032-4JA10	3RT2037-1AP00	S2/S2

Article numbers for basic versions with screw terminals and spring-loaded terminals also possible.

- <sup>1)</sup> Guide value for 4-pole standard motors at 500 V AC, 50 Hz. Selection depends on the concrete startup and rated data of the protected motor.
- <sup>2)</sup> Rated control supply voltage 230 V AC, 50 Hz, other control voltages possible.

## 4.2 Motor starter protector + contactor + 3RU21 thermal overload relay

**CLASS 10, type of coordination 1,  
short-circuit breaking capacity  $I_q = 100 \text{ kA} / 80 \text{ kA}$**



Standard three-phase motor 4-pole at 500 V AC <sup>1)</sup>		Motor starter protector Starter protection	Contactor <sup>2)</sup>	Size	Overload relay (thermal) <sup>3)</sup> Maximum permitted setting range overload release			
Standard output P	Motor current I					IE1 / IE2 motors	IE3 / IE4 motors	$I_q$
kW	A	Article No.	Article No.		Article No.	A	A	kA
0.04	0.11	3RV2311-0AC10	3RT2015-1AP01	S00/S00/S00	3RU2116-0AB0	0.11 ... 0.16	0.11 ... 0.14	100
0.06	0.16	3RV2311-0BC10	3RT2015-1AP01	S00/S00/S00	3RU2116-0BB0	0.14 ... 0.20	0.14 ... 0.18	100
0.09	0.24	3RV2311-0CC10	3RT2015-1AP01	S00/S00/S00	3RU2116-0CB0	0.18 ... 0.25	0.18 ... 0.22	100
0.09	0.24	3RV2311-0DC10	3RT2015-1AP01	S00/S00/S00	3RU2116-0DB0	0.22 ... 0.32	0.22 ... 0.28	100
0.12	0.32	3RV2311-0EC10	3RT2015-1AP01	S00/S00/S00	3RU2116-0EB0	0.28 ... 0.40	0.28 ... 0.35	100
0.18	0.48	3RV2311-0FC10	3RT2015-1AP01	S00/S00/S00	3RU2116-0FB0	0.35 ... 0.50	0.35 ... 0.45	100
0.18	0.48	3RV2311-0GC10	3RT2015-1AP01	S00/S00/S00	3RU2116-0GB0	0.45 ... 0.63	0.45 ... 0.55	100
0.25	0.68	3RV2311-0HC10	3RT2015-1AP01	S00/S00/S00	3RU2116-0HB0	0.55 ... 0.80	0.55 ... 0.70	100
0.37	0.88	3RV2311-0JC10	3RT2015-1AP01	S00/S00/S00	3RU2116-0JB0	0.70 ... 1.00	0.7 ... 0.9	100
0.55	1.2	3RV2311-0KC10	3RT2015-1AP01	S00/S00/S00	3RU2116-0KB0	0.90 ... 1.25	0.9 ... 1.1	100
0.55	1.2	3RV2311-1AC10	3RT2015-1AP01	S00/S00/S00	3RU2116-1AB0	1.1 ... 1.6	1.1 ... 1.4	100
0.75	1.5	3RV2311-1AC10	3RT2015-1AP01	S00/S00/S00	3RU2116-1AB0	1.1 ... 1.6	1.1 ... 1.4	100
0.75	1.5	3RV2311-1BC10	3RT2015-1AP01	S00/S00/S00	3RU2116-1BB0	1.4 ... 2.0	1.4 ... 1.8	100
1.1	2.2	3RV2311-1CC10	3RT2015-1AP01	S00/S00/S00	3RU2116-1CB0	1.8 ... 2.5	1.8 ... 2.2	100

## 4.2 Motor starter protector + contactor + 3RU21 thermal overload relay

Standard three-phase motor 4-pole at 500 V AC <sup>1)</sup>		Motor starter protector Starter protection	Contactor <sup>2)</sup>	Size	Overload relay (thermal) <sup>3)</sup> Maximum permitted setting range overload release			
Standard output P	Motor current I					IE1 / IE2 motors	IE3 / IE4 motors	I <sub>q</sub>
kW	A				Article No.	A	A	kA
1.5	2.9	3RV2311-1DC10	3RT2015-1AP01	S00/S00/S00	3RU2116-1DB0	2.2 ... 3.2	2.2 ... 2.8	100
2.2	3.9	3RV2311-1EC10	3RT2015-1AP01	S00/S00/S00	3RU2116-1EB0	2.8 ... 4.0	2.8 ... 3.5	100
2.2	3.9	3RV2311-1FC10	3RT2015-1AP01	S00/S00/S00	3RU2116-1FB0	3.5 ... 5.0	3.5 ... 4.5	100
3	5.2	3RV2311-1GC10	3RT2015-1AP01	S00/S00/S00	3RU2116-1GB0	4.5 ... 6.3	4.5 ... 5.5	100
4	6.8	3RV2311-1HC10	3RT2016-1AP01	S00/S00/S00	3RU2116-1HB0	5.5 ... 8.0	5.5 ... 7.0	100
5.5	9.2	3RV2311-1JC10	3RT2017-1AP01	S00/S00/S00	3RU2116-1JB0	7.0 ... 10.0	7.0 ... 9.0	100
7.5	12.4	3RV2311-1KC10	3RT2018-1AP01	S00/S00/S00	3RU2116-1KB0	9.0 ... 12.5	9.0 ... 11.0	100
7.5	12.4	3RV2311-4AC10	3RT2018-1AP01	S00/S00/S00	3RU2116-4AB0	11 ... 16	11 ... 14	100
11	17.6	3RV2321-4BC10	3RT2026-1AP00	S0/S0/S0	3RU2126-4BB0	14 ... 20	14 ... 17	100
11	17.6	3RV2321-4CC10	3RT2026-1AP00	S0/S0/S0	3RU2126-4CB0	17 ... 22	17 ... 20	100
15	23	3RV2321-4DC10	3RT2027-1AP00	S0/S0/S0	3RU2126-4DB0	20 ... 25	20 ... 23	100
18.5	28	3RV2321-4NC10	3RT2027-1AP00	S0/S0/S0	3RU2126-4NB0	23 ... 28	23 ... 27	100
18.5	28	3RV2321-4EC10	3RT2027-1AP00	S0/S0/S0	3RU2126-4EB0	27 ... 32	27 ... 30	100

## Selection tables 500 V AC

### 4.2 Motor starter protector + contactor + 3RU21 thermal overload relay

Standard three-phase motor 4-pole at 500 V AC <sup>1)</sup>		Motor starter protector Starter protection	Contactor <sup>2)</sup>	Size	Overload relay (thermal) <sup>3)</sup> Maximum permitted setting range overload release			
Standard output P	Motor current I					IE1 / IE2 motors	IE3 / IE4 motors	I <sub>q</sub>
kW	A	Article No.	Article No.		Article No.	A	A	kA
18.5	28	3RV2332-4EC10	3RT2035-1AP00	S2/S2/S2	3RU2136-4EB0	22 ... 32	22 ... 28	100
22	33	3RV2332-4PC10	3RT2035-1AP00	S2/S2/S2	3RU2136-4FB0	28 ... 36	28 ... 36	80
22	33	3RV2332-4UC10	3RT2035-1AP00	S2/S2/S2	3RU2136-4FB0	28 ... 40	28 ... 36	80
30	44	3RV2332-4VC10	3RT2036-1AP00	S2/S2/S2	3RU2136-4GB0	36 ... 45	36 ... 40	80
30	44	3RV2332-4VC10	3RT2036-1AP00	S2/S2/S2	3RU2136-4HB0	40 ... 45	40 ... 45	80
37	53	3RV2332-4WC10	3RT2036-1AP00	S2/S2/S2	3RU2136-4HB0	40 ... 50	40 ... 47	80
37	53	3RV2332-4WC10	3RT2036-1AP00	S2/S2/S2	3RU2136-4QB0	47 ... 50	47 ... 50	80
37	53	3RV2332-4XC10	3RT2037-1AP00	S2/S2/S2	3RU2136-4QB0	47 ... 57	47 ... 54	80
45	64	3RV2332-4JC10	3RT2037-1AP00	S2/S2/S2	3RU2136-4JB0	54 ... 65	54 ... 65	100

Article numbers for basic versions with screw terminals and spring-loaded terminals also possible.

1) Guide value for 4-pole standard motors at 500 V AC, 50 Hz. Selection depends on the concrete startup and rated data of the protected motor.

2) Rated control supply voltage 230 V AC, 50 Hz, other control voltages possible.

3) Assembled combinations of three are not permitted.

**CLASS 10, type of coordination 2,  
short-circuit breaking capacity  $I_q = 100 \text{ kA} / 80 \text{ kA}$**



Standard three-phase motor 4-pole at 500 V AC <sup>1)</sup>		Motor starter protector Starter protection	Contactor <sup>2)</sup>	Size	Overload relay (thermal) <sup>3)</sup> Maximum permitted setting range overload release			
Stand- ard output P	Motor current I				IE1 / IE2 motors	IE3 / IE4 motors	$I_q$	
kW	A	Article No.	Article No.		Article No.	A	A	kA
0.04	0.11	3RV2311-0AC10	3RT2015-1AP01	S00/S00/S00	3RU2116-0AB0	0.11 ... 0.16	0.11 ... 0.14	100
0.06	0.16	3RV2311-0BC10	3RT2015-1AP01	S00/S00/S00	3RU2116-0BB0	0.14 ... 0.20	0.14 ... 0.18	100
0.09	0.24	3RV2311-0CC10	3RT2015-1AP01	S00/S00/S00	3RU2116-0CB0	0.18 ... 0.25	0.18 ... 0.22	100
0.09	0.24	3RV2311-0DC10	3RT2015-1AP01	S00/S00/S00	3RU2116-0DB0	0.22 ... 0.32	0.22 ... 0.28	100
0.12	0.32	3RV2311-0EC10	3RT2015-1AP01	S00/S00/S00	3RU2116-0EB0	0.28 ... 0.40	0.28 ... 0.35	100
0.18	0.48	3RV2311-0FC10	3RT2015-1AP01	S00/S00/S00	3RU2116-0FB0	0.35 ... 0.50	0.35 ... 0.45	100
0.18	0.48	3RV2311-0GC10	3RT2015-1AP01	S00/S00/S00	3RU2116-0GB0	0.45 ... 0.63	0.45 ... 0.55	100
0.25	0.68	3RV2311-0HC10	3RT2015-1AP01	S00/S00/S00	3RU2116-0HB0	0.55 ... 0.80	0.55 ... 0.7	100
0.37	0.88	3RV2311-0JC10	3RT2015-1AP01	S00/S00/S00	3RU2116-0JB0	0.70 ... 1.00	0.7 ... 0.9	100
0.55	1.2	3RV2311-0KC10	3RT2015-1AP01	S00/S00/S00	3RU2116-0KB0	0.90 ... 1.25	0.9 ... 1.1	100
0.55	1.2	3RV2311-1AC10	3RT2015-1AP01	S00/S00/S00	3RU2116-1AB0	1.1 ... 1.6	1.1 ... 1.4	100
0.75	1.5	3RV2311-1AC10	3RT2015-1AP01	S00/S00/S00	3RU2116-1AB0	1.1 ... 1.6	1.1 ... 1.4	100
0.75	1.5	3RV2311-1BC10	3RT2015-1AP01	S00/S00/S00	3RU2116-1BB0	1.4 ... 2.0	1.4 ... 1.8	100
1.1	2.2	3RV2311-1CC10	3RT2015-1AP01	S00/S00/S00	3RU2116-1CB0	1.8 ... 2.5	1.8 ... 2.2	100
1.5	2.9	3RV2311-1DC10	3RT2015-1AP01	S00/S00/S00	3RU2116-1DB0	2.2 ... 3.2	2.2 ... 2.8	100

*Selection tables 500 V AC*

*4.2 Motor starter protector + contactor + 3RU21 thermal overload relay*

Standard three-phase motor 4-pole at 500 V AC <sup>1)</sup>		Motor starter protector Starter protection	Contactor <sup>2)</sup>	Size	Overload relay (thermal) <sup>3)</sup> Maximum permitted setting range overload release			
Stand- ard output P	Motor current I					IE1 / IE2 motors	IE3 / IE4 motors	I <sub>q</sub>
kW	A	Article No.	Article No.		Article No.	A	A	kA
2.2	3.9	3RV2311-1EC10	3RT2024-1AP00	S00/S0/S00	3RU2116-1EB0 <sup>4)</sup>	2.8 ... 4.0	2.8 ... 3.5	100
2.2	3.9	3RV2311-1FC10	3RT2024-1AP00	S00/S0/S00	3RU2116-1FB0 <sup>4)</sup>	3.5 ... 5.0	3.5 ... 4.5	100
3	5.2	3RV2311-1GC10	3RT2024-1AP00	S00/S0/S00	3RU2116-1GB0 <sup>4)</sup>	4.5 ... 6.3	4.5 ... 5.5	100
4	6.8	3RV2311-1HC10	3RT2026-1AP00	S00/S0/S00	3RU2116-1HB0 <sup>4)</sup>	5.5 ... 8.0	5.5 ... 7.0	100
5.5	9.2	3RV2311-1JC10	3RT2026-1AP00	S00/S0/S00	3RU2116-1JB0 <sup>4)</sup>	7.0 ... 10.0	7.0 ... 9.0	100
7.5	12.4	3RV2311-1KC10	3RT2026-1AP00	S00/S0/S00	3RU2116-1KB0 <sup>4)</sup>	9.0 ... 12.5	9.0 ... 11	100
7.5	12.4	3RV2311-4AC10	3RT2026-1AP00	S00/S0/S00	3RU2116-4AB0 <sup>4)</sup>	11 ... 16	11 ... 14	100
11	17.6	3RV2321-4BC10	3RT2027-1AP00	S0/S0/S0	3RU2126-4BB0	14 ... 20	14 ... 17	100
11	17.6	3RV2321-4CC10	3RT2027-1AP00	S0/S0/S0	3RU2126-4CB0	17 ... 22	17 ... 20	100
15	23	3RV2321-4DC10	3RT2027-1AP00	S0/S0/S0	3RU2126-4DB0	20 ... 25	20 ... 22	100

## 4.2 Motor starter protector + contactor + 3RU21 thermal overload relay

Standard three-phase motor 4-pole at 500 V AC <sup>1)</sup>		Motor starter protector Starter protection	Contactor <sup>2)</sup>	Size	Overload relay (thermal) <sup>3)</sup> Maximum permitted setting range overload release			
Stand- ard output P	Motor current I					IE1 / IE2 motors	IE3 / IE4 motors	I <sub>q</sub>
kW	A				Article No.	A	A	kA
15	23	3RV2332-4DC10	3RT2035-1AP00	S2/S2/S2	3RU2136-4DB0	18 ... 25	18 ... 22	100
18.5	28	3RV2332-4EC10	3RT2035-1AP00	S2/S2/S2	3RU2136-4EB0	22 ... 32	22 ... 28	100
22	33	3RV2332-4PC10	3RT2035-1AP00	S2/S2/S2	3RU2136-4FB0	28 ... 36	28 ... 36	80
22	33	3RV2332-4UC10	3RT2035-1AP00	S2/S2/S2	3RU2136-4FB0	28 ... 40	28 ... 36	80
30	44	3RV2332-4VC10	3RT2036-1AP00	S2/S2/S2	3RU2136-4GB0	36 ... 45	36 ... 40	80
30	44	3RV2332-4VC10	3RT2036-1AP00	S2/S2/S2	3RU2136-4HB0	40 ... 45	40 ... 45	80
37	53	3RV2332-4WC10	3RT2036-1AP00	S2/S2/S2	3RU2136-4HB0	40 ... 50	40 ... 47	80
37	53	3RV2332-4WC10	3RT2036-1AP00	S2/S2/S2	3RU2136-4QB0	47 ... 50	47 ... 50	80
37	53	3RV2332-4XC10	3RT2037-1AP00	S2/S2/S2	3RU2136-4QB0	47 ... 57	47 ... 54	80
45	64	3RV2332-4JC10	3RT2037-1AP00	S2/S2/S2	3RU2136-4JB0	54 ... 65	54 ... 65	100

Article numbers for basic versions with screw terminals and spring-loaded terminals also possible.

- 1) Guide value for 4-pole standard motors at 500 V AC, 50 Hz. Selection depends on the concrete startup and rated data of the protected motor.
- 2) Rated control supply voltage 230 V AC, 50 Hz, other control voltages possible.
- 3) Assembled combinations of three are not permitted.
- 4) Can also be used in size S00 (3RU2116).

## 4.3 Motor starter protector + contactor + 3RB3 solid-state overload relay

Type of coordination 1,  
short-circuit breaking capacity  $I_q = 100 \text{ kA} / 70 \text{ kA}$



Standard three-phase motor 4-pole at 500 V AC <sup>1)</sup>		Motor starter protector Starter protection <sup>2)</sup>		Contactor <sup>3)</sup>	Size	Overload relay (electronic) Maximum permitted setting range overload release			
Stand- ard output P	Motor current I	Setting range Overload release Motor starter protector	Article No.	Article No.		Article No.	A	IE1 / IE2 motors	IE3 / IE4 motors
kW	A								
<b>CLASS 10, short-circuit breaking capacity <math>I_q = 100 \text{ kA} / 70 \text{ kA}</math></b>									
0.04	0.11	None	3RV2311-0BC10	3RT2015-1AP01	S00/S00/S00	3RB3016-1RB0	0.1 ... 0.2	0.1 ... 0.11	100
0.06	0.16	None	3RV2311-0BC10	3RT2015-1AP01	S00/S00/S00	3RB3016-1RB0	0.1 ... 0.2	0.1 ... 0.16	100
0.09	0.24	None	3RV2311-0DC10	3RT2015-1AP01	S00/S00/S00	3RB3016-1RB0	0.1 ... 0.32	0.1 ... 0.24	100
0.12	0.32	None	3RV2311-0EC10	3RT2015-1AP01	S00/S00/S00	3RB3016-1NB0	0.32 ... 0.4	0.32 ... 0.32	100
0.18	0.48	None	3RV2311-0GC10	3RT2015-1AP01	S00/S00/S00	3RB3016-1NB0	0.32 ... 0.63	0.32 ... 0.48	100
0.25	0.68	None	3RV2311-0HC10	3RT2015-1AP01	S00/S00/S00	3RB3016-1NB0	0.32 ... 0.8	0.32 ... 0.68	100
0.37	0.88	None	3RV2311-0JC10	3RT2015-1AP01	S00/S00/S00	3RB3016-1NB0	0.32 ... 1	0.32 ... 0.88	100
0.55	1.2	None	3RV2311-0KC10	3RT2015-1AP01	S00/S00/S00	3RB3016-1PB0	1 ... 1.25	1 ... 1.2	100
0.75	1.5	None	3RV2311-1AC10	3RT2015-1AP01	S00/S00/S00	3RB3016-1PB0	1 ... 1.6	1 ... 1.5	100
1.1	2.2	None	3RV2311-1CC10	3RT2015-1AP01	S00/S00/S00	3RB3016-1PB0	1 ... 2.5	1 ... 2.2	100

## 4.3 Motor starter protector + contactor + 3RB3 solid-state overload relay

Standard three-phase motor 4-pole at 500 V AC <sup>1)</sup>		Motor starter protector Starter protection <sup>2)</sup>		Contactor <sup>3)</sup>	Size	Overload relay (electronic) Maximum permitted setting range overload release			
Stand- ard output P	Motor current I						IE1 / IE2 motors	IE3 / IE4 motors	I <sub>q</sub>
kW	A	Setting range Overload release Motor starter protector	Article No.	Article No.		Article No.	A	A	kA
1.5	2.9	None	3RV2311-1DC10	3RT2015-1AP01	S00/S00/S00	3RB3016-1PB0	1 ... 3.2	1 ... 2.9	100
2.2	3.9	None	3RV2311-1FC10	3RT2015-1AP01	S00/S00/S00	3RB3016-1PB0	1 ... 4	1 ... 3.9	100
3	5.2	None	3RV2311-1HC10	3RT2016-1AP01	S00/S00/S00	3RB3016-1SB0	3 ... 7.7	3 ... 5.2	100
4	6.8	None	3RV2311-1HC10	3RT2016-1AP01	S00/S00/S00	3RB3016-1SB0	3 ... 7.7	3 ... 6.8	100
5.5	9.2	None	3RV2311-1JC10	3RT2017-1AP01	S00/S00/S00	3RB3016-1SB0	3 ... 9.2	3 ... 9.2	100
7.5	12.4	None	3RV2321-4AC10	3RT2026-1AP00	S0/S0/S0	3RB3026-1QB0	6 ... 16	6 ... 12.4	100
11	17.6	None	3RV2321-4CC10	3RT2026-1AP00	S0/S0/S0	3RB3026-1QB0	6 ... 18	6 ... 17.6	100
15	23	None	3RV2321-4EC10	3RT2027-1AP00	S0/S0/S0	3RB3026-1VB0	10 ... 32	10 ... 23 (up to 256 A starting current)	100

*Selection tables 500 V AC*

*4.3 Motor starter protector + contactor + 3RB3 solid-state overload relay*

Standard three-phase motor 4-pole at 500 V AC <sup>1)</sup>		Motor starter protector Starter protection <sup>2)</sup>		Contactor <sup>3)</sup>	Size	Overload relay (electronic) Maximum permitted setting range overload release			
Stand- ard output P	Motor current I						IE1 / IE2 motors	IE3 / IE4 motors	I <sub>q</sub>
kW	A	Setting range Overload release Motor starter protector	Article No.	Article No.		Article No.	A	A	kA
15	23	None	3RV2332-4EC10	3RT2035-1AP00	S2/S2/S2	3RB3036-1UB0	12.5 ... 24	12.5 ... 24	100
18.5	28	None	3RV2332-4PC10	3RT2035-1AP00	S2/S2/S2	3RB3036-1UB0	12.5 ... 27	12.5 ... 27	100
18.5	28	None	3RV2332-4VC10	3RT2035-1AP00	S2/S2/S2	3RB3036-1UB0	12.5 ... 31	12.5 ... 31	100
22	33	49 ... 59	3RV2032-4XA10	3RT2037-1AP00	S2/S2/S2	3RB3036-1UB0	12.5 ... 39	12.5 ... 39	100
30	44	42 ... 52	3RV2031-4WB10	3RT2036-1AP00	S2/S2/S2	3RB3036-1WB0	20 ... 47	20 ... 47	70
37	53	49 ... 59	3RV2031-4XB10	3RT2037-1AP00	S2/S2/S2	3RB3036-1WB0	20 ... 53	20 ... 53	70
37	53	54 ... 65	3RV2031-4JB10	3RT2037-1AP00	S2/S2/S2	3RB3036-1WB0	20 ... 58.5	20 ... 58.5	70

Article numbers for basic versions with screw terminals and spring-loaded terminals also possible.

- 1) Guide value for 4-pole standard motors at 500 V AC, 50 Hz. Selection depends on the concrete startup and rated data of the protected motor.
- 2) The motor starter protector must be set to the maximum current value.
- 3) Rated control supply voltage 230 V AC, 50 Hz, other control voltages possible.

## 4.3 Motor starter protector + contactor + 3RB3 solid-state overload relay

Type of coordination 2,  
short-circuit breaking capacity  $I_q = 100 \text{ kA} / 70 \text{ kA} / 50 \text{ kA}$



Standard three-phase motor 4-pole at 500 V AC <sup>1)</sup>		Setting range Overload release  Motor starter protector	Motor starter protector Starter protection <sup>2)</sup>	Contactor <sup>3)</sup>	Size	Overload relay (electronic) Maximum permitted setting range overload release			
Stand- ard output P	Motor cur- rent I						IE1 / IE2 motors	IE3 / IE4 motors	$I_q$
kW	A					Article No.	A	A	kA
<b>CLASS 5, short-circuit breaking capacity <math>I_q = 100 \text{ kA} / 70 \text{ kA}</math></b>									
0.04	0.11	None	3RV2311-0BC10	3RT2015-1AP01	S00/S00/S00	3RB3113-4RB0	0.1 ... 0.2	0.1 ... 0.11	100
0.06	0.16	None	3RV2311-0BC10	3RT2015-1AP01	S00/S00/S00	3RB3113-4RB0	0.1 ... 0.2	0.1 ... 0.16	100
0.09	0.24	None	3RV2311-0DC10	3RT2015-1AP01	S00/S00/S00	3RB3113-4RB0	0.1 ... 0.32	0.1 ... 0.24	100
0.12	0.32	None	3RV2311-0EC10	3RT2015-1AP01	S00/S00/S00	3RB3113-4NB0	0.32 ... 0.4	0.32 ... 0.32	100
0.18	0.48	None	3RV2311-0GC10	3RT2015-1AP01	S00/S00/S00	3RB3113-4NB0	0.32 ... 0.63	0.32 ... 0.48	100
0.25	0.68	None	3RV2311-0HC10	3RT2015-1AP01	S00/S00/S00	3RB3113-4NB0	0.32 ... 0.8	0.32 ... 0.68	100
0.37	0.88	None	3RV2311-0JC10	3RT2015-1AP01	S00/S00/S00	3RB3113-4NB0	0.32 ... 1	0.32 ... 0.88	100
0.55	1.2	None	3RV2311-0KC10	3RT2015-1AP01	S00/S00/S00	3RB3113-4PB0	1 ... 1.25	1 ... 1.2	100
0.75	1.5	None	3RV2311-1AC10	3RT2015-1AP01	S00/S00/S00	3RB3113-4PB0	1 ... 1.6	1 ... 1.5	100
1.1	2.2	None	3RV2311-1CC10	3RT2015-1AP01	S00/S00/S00	3RB3113-4PB0	1 ... 2.5	1 ... 2.2	100
1.5	2.9	None	3RV2311-1DC10	3RT2015-1AP01	S00/S00/S00	3RB3113-4PB0	1 ... 3.2	1 ... 2.9	100
2.2	3.9	None	3RV2321-1EC10	3RT2024-1AP00	S0/S0/S0	3RB3123-4SB0	3 ... 4	3 ... 3.9	100
3	5.2	None	3RV2321-1GC10	3RT2024-1AP00	S0/S0/S0	3RB3123-4SB0	3 ... 6.3	3 ... 5.2	100
4	6.8	None	3RV2321-1HC10	3RT2026-1AP00	S0/S0/S0	3RB3123-4SB0	3 ... 8	3 ... 6.8	100

*Selection tables 500 V AC*

*4.3 Motor starter protector + contactor + 3RB3 solid-state overload relay*

Standard three-phase motor 4-pole at 500 V AC <sup>1)</sup>		Setting range Overload release Motor starter protector	Motor starter protector Starter protection <sup>2)</sup>	Contactor <sup>3)</sup>	Size	Overload relay (electronic) Maximum permitted setting range overload release			
Stand- ard output P	Motor cur- rent I						IE1 / IE2 motors	IE3 / IE4 motors	I <sub>q</sub>
kW	A					Article No.	A	A	kA
5.5	9.2	None	3RV2321-1JC10	3RT2026-1AP00	S0/S0/S0	3RB3123-4SB0	3 ... 10	3 ... 9.2	100
7.5	12.4	None	3RV2321-1KC10	3RT2026-1AP00	S0/S0/S0	3RB3123-4QB0	6 ... 12.5	6 ... 12.4	100
11	17.6	None	3RV2321-4BC10	3RT2027-1AP00	S0/S0/S0	3RB3123-4QB0	6 ... 20	6 ... 17.6	100
15	23	None	3RV2321-4DC10	3RT2027-1AP00	S0/S0/S0	3RB3123-4VB0	10 ... 25	10 ... 23	100
15	23	None	3RV2332-4DC10	3RT2035-1AP00	S2/S2/S2	3RB3133-4UB0	12.5 ... 25	12.5 ... 25	100
18.5	28	None	3RV2332-4EC10	3RT2035-1AP00	S2/S2/S2	3RB3133-4UB0	12.5 ... 32	12.5 ... 32	100
22	33	None	3RV2332-4PC10	3RT2035-1AP00	S2/S2/S2	3RB3133-4UB0	12.5 ... 36	12.5 ... 36	100
30	44	None	3RV2332-4VC10	3RT2036-1AP00	S2/S2/S2	3RB3133-4UB0	12.5 ... 45	12.5 ... 45	100
37	53	49 ... 59	3RV2032-4XA10	3RT2037-1AP00	S2/S2/S2	3RB3133-4WB0	20 ... 53	20 ... 53	100
37	53	54 ... 65	3RV2032-4JA10	3RT2037-1AP00	S2/S2/S2	3RB3133-4WB0	20 ... 55	20 ... 55	100
37	53	54 ... 65	3RV2031-4JB10	3RT2037-1AP00	S2/S2/S2	3RB3133-4WB0	20 ... 58.5	20 ... 58.5	70

## 4.3 Motor starter protector + contactor + 3RB3 solid-state overload relay

Standard three-phase motor 4-pole at 500 V AC <sup>1)</sup>		Setting range Overload release Motor starter protector	Motor starter protector Starter protection <sup>2)</sup>	Contactor <sup>3)</sup>	Size	Overload relay (electronic) Maximum permitted setting range overload release			
Standard output P	Motor current I						IE1 / IE2 motors	IE3 / IE4 motors	I <sub>q</sub>
kW	A					Article No.	A	A	kA
<b>CLASS 10, short-circuit breaking capacity I<sub>q</sub> = 100 kA / 70 kA</b>									
0.04	0.11	None	3RV2311-0BC10	3RT2015-1AP01	S00/S00/S00	3RB3016-1RB0	0.1 ... 0.2	0.1 ... 0.11	100
0.06	0.16	None	3RV2311-0BC10	3RT2015-1AP01	S00/S00/S00	3RB3016-1RB0	0.1 ... 0.2	0.1 ... 0.16	100
0.09	0.24	None	3RV2311-0DC10	3RT2015-1AP01	S00/S00/S00	3RB3016-1RB0	0.1 ... 0.32	0.1 ... 0.24	100
0.12	0.32	None	3RV2311-0EC10	3RT2015-1AP01	S00/S00/S00	3RB3016-1NB0	0.32 ... 0.4	0.32 ... 0.32	100
0.18	0.48	None	3RV2311-0GC10	3RT2015-1AP01	S00/S00/S00	3RB3016-1NB0	0.32 ... 0.63	0.32 ... 0.48	100
0.25	0.68	None	3RV2311-0HC10	3RT2015-1AP01	S00/S00/S00	3RB3016-1NB0	0.32 ... 0.8	0.32 ... 0.68	100
0.37	0.88	None	3RV2311-0JC10	3RT2015-1AP01	S00/S00/S00	3RB3016-1NB0	0.32 ... 1	0.32 ... 0.88	100
0.55	1.2	None	3RV2311-0KC10	3RT2015-1AP01	S00/S00/S00	3RB3016-1PB0	1 ... 1.25	1 ... 1.2	100
0.75	1.5	None	3RV2311-1AC10	3RT2015-1AP01	S00/S00/S00	3RB3016-1PB0	1 ... 1.6	1 ... 1.5	100
1.1	2.2	None	3RV2311-1CC10	3RT2015-1AP01	S00/S00/S00	3RB3016-1PB0	1 ... 2.5	1 ... 2.2	100
1.5	2.9	None	3RV2311-1DC10	3RT2015-1AP01	S00/S00/S00	3RB3016-1PB0	1 ... 3.2	1 ... 2.9	100
2.2	3.9	None	3RV2321-1FC10	3RT2024-1AP00	S0/S0/S0	3RB3026-1SB0	3 ... 5	3 ... 3.9	100
3	5.2	None	3RV2321-1HC10	3RT2026-1AP00	S0/S0/S0	3RB3026-1SB0	3 ... 8	3 ... 5.2	100
4	6.8	None	3RV2321-1HC10	3RT2026-1AP00	S0/S0/S0	3RB3026-1SB0	3 ... 8	3 ... 6.8	100
5.5	9.2	None	3RV2321-1JC10	3RT2026-1AP00	S0/S0/S0	3RB3026-1SB0	3 ... 10	3 ... 9.2	100
7.5	12.4	None	3RV2321-4AC10	3RT2026-1AP00	S0/S0/S0	3RB3026-1QB0	6 ... 16	6 ... 12.4	100
11	17.6	None	3RV2321-4CC10	3RT2027-1AP00	S0/S0/S0	3RB3026-1QB0	6 ... 22	6 ... 17.6	100
15	23	None	3RV2332-4EC10	3RT2035-1AP00	S2/S2/S2	3RB3036-1UB0	12.5 ... 24	12.5 ... 24	100
18.5	28	None	3RV2332-4PC10	3RT2035-1AP00	S2/S2/S2	3RB3036-1UB0	12.5 ... 27	12.5 ... 27	100

*Selection tables 500 V AC*

*4.3 Motor starter protector + contactor + 3RB3 solid-state overload relay*

Standard three-phase motor 4-pole at 500 V AC <sup>1)</sup>		Setting range Overload release Motor starter protector	Motor starter protector Starter protection <sup>2)</sup>	Contactor <sup>3)</sup>	Size	Overload relay (electronic) Maximum permitted setting range overload release			
Stand- ard output P	Motor cur- rent I						IE1 / IE2 motors	IE3 / IE4 motors	I <sub>q</sub>
kW	A					Article No.	A	A	kA
18.5	28	None	3RV2332-4VC10	3RT2035-1AP00	S2/S2/S2	3RB3036-1UB0	12.5 ... 31	12.5 ... 31	100
22	33	49 ... 59	3RV2032-4XA10	3RT2037-1AP00	S2/S2/S2	3RB3036-1UB0	12.5 ... 39	12.5 ... 39	100
30	44	42 ... 52	3RV2031-4WB10	3RT2036-1AP00	S2/S2/S2	3RB3036-1WB0	20 ... 47	20 ... 47	70
37	53	49 ... 59	3RV2031-4XB10	3RT2037-1AP00	S2/S2/S2	3RB3036-1WB0	20 ... 53	20 ... 53	70
37	53	54 ... 65	3RV2031-4JB10	3RT2037-1AP00	S2/S2/S2	3RB3036-1WB0	20 ... 58.5	20 ... 58.5	70

**CLASS 20, short-circuit breaking capacity I<sub>q</sub> = 100 kA / 70 kA / 50 kA**

0.04	0.11	None	3RV2311-0DC10	3RT2015-1AP01	S00/S00/S00	3RB3016-2RB0	0.1 ... 0.11	0.1 ... 0.11	100
0.06	0.16	None	3RV2311-0DC10	3RT2015-1AP01	S00/S00/S00	3RB3016-2RB0	0.1 ... 0.16	0.1 ... 0.16	100
0.09	0.24	0.45 ... 0.63	3RV2011-0GA10	3RT2015-1AP01	S00/S00/S00	3RB3016-2RB0	0.1 ... 0.24	0.1 ... 0.24	100
0.12	0.32	0.55 ... 0.8	3RV2011-0HA10	3RT2015-1AP01	S00/S00/S00	3RB3016-2NB0	0.32 ... 0.32	0.32 ... 0.32	100
0.18	0.48	0.9 ... 1.25	3RV2011-0KA10	3RT2015-1AP01	S00/S00/S00	3RB3016-2NB0	0.32 ... 0.48	0.32 ... 0.48	100
0.25	0.68	1.1 ... 1.6	3RV2011-1AA10	3RT2015-1AP01	S00/S00/S00	3RB3016-2NB0	0.32 ... 0.68	0.32 ... 0.68	100
0.37	0.88	1.4 ... 2	3RV2011-1BA10	3RT2015-1AP01	S00/S00/S00	3RB3016-2NB0	0.32 ... 0.88	0.32 ... 0.88	100
0.55	1.2	1.8 ... 2.5	3RV2011-1CA10	3RT2015-1AP01	S00/S00/S00	3RB3016-2PB0	1 ... 1.2	1 ... 1.2	100
0.75	1.5	2.2 ... 3.2	3RV2011-1DA10	3RT2015-1AP01	S00/S00/S00	3RB3016-2PB0	1 ... 1.5	1 ... 1.5	100
1.1	2.2	3.5 ... 5	3RV2021-1FA10	3RT2024-1AP00	S0/S0/S0	3RB3026-2PB0	1 ... 2.2	1 ... 2.2	100
1.5	2.9	4.5 ... 6.3	3RV2021-1GA10	3RT2024-1AP00	S0/S0/S0	3RB3026-2PB0	1 ... 2.9	1 ... 2.9	100
2.2	3.9	7 ... 10	3RV2021-1JA10	3RT2026-1AP00	S0/S0/S0	3RB3026-2SB0	3 ... 3.9	3 ... 3.9	100
3	5.2	10 ... 16	3RV2021-4AA10	3RT2026-1AP00	S0/S0/S0	3RB3026-2SB0	3 ... 5.2	3 ... 5.2	100
4	6.8	13 ... 20	3RV2021-4BA10	3RT2027-1AP00	S0/S0/S0	3RB3026-2QB0	6 ... 6.8	6 ... 6.8	100

## 4.3 Motor starter protector + contactor + 3RB3 solid-state overload relay

Standard three-phase motor 4-pole at 500 V AC <sup>1)</sup>		Setting range Overload release Motor starter protector	Motor starter protector Starter protection <sup>2)</sup>	Contactor <sup>3)</sup>	Size	Overload relay (electronic) Maximum permitted setting range overload release			
Standard output P	Motor current I						IE1 / IE2 motors	IE3 / IE4 motors	I <sub>q</sub>
kW	A					Article No.	A	A	kA
5.5	9.2	18 ... 25	3RV2021-4DA10	3RT2027-1AP00	S0/S0/S0	3RB3026-2QB0	6 ... 9.2	6 ... 9.2	100
7.5	12.4	22 ... 32	3RV2032-4EA10	3RT2035-1AP00	S2/S2/S2	3RB3036-2UB0	12.5 ... 14	12.5 ... 14	100
7.5	12.4	35 ... 45	3RV2032-4VA10	3RT2036-1AP00	S2/S2/S2	3RB3036-2UB0	12.5 ... 16.5	12.5 ... 16.5	100
11	17.6	49 ... 59	3RV2032-4XA10	3RT2037-1AP00	S2/S2/S2	3RB3036-2UB0	12.5 ... 25	12.5 ... 25	100
15	23	54 ... 65	3RV2032-4JA10	3RT2037-1AP00	S2/S2/S2	3RB3036-2UB0	12.5 ... 25	12.5 ... 25	100
18.5	28	28 ... 36	3RV2031-4PB10	3RT2035-1AP00	S2/S2/S2	3RB3036-2UB0	12.5 ... 27	12.5 ... 27	70
18.5	28	32 ... 40	3RV2031-4UB10	3RT2035-1AP00	S2/S2/S2	3RB3036-2UB0	12.5 ... 30	12.5 ... 30	50
22	33	35 ... 45	3RV2031-4VB10	3RT2036-1AP00	S2/S2/S2	3RB3036-2UB0	12.5 ... 34	12.5 ... 34	70
22	33	42 ... 52	3RV2031-4WB10	3RT2036-1AP00	S2/S2/S2	3RB3036-2UB0	12.5 ... 39	12.5 ... 39	70
30	44	49 ... 59	3RV2031-4XB10	3RT2037-1AP00	S2/S2/S2	3RB3036-2UB0	12.5 ... 44	12.5 ... 44	70
30	44	54 ... 65	3RV2031-4JB10	3RT2037-1AP00	S2/S2/S2	3RB3036-2UB0	12.5 ... 46	12.5 ... 46	70
<b>CLASS 30, short-circuit breaking capacity I<sub>q</sub> = 100 kA / 70 kA / 50 kA</b>									
0.04	0.11	None	3RV2311-0DC10	3RT2015-1AP01	S00/S00/S00	3RB3113-4RB0	0.1 ... 0.11	0.1 ... 0.11	100
0.06	0.16	0.35 ... 0.5	3RV2011-0FA10	3RT2015-1AP01	S00/S00/S00	3RB3113-4RB0	0.1 ... 0.16	0.1 ... 0.16	100
0.09	0.24	0.55 ... 0.8	3RV2011-0HA10	3RT2015-1AP01	S00/S00/S00	3RB3113-4RB0	0.1 ... 0.24	0.1 ... 0.24	100
0.12	0.32	0.9 ... 1.25	3RV2011-0KA10	3RT2015-1AP01	S00/S00/S00	3RB3113-4NB0	0.32 ... 0.32	0.32 ... 0.32	100
0.18	0.48	1.1 ... 1.6	3RV2011-1AA10	3RT2015-1AP01	S00/S00/S00	3RB3113-4NB0	0.32 ... 0.48	0.32 ... 0.48	100
0.25	0.68	1.4 ... 2	3RV2011-1BA10	3RT2015-1AP01	S00/S00/S00	3RB3113-4NB0	0.32 ... 0.68	0.32 ... 0.68	100
0.37	0.88	1.8 ... 2.5	3RV2011-1CA10	3RT2015-1AP01	S00/S00/S00	3RB3113-4NB0	0.32 ... 0.88	0.32 ... 0.88	100
0.55	1.2	2.8 ... 4	3RV2021-1EA10	3RT2024-1AP00	S0/S0/S0	3RB3123-4PB0	1 ... 1.2	1 ... 1.2	100

## Selection tables 500 V AC

### 4.3 Motor starter protector + contactor + 3RB3 solid-state overload relay

Standard three-phase motor 4-pole at 500 V AC <sup>1)</sup>		Setting range Overload release Motor starter protector	Motor starter protector Starter protection <sup>2)</sup>	Contactor <sup>3)</sup>	Size	Overload relay (electronic) Maximum permitted setting range overload release			
Stand- ard output P	Motor cur- rent I					IE1 / IE2 motors	IE3 / IE4 motors	I <sub>q</sub>	
kW	A					Article No.	Article No.	Article No.	
0.75	1.5	3.5 ... 5	3RV2021-1FA10	3RT2024-1AP00	S0/S0/S0	3RB3123-4PB0	1 ... 1.5	1 ... 1.5	100
1.1	2.2	4.5 ... 6.3	3RV2021-1GA10	3RT2024-1AP00	S0/S0/S0	3RB3123-4PB0	1 ... 2.2	1 ... 2.2	100
1.5	2.9	7 ... 10	3RV2021-1JA10	3RT2026-1AP00	S0/S0/S0	3RB3123-4PB0	1 ... 2.9	1 ... 2.9	100
2.2	3.9	9 ... 12.5	3RV2021-1KA10	3RT2026-1AP00	S0/S0/S0	3RB3123-4SB0	3 ... 3.9	3 ... 3.9	100
3	5.2	10 ... 16	3RV2021-4AA10	3RT2026-1AP00	S0/S0/S0	3RB3123-4SB0	3 ... 5.2	3 ... 5.2	100
4	6.8	13 ... 20	3RV2021-4BA10	3RT2027-1AP00	S0/S0/S0	3RB3123-4QB0	6 ... 6.8	6 ... 6.8	100
5.5	9.2	18 ... 25	3RV2021-4DA10	3RT2027-1AP00	S0/S0/S0	3RB3123-4QB0	6 ... 9.2	6 ... 9.2	100
7.5	12.4	28 ... 36	3RV2032-4PA10	3RT2035-1AP00	S2/S2/S2	3RB3133-4UB0	12.5 ... 13	12.5 ... 13	100
7.5	12.4	35 ... 45	3RV2032-4VA10	3RT2036-1AP00	S2/S2/S2	3RB3133-4UB0	12.5 ... 14	12.5 ... 14	100
11	17.6	22 ... 32	3RV2031-4EB10	3RT2035-1AP00	S2/S2/S2	3RB3133-4UB0	12.5 ... 17	12.5 ... 17	70
11	17.6	28 ... 36	3RV2031-4PB10	3RT2035-1AP00	S2/S2/S2	3RB3133-4UB0	12.5 ... 19	12.5 ... 19	70
15	23	32 ... 40	3RV2031-4UB10	3RT2035-1AP00	S2/S2/S2	3RB3133-4UB0	12.5 ... 22	12.5 ... 22	50
15	23	35 ... 45	3RV2031-4VB10	3RT2036-1AP00	S2/S2/S2	3RB3133-4UB0	12.5 ... 25	12.5 ... 25	70
18.5	28	42 ... 52	3RV2031-4WB10	3RT2036-1AP00	S2/S2/S2	3RB3133-4WB0	20 ... 29	20 ... 29	70
18.5	28	49 ... 59	3RV2031-4XB10	3RT2037-1AP00	S2/S2/S2	3RB3133-4WB0	20 ... 31	20 ... 31	70
22	33	54 ... 65	3RV2031-4JB10	3RT2037-1AP00	S2/S2/S2	3RB3133-4WB0	20 ... 35	20 ... 35	70

Article numbers for basic versions with screw terminals and spring-loaded terminals also possible. 3RA2921-1BA00 link module can only be used with screw terminals.

- <sup>1)</sup> Guide value for 4-pole standard motors at 500 V AC, 50 Hz. Selection depends on the concrete startup and rated data of the protected motor.
- <sup>2)</sup> The motor starter protector must be set to the maximum current value.
- <sup>3)</sup> Rated control supply voltage 230 V AC, 50 Hz, other control voltages possible.

## 4.4 Motor starter protector + contactor + 3RB22, 3RB23, 3RB24 electronic overload relay, or 3UF7

Type of coordination 2,  
short-circuit breaking capacity  $I_q = 100 \text{ kA} / 70 \text{ kA} / 50 \text{ kA}$



Standard three-phase motor 4-pole at 500 V AC <sup>1)</sup>		Setting range Overload release Motor starter protector	Motor starter protector Starter protection <sup>2)</sup>	Contactor <sup>3)</sup>	Size	Overload relay (electronic) or current measuring module <sup>4)</sup> Maximum permitted setting range overload release			
Stand- ard output P	Motor current I					IE1 / IE2 motors	IE3 / IE4 motors	$I_q$	
kW	A					Article No.	Article No.	A	kA
<b>CLASS 5, short-circuit breaking capacity <math>I_q = 100 \text{ kA}</math></b>									
0.12	0.32	None	3RV2311-0EC10	3RT2015-1AP01	S00/S00/-	3UF71x0-1AA00-0/3RB2906-2BG1	0.3 ... 0.32	0.3 ... 0.32	100
0.18	0.48	None	3RV2311-0GC10	3RT2015-1AP01	S00/S00/-	3UF71x0-1AA00-0/3RB2906-2BG1	0.3 ... 0.48	0.3 ... 0.48	100
0.25	0.68	None	3RV2311-0HC10	3RT2015-1AP01	S00/S00/-	3UF71x0-1AA00-0/3RB2906-2BG1	0.3 ... 0.68	0.3 ... 0.68	100
0.37	0.88	None	3RV2311-0JC10	3RT2015-1AP01	S00/S00/-	3UF71x0-1AA00-0/3RB2906-2BG1	0.3 ... 0.88	0.3 ... 0.88	100
0.55	1.20	None	3RV2311-0KC10	3RT2015-1AP01	S00/S00/-	3UF71x0-1AA00-0/3RB2906-2BG1	0.3 ... 1.2	0.3 ... 1.2	100
0.75	1.50	None	3RV2311-1AC10	3RT2015-1AP01	S00/S00/-	3UF71x0-1AA00-0/3RB2906-2BG1	0.3 ... 1.5	0.3 ... 1.5	100
1.1	2.20	None	3RV2311-1CC10	3RT2015-1AP01	S00/S00/-	3UF71x0-1AA00-0/3RB2906-2BG1	0.3 ... 2.2	0.3 ... 2.2	100
1.5	2.90	None	3RV2311-1DC10	3RT2015-1AP01	S00/S00/-	3UF71x0-1AA00-0/3RB2906-2BG1	0.3 ... 2.9	0.3 ... 2.9	100

*Selection tables 500 V AC*

*4.4 Motor starter protector + contactor + 3RB22, 3RB23, 3RB24 electronic overload relay, or 3UF7*

Standard three-phase motor 4-pole at 500 V AC <sup>1)</sup>		Setting range Overload release Motor starter protector	Motor starter protector Starter protection <sup>2)</sup>	Contactor <sup>3)</sup>	Size	Overload relay (electronic) or current measuring module <sup>4)</sup> Maximum permitted setting range overload release			
Stand- ard output P	Motor current I						IE1 / IE2 motors	IE3 / IE4 motors	I <sub>q</sub>
kW	A					Article No.	A	A	kA
2.2	3.90	None	3RV2321-1EC10	3RT2024-1AP00	S0/S0/-	3UF71x1-1AA00-0/3RB2906-2DG1	2.4 ... 3.9	2.4 ... 3.9	100
3	5.20	None	3RV2321-1GC10	3RT2024-1AP00	S0/S0/-	3UF71x1-1AA00-0/3RB2906-2DG1	2.4 ... 5.2	2.4 ... 5.2	100
4	6.80	None	3RV2321-1HC10	3RT2026-1AP00	S0/S0/-	3UF71x1-1AA00-0/3RB2906-2DG1	2.4 ... 6.8	2.4 ... 6.8	100
5.5	9.20	None	3RV2321-1JC10	3RT2026-1AP00	S0/S0/-	3UF71x1-1AA00-0/3RB2906-2DG1	2.4 ... 9.2	2.4 ... 9.2	100
7.5	12.4	None	3RV2321-1KC10	3RT2026-1AP00	S0/S0/-	3UF71x1-1AA00-0/3RB2906-2DG1	2.4 ... 12.4	2.4 ... 12.4	100
11	17.60	None	3RV2321-4BC10	3RT2027-1AP01	S0/S0/-	3UF71x1-1AA00-0/3RB2906-2DG1	2.4 ... 17.6	2.4 ... 17.6	100
15	23.00	None	3RV2321-4DC10	3RT2027-1AP01	S0/S0/-	3UF71x1-1AA00-0/3RB2906-2DG1	2.4 ... 23.0	2.4 ... 23.0	100
15	23.00	None	3RV2332-4DC10	3RT2035-1AP00	S2/S2/-	3UF71x2-1AA00-0/3RB2906-2JG1	10 ... 25	10 ... 25	100
18.5	28	None	3RV2032-4EC10	3RT2035-1AP00	S2/S2/-	3UF71x2-1AA00-0/3RB2906-2JG1	10 ... 32	10 ... 32	100
22	33	None	3RV2032-4PC10	3RT2035-1AP00	S2/S2/-	3UF71x2-1AA00-0/3RB2906-2JG1	10 ... 36	10 ... 36	100
30	44	None	3RV2332-4VC10	3RT2036-1AP00	S2/S2/-	3UF71x2-1AA00-0/3RB2906-2JG1	10 ... 45	10 ... 45	100
37	53	None	3RV2332-4JC10	3RT2037-1AP00	S2/S2/-	3UF71x2-1AA00-0/3RB2906-2JG1	10 ... 52	10 ... 52	100
37	53	49 ... 59	3RV2032-4XA10	3RT2037-1AP00	S2/S2/-	3UF71x2-1AA00-0/3RB2906-2JG1	10 ... 53	10 ... 53	100
37	53	54 ... 65	3RV2032-4JA10	3RT2037-1AP00	S2/S2/-	3UF71x2-1AA00-0/3RB2906-2JG1	10 ... 55	10 ... 55	100

## 4.4 Motor starter protector + contactor + 3RB22, 3RB23, 3RB24 electronic overload relay, or 3UF7

Standard three-phase motor 4-pole at 500 V AC <sup>1)</sup>		Setting range Overload release	Motor starter protector Starter protection <sup>2)</sup>	Contactor <sup>3)</sup>	Size	Overload relay (electronic) or current measuring module <sup>4)</sup> Maximum permitted setting range overload release			
Standard output P	Motor current I					IE1 / IE2 motors	IE3 / IE4 motors	I <sub>q</sub>	
kW	A	Article No.	Article No.	Article No.	A	A	kA		
<b>CLASS 10, short-circuit breaking capacity I<sub>q</sub> = 100 kA / 70 kA</b>									
0.12	0.32	None	3RV2311-0EC10	3RT2015-1AP01	S00/S00/-	3UF71x0-1AA00-0/ 3RB2906-2BG1	0.3 ... 0.32	0.3 ... 0.32	100
0.18	0.48	None	3RV2311-0GC10	3RT2015-1AP01	S00/S00/-	3UF71x0-1AA00-0/ 3RB2906-2BG1	0.3 ... 0.48	0.3 ... 0.48	100
0.25	0.68	None	3RV2311-0HC10	3RT2015-1AP01	S00/S00/-	3UF71x0-1AA00-0/ 3RB2906-2BG1	0.3 ... 0.68	0.3 ... 0.68	100
0.37	0.88	None	3RV2311-0JC10	3RT2015-1AP01	S00/S00/-	3UF71x0-1AA00-0/ 3RB2906-2BG1	0.3 ... 0.88	0.3 ... 0.88	100
0.55	1.20	None	3RV2311-0KC10	3RT2015-1AP01	S00/S00/-	3UF71x0-1AA00-0/ 3RB2906-2BG1	0.3 ... 1.2	0.3 ... 1.2	100
0.75	1.50	None	3RV2311-1AC10	3RT2015-1AP01	S00/S00/-	3UF71x0-1AA00-0/ 3RB2906-2BG1	0.3 ... 1.5	0.3 ... 1.5	100
1.1	2.20	None	3RV2311-1CC10	3RT2015-1AP01	S00/S00/-	3UF71x0-1AA00-0/ 3RB2906-2BG1	0.3 ... 2.2	0.3 ... 2.2	100
1.5	2.90	None	3RV2311-1DC10	3RT2015-1AP01	S00/S00/-	3UF71x0-1AA00-0/ 3RB2906-2BG1	0.3 ... 2.9	0.3 ... 2.9	100
2.2	3.90	None	3RV2321-1FC10	3RT2024-1AP00	S0/S0/-	3UF71x1-1AA00-0/ 3RB2906-2DG1	2.4 ... 3.9	2.4 ... 3.9	100
3	5.2	None	3RV2321-1HC10	3RT2026-1AP00	S0/S0/-	3UF71x1-1AA00-0/ 3RB2906-2DG1	2.4 ... 5.2	2.4 ... 5.2	100
4	6.8	None	3RV2321-1HC10	3RT2026-1AP00	S0/S0/-	3UF71x1-1AA00-0/ 3RB2906-2DG1	2.4 ... 6.8	2.4 ... 6.8	100
5.5	9.2	None	3RV2321-1JC10	3RT2026-1AP00	S0/S0/-	3UF71x1-1AA00-0/ 3RB2906-2DG1	2.4 ... 9.2	2.4 ... 9.2	100
7.5	12.4	None	3RV2321-4BC10	3RT2027-1AP00	S0/S0/-	3UF71x2-1AA00-0/ 3RB2906-2JG1	10 ... 12.4	10 ... 12.4	100

*Selection tables 500 V AC*

*4.4 Motor starter protector + contactor + 3RB22, 3RB23, 3RB24 electronic overload relay, or 3UF7*

Standard three-phase motor 4-pole at 500 V AC <sup>1)</sup>		Setting range Overload release Motor starter protector	Motor starter protector Starter protection <sup>2)</sup>	Contactor <sup>3)</sup>	Size	Overload relay (electronic) or current measuring module <sup>4)</sup> Maximum permitted setting range overload release			
Stand- ard output P	Motor current I						IE1 / IE2 motors	IE3 / IE4 motors	I <sub>q</sub>
kW	A					Article No.	A	A	kA
11	17.6	None	3RV2321-4CC10	3RT2027-1AP01	S0/S0/-	3UF71x2-1AA00-0/3RB2906-2JG1	10 ... 17.6	10 ... 17.6	100
15	23	None	3RV2332-4EC10	3RT2035-1AP00	S2/S2/-	3UF71x2-1AA00-0/3RB2906-2JG1	10 ... 24	10 ... 24	100
18.5	28	None	3RV2332-4VC10	3RT2036-1AP00	S2/S2/-	3UF71x2-1AA00-0/3RB2906-2JG1	10 ... 31	10 ... 31	100
22	33	54 ... 65	3RV2032-4JA10	3RT2037-1AP00	S2/S2/-	3UF71x2-1AA00-0/3RB2906-2JG1	10 ... 36	10 ... 36	100
30	44	42 ... 52	3RV2031-4WB10	3RT2036-1AP00	S2/S2/-	3UF71x2-1AA00-0/3RB2906-2JG1	10 ... 47	10 ... 47	70
37	53	49 ... 59	3RV2031-4XB10	3RT2037-1AP00	S2/S2/-	3UF71x2-1AA00-0/3RB2906-2JG1	10 ... 53	10 ... 53	70
<b>CLASS 20, short-circuit breaking capacity I<sub>q</sub> = 100 kA / 70 kA / 50 kA</b>									
0.12	0.32	0.55 ... 0.8	3RV2011-0HA10	3RT2015-1AP01	S00/S00/-	3UF71x0-1AA00-0/3RB2906-2BG1	0.3 ... 0.32	0.3 ... 0.32	100
0.18	0.48	0.9 ... 1.25	3RV2011-0KA10	3RT2015-1AP01	S00/S00/-	3UF71x0-1AA00-0/3RB2906-2BG1	0.3 ... 0.48	0.3 ... 0.48	100
0.25	0.68	1.1 ... 1.6	3RV2011-1AA10	3RT2015-1AP01	S00/S00/-	3UF71x0-1AA00-0/3RB2906-2BG1	0.3 ... 0.68	0.3 ... 0.68	100
0.37	0.88	1.4 ... 2.0	3RV2011-1BA10	3RT2015-1AP01	S00/S00/-	3UF71x0-1AA00-0/3RB2906-2BG1	0.3 ... 0.88	0.3 ... 0.88	100
0.55	1.20	1.8 ... 2.5	3RV2011-1CA10	3RT2015-1AP01	S00/S00/-	3UF71x0-1AA00-0/3RB2906-2BG1	0.3 ... 1.2	0.3 ... 1.2	100
0.75	1.50	2.2 ... 3.2	3RV2011-1DA10	3RT2015-1AP01	S00/S00/-	3UF71x0-1AA00-0/3RB2906-2BG1	0.3 ... 1.5	0.3 ... 1.5	100
1.1	2.20	3.5 ... 5.0	3RV2021-1FA10	3RT2024-1AP00	S0/S0/-	3UF71x0-1AA00-0/3RB2906-2BG1	0.3 ... 2.2	0.3 ... 2.2	100

## 4.4 Motor starter protector + contactor + 3RB22, 3RB23, 3RB24 electronic overload relay, or 3UF7

Standard three-phase motor 4-pole at 500 V AC <sup>1)</sup>		Setting range Overload release	Motor starter protector Starter protection <sup>2)</sup>	Contactor <sup>3)</sup>	Size	Overload relay (electronic) or current measuring module <sup>4)</sup> Maximum permitted setting range overload release			
Standard output P	Motor current I					IE1 / IE2 motors	IE3 / IE4 motors	I <sub>q</sub>	
kW	A	Article No.	Article No.	Article No.	A	A	kA		
1.5	2.90	4.5 ... 6.3	3RV2021-1GA10	3RT2024-1AP00	S0/S0/-	3UF71x0-1AA00-0/3RB2906-2BG1	0.3 ... 2.9	0.3 ... 2.9	100
2.2	3.90	7.0 ... 10.0	3RV2021-1JA10	3RT2026-1AP00	S0/S0/-	3UF71x1-1AA00-0/3RB2906-2DG1	2.4 ... 3.9	2.4 ... 3.9	100
3	5.2	10 ... 16	3RV2021-4AA10	3RT2026-1AP00	S0/S0/-	3UF71x1-1AA00-0/3RB2906-2DG1	2.4 ... 5.2	2.4 ... 5.2	100
4	6.8	13 ... 20	3RV2021-4BA10	3RT2027-1AP00	S0/S0/-	3UF71x1-1AA00-0/3RB2906-2DG1	2.4 ... 6.8	2.4 ... 6.8	100
5.5	9.2	None	3RV2332-4TC10	3RT2035-1AP00	S2/S2/-	3UF71x1-1AA00-0/3RB2906-2DG1	2.4 ... 10.0	2.4 ... 10.0	100
7.5	12.4	None	3RV2332-4PC10	3RT2035-1AP00	S2/S2/-	3UF71x1-1AA00-0/3RB2906-2DG1	2.4 ... 12.5	2.4 ... 12.5	100
11	17.6	49 ... 59	3RV2032-4XA10	3RT2037-1AP00	S2/S2/-	3UF71x2-1AA00-0/3RB2906-2JG1	10 ... 25	10 ... 25	100
15	23	54 ... 65	3RV2032-4JA10	3RT2037-1AP00	S2/S2/-	3UF71x2-1AA00-0/3RB2906-2JG1	10 ... 25	10 ... 25	100
18.5	28	32 ... 40	3RV2031-4UB10	3RT2035-1AP00	S2/S2/-	3UF71x2-1AA00-0/3RB2906-2JG1	10 ... 30	10 ... 30	50
22	33	35 ... 45	3RV2031-4VB10	3RT2036-1AP00	S2/S2/-	3UF71x2-1AA00-0/3RB2906-2JG1	10 ... 34	10 ... 34	70
30	44	49 ... 59	3RV2031-4XB10	3RT2037-1AP00	S2/S2/-	3UF71x2-1AA00-0/3RB2906-2JG1	10 ... 44	10 ... 44	70
30	44	54 ... 65	3RV2031-4JB10	3RT2037-1AP00	S2/S2/-	3UF71x2-1AA00-0/3RB2906-2JG1	10 ... 46	10 ... 46	70

*Selection tables 500 V AC*

*4.4 Motor starter protector + contactor + 3RB22, 3RB23, 3RB24 electronic overload relay, or 3UF7*

Standard three-phase motor 4-pole at 500 V AC <sup>1)</sup>		Setting range Overload release Motor starter protector	Motor starter protector Starter protection <sup>2)</sup>	Contactor <sup>3)</sup>	Size	Overload relay (electronic) or current measuring module <sup>4)</sup> Maximum permitted setting range overload release			
Stand- ard output P	Motor current I					IE1 / IE2 motors	IE3 / IE4 motors	I <sub>q</sub>	
kW	A					Article No.	Article No.	A	kA
<b>CLASS 30, short-circuit breaking capacity I<sub>q</sub> = 100 kA / 70 kA</b>									
0.12	0.32	0.9 ... 1.25	3RV2011-0KA10	3RT2015-1AP01	S00/S00/-	3UF71x0-1AA00-0/ 3RB2906-2BG1	0.3 ... 0.32	0.3 ... 0.32	100
0.18	0.48	1.1 ... 1.6	3RV2011-1AA10	3RT2015-1AP01	S00/S00/-	3UF71x0-1AA00-0/ 3RB2906-2BG1	0.3 ... 0.48	0.3 ... 0.48	100
0.25	0.68	1.4 ... 2.0	3RV2011-1BA10	3RT2015-1AP01	S00/S00/-	3UF71x0-1AA00-0/ 3RB2906-2BG1	0.3 ... 0.68	0.3 ... 0.68	100
0.37	0.88	1.8 ... 2.5	3RV2011-1CA10	3RT2015-1AP01	S00/S00/-	3UF71x0-1AA00-0/ 3RB2906-2BG1	0.3 ... 0.88	0.3 ... 0.88	100
0.55	1.20	2.8 ... 4.0	3RV2021-1EA10	3RT2024-1AP00	S0/S0/-	3UF71x0-1AA00-0/ 3RB2906-2BG1	0.3 ... 1.20	0.3 ... 1.20	100
0.75	1.50	3.5 ... 5.0	3RV2021-1EA10	3RT2024-1AP00	S0/S0/-	3UF71x0-1AA00-0/ 3RB2906-2BG1	0.3 ... 1.50	0.3 ... 1.50	100
1.1	2.20	4.5 ... 6.3	3RV2021-1GA10	3RT2024-1AP00	S0/S0/-	3UF71x0-1AA00-0/ 3RB2906-2BG1	0.3 ... 2.20	0.3 ... 2.20	100
1.5	2.90	7.0 ... 10.0	3RV2021-1JA10	3RT2026-1AP00	S0/S0/-	3UF71x0-1AA00-0/ 3RB2906-2BG1	0.3 ... 2.90	0.3 ... 2.90	100
2.2	3.90	9.0 ... 12.5	3RV2021-1KA10	3RT2026-1AP00	S0/S0/-	3UF71x1-1AA00-0/ 3RB2906-2DG1	2.4 ... 3.90	2.4 ... 3.90	100
3	5.20	10 ... 16	3RV2021-4AA10	3RT2026-1AP00	S0/S0/-	3UF71x1-1AA00-0/ 3RB2906-2DG1	2.4 ... 5.20	2.4 ... 5.20	100
4	6.80	13 ... 20	3RV2021-4BA10	3RT2027-1AP00	S0/S0/-	3UF71x1-1AA00-0/ 3RB2906-2DG1	2.4 ... 6.80	2.4 ... 6.80	100
5.5	9.20	18 ... 25	3RV2021-4DA10	3RT2027-1AP00	S0/S0/-	3UF71x1-1AA00-0/ 3RB2906-2DG1	2.4 ... 9.20	2.4 ... 9.20	100
5.5	9.20	14 ... 20	3RV2031-4BB10	3RT2035-1AP00	S2/S2/-	3UF71x1-1AA00-0/ 3RB2906-2DG1	2.4 ... 9.50	2.4 ... 9.50	70

## 4.4 Motor starter protector + contactor + 3RB22, 3RB23, 3RB24 electronic overload relay, or 3UF7

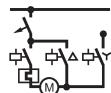
Standard three-phase motor 4-pole at 500 V AC <sup>1)</sup>		Setting range Overload release	Motor starter protector Starter protection <sup>2)</sup>	Contactor <sup>3)</sup>	Size	Overload relay (electronic) or current measuring module <sup>4)</sup> Maximum permitted setting range overload release			
Stand-ard output P	Motor current I					IE1 / IE2 motors	IE3 / IE4 motors	I <sub>q</sub>	
kW	A	Article No.	Article No.	Article No.	A	A	kA		
7.5	12.40	18 ... 25	3RV2031-4DB10	3RT2035-1AP00	S2/S2/-	3UF71x1-1AA00-0/3RB2906-2DG1	2.4 ... 13.0	2.4 ... 13.0	70
11	17.6	28 ... 36	3RV2031-4PB10	3RT2035-1AP00	S2/S2/-	3UF71x2-1AA00-0/3RB2906-2JG1	10 ... 19	10 ... 19	70
15	23	35 ... 45	3RV2031-4VB10	3RT2036-1AP00	S2/S2/-	3UF71x2-1AA00-0/3RB2906-2JG1	10 ... 25	10 ... 25	70
18.5	28	42 ... 52	3RV2031-4WB10	3RT2036-1AP00	S2/S2/-	3UF71x2-1AA00-0/3RB2906-2JG1	10 ... 29	10 ... 29	70
22	33	54 ... 65	3RV2031-4JB10	3RT2037-1AP00	S2/S2/-	3UF71x2-1AA00-0/3RB2906-2JG1	10 ... 35	10 ... 35	70

Article numbers for basic versions with screw terminals and spring-loaded terminals also possible. 3RA2921-1BA00 link module can only be used with screw terminals.

- <sup>1)</sup> Guide value for 4-pole standard motors at 500 V AC, 50 Hz. Selection depends on the concrete startup and rated data of the protected motor.
- <sup>2)</sup> The motor starter protector must be set to the maximum current value.
- <sup>3)</sup> Rated control supply voltage 230 V AC, 50 Hz, other control voltages possible.
- <sup>4)</sup> The necessary current measuring modules ( $x = 0$ ) or the current measuring modules / voltage measuring modules ( $x = 1$ ) are specified. The corresponding basic units 3RB22 / 3RB23 / 3RB24 and 3UF7 are additionally required.

## 4.5 Motor starter protector + contactor assembly for star-delta (wye-delta) start + 3RU21 thermal overload relay

**CLASS 10, types of coordination 1 and 2,  
short-circuit breaking capacity  $I_q = 100 \text{ kA}$**



AC 500V

Standard three-phase motor 4-pole at 500 V AC <sup>1)</sup>		Motor starter protector	Contactors <sup>2)</sup>		Size	Overload relay (thermal)	Setting range Overload release Overload relay
Stand- ard output P	Motor current I		Line contactor + delta contactor	Star contactor			
kW	A	Article No.	Article No.	Article No.		Article No.	A
<b>Type of coordination 1</b>							
5.5	9.2	3RV2311-1JC10	3RT2017-1AP01	3RT2017-1AP01	S00/S00/S00/ S00	3RU2116-1GB0	4.5 ... 6.3
7.5	12.4	3RV2311-1KC10	3RT2018-1AP01	3RT2017-1AP01	S00/S00/S00/ S00	3RU2116-1HB0	5.5 ... 8.0
7.5	12.4	3RV2321-1KC10	3RT2024-1AP00	3RT2024-1AP00	S00/S0/S0/S0	3RU2126-1HB0	5.5 ... 8.0
11	17.6	3RV2321-4BC10	3RT2026-1AP00	3RT2026-1AP00	S00/S0/S0/S0	3RU2126-1KB0	9.0 ... 12.5
11	17.6	3RV2321-4CC10	3RT2026-1AP00	3RT2026-1AP00	S00/S0/S0/S0	3RU2126-1KB0	9.0 ... 12.5
15	23	3RV2321-4DC10	3RT2027-1AP00	3RT2027-1AP00	S00/S0/S0/S0	3RU2126-4AB0	11.0 ... 16.0
18.5	28	3RV2321-4NC10	3RT2027-1AP00	3RT2027-1AP00	S00/S0/S0/S0	3RU2126-4BB0	14.0 ... 20.0
18.5	28	3RV2321-4EC10	3RT2027-1AP00	3RT2027-1AP00	S0/S0/S0	3RU2126-4BB0	14.0 ... 20.0
15	23	3RV2321-4DC10	3RT2027-1AP00	3RT2027-1AP00	S0/S0/S0/S0	3RU2126-4AB0	11 ... 16
15	23	3RV2332-4DC10	3RT2035-1AP00	3RT2026-1AP00	S2/S2/S0/S2	3RU2136-4AB0	11 ... 16
15	23	3RV2332-4DC10	3RT2035-1AP00	3RT2026-1AP00	S2/S2/S0/S2	3RU2136-4BB0	14 ... 20
15	23	3RV2332-4EC10	3RT2035-1AP00	3RT2026-1AP00	S2/S2/S0/S2	3RU2136-4BB0	14 ... 20
18.5	28	3RV2332-4EC10	3RT2035-1AP00	3RT2026-1AP00	S2/S2/S0/S2	3RU2136-4BB0	14 ... 20

## 4.5 Motor starter protector + contactor assembly for star-delta (wye-delta) start + 3RU21 thermal overload relay

Standard three-phase motor 4-pole at 500 V AC <sup>1)</sup>		Motor starter protector	Contactors <sup>2)</sup>		Size	Overload relay (thermal)	Setting range Overload release Overload relay
Stand- ard output P	Motor current I		Line contactor + delta contactor	Star contactor			
kW	A	Article No.	Article No.	Article No.		Article No.	A
18.5	28	3RV2332-4PC10	3RT2035-1AP00	3RT2026-1AP00	S2/S2/S0/S2	3RU2136-4BB0	14 ... 20
22	33	3RV2332-4PC10	3RT2035-1AP00	3RT2027-1AP00	S2/S2/S0/S2	3RU2136-4DB0	18 ... 25
22	33	3RV2332-4UC10	3RT2035-1AP00	3RT2027-1AP00	S2/S2/S0/S2	3RU2136-4DB0	18 ... 25
30	44	3RV2332-4VC10	3RT2036-1AP00	3RT2027-1AP00	S2/S2/S0/S2	3RU2136-4EB0	22 ... 32
30	44	3RV2332-4WC10	3RT2036-1AP00	3RT2027-1AP00	S2/S2/S0/S2	3RU2136-4EB0	22 ... 32
37	53	3RV2332-4XC10	3RT2037-1AP00	3RT2035-1AP00	S2/S2/S2/S2	3RU2136-4FB0	28 ... 40
45	64	3RV2332-4JC10	3RT2037-1AP00	3RT2035-1AP00	S2/S2/S2/S2	3RU2136-4GB0	36 ... 45
45	64	3RV2331-4RC10 + 3RV2332-4KC10	3RT2038-1AP00	3RT2035-1AP00	S2/S2/S2/S2/S2	3RU2136-4GB0	36 ... 45
55	78	3RV2331-4RC10 + 3RV2332-4RC10	3RT2038-1AP00	3RT2035-1AP00	S2/S2/S2/S2/S2	3RU2136-4HB0	40 ... 50
<b>Type of coordination 2</b>							
5.5	9.2	3RV2321-1JC10	3RT2026-1AP00	3RT2026-1AP00	S0/S0/S0/S0	3RU2126-1GB0	4.5 ... 6.3
7.5	12.4	3RV2321-1KC10	3RT2026-1AP00	3RT2026-1AP00	S0/S0/S0/S0	3RU2116-1HB0	5.5 ... 8.0
11	17.6	3RV2321-4BC10	3RT2027-1AP00	3RT2027-1AP00	S0/S0/S0/S0	3RU2126-1KB0	9.0 ... 12.5
11	17.6	3RV2321-4CC10	3RT2027-1AP00	3RT2027-1AP00	S0/S0/S0/S0	3RU2126-1KB0	9.0 ... 12.5
15	23	3RV2321-4DC10	3RT2027-1AP00	3RT2027-1AP00	S0/S0/S0/S0	3RU2126-4AB0	11.0 ... 16.0
15	23	3RV2332-4DC10	3RT2035-1AP00	3RT2026-1AP00	S2/S2/S0/S2	3RU2136-4AB0	11.0 ... 16.0
15	23	3RV2332-4DC10	3RT2035-1AP00	3RT2026-1AP00	S2/S2/S0/S2	3RU2136-4BB0	14.0 ... 20.0
15	23	3RV2332-4EC10	3RT2035-1AP00	3RT2026-1AP00	S2/S2/S0/S2	3RU2136-4BB0	14.0 ... 20.0
18.5	28	3RV2332-4EC10	3RT2035-1AP00	3RT2026-1AP00	S2/S2/S0/S2	3RU2136-4BB0	14.0 ... 20.0

## Selection tables 500 V AC

4.6 Motor starter protector + contactor assembly for star-delta (wye-delta) start + 3RB22, 3RB23, 3RB24 electronic overload relay, or 3UF7, 3RB3

Standard three-phase motor 4-pole at 500 V AC <sup>1)</sup>		Motor starter protector	Contactors <sup>2)</sup>		Size	Overload relay (thermal)	Setting range Overload release Overload relay
Stand- ard output P	Motor current I		Line contactor + delta contactor	Star contactor			
kW	A		Article No.	Article No.		Article No.	A
18.5	28	3RV2332-4PC10	3RT2035-1AP00	3RT2026-1AP00	S2/S2/S0/S2	3RU2136-4BB0	14.0 ... 20.0
22	33	3RV2332-4PC10	3RT2035-1AP00	3RT2027-1AP00	S2/S2/S0/S2	3RU2136-4DB0	18 ... 25
22	33	3RV2332-4UC10	3RT2035-1AP00	3RT2027-1AP00	S2/S2/S0/S2	3RU2136-4DB0	18 ... 25
30	44	3RV2332-4VC10	3RT2036-1AP00	3RT2027-1AP00	S2/S2/S0/S2	3RU2136-4EB0	22 ... 32
30	44	3RV2332-4WC10	3RT2036-1AP00	3RT2027-1AP00	S2/S2/S0/S2	3RU2136-4EB0	22 ... 32
37	53	3RV2332-4XC10	3RT2037-1AP00	3RT2035-1AP00	S2/S2/S2/S2	3RU2136-4FB0	28 ... 40
45	64	3RV2332-4JC10	3RT2037-1AP00	3RT2035-1AP00	S2/S2/S2/S2	3RU2136-4GB0	36 ... 45
45	64	3RV2331-4RC10 + 3RV2332-4KC10	3RT2038-1AP00	3RT2035-1AP00	S2/S2/S2/S2/ S2	3RU2136-4GB0	36 ... 45
55	78	3RV2331-4RC10 + 3RV2332-4RC10	3RT2038-1AP00	3RT2035-1AP00	S2/S2/S2/S2/ S2	3RU2136-4HB0	40 ... 50

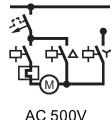
Article numbers for basic versions with screw terminals and spring-loaded terminals also possible.

- 1) Guide value for 4-pole standard motors at 500 V AC, 50 Hz. Selection depends on the concrete startup and rated data of the protected motor.
- 2) Rated control supply voltage 230 V AC, 50 Hz, other control voltages possible.

4.6 Motor starter protector + contactor assembly for star-delta (wye-delta) start + 3RB22, 3RB23, 3RB24 electronic overload relay, or 3UF7, 3RB3

## 4.6 Motor starter protector + contactor assembly for star-delta (wye-delta) start + 3RB22, 3RB23, 3RB24 electronic overload relay, or 3UF7, 3RB3

**CLASS 10, types of coordination 1 and 2,  
short-circuit breaking capacity  $I_q = 100 \text{ kA} / 70 \text{ kA}$**



Standard three-phase motor 4-pole at 500 V AC <sup>1)</sup>		Motor starter protector	Contactors <sup>2)</sup>		Size	Overload relay (electronic) or current measuring module <sup>3)</sup>	Setting range Overload release Overload relay	$I_q$
Stand- ard output P	Motor current $I$		Line contactor + delta contactor	Star contactor				
kW	A		Article No.	Article No.				
<b>Type of coordination 1 with 3RB3, short-circuit breaking capacity <math>I_q = 100 \text{ kA} / 70 \text{ kA}</math></b>								
5.5	9.2	3RV2311-1JC10	3RT2017-1AP01	3RT2017-1AP01	S00/S00/S00/S00	3RB3016-1SB0	3 ... 12	100
7.5	12.4	3RV2311-1KC10	3RT2018-1AP01	3RT2017-1AP01	S00/S00/S00/S00	3RB3016-1SB0	3 ... 12	100
7.5	12.4	3RV2311-1KC10	3RT2024-1AP00	3RT2024-1AP00	S0/S0/S0/S0	3RB3026-1SB0	3 ... 12	100
11	17.6	3RV2321-4BC10	3RT2026-1AP00	3RT2026-1AP00	S0/S0/S0/S0	3RB3026-1QBO	6 ... 25	100
11	17.6	3RV2321-4CC10	3RT2026-1AP00	3RT2026-1AP00	S0/S0/S0/S0	3RB3026-1QBO	6 ... 25	100
15	23	3RV2321-4DC10	3RT2027-1AP00	3RT2027-1AP00	S0/S0/S0/S0	3RB3026-1QBO	6 ... 25	100
18.5	28	3RV2321-4NC10	3RT2027-1AP00	3RT2027-1AP00	S0/S0/S0/S0	3RB3026-1VB0	10 ... 40	100
18.5	28	3RV2321-4EC10	3RT2027-1AP00	3RT2027-1AP00	S0/S0/S0/S0	3RB3026-1VB0	10 ... 40	100
18.5	28	3RV2332-4PC10	3RT2035-1AP00	3RT2026-1AP00	S2/S2/S0/S2	3RB3036-1UB0	12.5 ... 50	100
22	33	3RV2332-4PC10	3RT2035-1AP00	3RT2027-1AP00	S2/S2/S0/S2	3RB3036-1UB0	12.5 ... 50	100
30	44	3RV2332-4WC10	3RT2036-1AP00	3RT2027-1AP00	S2/S2/S0/S2	3RB3036-1UB0	12.5 ... 50	100
37	53	3RV2031-4XB10	3RT2037-1AP00	3RT2035-1AP00	S2/S2/S2/S2	3RB3036-1UB0	12.5 ... 50	70
45	64	3RV2031-4JB10	3RT2037-1AP00	3RT2035-1AP00	S2/S2/S2/S2	3RB3036-1UB0	12.5 ... 50	70

## Selection tables 500 V AC

4.6 Motor starter protector + contactor assembly for star-delta (wye-delta) start + 3RB22, 3RB23, 3RB24 electronic overload relay, or 3UF7, 3RB3

Standard three-phase motor 4-pole at 500 V AC <sup>1)</sup>		Motor starter protector	Contactors <sup>2)</sup>		Size	Overload relay (electronic) or current measuring module <sup>3)</sup>	Setting range Overload release Overload relay	$I_q$
Stand- ard output $P$	Motor current $I$		Line contactor + delta contactor	Star contactor				
kW	A		Article No.	Article No.				
<b>Type of coordination 1 with 3RB22, 3RB23, 3RB24 or 3UF7, short-circuit breaking capacity <math>I_q = 100 \text{ kA} / 70 \text{ kA}</math></b>								
5.5	9.2	3RV2311-1JC10	3RT2017-1AP01	3RT2017-1AP01	S00/S00/S00/-	3UF71x1-1AA00-0/3RB2906-2DG1	2.4 ... 25	100
7.5	12.4	3RV2311-1KC10	3RT2018-1AP01	3RT2017-1AP01	S00/S00/S00/-	3UF71x1-1AA00-0/3RB2906-2DG1	2.4 ... 25	100
7.5	12.4	3RV2321-1KC10	3RT2024-1AP00	3RT2024-1AP00	S0/S0/S0/-	3UF71x1-1AA00-0/3RB2906-2DG1	2.4 ... 25	100
11	17.6	3RV2321-4BC10	3RT2026-1AP00	3RT2026-1AP00	S0/S0/S0/-	3UF71x1-1AA00-0/3RB2906-2DG1	2.4 ... 25	100
11	17.6	3RV2321-4CC10	3RT2026-1AP00	3RT2026-1AP00	S0/S0/S0/-	3UF71x1-1AA00-0/3RB2906-2DG1	2.4 ... 25	100
15	23	3RV2321-4DC10	3RT2027-1AP00	3RT2027-1AP00	S0/S0/S0/-	3UF71x1-1AA00-0/3RB2906-2DG1	2.4 ... 25	100
18.5	28	3RV2321-4NC10	3RT2027-1AP00	3RT2027-1AP00	S0/S0/S0/-	3UF71x2-1AA00-0/3RB2906-2JG1	10 ... 100	100
18.5	28	3RV2321-4EC10	3RT2027-1AP00	3RT2027-1AP00	S0/S0/S0/-	3UF71x2-1AA00-0/3RB2906-2JG1	10 ... 100	100
18.5	28	3RV2332-4PC10	3RT2035-1AP00	3RT2026-1AP00	S2/S2/S0/-	3UF71x2-1AA00-0/3RB2906-2JG1	10 ... 100	100
22	33	3RV2332-4PC10	3RT2035-1AP00	3RT2027-1AP00	S2/S2/S0/-	3UF71x2-1AA00-0/3RB2906-2JG1	10 ... 100	100

**4.6 Motor starter protector + contactor assembly for star-delta (wye-delta) start + 3RB22, 3RB23, 3RB24 electronic overload relay, or 3UF7, 3RB3**

Standard three-phase motor 4-pole at 500 V AC <sup>1)</sup>		Motor starter protector	Contactors <sup>2)</sup>		Size	Overload relay (electronic) or current measuring module <sup>3)</sup>	Setting range Overload release Overload relay	$I_q$
Stand- ard output P	Motor current $I$		Line contactor + delta contactor	Star contactor				
kW	A		Article No.	Article No.				
30	44	3RV2332-4WC10	3RT2036-1AP00	3RT2027-1AP00	S2/S2/S0/-	3UF71x2-1AA00-0/3RB2906-2JG1	10 ... 100	100
37	53	3RV2331-4XB10	3RT2037-1AP00	3RT2035-1AP00	S2/S2/S2/-	3UF71x2-1AA00-0/3RB2906-2JG1	10 ... 100	70
45	64	3RV2331-4JB10	3RT2037-1AP00	3RT2035-1AP00	S2/S2/S2/-	3UF71x2-1AA00-0/3RB2906-2JG1	10 ... 100	70
<b>Type of coordination 2 with 3RB3, short-circuit breaking capacity <math>I_q = 100 \text{ kA} / 70 \text{ kA}</math></b>								
5.5	9.2	3RV2321-1JC10	3RT2026-1AP00	3RT2026-1AP00	S0/S0/S0/S0	3RB3026-1SB0	3 ... 12	100
7.5	12.4	3RV2321-1KC10	3RT2026-1AP00	3RT2026-1AP00	S0/S0/S0/S0	3RB3026-1SB0	3 ... 12	100
11	17.6	3RV2321-4BC10	3RT2027-1AP00	3RT2027-1AP00	S0/S0/S0/S0	3RB3026-1QB0	6 ... 25	100
11	17.6	3RV2321-4CC10	3RT2027-1AP00	3RT2027-1AP00	S0/S0/S0/S0	3RB3026-1QB0	6 ... 25	100
15	23	3RV2321-4DC10	3RT2027-1AP00	3RT2027-1AP00	S0/S0/S0/S0	3RB3026-1QB0	6 ... 25	100
18.5	28	3RV2332-4PC10	3RT2035-1AP00	3RT2026-1AP00	S2/S2/S0/S2	3RB3036-1UB0	12.5 ... 50	100
22	33	3RV2332-4PC10	3RT2035-1AP00	3RT2027-1AP00	S2/S2/S0/S2	3RB3036-1UB0	12.5 ... 50	100
30	44	3RV2332-4WC10	3RT2036-1AP00	3RT2027-1AP00	S2/S2/S0/S2	3RB3036-1UB0	12.5 ... 50	100
37	53	3RV2031-4XB10	3RT2037-1AP00	3RT2035-1AP00	S2/S2/S2/S2	3RB3036-1UB0	12.5 ... 50	70
45	64	3RV2031-4JB10	3RT2037-1AP00	3RT2035-1AP00	S2/S2/S2/S2	3RB3036-1UB0	12.5 ... 50	70

## Selection tables 500 V AC

4.6 Motor starter protector + contactor assembly for star-delta (wye-delta) start + 3RB22, 3RB23, 3RB24 electronic overload relay, or 3UF7, 3RB3

Standard three-phase motor 4-pole at 500 V AC <sup>1)</sup>		Motor starter protector	Contactors <sup>2)</sup>		Size	Overload relay (electronic) or current measuring module <sup>3)</sup>	Setting range Overload release Overload relay	$I_q$
Stand- ard output $P$	Motor current $I$		Line contactor + delta contactor	Star contactor				
kW	A		Article No.	Article No.				
<b>Type of coordination 2 with 3RB22, 3RB23, 3RB24 or 3UF7, short-circuit breaking capacity <math>I_q = 100 \text{ kA} / 70 \text{ kA}</math></b>								
5.5	9.2	3RV2321-1JC10	3RT2026-1AP00	3RT2026-1AP00	S0/S0/S0/-	3UF71x1-1AA00-0/3RB2906-2DG1	2.4 ... 25	100
7.5	12.4	3RV2321-1KC10	3RT2026-1AP00	3RT2026-1AP00	S0/S0/S0/-	3UF71x1-1AA00-0/3RB2906-2DG1	2.4 ... 25	100
11	17.6	3RV2321-4BC10	3RT2027-1AP00	3RT2027-1AP00	S0/S0/S0/-	3UF71x1-1AA00-0/3RB2906-2DG1	2.4 ... 25	100
11	17.6	3RV2321-4CC10	3RT2027-1AP00	3RT2027-1AP00	S0/S0/S0/-	3UF71x1-1AA00-0/3RB2906-2DG1	2.4 ... 25	100
15	23	3RV2321-4DC10	3RT2027-1AP00	3RT2027-1AP00	S0/S0/S0/-	3UF71x1-1AA00-0/3RB2906-2DG1	2.4 ... 25	100
18.5	28	3RV2332-4PC10	3RT2035-1AP00	3RT2026-1AP00	S2/S2/S0/-	3UF71x2-1AA00-0/3RB2906-2JG1	10 ... 100	100
22	33	3RV2332-4PC10	3RT2035-1AP00	3RT2027-1AP00	S2/S2/S0/-	3UF71x2-1AA00-0/3RB2906-2JG1	10 ... 100	100
30	44	3RV2332-4WC10	3RT2036-1AP00	3RT2027-1AP00	S2/S2/S0/-	3UF71x2-1AA00-0/3RB2906-2JG1	10 ... 100	100

**4.6 Motor starter protector + contactor assembly for star-delta (wye-delta) start + 3RB22, 3RB23, 3RB24 electronic overload relay, or 3UF7, 3RB3**

Standard three-phase motor 4-pole at 500 V AC <sup>1)</sup>		Motor starter protector	Contactors <sup>2)</sup>		Size	Overload relay (electronic) or current measuring module <sup>3)</sup>	Setting range Overload release Overload relay	$I_q$
Stand- ard output P	Motor current $I$		Line contactor + delta contactor	Star contactor				
kW	A		Article No.	Article No.				
37	53	3RV2331-4XB10	3RT2037-1AP00	3RT2035-1AP00	S2/S2/S2/-	3UF71x2-1AA00-0/3RB2906-2JG1	10 ... 100	70
45	64	3RV2331-4JB10	3RT2037-1AP00	3RT2035-1AP00	S2/S2/S2/-	3UF71x2-1AA00-0/3RB2906-2JG1	10 ... 100	70

Article numbers for basic versions with screw terminals and spring-loaded terminals also possible.

1) Guide value for 4-pole standard motors at 500 V AC, 50 Hz. Selection depends on the concrete startup and rated data of the protected motor.

2) Rated control supply voltage 230 V AC, 50 Hz, other control voltages possible.

3) The necessary current measuring modules ( $x = 0$ ) or the current measuring modules / voltage measuring modules ( $x = 1$ ) are specified in each case.

The corresponding basic units 3RB22 / 3RB23 / 3RB24 or 3UF7 are additionally required.

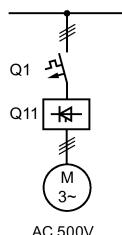
## 4.7 Motor starter protector + 3RW40 soft starter

### Restrictions

The soft starters are dimensioned in accordance with IEC60947-4-2. In accordance with the device standard, the maximum motor current to be taken into account is 8 times the rated motor current (locked rotor current). For the correct dimensioning of soft starters for motors with high starting current ratios ( $I/I_e \geq 8$ ), we recommend our Simulation Tool for Soft Starters (STS):

- Download (<http://support.automation.siemens.com/WW/view/en/101494917>)
- Readme (<http://support.automation.siemens.com/WW/view/en/101494773>)

**CLASS 10, type of coordination 1,  
short-circuit breaking capacity  $I_q = 10 \text{ kA} / 5 \text{ kA}$**



Standard three-phase motor 4-pole at 500 V AC <sup>1)</sup>		Setting range Overload release Motor starter protector	Motor starter protector Motor protection <sup>2)</sup>	Soft starter	Size MSP / 3RW40	$I_q$
Standard output P	Motor current I					
kW	A	A	Article No.	Article No.		kA
7.5	12.5	11 ... 16	3RV2021-4AA10	3RW4024-1BB14	S0/S0	10
15	25	20 ... 25	3RV2021-4DA10	3RW4026-1BB14	S0/S0	10
18.5	32	27 ... 32	3RV2021-4EA10	3RW4027-1BB14	S0/S0	10
22 <sup>3)</sup>	38	34 ... 40	3RV2021-4FA10	3RW4028-1BB14	S0/S0	10

Standard three-phase motor 4-pole at 500 V AC <sup>1)</sup>		Setting range Overload release Motor starter protector	Motor starter protector Motor protection <sup>2)</sup>	Soft starter	Size MSP / 3RW40	$I_q$
Standard output P	Motor current I					
kW	A	A	Article No.	Article No.		kA
30	45	42 ... 52	3RV2031-4WA10	3RW4036-1BB15	S2/S2	10
37	63	54 ... 65	3RV2031-4JA10	3RW4037-1BB15	S2/S2	5
45	72	62 ... 73	3RV2031-4KA10	3RW4038-1BB15	S2/S2	5
55	80	75 ... 93	3RV2041-4YA10	3RW4046-1BB15	S3/S3	5
75	100	80 ... 100	3RV2041-4MA10	3RW4047-1BB15	S3/S3	5

Article numbers for basic versions with screw terminals and spring-loaded terminals also possible. 3RA2921-1BA00 link module can only be used with screw terminals.

- 1) Guide value for 4-pole standard motors at 500 V AC, 50 Hz. Selection depends on the concrete startup and rated data of the protected motor.
- 2) Rated currents taken into account at 40 °C ambient temperature. Rated control supply voltage 230 V AC, 50 Hz, other control voltages possible.
- 3) Discrete mounting only, without a link module.

## 4.8 Motor starter protector + 3RW44 soft starter

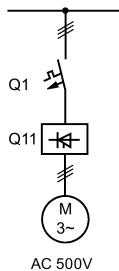
### Restrictions

The soft starters are dimensioned in accordance with IEC60947-4-2. In accordance with the device standard, the maximum motor current to be taken into account is 8 times the rated motor current (locked rotor current).

For the correct dimensioning of soft starters for motors with high starting current ratios ( $I/I_e \geq 8$ ), we recommend our "Simulation Tool for Soft Starters (STS)":

- Download (<http://support.automation.siemens.com/WW/view/en/101494917>)
- Readme (<http://support.automation.siemens.com/WW/view/en/101494773>)

**CLASS 10, type of coordination 1,  
short-circuit breaking capacity  $I_q = 32 \text{ kA} / 10 \text{ kA}$**



Standard three-phase motor 4-pole at 500 V AC <sup>1)</sup>		Setting range Overload release Motor starter protector	Motor starter protector Motor protection <sup>2)</sup>	Soft starter	Size MSP / 3RW44	$I_q$
Standard output P	Motor current I					
kW	A	A	Article No.	Article No.		kA
18.5 <sup>3)</sup>	29	27 ... 32	3RV2021-4EA10	3RW4422-1BC45	S0/FS1	10
22 <sup>3)</sup>	36	34 ... 40	3RV2021-4FA10	3RW4423-1BC45	S0/FS1	10
18.5 <sup>3)</sup>	29	22 ... 32	3RV2031-4EA10	3RW4422-1BC45	S2/FS1	32
22 <sup>3)</sup>	36	35 ... 45	3RV2031-4VA10	3RW4423-1BC45	S2/FS1	32
30 <sup>3)</sup>	47	42 ... 52	3RV2031-4WA10	3RW4424-1BC45	S2/FS1	32
37 <sup>3)</sup>	57	54 ... 65	3RV2031-4JA10	3RW4425-1BC45	S2/FS1	32
45 <sup>3)</sup>	77	70 ... 80	3RV2031-4RA10	3RW4426-1BC45	S2/FS1	32

Standard three-phase motor 4-pole at 500 V AC <sup>1)</sup>		Setting range Overload release Motor starter protector	Motor starter protector Motor protection <sup>2)</sup>	Soft starter	Size MSP / 3RW44	I <sub>q</sub>
Standard output P	Motor current I					
kW	A	A	Article No.	Article No.		kA
45 <sup>3)</sup>	77	75 ... 93	3RV2042-4YA10	3RW4426-1BC45	S3/FS1	10
55 <sup>3)</sup>	93	80 ... 100	3RV2042-4MA10	3RW4427-1BC45	S3/FS1	10

Article numbers for basic versions with screw terminals and spring-loaded terminals also possible. 3RA2921-1BA00 link module can only be used with screw terminals.

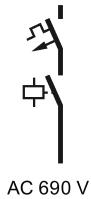
- <sup>1)</sup> Guide value for 4-pole standard motors at 500 V AC, 50 Hz. Selection depends on the concrete startup and rated data of the protected motor.
- <sup>2)</sup> Rated currents taken into account at 40 °C ambient temperature. Rated control supply voltage 230 V AC, 50 Hz, other control voltages possible.
- <sup>3)</sup> Discrete mounting only, without a link module.

# 5

## Selection tables up to 690 V

### 5.1 Motor starter protector + contactor

CLASS 10, type of coordination 1,  
short-circuit breaking capacity  $I_q = 100 \text{ kA} / 20 \text{ kA}$



AC 690 V

Standard three-phase motor 4-pole at 690 V AC <sup>1)</sup>		Standard motor starter protector with limiter function <sup>2)</sup>	Motor starter protector for motor protection Maximum permitted setting range overload release			Contactor <sup>3)</sup>	Size	$I_q$
Standard output P	Motor current <b>I</b>		IE1 / IE2 motors	IE3 / IE4 motors				
kW	A	Article No.	A	A	Article No.	Article No.		<b>kA</b>
0.06	0.12	–	0.11 ... 0.16	0.11 ... 0.14	3RV2011-0AA10	3RT2015-1AP01	S00/S00	100
0.09	0.17	–	0.14 ... 0.20	0.14 ... 0.18	3RV2011-0BA10	3RT2015-1AP01	S00/S00	100
0.12	0.23	–	0.18 ... 0.25	0.18 ... 0.22	3RV2011-0CA10	3RT2015-1AP01	S00/S00	100
0.12	0.23	–	0.22 ... 0.32	0.22 ... 0.28	3RV2011-0DA10	3RT2015-1AP01	S00/S00	100
0.18	0.35	–	0.28 ... 0.40	0.28 ... 0.35	3RV2011-0EA10	3RT2015-1AP01	S00/S00	100
0.25	0.49	–	0.35 ... 0.50	0.35 ... 0.45	3RV2011-0FA10	3RT2015-1AP01	S00/S00	100
0.25	0.49	–	0.45 ... 0.63	0.45 ... 0.55	3RV2011-0GA10	3RT2015-1AP01	S00/S00	100
0.37	0.64	–	0.55 ... 0.80	0.55 ... 0.7	3RV2011-0HA10	3RT2015-1AP01	S00/S00	100
0.55	0.87	–	0.7 ... 1.00	0.7 ... 0.9	3RV2011-0JA10	3RT2015-1AP01	S00/S00	100
0.75	1.1	–	0.9 ... 1.25	0.9 ... 1.1	3RV2011-0KA10	3RT2015-1AP01	S00/S00	100
1.1	1.6	–	1.1 ... 1.6	1.1 ... 1.4	3RV2011-1AA10	3RT2015-1AP01	S00/S00	100

Standard three-phase motor 4-pole at 690 V AC <sup>1)</sup>		Standard motor starter protector with limiter function <sup>2)</sup>	Motor starter protector for motor protection Maximum permitted setting range overload release			Contactor <sup>3)</sup>	Size	I <sub>q</sub> kA
Standard output P kW	Motor current I A	Article No.	A IE1 / IE2 motors	A IE3 / IE4 motors				
1.1	1.6	3RV2321-4EC10	1.4 ... 2.0	1.4 ... 1.8	3RV2011-1BA10	3RT2015-1AP01	S00/S00	100
1.5	2.1		1.8 ... 2.5	1.8 ... 2.2	3RV2011-1CA10	3RT2015-1AP01	S00/S00	100
2.2	2.8		2.2 ... 3.2	2.2 ... 2.8	3RV2011-1DA10	3RT2015-1AP01	S00/S00	100
3	3.8		2.8 ... 4.0	2.8 ... 3.5	3RV2011-1EA10	3RT2015-1AP01	S00/S00	100
3	3.8		3.5 ... 5.0	3.5 ... 4.5	3RV2011-1FA10	3RT2015-1AP01	S00/S00	100
4	4.9		3.5 ... 5.0	3.5 ... 4.5	3RV2011-1FA10	3RT2015-1AP01	S00/S00	100
4	4.9		4.5 ... 6.3	4.5 ... 5.5	3RV2011-1GA10	3RT2015-1AP01	S00/S00	100
5.5	6.7		5.5 ... 8.0	5.5 ... 7.0	3RV2011-1HA10	3RT2018-1AP01	S00/S00	100
7.5	8.9		7.0 ... 10.0	7.0 ... 9.0	3RV2011-1JA10	3RT2018-1AP01	S00/S00	100
7.5	8.9		9.0 ... 12.5	9.0 ... 10	3RV2021-1KA10	3RT2025-1AP00	S0/S0	20
11	12.8		10 ... 16	10 ... 13	3RV2021-4AA10	3RT2025-1AP00	S0/S0	20
15	17		13 ... 20	13 ... 16	3RV2021-4BA10	3RT2027-1AP00	S0/S0	20
18.5	21		16 ... 22	16 ... 18	3RV2021-4CA10	3RT2027-1AP00	S0/S0	20
11	12.8	3RV1331-4HC10	10 ... 16	10 ... 13	3RV2021-4AA10	3RT2025-1AP00	S0/S0	100
15	17		13 ... 20	13 ... 16	3RV2021-4BA10	3RT2028-1AP00	S0/S0	100
18.5	21		16 ... 22	16 ... 18	3RV2021-4CA10	3RT2028-1AP00	S0/S0	100
18.5	21		18 ... 25	18 ... 23	3RV2021-4DA10	3RT2028-1AP00	S0/S0	100

*Selection tables up to 690 V*

*5.1 Motor starter protector + contactor*

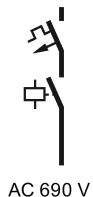
Standard three-phase motor 4-pole at 690 V AC <sup>1)</sup>		Standard motor starter protector with limiter function <sup>2)</sup>	Motor starter protector for motor protection Maximum permitted setting range overload release			Contactor <sup>3)</sup>	Size	$I_q$
Standard output P	Motor current I		IE1 / IE2 motors	IE3 / IE4 motors				
kW	A	Article No.	A	A	Article No.	Article No.		kA
11	12.8	—	9.5 ... 14	9.5 ... 12	3RV2032-4SA10	3RT2035-1AP00	S2/S2	100
11	12.8	—	12 ... 17	12 ... 14	3RV2032-4TA10	3RT2035-1AP00	S2/S2	100
15	17	—	14 ... 20	14 ... 18	3RV2032-4BA10	3RT2035-1AP00	S2/S2	100
18.5	21	—	18 ... 25	18 ... 22	3RV2032-4DA10	3RT2035-1AP00	S2/S2	100
22	24	3RV2332-4RC10	22 ... 32	22 ... 28	3RV2032-4EA10	3RT2037-1AP00	S2/S2	100
30	32		28 ... 36	28 ... 32	3RV2032-4PA10	3RT2037-1AP00	S2/S2	100
30	32		32 ... 40	32 ... 35	3RV2032-4UA10	3RT2037-1AP00	S2/S2	100
37	39		35 ... 45	35 ... 42	3RV2032-4VA10	3RT2037-1AP00	S2/S2	100
45	47		42 ... 52	42 ... 49	3RV2032-4WA10	3RT2037-1AP00	S2/S2	100
55	57		49 ... 59	49 ... 54	3RV2032-4XA10	3RT2038-1AP00	S2/S2	100
55	57		54 ... 65	54 ... 65	3RV2032-4JA10	3RT2038-1AP00	S2/S2	100

— : Not required

Article numbers for basic versions with screw terminals and spring-loaded terminals also possible.

- <sup>1)</sup> Guide value for 4-pole standard motors at 690 V AC, 50 Hz. Selection depends on the concrete startup data and rated data of the motor to be protected.
- <sup>2)</sup> The motor starter protector must be set to the maximum current value. Infeed on limiter must be from above.
- <sup>3)</sup> Rated control supply voltage 230 V AC, 50 Hz, other control voltages possible.

**CLASS 10, type of coordination 2,  
short-circuit breaking capacity  $I_q = 100 \text{ kA} / 20 \text{ kA}$**



AC 690 V

Standard three-phase motor 4-pole at 690 V AC <sup>1)</sup>		Standard motor starter protector with limiter function <sup>2)</sup>	Motor starter protector for motor protection Maximum permitted setting range overload release			Contactor <sup>3)</sup>	Size	$I_q$ kA
Standard output P	Motor current I		IE1 / IE2 motors	IE3 / IE4 motors				
kW	A	Article No.	A	A	Article No.	Article No.		kA
0.06	0.12	–	0.11 ... 0.16	0.11 ... 0.14	3RV2011-0AA10	3RT2015-1AP01	S00/S00	100
0.09	0.17	–	0.14 ... 0.20	0.14 ... 0.18	3RV2011-0BA10	3RT2015-1AP01	S00/S00	100
0.12	0.23	–	0.18 ... 0.25	0.18 ... 0.22	3RV2011-0CA10	3RT2015-1AP01	S00/S00	100
0.12	0.23	–	0.22 ... 0.32	0.22 ... 0.28	3RV2011-0DA10	3RT2015-1AP01	S00/S00	100
0.18	0.35	–	0.28 ... 0.40	0.28 ... 0.35	3RV2011-0EA10	3RT2015-1AP01	S00/S00	100
0.25	0.49	–	0.35 ... 0.50	0.35 ... 0.45	3RV2011-0FA10	3RT2015-1AP01	S00/S00	100
0.25	0.49	–	0.45 ... 0.63	0.45 ... 0.55	3RV2011-0GA10	3RT2015-1AP01	S00/S00	100
0.37	0.64	–	0.55 ... 0.80	0.55 ... 0.7	3RV2011-0HA10	3RT2015-1AP01	S00/S00	100
0.55	0.87	–	0.7 ... 1.00	0.7 ... 0.9	3RV2011-0JA10	3RT2015-1AP01	S00/S00	100
0.75	1.1	–	0.9 ... 1.25	0.9 ... 1.1	3RV2011-0KA10	3RT2015-1AP01	S00/S00	100
1.1	1.6	–	1.1 ... 1.6	1.1 ... 1.4	3RV2011-1AA10	3RT2015-1AP01	S00/S00	100
1.1	1.6	–	1.4 ... 2.0	1.4 ... 1.8	3RV2011-1BA10	3RT2015-1AP01	S00/S00	100

*Selection tables up to 690 V*

*5.1 Motor starter protector + contactor*

Standard three-phase motor 4-pole at 690 V AC <sup>1)</sup>		Standard motor starter protector with limiter function <sup>2)</sup>	Motor starter protector for motor protection Maximum permitted setting range overload release			Contactor <sup>3)</sup>	Size	I <sub>q</sub>
Standard output P	Motor current I		IE1 / IE2 motors	IE3 / IE4 motors				
kW	A	Article No.	A	A	Article No.	Article No.		kA
1.5	2.1	3RV2321-4EC10	1.8 ... 2.5	1.8 ... 2.2	3RV2011-1CA10	3RT2015-1AP01	S00/S00	100
2.2	2.8		2.2 ... 3.2	2.2 ... 2.8	3RV2021-1DA10	3RT2024-1AP00	S0/S0	100
3	3.8		2.8 ... 4.0	2.8 ... 3.5	3RV2021-1EA10	3RT2024-1AP00	S0/S0	100
3	3.8		3.5 ... 5.0	3.5 ... 4.5	3RV2021-1FA10	3RT2024-1AP00	S0/S0	100
4	4.9		3.5 ... 5.0	3.5 ... 4.5	3RV2021-1FA10	3RT2024-1AP00	S0/S0	100
4	4.9		4.5 ... 6.3	4.5 ... 5.5	3RV2021-1GA10	3RT2024-1AP00	S0/S0	100
5.5	6.7		5.5 ... 8.0	5.5 ... 7.0	3RV2021-1HA10	3RT2024-1AP00	S0/S0	100
7.5	8.9		7.0 ... 10.0	7.0 ... 9.0	3RV2021-1JA10	3RT2024-1AP00	S0/S0	100
7.5	8.9		9.0 ... 12.5	9.0 ... 10	3RV2021-1KA10	3RT2027-1AP00	S0/S0	20
11	12.8		10 ... 16	10 ... 13	3RV2021-4AA10	3RT2027-1AP00	S0/S0	20
15	17		13 ... 20	13 ... 16	3RV2021-4BA10	3RT2027-1AP00	S0/S0	20
18.5	21		16 ... 22	16 ... 18	3RV2021-4CA10	3RT2027-1AP00	S0/S0	20
11	12.8	3RV1331-4HC10	10 ... 16	10 ... 13	3RV2021-4AA10	3RT2027-1AP00	S0/S0	100
15	17		13 ... 20	13 ... 16	3RV2021-4BA10	3RT2028-1AP00	S0/S0	100
18.5	21		16 ... 22	16 ... 18	3RV2021-4CA10	3RT2028-1AP00	S0/S0	100
18.5	21		18 ... 25	18 ... 23	3RV2021-4DA10	3RT2028-1AP00	S0/S0	100

Standard three-phase motor 4-pole at 690 V AC <sup>1)</sup>		Standard motor starter protector with limiter function <sup>2)</sup>	Motor starter protector for motor protection Maximum permitted setting range overload release			Contactor <sup>3)</sup>	Size	I <sub>q</sub>
Standard output P	Motor current I		IE1 / IE2 motors	IE3 / IE4 motors				
kW	A	Article No.	A	A	Article No.	Article No.		kA
11	12.8	–	9.5 ... 14	9.5 ... 12	3RV2032-4SA10	3RT2035-1AP00	S2/S2	100
11	12.8	–	12 ... 17	12 ... 14	3RV2032-4TA10	3RT2035-1AP00	S2/S2	100
15	17	–	14 ... 20	14 ... 18	3RV2032-4BA10	3RT2035-1AP00	S2/S2	100
18.5	21	–	18 ... 25	18 ... 22	3RV2032-4DA10	3RT2035-1AP00	S2/S2	100
22	24	3RV2332-4RC10	22 ... 32	22 ... 28	3RV2032-4EA10	3RT2037-1AP00	S2/S2	100
30	32		28 ... 36	28 ... 32	3RV2032-4PA10	3RT2037-1AP00	S2/S2	100
30	32		32 ... 40	32 ... 35	3RV2032-4UA10	3RT2037-1AP00	S2/S2	100
37	39		35 ... 45	35 ... 42	3RV2032-4VA10	3RT2037-1AP00	S2/S2	100
45	47		42 ... 52	42 ... 49	3RV2032-4WA10	3RT2037-1AP00	S2/S2	100
55	57		49 ... 59	49 ... 54	3RV2032-4XA10	3RT2038-1AP00	S2/S2	100
55	57		54 ... 65	54 ... 65	3RV2032-4JA10	3RT2038-1AP00	S2/S2	100

— : Not required

Article numbers for basic versions with screw terminals and spring-loaded terminals also possible.

- 1) Guide value for 4-pole standard motors at 690 V AC, 50 Hz. Selection depends on the concrete startup data and rated data of the motor to be protected.
- 2) The motor starter protector must be set to the maximum current value. Infeed on limiter must be from above.
- 3) Rated control supply voltage 230 V AC, 50 Hz, other control voltages possible.

## 5.2 Motor starter protector + contactor + 3RU21 thermal overload relay

**CLASS 10, type of coordination 1,  
short-circuit breaking capacity  $I_q = 100 \text{ kA} / 20 \text{ kA}$**



Standard three-phase motor 4-pole at 690 V AC <sup>1)</sup>		Standard motor starter protector with limiter function <sup>2)</sup>	Motor starter protector for starter protection	Contactor <sup>3)</sup>	Size	Overload relay (thermal) <sup>4)</sup> Maximum permitted setting range overload release			
Stand- ard output P	Motor current I					IE1 / IE2 motors	IE3 / IE4 motors	$I_q$	
kW	A	Article No.	Article No.	Article No.	Article No.	A	A	kA	
0.06	0.12	–	3RV2311-0AC10	3RT2015-1AP01	S00/S00/S00	3RU2116-0AB0	0.11 ... 0.16	0.11 ... 0.14	100
0.09	0.17	–	3RV2311-0BC10	3RT2015-1AP01	S00/S00/S00	3RU2116-0BB0	0.14 ... 0.20	0.14 ... 0.18	100
0.12	0.23	–	3RV2311-0CC10	3RT2015-1AP01	S00/S00/S00	3RU2116-0CB0	0.18 ... 0.25	0.18 ... 0.22	100
0.12	0.23	–	3RV2311-0DC10	3RT2015-1AP01	S00/S00/S00	3RU2116-0DB0	0.22 ... 0.32	0.22 ... 0.28	100
0.18	0.35	–	3RV2311-0EC10	3RT2015-1AP01	S00/S00/S00	3RU2116-0EB0	0.28 ... 0.40	0.28 ... 0.35	100
0.25	0.49	–	3RV2311-0FC10	3RT2015-1AP01	S00/S00/S00	3RU2116-0FB0	0.35 ... 0.50	0.35 ... 0.45	100
0.25	0.49	–	3RV2311-0GC10	3RT2015-1AP01	S00/S00/S00	3RU2116-0GB0	0.45 ... 0.63	0.45 ... 0.55	100
0.37	0.64	–	3RV2311-0HC10	3RT2015-1AP01	S00/S00/S00	3RU2116-0HB0	0.55 ... 0.80	0.55 ... 0.7	100
0.55	0.87	–	3RV2311-0JC10	3RT2015-1AP01	S00/S00/S00	3RU2116-0JB0	0.7 ... 1.00	0.7 ... 0.9	100
0.75	1.1	–	3RV2311-0KC10	3RT2015-1AP01	S00/S00/S00	3RU2116-0KB0	0.9 ... 1.25	0.9 ... 1.1	100
1.1	1.6	–	3RV2311-1AC10	3RT2015-1AP01	S00/S00/S00	3RU2116-1AB0	1.1 ... 1.6	1.1 ... 1.4	100
1.1	1.6	–	3RV2311-1BC10	3RT2015-1AP01	S00/S00/S00	3RU2116-1BB0	1.4 ... 2.0	1.4 ... 1.8	100

## 5.2 Motor starter protector + contactor + 3RU21 thermal overload relay

Standard three-phase motor 4-pole at 690 V AC <sup>1)</sup>		Standard motor starter protector with limiter function <sup>2)</sup>	Motor starter protector for starter protection	Contactor <sup>3)</sup>	Size	Overload relay (thermal) <sup>4)</sup> Maximum permitted setting range overload release			
Stand- ard output P	Motor current I						IE1 / IE2 motors	IE3 / IE4 motors	I <sub>q</sub>
kW	A	Article No.	Article No.	Article No.		Article No.	A	A	kA
1.5	2.1	3RV2321-4EC10	3RV2311-1CC10	3RT2015-1AP01	S00/S00/S00	3RU2116-1CB0	1.8 ... 2.5	1.8 ... 2.2	100
2.2	2.8		3RV2311-1DC10	3RT2015-1AP01	S00/S00/S00	3RU2116-1DB0	2.2 ... 3.2	2.2 ... 2.8	100
3	3.8		3RV2311-1EC10	3RT2015-1AP01	S00/S00/S00	3RU2116-1EB0	2.8 ... 4.0	2.8 ... 3.5	100
3	3.8		3RV2311-1FC10	3RT2015-1AP01	S00/S00/S00	3RU2116-1FB0	3.5 ... 5.0	3.5 ... 4.5	100
4	4.9		3RV2311-1FC10	3RT2015-1AP01	S00/S00/S00	3RU2116-1FB0	3.5 ... 5.0	3.5 ... 4.5	100
4	4.9		3RV2311-1GC10	3RT2015-1AP01	S00/S00/S00	3RU2116-1GB0	4.5 ... 6.3	4.5 ... 5.5	100
5.5	6.7		3RV2311-1HC10	3RT2018-1AP01	S00/S00/S00	3RU2116-1HBO	5.5 ... 8.0	5.5 ... 7.0	100
7.5	8.9		3RV2311-1JC10	3RT2018-1AP01	S00/S00/S00	3RU2116-1JB0	7.0 ... 10.0	7.0 ... 9.0	100
7.5	8.9		3RV2321-1KC10	3RT2025-1AP00	S0/S0/S0	3RU2126-1KB0	9.0 ... 12.5	9.0 ... 11	20
11	12.8		3RV2321-4AC10	3RT2025-1AP00	S0/S0/S0	3RU2126-4AB0	11 ... 16	11 ... 14	20
15	17		3RV2321-4BC10	3RT2027-1AP00	S0/S0/S0	3RU2126-4BB0	14 ... 20	14 ... 17	20
18.5	21		3RV2321-4CC10	3RT2027-1AP00	S0/S0/S0	3RU2126-4CB0	17 ... 22	17 ... 20	20
11	12.8	3RV1331-4HC10	3RV2321-4AC10	3RT2025-1AP00	S0/S0/S0	3RU2126-4AB0	11 ... 16	11 ... 14	100
15	17		3RV2321-4BC10	3RT2028-1AP00	S0/S0/S0	3RU2126-4BB0	14 ... 20	14 ... 17	100
18.5	21		3RV2321-4CC10	3RT2028-1AP00	S0/S0/S0	3RU2126-4CB0	17 ... 22	17 ... 20	100
18.5	21		3RV2321-4DC10	3RT2028-1AP00	S0/S0/S0	3RU2126-4DB0	20 ... 25	20 ... 23	100

*Selection tables up to 690 V*

*5.2 Motor starter protector + contactor + 3RU21 thermal overload relay*

Standard three-phase motor 4-pole at 690 V AC <sup>1)</sup>		Standard motor starter protector with limiter function <sup>2)</sup>	Motor starter protector for starter protection	Contactor <sup>3)</sup>	Size	Overload relay (thermal) <sup>4)</sup> Maximum permitted setting range overload release			
Stand- ard output P	Motor current I					IE1 / IE2 motors	IE3 / IE4 motors	I <sub>q</sub>	
kW	A	Article No.	Article No.	Article No.	Article No.	A	A	kA	
15	17	—	3RV2332-4TC10	3RT2035-1AP00	S2/S2/S2	3RU2136-4AB0	11 ... 16	11 ... 14	100
18.5	21	—	3RV2332-4BC10	3RT2035-1AP00	S2/S2/S2	3RU2136-4BB0	14 ... 20	14 ... 18	100
22	24	—	3RV2332-4DC10	3RT2035-1AP00	S2/S2/S2	3RU2136-4DB0	18 ... 25	18 ... 22	100
30	32	3RV2332-4RC10	3RV2332-4PC10	3RT2037-1AP00	S2/S2/S2	3RU2136-4EB0	22 ... 32	22 ... 28	100
30	32		3RV2332-4UC10	3RT2037-1AP00	S2/S2/S2	3RU2136-4FB0	28 ... 40	28 ... 36	100
37	39		3RV2332-4VC10	3RT2037-1AP00	S2/S2/S2	3RU2136-4GB0	36 ... 45	36 ... 40	100
45	47		3RV2332-4WC10	3RT2037-1AP00	S2/S2/S2	3RU2136-4HB0	40 ... 50	40 ... 47	100
55	57		3RV2332-4XC10	3RT2038-1AP00	S2/S2/S2	3RU2136-4QB0	47 ... 57	47 ... 54	100
55	57		3RV2332-4JC10	3RT2038-1AP00	S2/S2/S2	3RU2136-4JB0	54 ... 65	54 ... 62	100

—: Not required

Article numbers for basic versions with screw terminals and spring-loaded terminals also possible.

- 1) Guide value for 4-pole standard motors at 690 V AC, 50 Hz. Selection depends on the concrete startup and rated data of the protected motor.
- 2) The motor starter protector must be set to the maximum current value. Infeed on limiter must be from above.
- 3) Rated control supply voltage 230 V AC, 50 Hz, other control voltages possible.
- 4) Assembled combinations of three are not permitted.

**CLASS 10, type of coordination 2,  
short-circuit breaking capacity  $I_q = 100 \text{ kA} / 20 \text{ kA}$**



Standard three-phase motor 4-pole at 500 V AC <sup>1)</sup>		Standard motor starter protector with limiter function <sup>2)</sup>	Motor starter protector for starter protection	Contactor <sup>3)</sup>	Size	Overload relay (thermal) <sup>4)</sup> Maximum permitted setting range overload release			
Stand- ard output P	Motor cur- rent I								
kW	A	Article No.	Article No.	Article No.	Article No.	IE1 / IE2 motors	IE3 / IE4 motors	$I_q$	
0.06	0.12	–	3RV2311-0AC10	3RT2015-1AP01	S00/S00/S00	3RU2116-0AB0	0.11 ... 0.16	0.11 ... 0.14	100
0.09	0.17	–	3RV2311-0BC10	3RT2015-1AP01	S00/S00/S00	3RU2116-0BB0	0.14 ... 0.20	0.14 ... 0.18	100
0.12	0.23	–	3RV2311-0CC10	3RT2015-1AP01	S00/S00/S00	3RU2116-0CB0	0.18 ... 0.25	0.18 ... 0.22	100
0.12	0.23	–	3RV2311-0DC10	3RT2015-1AP01	S00/S00/S00	3RU2116-0DB0	0.22 ... 0.32	0.22 ... 0.28	100
0.18	0.35	–	3RV2311-0EC10	3RT2015-1AP01	S00/S00/S00	3RU2116-0EB0	0.28 ... 0.40	0.28 ... 0.35	100
0.25	0.49	–	3RV2311-0FC10	3RT2015-1AP01	S00/S00/S00	3RU2116-0FB0	0.35 ... 0.50	0.35 ... 0.45	100
0.25	0.49	–	3RV2311-0GC10	3RT2015-1AP01	S00/S00/S00	3RU2116-0GB0	0.45 ... 0.63	0.45 ... 0.55	100
0.37	0.64	–	3RV2311-0HC10	3RT2015-1AP01	S00/S00/S00	3RU2116-0HB0	0.55 ... 0.80	0.55 ... 0.7	100
0.55	0.87	–	3RV2311-0JC10	3RT2015-1AP01	S00/S00/S00	3RU2116-0JB0	0.7 ... 1.00	0.7 ... 0.9	100
0.75	1.1	–	3RV2311-0KC10	3RT2015-1AP01	S00/S00/S00	3RU2116-0KB0	0.9 ... 1.25	0.9 ... 1.1	100
1.1	1.6	–	3RV2311-1AC10	3RT2015-1AP01	S00/S00/S00	3RU2116-1AB0	1.1 ... 1.6	1.1 ... 1.4	100
1.1	1.6	–	3RV2311-1BC10	3RT2015-1AP01	S00/S00/S00	3RU2116-1BB0	1.4 ... 2.0	1.4 ... 1.8	100

*Selection tables up to 690 V*

*5.2 Motor starter protector + contactor + 3RU21 thermal overload relay*

Standard three-phase motor 4-pole at 500 V AC <sup>1)</sup>		Standard motor starter protector with limiter function <sup>2)</sup>	Motor starter protector for starter protection	Contactor <sup>3)</sup>	Size	Overload relay (thermal) <sup>4)</sup> Maximum permitted setting range overload release			
Stand- ard output P	Motor cur- rent I								
kW	A	Article No.	Article No.	Article No.	Article No.	A	A	kA	
1.5	2.1	3RV2321-4EC10	3RV2311-1CC10	3RT2015-1AP01	S00/S00/S00	3RU2116-1CB0	1.8 ... 2.5	1.8 ... 2.2	100
2.2	2.8		3RV2321-1DC10	3RT2024-1AP00	S0/S0/S0	3RU2126-1DB0	2.2 ... 3.2	2.2 ... 2.8	100
3	3.8		3RV2321-1EC10	3RT2024-1AP00	S0/S0/S0	3RU2126-1EB0	2.8 ... 4.0	2.8 ... 3.5	100
3	3.8		3RV2321-1FC10	3RT2024-1AP00	S0/S0/S0	3RU2126-1FB0	3.5 ... 5.0	3.5 ... 4.5	100
4	4.9		3RV2321-1FC10	3RT2024-1AP00	S0/S0/S0	3RU2126-1FB0	3.5 ... 5.0	3.5 ... 4.5	100
4	4.9		3RV2321-1GC10	3RT2024-1AP00	S0/S0/S0	3RU2126-1GB0	4.5 ... 6.3	4.5 ... 5.5	100
5.5	6.7		3RV2321-1HC10	3RT2024-1AP00	S0/S0/S0	3RU2126-1HB0	5.5 ... 8.0	5.5 ... 7.0	100
7.5	8.9		3RV2321-1JC10	3RT2024-1AP00	S0/S0/S0	3RU2126-1JB0	7.0 ... 10.0	7.0 ... 9.0	100
7.5	8.9		3RV2321-1KC10	3RT2027-1AP00	S0/S0/S0	3RU2126-1KB0	9.0 ... 12.5	9.0 ... 11	20
11	12.8		3RV2321-4AC10	3RT2027-1AP00	S0/S0/S0	3RU2126-4AB0	11 ... 16	11 ... 14	20
15	17		3RV2321-4BC10	3RT2027-1AP00	S0/S0/S0	3RU2126-4BB0	14 ... 20	14 ... 17	20
18.5	21		3RV2321-4CC10	3RT2027-1AP00	S0/S0/S0	3RU2126-4CB0	17 ... 22	17 ... 20	20
18.5	21		3RV2321-4DC10	3RT2027-1AP00	S0/S0/S0	3RU2126-4DB0	20 ... 25	20 ... 23	20
11	12.8	3RV1331-4HC10	3RV2321-4AC10	3RT2027-1AP00	S0/S0/S0	3RU2126-4AB0	11 ... 16	11 ... 14	100
15	17		3RV2321-4BC10	3RT2028-1AP00	S0/S0/S0	3RU2126-4BB0	14 ... 20	14 ... 17	100
18.5	21		3RV2321-4CC10	3RT2028-1AP00	S0/S0/S0	3RU2126-4CB0	17 ... 22	17 ... 20	100
18.5	21		3RV2321-4DC10	3RT2028-1AP00	S0/S0/S0	3RU2126-4DB0	20 ... 25	20 ... 23	100

## 5.2 Motor starter protector + contactor + 3RU21 thermal overload relay

Standard three-phase motor 4-pole at 500 V AC <sup>1)</sup>		Standard motor starter protector with limiter function <sup>2)</sup>	Motor starter protector for starter protection	Contactor <sup>3)</sup>	Size	Overload relay (thermal) <sup>4)</sup> Maximum permitted setting range overload release			
Stand- ard output P	Motor cur- rent I						IE1 / IE2 motors	IE3 / IE4 motors	I <sub>q</sub>
kW	A	Article No.	Article No.	Article No.		Article No.	A	A	kA
15	17	—	3RV2332-4TC10	3RT2035-1AP00	S2/S2/S2	3RU2136-4AB0	11 ... 16	11 ... 14	100
18.5	21	—	3RV2332-4BC10	3RT2035-1AP00	S2/S2/S2	3RU2136-4BB0	14 ... 20	14 ... 18	100
22	24	—	3RV2332-4DC10	3RT2035-1AP00	S2/S2/S2	3RU2136-4DB0	18 ... 25	18 ... 22	100
30	32	3RV2332-4RC10	3RV2332-4PC10	3RT2037-1AP00	S2/S2/S2	3RU2136-4EB0	22 ... 32	22 ... 28	100
30	32		3RV2332-4UC10	3RT2037-1AP00	S2/S2/S2	3RU2136-4FB0	28 ... 40	28 ... 36	100
37	39		3RV2332-4VC10	3RT2037-1AP00	S2/S2/S2	3RU2136-4GB0	36 ... 45	36 ... 40	100
45	47		3RV2332-4WC10	3RT2037-1AP00	S2/S2/S2	3RU2136-4HB0	40 ... 50	40 ... 47	100
55	57		3RV2332-4XC10	3RT2038-1AP00	S2/S2/S2	3RU2136-4QB0	47 ... 57	47 ... 54	100
55	57		3RV2332-4JC10	3RT2038-1AP00	S2/S2/S2	3RU2136-4JB0	54 ... 65	54 ... 62	100

—: Not required

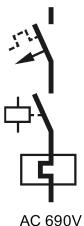
Article numbers for basic versions with screw terminals and spring-loaded terminals also possible.

- 1) Guide value for 4-pole standard motors at 690 V AC, 50 Hz. Selection depends on the concrete startup and rated data of the protected motor.
- 2) The motor starter protector must be set to the maximum current value. Infeed on limiter must be from above.
- 3) Rated control supply voltage 230 V AC, 50 Hz, other control voltages possible.
- 4) Assembled combinations of three are not permitted.

## 5.3 Motor starter protector + contactor + 3RB3 solid-state overload relay

### 5.3.1 Type of coordination 1, short-circuit breaking capacity $I_q = 100 \text{ kA} / 70 \text{ kA} / 20 \text{ kA}$

Type of coordination 1,  
short-circuit breaking capacity  $I_q = 100 \text{ kA} / 70 \text{ kA} / 20 \text{ kA}$



Standard three-phase motor 4-pole at 690 V AC <sup>1)</sup>		Standard motor starter protector with limiter function <sup>2)</sup>	Motor starter protector Starter protection <sup>3)</sup>		Contactor <sup>4)</sup>	Size	Overload relay (electronic) Maximum permitted setting range overload release			
Stand- ard output P	Motor cur- rent I		Article No.	Setting range Overload release Motor starter protector			Article No.	IE1 / IE2 motors	IE3 / IE4 motors	$I_q$
kW	A	Article No.	Setting range Overload release Motor starter protector	Article No.	Article No.	Article No.	A	A	kA	
<b>CLASS 10, short-circuit breaking capacity <math>I_q = 100 \text{ kA} / 70 \text{ kA} / 20 \text{ kA}</math></b>										
0.06	0.12	–	None	3RV2311-0BC10	3RT2015-1AP01	S00/S00/S00	3RB3016-1RBO	0.1 ... 0.2	0.1 ... 0.12	100
0.09	0.17	–	None	3RV2311-0CC10	3RT2015-1AP01	S00/S00/S00	3RB3016-1RBO	0.1 ... 0.25	0.1 ... 0.17	100
0.12	0.23	–	None	3RV2311-0CC10	3RT2015-1AP01	S00/S00/S00	3RB3016-1RBO	0.1 ... 0.25	0.1 ... 0.23	100
0.12	0.23	–	None	3RV2311-0DC10	3RT2015-1AP01	S00/S00/S00	3RB3016-1RBO	0.1 ... 0.32	0.1 ... 0.25	100
0.18	0.35	–	None	3RV2311-0EC10	3RT2015-1AP01	S00/S00/S00	3RB3016-1RBO	0.1 ... 0.4	0.1 ... 0.35	100
0.25	0.49	–	None	3RV2311-0FC10	3RT2015-1AP01	S00/S00/S00	3RB3016-1NBO	0.32 ... 0.5	0.32 ... 0.49	100

## 5.3 Motor starter protector + contactor + 3RB3 solid-state overload relay

Standard three-phase motor 4-pole at 690 V AC <sup>1)</sup>		Standard motor starter protector with limiter function <sup>2)</sup>	Motor starter protector Starter protection <sup>3)</sup>		Contactor <sup>4)</sup>	Size	Overload relay (electronic) Maximum permitted setting range overload release			
Standard output P	Motor current I		Setting range Overload release	Article No.			IE1 / IE2 motors	IE3 / IE4 motors	I <sub>q</sub>	
kW	A	Article No.	Motor starter protector	Article No.	Article No.	Article No.	A	A	kA	
0.25	0.49	–	None	3RV2311-0GC10	3RT2015-1AP01	S00/S00/S00	3RB3016-1NB0	0.32 ... 0.63	0.32 ... 0.55	100
0.37	0.64	–	None	3RV2311-0HC10	3RT2015-1AP01	S00/S00/S00	3RB3016-1NB0	0.32 ... 0.8	0.32 ... 0.64	100
0.55	0.87	–	None	3RV2311-0JC10	3RT2015-1AP01	S00/S00/S00	3RB3016-1NB0	0.32 ... 1	0.32 ... 0.87	100
0.75	1.1	–	None	3RV2311-0KC10	3RT2015-1AP01	S00/S00/S00	3RB3016-1NB0	0.32 ... 1.25	0.32 ... 1.1	100
1.1	1.6	–	None	3RV2311-1BC10	3RT2015-1AP01	S00/S00/S00	3RB3016-1PB0	1 ... 2	1 ... 1.6	100
1.5	2.1	3RV2321-4EC10	None	3RV2311-1CC10	3RT2015-1AP01	S00/S00/S00	3RB3016-1PB0	1 ... 2.5	1 ... 2.1	100
2.2	2.8		None	3RV2311-1DC10	3RT2015-1AP01	S00/S00/S00	3RB3016-1PB0	1 ... 3.2	1 ... 2.8	100
3	3.8		None	3RV2311-1FC10	3RT2015-1AP01	S00/S00/S00	3RB3016-1PB0	1 ... 4	1 ... 3.8	100
4	4.9		None	3RV2311-1GC10	3RT2015-1AP01	S00/S00/S00	3RB3016-1SB0	3 ... 4.9	3 ... 4.9	100
5.5	6.7		None	3RV2311-1HC10	3RT2018-1AP01	S00/S00/S00	3RB3016-1SB0	3 ... 8	3 ... 6.7	100
7.5	8.9		None	3RV2311-1JC10	3RT2018-1AP01	S00/S00/S00	3RB3016-1TB0	4 ... 8.9	4 ... 8.9	100
11	12.8		None	3RV2321-4AC10	3RT2025-1AP00	S0/S0/S0	3RB3026-1QB0	6 ... 13	6 ... 12.8	20
15	17		None	3RV2321-4CC10	3RT2027-1AP00	S0/S0/S0	3RB3026-1QB0	6 ... 21	6 ... 17	20
18.5	21		None	3RV2321-4DC10	3RT2027-1AP00	S0/S0/S0	3RB3026-1QB0	6 ... 21	6 ... 21	20
11	12.8	3RV1331-4HC10	None	3RV2321-4AC10	3RT2025-1AP00	S0/S0/S0	3RB3026-1QB0	6 ... 13	6 ... 12.8	100
15	17		None	3RV2321-4CC10	3RT2028-1AP00	S0/S0/S0	3RB3026-1QB0	6 ... 21	6 ... 17	100
18.5	21		None	3RV2321-4DC10	3RT2028-1AP00	S0/S0/S0	3RB3026-1QB0	6 ... 21	6 ... 21	100

*Selection tables up to 690 V*

*5.3 Motor starter protector + contactor + 3RB3 solid-state overload relay*

Standard three-phase motor 4-pole at 690 V AC <sup>1)</sup>		Standard motor starter protector with limiter function <sup>2)</sup>	Motor starter protector Starter protection <sup>3)</sup>		Contactor <sup>4)</sup>	Size	Overload relay (electronic) Maximum permitted setting range overload release			
Stand- ard output P	Motor cur- rent I		Article No.	Setting range Overload release Motor starter protector			IE1 / IE2 motors	IE3 / IE4 motors	I <sub>q</sub>	
kW	A	Article No.	Setting range Overload release Motor starter protector	Article No.	Article No.	Article No.	A	A	kA	
11	12.8	—	None	3RV2332-4BC10	3RT2035-1AP00	S2/S2/S2	3RB3036-1UB0	12.5 ... 16.5	12.5 ... 16.5	100
15	17	—	None	3RV2332-4DC10	3RT2035-1AP00	S2/S2/S2	3RB3036-1UB0	12.5 ... 16.5	12.5 ... 16.5	100
18.5	21	—	None	3RV2332-4EC10	3RT2037-1AP00	S2/S2/S2	3RB3036-1UB0	12.5 ... 24	12.5 ... 24	100
22	24	—	None	3RV2332-4PC10	3RT2037-1AP00	S2/S2/S2	3RB3036-1UB0	12.5 ... 27	12.5 ... 27	100
30	32	—	None	3RV2332-4JC10	3RT2038-1AP00	S2/S2/S2	3RB3036-1UB0	12.5 ... 30	12.5 ... 30	100
30	32	3RV2331-4RC10	28 ... 36	3RV2031-4PB10	3RT2037-1AP00	S2/S2/S2	3RB3036-1UB0	12.5 ... 32.5	12.5 ... 32.5	70
37	39		35 ... 45	3RV2031-4VB10	3RT2037-1AP00	S2/S2/S2	3RB3036-1UB0	12.5 ... 40.5	12.5 ... 40.5	70
45	47		42 ... 52	3RV2031-4WB10	3RT2037-1AP00	S2/S2/S2	3RB3036-1WB0	20 ... 47	20 ... 47	70
55	57		54 ... 65	3RV2031-4JB10	3RT2038-1AP00	S2/S2/S2	3RB3036-1WB0	20 ... 58	20 ... 58	70

—: Not required

Article numbers for basic versions with screw terminals and spring-loaded terminals also possible.

- 1) Guide value for 4-pole standard motors at 690 V AC, 50 Hz. Selection depends on the concrete startup and rated data of the protected motor.
- 2) The motor starter protector must be set to the maximum current value. Infeed on limiter must be from above.
- 3) The motor starter protector must be set to maximum current value.
- 4) Rated control supply voltage 230 V AC, 50 Hz, other control voltages possible.

### 5.3.2 Type of coordination 2, short-circuit breaking capacity $I_q = 100 \text{ kA} / 70 \text{ kA} / 20 \text{ kA}$

Type of coordination 2,  
short-circuit breaking capacity  $I_q = 100 \text{ kA} / 70 \text{ kA} / 20 \text{ kA}$



AC 690V

Standard three-phase motor 4-pole at 690 V AC <sup>1)</sup>		Standard motor starter protector with limiter function <sup>2)</sup>	Setting range Overload release Motor starter protector	Motor starter protector Starter protection <sup>3)</sup>	Contactor <sup>4)</sup>	Size	Overload relay (electronic) Maximum permitted setting range overload release			
Stand- ard output P	Motor cur- rent I						IE1 / IE2 motors	IE3 / IE4 motors	$I_q$	
kW	A						Article No.	A	kA	
<b>CLASS 5, short-circuit breaking capacity <math>I_q = 100 \text{ kA} / 70 \text{ kA} / 20 \text{ kA}</math></b>										
0.06	0.12	–	None	3RV2311-0BC10	3RT2015-1AP01	S00/S00/S00	3RB3113-4RB0	0.1 ... 0.2	0.1 ... 0.12	100
0.09	0.17	–	None	3RV2311-0BC10	3RT2015-1AP01	S00/S00/S00	3RB3113-4RB0	0.1 ... 0.2	0.1 ... 0.17	100
0.12	0.23	–	None	3RV2311-0CC10	3RT2015-1AP01	S00/S00/S00	3RB3113-4RB0	0.1 ... 0.25	0.1 ... 0.23	100
0.12	0.23	–	None	3RV2311-0CC10	3RT2015-1AP01	S00/S00/S00	3RB3113-4RB0	0.1 ... 0.25	0.1 ... 0.25	100
0.18	0.35	–	None	3RV2311-0EC10	3RT2015-1AP01	S00/S00/S00	3RB3113-4RB0	0.1 ... 0.4	0.1 ... 0.35	100
0.25	0.49	–	None	3RV2311-0FC10	3RT2015-1AP01	S00/S00/S00	3RB3113-4NB0	0.32 ... 0.5	0.32 ... 0.49	100
0.37	0.64	–	None	3RV2311-0HC10	3RT2015-1AP01	S00/S00/S00	3RB3113-4NB0	0.32 ... 0.8	0.32 ... 0.64	100
0.55	0.87	–	None	3RV2311-0JC10	3RT2015-1AP01	S00/S00/S00	3RB3113-4NB0	0.32 ... 1	0.32 ... 0.87	100
0.75	1.1	–	None	3RV2311-0KC10	3RT2015-1AP01	S00/S00/S00	3RB3113-4NB0	0.32 ... 1.25	0.32 ... 1.1	100
1.1	1.6	–	None	3RV2311-1AC10	3RT2015-1AP01	S00/S00/S00	3RB3113-4PB0	1 ... 1.6	1 ... 1.6	100
1.5	2.1	3RV2321-4EC10	None	3RV2311-1CC10	3RT2015-1AP01	S00/S00/S00	3RB3113-4PB0	1 ... 2.5	1 ... 2.1	100
2.2	2.8		None	3RV2321-1DC10	3RT2024-1AP00	S0/S0/S0	3RB3123-4PB0	1 ... 3.2	1 ... 2.8	100

*Selection tables up to 690 V*

*5.3 Motor starter protector + contactor + 3RB3 solid-state overload relay*

Standard three-phase motor 4-pole at 690 V AC <sup>1)</sup>		Standard motor starter protector with limiter function <sup>2)</sup>	Setting range Overload release Motor starter protector	Motor starter protector Starter protection <sup>3)</sup>	Contactor <sup>4)</sup>	Size	Overload relay (electronic) Maximum permitted setting range overload release			
Stand- ard output P	Motor cur- rent I							IE1 / IE2 motors	IE3 / IE4 motors	I <sub>q</sub>
kW	A						Article No.	A	A	kA
3	3.8	3RV1331-4HC10	None	3RV2321-1EC10	3RT2024-1AP00	S0/S0/S0	3RB3123-4PB0	1 ... 4	1 ... 3.8	100
4	4.9		None	3RV2321-1FC10	3RT2024-1AP00	S0/S0/S0	3RB3123-4SB0	3 ... 5	3 ... 4.9	100
5.5	6.7		None	3RV2321-1HC10	3RT2024-1AP00	S0/S0/S0	3RB3123-4SB0	3 ... 8	3 ... 6.7	100
7.5	8.9		None	3RV2321-1JC10	3RT2024-1AP00	S0/S0/S0	3RB3123-4SB0	3 ... 9	3 ... 8.9	100
11	12.8		None	3RV2321-4AC10	3RT2027-1AP00	S0/S0/S0	3RB3123-4QBO	6 ... 16	6 ... 12.8	20
15	17		None	3RV2321-4BC10	3RT2027-1AP00	S0/S0/S0	3RB3123-4QBO	6 ... 20	6 ... 17	20
18.5	21		None	3RV2321-4CC10	3RT2027-1AP00	S0/S0/S0	3RB3123-4QBO	6 ... 21	6 ... 21	20
11	12.8	3RV1331-4HC10	None	3RV2321-4AC10	3RT2027-1AP00	S0/S0/S0	3RB3123-4QBO	6 ... 16	6 ... 12.8	100
15	17		None	3RV2321-4BC10	3RT2028-1AP00	S0/S0/S0	3RB3123-4QBO	6 ... 20	6 ... 17	100
18.5	21		None	3RV2321-4CC10	3RT2028-1AP00	S0/S0/S0	3RB3123-4QBO	6 ... 21	6 ... 21	100
11	12.8	-	None	3RV2332-4TC10	3RT2035-1AP00	S2/S2/S2	3RB3133-4UB0	12.5 ... 15.5	12.5 ... 15.5	100
15	17	-	None	3RV2332-4BC10	3RT2035-1AP00	S2/S2/S2	3RB3133-4UB0	12.5 ... 18.0	12.5 ... 18.0	100
18.5	21	-	None	3RV2332-4DC10	3RT2035-1AP00	S2/S2/S2	3RB3133-4UB0	12.5 ... 22.5	12.5 ... 22.5	100
22	24	3RV2332-4RC10	None	3RV2332-4EC10	3RT2037-1AP00	S2/S2/S2	3RB3133-4UB0	12.5 ... 30.0	12.5 ... 30.0	100
30	32		None	3RV2332-4PC10	3RT2037-1AP00	S2/S2/S2	3RB3133-4UB0	12.5 ... 32.5	12.5 ... 32.5	100
30	32		None	3RV2332-4UC10	3RT2037-1AP00	S2/S2/S2	3RB3133-4UB0	12.5 ... 36.0	12.5 ... 36.0	100
37	39		None	3RV2332-4VC10	3RT2037-1AP00	S2/S2/S2	3RB3133-4UB0	12.5 ... 40.5	12.5 ... 40.5	100
45	47		None	3RV2332-4WC10	3RT2037-1AP00	S2/S2/S2	3RB3133-4WB0	20 ... 47	20 ... 47	100
55	57		54 ... 65	3RV2032-4JA10	3RT2038-1AP00	S2/S2/S2	3RB3133-4WB0	20 ... 55	20 ... 55	100
55	57	3RV2331-4RC10	54 ... 65	3RV2031-4JB10	3RT2038-1AP00	S2/S2/S2	3RB3133-4WB0	20 ... 58	20 ... 58	70

## 5.3 Motor starter protector + contactor + 3RB3 solid-state overload relay

Standard three-phase motor 4-pole at 690 V AC <sup>1)</sup>		Standard motor starter protector with limiter function <sup>2)</sup>	Setting range Overload release Motor starter protector	Motor starter protector Starter protection <sup>3)</sup>	Contactor <sup>4)</sup>	Size	Overload relay (electronic) Maximum permitted setting range overload release			
Standard output P	Motor current I						IE1 / IE2 motors	IE3 / IE4 motors	I <sub>q</sub>	
kW	A						Article No.	A	kA	
<b>CLASS 10, short-circuit breaking capacity I<sub>q</sub> = 100 kA / 70 kA / 20 kA</b>										
0.06	0.12	–	None	3RV2311-0BC10	3RT2015-1AP01	S00/S00/S00	3RB3016-1RB0	0.1 ... 0.2	0.1 ... 0.12	100
0.09	0.17	–	None	3RV2311-0CC10	3RT2015-1AP01	S00/S00/S00	3RB3016-1RB0	0.1 ... 0.25	0.1 ... 0.17	100
0.12	0.23	–	None	3RV2311-0CC10	3RT2015-1AP01	S00/S00/S00	3RB3016-1RB0	0.1 ... 0.25	0.1 ... 0.23	100
0.12	0.23	–	None	3RV2311-0DC10	3RT2015-1AP01	S00/S00/S00	3RB3016-1RB0	0.1 ... 0.32	0.1 ... 0.25	100
0.18	0.35	–	None	3RV2311-0EC10	3RT2015-1AP01	S00/S00/S00	3RB3016-1RB0	0.1 ... 0.4	0.1 ... 0.35	100
0.25	0.49	–	None	3RV2311-0FC10	3RT2015-1AP01	S00/S00/S00	3RB3016-1NB0	0.32 ... 0.5	0.32 ... 0.49	100
0.25	0.49	–	None	3RV2311-0GC10	3RT2015-1AP01	S00/S00/S00	3RB3016-1NB0	0.32 ... 0.63	0.32 ... 0.55	100
0.37	0.64	–	None	3RV2311-0HC10	3RT2015-1AP01	S00/S00/S00	3RB3016-1NB0	0.32 ... 0.8	0.32 ... 0.64	100
0.55	0.87	–	None	3RV2311-0JC10	3RT2015-1AP01	S00/S00/S00	3RB3016-1NB0	0.32 ... 1	0.32 ... 0.87	100
0.75	1.1	–	None	3RV2311-0KC10	3RT2015-1AP01	S00/S00/S00	3RB3016-1NB0	0.32 ... 1.25	0.32 ... 1.1	100
1.1	1.6	–	None	3RV2311-1BC10	3RT2015-1AP01	S00/S00/S00	3RB3016-1PB0	1 ... 2	1 ... 1.6	100
1.5	2.1	3RV2321-4EC10	None	3RV2311-1CC10	3RT2015-1AP01	S00/S00/S00	3RB3016-1PB0	1 ... 2.5	1 ... 2.1	100
2.2	2.8		None	3RV2321-1DC10	3RT2024-1AP00	S0/S0/S0	3RB3026-1PB0	1 ... 3.2	1 ... 2.8	100
3	3.8		None	3RV2321-1FC10	3RT2024-1AP00	S0/S0/S0	3RB3026-1PB0	1 ... 4	1 ... 3.8	100
4	4.9		None	3RV2321-1GC10	3RT2024-1AP00	S0/S0/S0	3RB3026-1SB0	3 ... 6.3	3 ... 4.9	100
5.5	6.7		None	3RV2321-1HC10	3RT2024-1AP00	S0/S0/S0	3RB3026-1SB0	3 ... 8	3 ... 6.7	100
7.5	8.9		None	3RV2321-1JC10	3RT2024-1AP00	S0/S0/S0	3RB3026-1SB0	3 ... 9	3 ... 8.9	100
11	12.8		None	3RV2321-4AC10	3RT2027-1AP00	S0/S0/S0	3RB3026-1QB0	6 ... 16	6 ... 12.8	20
15	17		None	3RV2321-4CC10	3RT2027-1AP00	S0/S0/S0	3RB3026-1QB0	6 ... 21	6 ... 17	20
18.5	21		None	3RV2321-4DC10	3RT2028-1AP00	S0/S0/S0	3RB3026-1QB0	6 ... 21	6 ... 21	20

*Selection tables up to 690 V*

*5.3 Motor starter protector + contactor + 3RB3 solid-state overload relay*

Standard three-phase motor 4-pole at 690 V AC <sup>1)</sup>		Standard motor starter protector with limiter function <sup>2)</sup>	Setting range Overload release Motor starter protector	Motor starter protector Starter protection <sup>3)</sup>	Contactor <sup>4)</sup>	Size	Overload relay (electronic) Maximum permitted setting range overload release			
Stand- ard output P	Motor cur- rent I							IE1 / IE2 motors	IE3 / IE4 motors	I <sub>q</sub>
kW	A						Article No.	A	A	kA
11	12.8	3RV1331-4HC10	None	3RV2321-4AC10	3RT2027-1AP00	S0/S0/S0	3RB3026-1QBO	6 ... 16	6 ... 12.8	100
15	17		None	3RV2321-4CC10	3RT2028-1AP00	S0/S0/S0	3RB3026-1QBO	6 ... 21	6 ... 17	100
18.5	21		None	3RV2321-4DC10	3RT2028-1AP00	S0/S0/S0	3RB3026-1QBO	6 ... 21	6 ... 21	100
11	12.8	-	None	3RV2332-4BC10	3RT2035-1AP00	S2/S2/S2	3RB3036-1UB0	12.5 ... 16.5	12.5 ... 16.5	100
15	17	-	None	3RV2332-4DC10	3RT2035-1AP00	S2/S2/S2	3RB3036-1UB0	12.5 ... 16.5	12.5 ... 16.5	100
15	17	3RV2332-4RC10	None	3RV2332-4EC10	3RT2037-1AP00	S2/S2/S2	3RB3036-1UB0	12.5 ... 24	12.5 ... 24	100
18.5	21		None	3RV2332-4EC10	3RT2037-1AP00	S2/S2/S2	3RB3036-1UB0	12.5 ... 24	12.5 ... 24	100
22	24		None	3RV2332-4PC10	3RT2037-1AP00	S2/S2/S2	3RB3036-1UB0	12.5 ... 27	12.5 ... 27	100
30	32		None	3RV2332-4JC10	3RT2038-1AP00	S2/S2/S2	3RB3036-1UB0	12.5 ... 30	12.5 ... 30	100
30	32	3RV2331-4RC10	28 ... 36	3RV2031-4PB10	3RT2037-1AP00	S2/S2/S2	3RB3036-1UB0	12.5 ... 32.5	12.5 ... 32.5	70
37	39		35 ... 45	3RV2031-4VB10	3RT2037-1AP00	S2/S2/S2	3RB3036-1UB0	12.5 ... 40.5	12.5 ... 40.5	70
45	47		42 ... 52	3RV2031-4WB10	3RT2037-1AP00	S2/S2/S2	3RB3036-1WB0	20 ... 47	20 ... 47	70
55	57		54 ... 65	3RV2031-4JB10	3RT2038-1AP00	S2/S2/S2	3RB3036-1WB0	20 ... 58	20 ... 58	70
<b>CLASS 20, short-circuit breaking capacity I<sub>q</sub> = 100 kA / 70 kA / 20 kA</b>										
0.06	0.12	-	None	3RV2311-0CC10	3RT2015-1AP01	S00/S00/S00	3RB3016-2RB0	0.1 ... 0.12	0.1 ... 0.12	100
0.09	0.17	-	None	3RV2311-0DC10	3RT2015-1AP01	S00/S00/S00	3RB3016-2RB0	0.1 ... 0.17	0.1 ... 0.17	100
0.12	0.23	-	0.45 ... 0.63	3RV2011-0GA10	3RT2015-1AP01	S00/S00/S00	3RB3016-2RB0	0.1 ... 0.23	0.1 ... 0.23	100
0.18	0.35	-	0.55 ... 0.8	3RV2011-0HA10	3RT2015-1AP01	S00/S00/S00	3RB3016-2RB0	0.1 ... 0.35	0.1 ... 0.35	100
0.25	0.49	-	0.9 ... 1.25	3RV2011-0KA10	3RT2015-1AP01	S00/S00/S00	3RB3016-2NB0	0.32 ... 0.49	0.32 ... 0.49	100

## 5.3 Motor starter protector + contactor + 3RB3 solid-state overload relay

Standard three-phase motor 4-pole at 690 V AC <sup>1)</sup>		Standard motor starter protector with limiter function <sup>2)</sup>	Setting range Overload release Motor starter protector	Motor starter protector Starter protection <sup>3)</sup>	Contactor <sup>4)</sup>	Size	Overload relay (electronic) Maximum permitted setting range overload release				
Standard output P	Motor current I							IE1 / IE2 motors	IE3 / IE4 motors	I <sub>q</sub>	
kW	A						Article No.	A	A	kA	
0.37	0.64	3RV2321-4EC10	–	1.1 ... 1.6	3RV2011-1AA10	3RT2015-1AP01	S00/S00/S00	3RB3016-2NB0	0.32 ... 0.64	0.32 ... 0.64	100
0.55	0.87		–	1.4 ... 2	3RV2011-1BA10	3RT2015-1AP01	S00/S00/S00	3RB3016-2NB0	0.32 ... 0.87	0.32 ... 0.87	100
0.75	1.1		1.8 ... 2.5	3RV2011-1CA10	3RT2015-1AP01	S00/S00/S00	3RB3016-2NB0	0.32 ... 1.1	0.32 ... 1.1	100	
1.1	1.6		2.8 ... 4	3RV2021-1EA10	3RT2024-1AP00	S0/S0/S0	3RB3026-2PB0	1 ... 1.6	1 ... 1.6	100	
1.5	2.1		3.5 ... 5	3RV2021-1FA10	3RT2024-1AP00	S0/S0/S0	3RB3026-2PB0	1 ... 2.1	1 ... 2.1	100	
2.2	2.8		4.5 ... 6.3	3RV2021-1GA10	3RT2024-1AP00	S0/S0/S0	3RB3026-2PB0	1 ... 2.8	1 ... 2.8	100	
3	3.8		5.5 ... 8	3RV2021-1HA10	3RT2024-1AP00	S0/S0/S0	3RB3026-2PB0	1 ... 3.8	1 ... 3.8	100	
4	4.9		7 ... 10	3RV2021-1JA10	3RT2024-1AP00	S0/S0/S0	3RB3026-2SB0	3 ... 4.9	3 ... 4.9	100	
5.5	6.7		10 ... 16	3RV2021-4AA10	3RT2027-1AP00	S0/S0/S0	3RB3026-2SB0	3 ... 6.7	3 ... 6.7	20	
7.5	8.9		13 ... 20	3RV2021-4BA10	3RT2027-1AP00	S0/S0/S0	3RB3026-2QB0	6 ... 8.9	6 ... 8.9	20	
11	12.8		18 ... 25	3RV2021-4DA10	3RT2027-1AP00	S0/S0/S0	3RB3026-2QB0	6 ... 12.8	6 ... 12.8	20	
5.5	6.7	3RV1331-4HC10	10 ... 16	3RV2021-4AA10	3RT2027-1AP00	S0/S0/S0	3RB3026-2SB0	3 ... 6.7	3 ... 6.7	100	
7.5	8.9		13 ... 20	3RV2021-4BA10	3RT2028-1AP00	S0/S0/S0	3RB3026-2QB0	6 ... 8.9	6 ... 8.9	100	
11	12.8		18 ... 25	3RV2021-4DA10	3RT2028-1AP00	S0/S0/S0	3RB3026-2QB0	6 ... 12.8	6 ... 12.8	100	
11	12.8	3RV2332-4RC10	22 ... 32	3RV2032-4EA10	3RT2037-1AP00	S2/S2/S2	3RB3036-2UB0	12.5 ... 14	12.5 ... 14	100	
15	17		49 ... 59	3RV2032-4XA10	3RT2038-1AP00	S2/S2/S2	3RB3036-2UB0	12.5 ... 25	12.5 ... 25	100	
18.5	21		54 ... 65	3RV2032-4JA10	3RT2038-1AP00	S2/S2/S2	3RB3036-2UB0	12.5 ... 25	12.5 ... 25	100	

*Selection tables up to 690 V*

*5.3 Motor starter protector + contactor + 3RB3 solid-state overload relay*

Standard three-phase motor 4-pole at 690 V AC <sup>1)</sup>		Standard motor starter protector with limiter function <sup>2)</sup>	Setting range Overload release Motor starter protector	Motor starter protector Starter protection <sup>3)</sup>	Contactor <sup>4)</sup>	Size	Overload relay (electronic) Maximum permitted setting range overload release			
Stand- ard output P	Motor cur- rent I						IE1 / IE2 motors	IE3 / IE4 motors	I <sub>q</sub>	
kW	A						Article No.	A	kA	
22	24	3RV2331-4RC10	28 ... 36	3RV2031-4PB10	3RT2037-1AP00	S2/S2/S2	3RB3036-2UB0	12.5 ... 27	12.5 ... 27	70
30	32		35 ... 45	3RV2031-4VB10	3RT2037-1AP00	S2/S2/S2	3RB3036-2UB0	12.5 ... 34	12.5 ... 34	70
37	39		42 ... 52	3RV2031-4WB10	3RT2037-1AP00	S2/S2/S2	3RB3036-2UB0	12.5 ... 39	12.5 ... 39	70
45	47		54 ... 65	3RV2031-4JB10	3RT2038-1AP00	S2/S2/S2	3RB3036-2UB0	12.5 ... 48	12.5 ... 48	70

**CLASS 30, short-circuit breaking capacity I<sub>q</sub> = 100 kA / 70 kA / 20 kA**

0.06	0.12	-	None	3RV2311-0DC10	3RT2015-1AP01	S00/S00/S00	3RB3113-4RB0	0.1 ... 0.12	0.1 ... 0.12	100
0.09	0.17	-	0.45 ... 0.63	3RV2011-0GA10	3RT2015-1AP01	S00/S00/S00	3RB3113-4RB0	0.1 ... 0.17	0.1 ... 0.17	100
0.12	0.23	-	0.55 ... 0.8	3RV2011-0HA10	3RT2015-1AP01	S00/S00/S00	3RB3113-4RB0	0.1 ... 0.23	0.1 ... 0.23	100
0.18	0.35	-	0.7 ... 1	3RV2011-0JA10	3RT2015-1AP01	S00/S00/S00	3RB3113-4NB0	0.32 ... 0.35	0.32 ... 0.35	100
0.25	0.49	-	1.1 ... 1.6	3RV2011-1AA10	3RT2015-1AP01	S00/S00/S00	3RB3113-4NB0	0.32 ... 0.49	0.32 ... 0.49	100
0.37	0.64	3RV2321-4EC10	1.8 ... 2.5	3RV2011-1CA10	3RT2015-1AP01	S00/S00/S00	3RB3113-4NB0	0.32 ... 0.64	0.32 ... 0.64	100
0.55	0.87		1.8 ... 2.5	3RV2011-1CA10	3RT2015-1AP01	S00/S00/S00	3RB3113-4NB0	0.32 ... 0.87	0.32 ... 0.87	100
0.75	1.1		2.2 ... 3.2	3RV2021-1DA10	3RT2024-1AP00	S0/S0/S0	3RB3123-4PB0	1 ... 1.1	1 ... 1.1	100
1.1	1.6		3.5 ... 5	3RV2021-1FA10	3RT2024-1AP00	S0/S0/S0	3RB3123-4PB0	1 ... 1.6	1 ... 1.6	100
1.5	2.1		4.5 ... 6.3	3RV2021-1GA10	3RT2024-1AP00	S0/S0/S0	3RB3123-4PB0	1 ... 2.1	1 ... 2.1	100
2.2	2.8		5.5 ... 8	3RV2021-1HA10	3RT2024-1AP00	S0/S0/S0	3RB3123-4PB0	1 ... 2.8	1 ... 2.8	100
3	3.8		7 ... 10	3RV2021-1JA10	3RT2024-1AP00	S0/S0/S0	3RB3123-4SB0	3 ... 3.8	3 ... 3.8	100
4	4.9		10 ... 16	3RV2021-4AA10	3RT2027-1AP00	S0/S0/S0	3RB3123-4SB0	3 ... 4.9	3 ... 4.9	20
5.5	6.7		13 ... 20	3RV2021-4BA10	3RT2027-1AP00	S0/S0/S0	3RB3123-4QB0	6 ... 6.7	6 ... 6.7	20
7.5	8.9		18 ... 25	3RV2021-4DA10	3RT2027-1AP00	S0/S0/S0	3RB3123-4QB0	6 ... 8.9	6 ... 8.9	20

## 5.3 Motor starter protector + contactor + 3RB3 solid-state overload relay

Standard three-phase motor 4-pole at 690 V AC <sup>1)</sup>		Standard motor starter protector with limiter function <sup>2)</sup>	Setting range Overload release Motor starter protector	Motor starter protector Starter protection <sup>3)</sup>	Contactor <sup>4)</sup>	Size	Overload relay (electronic) Maximum permitted setting range overload release			
Standard output P	Motor current I							IE1 / IE2 motors	IE3 / IE4 motors	I <sub>q</sub>
kW	A						Article No.	A	A	kA
4	4.9	3RV1331-4HC10	10 ... 16	3RV2021-4AA10	3RT2027-1AP00	S0/S0/S0	3RB3123-4SB0	3 ... 4.9	3 ... 4.9	100
5.5	6.7		13 ... 20	3RV2021-4BA10	3RT2028-1AP00	S0/S0/S0	3RB3123-4QB0	6 ... 6.7	6 ... 6.7	100
7.5	8.9		18 ... 25	3RV2021-4DA10	3RT2028-1AP00	S0/S0/S0	3RB3123-4QB0	6 ... 8.9	6 ... 8.9	100
11	12.8		35 ... 45	3RV2032-4VA10	3RT2037-1AP00	S2/S2/S2	3RB3133-4UB0	12.5 ... 14	12.5 ... 14	100
11	12.8		35 ... 45	3RV2031-4VA10	3RT2037-1AP00	S2/S2/S2	3RB3133-4UB0	12.5 ... 14	12.5 ... 14	70
15	17		22 ... 32	3RV2031-4EB10	3RT2037-1AP00	S2/S2/S2	3RB3133-4UB0	12.5 ... 17	12.5 ... 17	70
18.5	21		32 ... 40	3RV2031-4UB10	3RT2037-1AP00	S2/S2/S2	3RB3133-4UB0	12.5 ... 22	12.5 ... 22	70
22	24		35 ... 45	3RV2031-4VB10	3RT2037-1AP00	S2/S2/S2	3RB3133-4UB0	12.5 ... 25	12.5 ... 25	70
30	32		54 ... 65	3RV2031-4JB10	3RT2038-1AP00	S2/S2/S2	3RB3133-4WB0	20 ... 35	20 ... 35	70

—: Not required

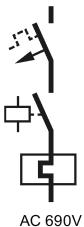
Article numbers for basic versions with screw terminals and spring-loaded terminals also possible.

- 1) Guide value for 4-pole standard motors at 690 V AC, 50 Hz. Selection depends on the concrete startup and rated data of the protected motor.
- 2) The motor starter protector must be set to the maximum current value. Infeed on limiter must be from above.
- 3) The motor starter protector is to be set to maximum current value.
- 4) Rated control supply voltage 230 V AC, 50 Hz, other control voltages possible.

## 5.4 Motor starter protector + contactor + 3RB22, 3RB23, 3RB24 electronic overload relay, or 3UF7

### 5.4.1 Type of coordination 2, short-circuit breaking capacity $I_q = 100 \text{ kA} / 70 \text{ kA} / 50 \text{ kA} / 20 \text{ kA}$

Type of coordination 2,  
short-circuit breaking capacity  $I_q = 100 \text{ kA} / 70 \text{ kA} / 50 \text{ kA} / 20 \text{ kA}$



Standard three-phase motor 4-pole at 690 V AC <sup>1)</sup>		Standard motor starter protector with limiter function <sup>2)</sup>	Setting range Overload release Motor starter protector	Motor starter protector Starter protection <sup>3)</sup>	Contactor <sup>4)</sup>	Size	Overload relay (electronic) or current measuring module <sup>5)</sup> Maximum permitted setting range overload release			
Stand- ard output P	Motor cur- rent I						Article No.	Article No.	A	$I_q$
kW	A						Article No.	Article No.	A	kA
CLASS 5, short-circuit breaking capacity $I_q = 100 \text{ kA} / 70 \text{ kA} / 20 \text{ kA}$										
0.12	0.23	–	None	3RV2311-0EC10	3RT2015-1AP01	S00/S00/-	3UF71x0-1AA00-0/ 3RB2906-2BG1	0.3 ... 0.35	0.3 ... 0.35	100
0.18	0.35	–	None	3RV2311-0EC10	3RT2015-1AP01	S00/S00/-	3UF71x0-1AA00-0/ 3RB2906-2BG1	0.3 ... 0.35	0.3 ... 0.35	100
0.25	0.49	–	None	3RV2311-0FC10	3RT2015-1AP01	S00/S00/-	3UF71x0-1AA00-0/ 3RB2906-2BG1	0.3 ... 0.49	0.3 ... 0.49	100
0.37	0.64	–	None	3RV2311-0HC10	3RT2015-1AP01	S00/S00/-	3UF71x0-1AA00-0/ 3RB2906-2BG1	0.3 ... 0.64	0.3 ... 0.64	100

## 5.4 Motor starter protector + contactor + 3RB22, 3RB23, 3RB24 electronic overload relay, or 3UF7

Standard three-phase motor 4-pole at 690 V AC <sup>1)</sup>		Standard motor starter protector with limiter function <sup>2)</sup>	Setting range Overload release Motor starter protector	Motor starter protector Starter protection <sup>3)</sup>	Contactor <sup>4)</sup>	Size	Overload relay (electronic) or current measuring module <sup>5)</sup> Maximum permitted setting range overload release			
Standard output P	Motor current I							IE1 / IE2 motors	IE3 / IE4 motors	I <sub>q</sub>
kW	A						Article No.	A	A	kA
0.55	0.87	3RV2321-4EC10	None	3RV2311-0JC10	3RT2015-1AP01	S00/S00/-	3UF71x0-1AA00-0/3RB2906-2BG1	0.3 ... 0.87	0.3 ... 0.87	100
0.75	1.10		None	3RV2311-1KC10	3RT2015-1AP01	S00/S00/-	3UF71x0-1AA00-0/3RB2906-2BG1	0.3 ... 1.1	0.3 ... 1.1	100
1.1	1.60		None	3RV2311-1AC10	3RT2015-1AP01	S00/S00/-	3UF71x0-1AA00-0/3RB2906-2BG1	0.3 ... 1.6	0.3 ... 1.6	100
1.5	2.10		None	3RV2311-1CC10	3RT2015-1AP01	S00/S00/-	3UF71x0-1AA00-0/3RB2906-2BG1	0.3 ... 2.1	0.3 ... 2.1	100
2.2	2.80		None	3RV2321-1DC10	3RT2024-1AP00	S0/S0/-	3UF71x0-1AA00-0/3RB2906-2BG1	0.3 ... 2.8	0.3 ... 2.8	100
3	3.80		None	3RV2321-1EC10	3RT2024-1AP00	S0/S0/-	3UF71x1-1AA00-0/3RB2906-2DG1	2.4 ... 3.8	2.4 ... 3.8	100
4	4.90		None	3RV2321-1FC10	3RT2024-1AP00	S0/S0/-	3UF71x1-1AA00-0/3RB2906-2DG1	2.4 ... 4.9	2.4 ... 4.9	100
5.5	6.70		None	3RV2321-1HC10	3RT2024-1AP00	S0/S0/-	3UF71x1-1AA00-0/3RB2906-2DG1	2.4 ... 6.7	2.4 ... 6.7	100
7.5	8.90		None	3RV2321-1JC10	3RT2024-1AP00	S0/S0/-	3UF71x1-1AA00-0/3RB2906-2DG1	2.4 ... 8.9	2.4 ... 8.9	100
11	12.80		None	3RV2321-4AC10	3RT2027-1AP01	S0/S0/-	3UF71x1-1AA00-0/3RB2906-2DG1	2.4 ... 12.8	2.4 ... 12.8	20

*Selection tables up to 690 V*

*5.4 Motor starter protector + contactor + 3RB22, 3RB23, 3RB24 electronic overload relay, or 3UF7*

Standard three-phase motor 4-pole at 690 V AC <sup>1)</sup>		Standard motor starter protector with limiter function <sup>2)</sup>	Setting range Overload release Motor starter protector	Motor starter protector Starter protection <sup>3)</sup>	Contactor <sup>4)</sup>	Size	Overload relay (electronic) or current measuring module <sup>5)</sup> Maximum permitted setting range overload release			
Stand- ard output P	Motor cur- rent I						Article No.	IE1 / IE2 motors	IE3 / IE4 motors	I <sub>q</sub>
kW	A	Article No.	Article No.	Article No.	A	A	kA			
15	17.00	3RV1331-4HC10	None	3RV2321-4BC10	3RT2027-1AP01	S0/S0/-	3UF71x1-1AA00-0/3RB2906-2DG1	2.4 ... 17	2.4 ... 17	20
18.5	21.00		None	3RV2332-4CC10	3RT2027-1AP01	S0/S0/-	3UF71x1-1AA00-0/3RB2906-2JG1	2.4 ... 21	2.4 ... 21	20
11	12.80	3RV1331-4HC10	None	3RV2321-4AC10	3RT2027-1AP01	S0/S0/-	3UF71x1-1AA00-0/3RB2906-2DG1	2.4 ... 12.8	2.4 ... 12.8	100
15	17.00		None	3RV2321-4BC10	3RT2027-1AP01	S0/S0/-	3UF71x1-1AA00-0/3RB2906-2DG1	2.4 ... 17	2.4 ... 17	100
18.5	21.00		None	3RV2321-4CC10	3RT2028-1AP01	S0/S0/-	3UF71x1-1AA00-0/3RB2906-2DG1	2.4 ... 21	2.4 ... 21	100
11	12.8	-	None	3RV2332-4TC10	3RT2035-1AP00	S2/S2/-	3UF71x1-1AA00-0/3RB2906-2DG1	2.4 ... 15.5	2.4 ... 15.5	100
15	17	-	None	3RV2332-4BC10	3RT2035-1AP00	S2/S2/-	3UF71x1-1AA00-0/3RB2906-2DG1	2.4 ... 18.0	2.4 ... 18.0	100
18.5	21	-	None	3RV2332-4DC10	3RT2035-1AP00	S2/S2/-	3UF71x1-1AA00-0/3RB2906-2DG1	2.4 ... 22.5	2.4 ... 22.5	100
18.5	21	-	None	3RV2332-4DC10	3RT2035-1AP00	S2/S2/-	3UF71x2-1AA00-0/3RB2906-2JG1	10 ... 22.5	10 ... 22.5	100

## 5.4 Motor starter protector + contactor + 3RB22, 3RB23, 3RB24 electronic overload relay, or 3UF7

Standard three-phase motor 4-pole at 690 V AC <sup>1)</sup>		Standard motor starter protector with limiter function <sup>2)</sup>	Setting range Overload release Motor starter protector	Motor starter protector Starter protection <sup>3)</sup>	Contactor <sup>4)</sup>	Size	Overload relay (electronic) or current measuring module <sup>5)</sup> Maximum permitted setting range overload release			
Standard output P	Motor current I							IE1 / IE2 motors	IE3 / IE4 motors	I <sub>q</sub>
kW	A						Article No.	A	A	kA
22	24	3RV2332-4RC10	None	3RV2032-4EC10	3RT2037-1AP00	S2/S2/-	3UF71x2-1AA00-0/3RB2906-2JG1	10 ... 30	10 ... 30	100
30	32			3RV2332-4UC10	3RT2037-1AP00	S2/S2/-	3UF71x2-1AA00-0/3RB2906-2JG1	10 ... 36	10 ... 36	100
37	39			3RV2332-4VC10	3RT2037-1AP00	S2/S2/-	3UF71x2-1AA00-0/3RB2906-2JG1	10 ... 40.5	10 ... 40.5	100
45	47			3RV2332-4WC10	3RT2037-1AP00	S2/S2/-	3UF71x2-1AA00-0/3RB2906-2JG1	10 ... 47.0	10 ... 47.0	100
45	47			3RV2332-4XC10	3RT2038-1AP00	S2/S2/-	3UF71x2-1AA00-0/3RB2906-2JG1	10 ... 52.0	10 ... 52.0	100
45	47			54 ... 65	3RV2032-4JA10	3RT2038-1AP00	S2/S2/-	3UF71x2-1AA00-0/3RB2906-2JG1	10 ... 55	10 ... 55
55	57	3RV2331-4RC10	54 ... 65	3RV2031-4JB10	3RT2038-1AP00	S2/S2/-	3UF71x2-1AA00-0/3RB2906-2JG1	10 ... 58	10 ... 58	70

*Selection tables up to 690 V*

*5.4 Motor starter protector + contactor + 3RB22, 3RB23, 3RB24 electronic overload relay, or 3UF7*

Standard three-phase motor 4-pole at 690 V AC <sup>1)</sup>		Standard motor starter protector with limiter function <sup>2)</sup>	Setting range Overload release Motor starter protector	Motor starter protector Starter protection <sup>3)</sup>	Contactor <sup>4)</sup>	Size	Overload relay (electronic) or current measuring module <sup>5)</sup> Maximum permitted setting range overload release			
Stand- ard output P	Motor cur- rent I						IE1 / IE2 motors	IE3 / IE4 motors	I <sub>q</sub>	
kW	A						Article No.	A	kA	
<b>CLASS 10, short-circuit breaking capacity I<sub>q</sub> = 100 kA / 70 kA / 20 kA</b>										
0.12	0.23	–	None	3RV2311-0EC10	3RT2015-1AP01	S00/S00/-	3UF71x0-1AA00-0/ 3RB2906-2BG1	0.3 ... 0.35	0.3 ... 0.35	100
0.18	0.35	–	None	3RV2311-0EC10	3RT2015-1AP01	S00/S00/-	3UF71x0-1AA00-0/ 3RB2906-2BG1	0.3 ... 0.35	0.3 ... 0.35	100
0.25	0.49	–	None	3RV2311-0FC10	3RT2015-1AP01	S00/S00/-	3UF71x0-1AA00-0/ 3RB2906-2BG1	0.3 ... 0.49	0.3 ... 0.49	100
0.25	0.49	–	None	3RV2311-0GC10	3RT2015-1AP01	S00/S00/-	3UF71x0-1AA00-0/ 3RB2906-2BG1	0.3 ... 0.49	0.3 ... 0.49	100
0.37	0.64	–	None	3RV2311-0HC10	3RT2015-1AP01	S00/S00/-	3UF71x0-1AA00-0/ 3RB2906-2BG1	0.3 ... 0.64	0.3 ... 0.64	100
0.55	0.87	–	None	3RV2311-0JC10	3RT2015-1AP01	S00/S00/-	3UF71x0-1AA00-0/ 3RB2906-2BG1	0.3 ... 0.87	0.3 ... 0.87	100
0.75	1.1	–	None	3RV2311-1KC10	3RT2015-1AP01	S00/S00/-	3UF71x0-1AA00-0/ 3RB2906-2BG1	0.3 ... 1.1	0.3 ... 1.1	100
1.1	1.6	–	None	3RV2311-1BC10	3RT2015-1AP01	S00/S00/-	3UF71x0-1AA00-0/ 3RB2906-2BG1	0.3 ... 1.6	0.3 ... 1.6	100
1.5	2.10	3RV2321-4EC10	None	3RV2311-1CC10	3RT2015-1AP01	S00/S00/-	3UF71x0-1AA00-0/ 3RB2906-2BG1	0.3 ... 2.1	0.3 ... 2.1	100
2.2	2.8		None	3RV2321-1DC10	3RT2024-1AP00	S0/S0/-	3UF71x1-1AA00-0/ 3RB2906-2DG1	2.4 ... 2.8	2.4 ... 2.8	100

## 5.4 Motor starter protector + contactor + 3RB22, 3RB23, 3RB24 electronic overload relay, or 3UF7

Standard three-phase motor 4-pole at 690 V AC <sup>1)</sup>		Standard motor starter protector with limiter function <sup>2)</sup>	Setting range Overload release Motor starter protector	Motor starter protector Starter protection <sup>3)</sup>	Contactor <sup>4)</sup>	Size	Overload relay (electronic) or current measuring module <sup>5)</sup> Maximum permitted setting range overload release			
Standard output P	Motor current I							IE1 / IE2 motors	IE3 / IE4 motors	I <sub>q</sub>
kW	A						Article No.	A	A	kA
3	3.8	3RV1331-4HC10	None	3RV2321-1FC10	3RT2024-1AP00	S0/S0/-	3UF71x1-1AA00-0/3RB2906-2DG1	2.4 ... 3.8	2.4 ... 3.8	100
4	4.9		None	3RV2321-1GC10	3RT2024-1AP00	S0/S0/-	3UF71x1-1AA00-0/3RB2906-2DG1	2.4 ... 4.9	2.4 ... 4.9	100
5.5	6.7		None	3RV2321-1HC10	3RT2024-1AP00	S0/S0/-	3UF71x1-1AA00-0/3RB2906-2DG1	2.4 ... 6.7	2.4 ... 6.7	100
7.5	8.9		None	3RV2321-1JC10	3RT2024-1AP00	S0/S0/-	3UF71x1-1AA00-0/3RB2906-2DG1	2.4 ... 8.9	2.4 ... 8.9	100
11	12.8		None	3RV2321-4AC10	3RT2027-1AP01	S0/S0/-	3UF71x1-1AA00-0/3RB2906-2DG1	2.4 ... 12.8	2.4 ... 12.8	20
15	17		None	3RV2321-4CC10	3RT2027-1AP01	S0/S0/-	3UF71x2-1AA00-0/3RB2906-2JG1	10 ... 17	10 ... 17	20
18.5	21		None	3RV2321-4DC10	3RT2027-1AP01	S0/S0/-	3UF71x2-1AA00-0/3RB2906-2JG1	10 ... 21	10 ... 21	20
11	12.80		None	3RV2321-4AC10	3RT2027-1AP01	S0/S0/-	3UF71x1-1AA00-0/3RB2906-2DG1	2.4 ... 12.8	2.4 ... 12.8	100
15	17.00		None	3RV2321-4BC10	3RT2028-1AP01	S0/S0/-	3UF71x2-1AA00-0/3RB2906-2JG1	10 ... 17	10 ... 17	100
18.5	21.00		None	3RV2321-4CC10	3RT2028-1AP01	S0/S0/-	3UF71x2-1AA00-0/3RB2906-2JG1	10 ... 21	10 ... 21	100

*Selection tables up to 690 V*

*5.4 Motor starter protector + contactor + 3RB22, 3RB23, 3RB24 electronic overload relay, or 3UF7*

Standard three-phase motor 4-pole at 690 V AC <sup>1)</sup>		Standard motor starter protector with limiter function <sup>2)</sup>	Setting range Overload release Motor starter protector	Motor starter protector Starter protection <sup>3)</sup>	Contactor <sup>4)</sup>	Size	Overload relay (electronic) or current measuring module <sup>5)</sup> Maximum permitted setting range overload release			
Stand- ard output P	Motor cur- rent I						IE1 / IE2 motors	IE3 / IE4 motors	I <sub>q</sub>	
kW	A	Article No.					Article No.	A	kA	
11	12.8	–	None	3RV2332-4TC10	3RT2035-1AP00	S2/S2/–	3UF71x1-1AA00-0/3RB2906-2DG1	2.4 ... 15.5	2.4 ... 15.5	100
15	17	–	14 ... 20	3RV2031-4BB10	3RT2035-1AP00	S2/S2/–	3UF71x1-1AA00-0/3RB2906-2DG1	2.4 ... 18.0	2.4 ... 18.0	70
15	17	–	14 ... 20	3RV2031-4BB10	3RT2035-1AP00	S2/S2/–	3UF71x2-1AA00-0/3RB2906-2JG1	10 ... 18.0	10 ... 18.0	70
18.5	21	–	18 ... 25	3RV2031-4DB10	3RT2037-1AP00	S2/S2/–	3UF71x2-1AA00-0/3RB2906-2JG1	10 ... 22.5	10 ... 22.5	70
15	17	3RV2332-4RC10	22 ... 32	3RV2032-4EA10	3RT2037-1AP00	S2/S2/–	3UF71x2-1AA00-0/3RB2906-2JG1	10 ... 20	10 ... 20	100
18.5	21		28 ... 36	3RV2032-4PA10	3RT2037-1AP00	S2/S2/–	3UF71x2-1AA00-0/3RB2906-2JG1	10 ... 24	10 ... 24	100
22	24		28 ... 36	3RV2032-4PA10	3RT2037-1AP00	S2/S2/–	3UF71x2-1AA00-0/3RB2906-2JG1	10 ... 24	10 ... 24	100
30	32		49 ... 59	3RV2032-4XA10	3RT2038-1AP00	S2/S2/–	3UF71x2-1AA00-0/3RB2906-2JG1	10 ... 39	10 ... 39	100
37	39		49 ... 59	3RV2032-4XA10	3RT2038-1AP00	S2/S2/–	3UF71x2-1AA00-0/3RB2906-2JG1	10 ... 39	10 ... 39	100

## 5.4 Motor starter protector + contactor + 3RB22, 3RB23, 3RB24 electronic overload relay, or 3UF7

Standard three-phase motor 4-pole at 690 V AC <sup>1)</sup>		Standard motor starter protector with limiter function <sup>2)</sup>	Setting range Overload release Motor starter protector	Motor starter protector Starter protection <sup>3)</sup>	Contactor <sup>4)</sup>	Size	Overload relay (electronic) or current measuring module <sup>5)</sup> Maximum permitted setting range overload release			
Standard output P	Motor current I						IE1 / IE2 motors	IE3 / IE4 motors	I <sub>q</sub>	
kW	A						Article No.	A	kA	
45	47	3RV2331-4RC10	42 ... 52	3RV2031-4WB10	3RT2037-1AP00	S2/S2/-	3UF71x2-1AA00-0/3RB2906-2JG1	10 ... 47	10 ... 47	70
45	47		49 ... 59	3RV2031-4XB10	3RT2038-1AP00	S2/S2/-	3UF71x2-1AA00-0/3RB2906-2JG1	10 ... 53	10 ... 53	70
55	57		54 ... 65	3RV2031-4JB10	3RT2038-1AP00	S2/S2/-	3UF71x2-1AA00-0/3RB2906-2JG1	10 ... 58	10 ... 58	70
<b>CLASS 20, short-circuit breaking capacity I<sub>q</sub> = 100 kA / 70 kA / 20 kA</b>										
0.12	0.23	–	0.55 ... 0.8	3RV2011-0HA10	3RT2015-1AP01	S00/S00/-	3UF71x0-1AA00-0/3RB2906-2BG1	0.3 ... 0.35	0.3 ... 0.35	100
0.18	0.35	–	0.55 ... 0.8	3RV2011-0HA10	3RT2015-1AP01	S00/S00/-	3UF71x0-1AA00-0/3RB2906-2BG1	0.3 ... 0.35	0.3 ... 0.35	100
0.25	0.49	–	0.9 ... 1.25	3RV2011-0KA10	3RT2015-1AP01	S00/S00/-	3UF71x0-1AA00-0/3RB2906-2BG1	0.3 ... 0.49	0.3 ... 0.49	100
0.37	0.64	–	1.1 ... 1.6	3RV2011-1AA10	3RT2015-1AP01	S00/S00/-	3UF71x0-1AA00-0/3RB2906-2BG1	0.3 ... 0.64	0.3 ... 0.64	100
0.55	0.87	–	1.4 ... 2.0	3RV2011-1BA10	3RT2015-1AP01	S00/S00/-	3UF71x0-1AA00-0/3RB2906-2BG1	0.3 ... 0.87	0.3 ... 0.87	100
0.75	1.1	3RV2321-4EC10	1.8 ... 2.5	3RV2011-1CA10	3RT2015-1AP01	S00/S00/-	3UF71x0-1AA00-0/3RB2906-2BG1	0.3 ... 1.1	0.3 ... 1.1	100
1.1	1.6		2.8 ... 4.0	3RV2021-1EA10	3RT2024-1AP00	S0/S0/-	3UF71x0-1AA00-0/3RB2906-2BG1	0.3 ... 1.6	0.3 ... 1.6	100

*Selection tables up to 690 V*

*5.4 Motor starter protector + contactor + 3RB22, 3RB23, 3RB24 electronic overload relay, or 3UF7*

Standard three-phase motor 4-pole at 690 V AC <sup>1)</sup>		Standard motor starter protector with limiter function <sup>2)</sup>	Setting range Overload release Motor starter protector	Motor starter protector Starter protection <sup>3)</sup>	Contactor <sup>4)</sup>	Size	Overload relay (electronic) or current measuring module <sup>5)</sup> Maximum permitted setting range overload release			
Stand- ard output P	Motor cur- rent I						IE1 / IE2 motors	IE3 / IE4 motors	I <sub>q</sub>	
kW	A						Article No.	A	kA	
1.5	2.1	3RV1331-4HC10	3.5 ... 5.0	3RV2021-1FA10	3RT2024-1AP00	S0/S0/-	3UF71x0-1AA00-0/3RB2906-2BG1	0.3 ... 2.1	0.3 ... 2.1	100
2.2	2.8		4.5 ... 6.3	3RV2021-1GA10	3RT2024-1AP00	S0/S0/-	3UF71x1-1AA00-0/3RB2906-2DG1	2.4 ... 2.8	2.4 ... 2.8	100
3	3.8		5.5 ... 8.0	3RV2021-1HA10	3RT2024-1AP00	S0/S0/-	3UF71x1-1AA00-0/3RB2906-2DG1	2.4 ... 3.8	2.4 ... 3.8	100
4	4.9		7 ... 10	3RV2021-1JA10	3RT2024-1AP00	S0/S0/-	3UF71x1-1AA00-0/3RB2906-2DG1	2.4 ... 4.9	2.4 ... 4.9	100
5.5	6.7		10 ... 16	3RV2021-4AA10	3RT2027-1AP00	S0/S0/-	3UF71x1-1AA00-0/3RB2906-2DG1	2.4 ... 6.7	2.4 ... 6.7	20
7.5	8.9		13 ... 20	3RV2021-4BA10	3RT2027-1AP00	S0/S0/-	3UF71x1-1AA00-0/3RB2906-2DG1	2.4 ... 8.9	2.4 ... 8.9	20
11	12.8		18 ... 25	3RV2021-4DA10	3RT2027-1AP00	S0/S0/-	3UF71x1-1AA00-0/3RB2906-2DG1	2.4 ... 12.8	2.4 ... 12.8	20
5.5	6.7		10 ... 16	3RV2021-4AA10	3RT2027-1AP00	S0/S0/-	3UF71x1-1AA00-0/3RB2906-2DG1	2.4 ... 6.7	2.4 ... 6.7	100
7.5	8.9		13 ... 20	3RV2021-4BA10	3RT2027-1AP00	S0/S0/-	3UF71x1-1AA00-0/3RB2906-2DG1	2.4 ... 8.9	2.4 ... 8.9	100
11	12.8		18 ... 25	3RV2021-4DA10	3RT2027-1AP00	S0/S0/-	3UF71x1-1AA00-0/3RB2906-2DG1	2.4 ... 12.8	2.4 ... 12.8	100

## 5.4 Motor starter protector + contactor + 3RB22, 3RB23, 3RB24 electronic overload relay, or 3UF7

Standard three-phase motor 4-pole at 690 V AC <sup>1)</sup>		Standard motor starter protector with limiter function <sup>2)</sup>	Setting range Overload release Motor starter protector	Motor starter protector Starter protection <sup>3)</sup>	Contactor <sup>4)</sup>	Size	Overload relay (electronic) or current measuring module <sup>5)</sup> Maximum permitted setting range overload release			
Standard output P	Motor current I							IE1 / IE2 motors	IE3 / IE4 motors	I <sub>q</sub>
kW	A	Article No.	Article No.	Article No.	A	A	kA			
5.5	6.7	3RV2332-4RC10	None	3RV2332-4SC10	3RT2035-1AP00	S2/S2/-	3UF71x1-1AA00-0/3RB2906-2DG1	2.4 ... 8.0	2.4 ... 8.0	100
7.5	8.9						3UF71x1-1AA00-0/3RB2906-2DG1	2.4 ... 10.0	2.4 ... 10.0	100
11	12.8						3UF71x2-1AA00-0/3RB2906-2JG1	10 ... 14.0	10 ... 14.0	100
15	17						3UF71x2-1AA00-0/3RB2906-2JG1	10 ... 25	10 ... 25	100
18.5	21						3UF71x2-1AA00-0/3RB2906-2JG1	10 ... 25	10 ... 25	100
22	24						3UF71x2-1AA00-0/3RB2906-2JG1	10 ... 25	10 ... 25	100
22	24						3UF71x2-1AA00-0/3RB2906-2JG1	10 ... 27	10 ... 27	70
30	32						3UF71x2-1AA00-0/3RB2906-2JG1	10 ... 34	10 ... 34	70
37	39						3UF71x2-1AA00-0/3RB2906-2JG1	10 ... 39	10 ... 39	70
45	47						3UF71x2-1AA00-0/3RB2906-2JG1	10 ... 48	10 ... 48	70

*Selection tables up to 690 V*

*5.4 Motor starter protector + contactor + 3RB22, 3RB23, 3RB24 electronic overload relay, or 3UF7*

Standard three-phase motor 4-pole at 690 V AC <sup>1)</sup>		Standard motor starter protector with limiter function <sup>2)</sup>	Setting range Overload release Motor starter protector	Motor starter protector Starter protection <sup>3)</sup>	Contactor <sup>4)</sup>	Size	Overload relay (electronic) or current measuring module <sup>5)</sup> Maximum permitted setting range overload release			
Stand- ard output P	Motor cur- rent I						IE1 / IE2 motors	IE3 / IE4 motors	I <sub>q</sub>	
kW	A						Article No.	A	kA	
<b>CLASS 30, short-circuit breaking capacity I<sub>q</sub> = 100 kA / 70 kA / 20 kA</b>										
0.12	0.23	–	0.7 ... 1.0	3RV2011-0JA10	3RT2015-1AP01	S00/S00/-	3UF71x0-1AA00-0/ 3RB2906-2BG1	0.3 ... 0.35	0.3 ... 0.35	100
0.18	0.35	–	0.7 ... 1.0	3RV2011-0JA10	3RT2015-1AP01	S00/S00/-	3UF71x0-1AA00-0/ 3RB2906-2BG1	0.3 ... 0.35	0.3 ... 0.35	100
0.25	0.49	–	1.1 ... 1.6	3RV2011-1AA10	3RT2015-1AP01	S00/S00/-	3UF71x0-1AA00-0/ 3RB2906-2BG1	0.3 ... 0.49	0.3 ... 0.49	100
0.37	0.64	3RV2321-4EC10	1.8 ... 2.5	3RV2011-1CA10	3RT2015-1AP01	S00/S00/-	3UF71x0-1AA00-0/ 3RB2906-2BG1	0.3 ... 0.64	0.3 ... 0.64	100
0.55	0.87		1.8 ... 2.5	3RV2011-1CA10	3RT2015-1AP01	S00/S00/-	3UF71x0-1AA00-0/ 3RB2906-2BG1	0.3 ... 0.87	0.3 ... 0.87	100
0.75	1.1		2.2 ... 3.2	3RV2021-1DA10	3RT2024-1AP00	S0/S0/-	3UF71x0-1AA00-0/ 3RB2906-2BG1	0.3 ... 3.0	0.3 ... 3.0	100
1.1	1.6		3.5 ... 5.0	3RV2021-1FA10	3RT2024-1AP00	S0/S0/-	3UF71x0-1AA00-0/ 3RB2906-2BG1	0.3 ... 1.6	0.3 ... 1.6	100
1.5	2.1		4.5 ... 6.3	3RV2021-1GA10	3RT2024-1AP00	S0/S0/-	3UF71x0-1AA00-0/ 3RB2906-2BG1	0.3 ... 2.1	0.3 ... 2.1	100
2.2	2.8		5.5 ... 8.0	3RV2021-1HA10	3RT2024-1AP00	S0/S0/-	3UF71x1-1AA00-0/ 3RB2906-2DG1	2.4 ... 2.8	2.4 ... 2.8	100
3	3.8		7 ... 10	3RV2021-1JA10	3RT2024-1AP00	S0/S0/-	3UF71x1-1AA00-0/ 3RB2906-2DG1	2.4 ... 3.8	2.4 ... 3.8	100

## 5.4 Motor starter protector + contactor + 3RB22, 3RB23, 3RB24 electronic overload relay, or 3UF7

Standard three-phase motor 4-pole at 690 V AC <sup>1)</sup>		Standard motor starter protector with limiter function <sup>2)</sup>	Setting range Overload release Motor starter protector	Motor starter protector Starter protection <sup>3)</sup>	Contactor <sup>4)</sup>	Size	Overload relay (electronic) or current measuring module <sup>5)</sup> Maximum permitted setting range overload release			
Standard output P	Motor current I							IE1 / IE2 motors	IE3 / IE4 motors	I <sub>q</sub>
kW	A						Article No.	A	A	kA
4	4.9	3RV2021-4AA10	10 ... 16	3RV2021-4AA10	3RT2027-1AP00	S0/S0/-	3UF71x1-1AA00-0/3RB2906-2DG1	2.4 ... 4.9	2.4 ... 4.9	20
5.5	6.7		13 ... 20	3RV2021-4BA10	3RT2027-1AP00	S0/S0/-	3UF71x1-1AA00-0/3RB2906-2DG1	2.4 ... 6.7	2.4 ... 6.7	20
7.5	8.9		18 ... 25	3RV2021-4DA10	3RT2027-1AP00	S0/S0/-	3UF71x1-1AA00-0/3RB2906-2DG1	2.4 ... 8.9	2.4 ... 8.9	20
4	4.9	3RV1331-4HC10	10 ... 16	3RV2021-4AA10	3RT2027-1AP00	S0/S0/-	3UF71x1-1AA00-0/3RB2906-2DG1	2.4 ... 4.9	2.4 ... 4.9	100
5.5	6.7		13 ... 20	3RV2021-4BA10	3RT2027-1AP00	S0/S0/-	3UF71x1-1AA00-0/3RB2906-2DG1	2.4 ... 6.7	2.4 ... 6.7	100
7.5	8.9		18 ... 25	3RV2021-4DA10	3RT2027-1AP00	S0/S0/-	3UF71x1-1AA00-0/3RB2906-2DG1	2.4 ... 8.9	2.4 ... 8.9	100
5.5	6.7	3RV2332-4RC10	14 ... 20	3RV2032-4BA10	3RT2035-1AP00	S2/S2/-	3UF71x1-1AA00-0/3RB2906-2DG1	2.4 ... 7.3	2.4 ... 7.3	100
7.5	8.9		28 ... 36	3RV2032-4PA10	3RT2037-1AP00	S2/S2/-	3UF71x1-1AA00-0/3RB2906-2DG1	2.4 ... 13.0	2.4 ... 13.0	100
7.5	8.9		28 ... 36	3RV2032-4PA10	3RT2037-1AP00	S2/S2/-	3UF71x2-1AA00-0/3RB2906-2JG1	10 ... 13.0	10 ... 13.0	100
11	12.8	3RV2032-4VA10	35 ... 45	3RV2032-4VA10	3RT2037-1AP00	S2/S2/-	3UF71x1-1AA00-0/3RB2906-2DG1	2.4 ... 14.0	2.4 ... 14.0	100
11	12.8		35 ... 45	3RV2032-4VA10	3RT2037-1AP00	S2/S2/-	3UF71x2-1AA00-0/3RB2906-2JG1	10 ... 14.0	10 ... 14.0	100

*Selection tables up to 690 V*

*5.4 Motor starter protector + contactor + 3RB22, 3RB23, 3RB24 electronic overload relay, or 3UF7*

Standard three-phase motor 4-pole at 690 V AC <sup>1)</sup>		Standard motor starter protector with limiter function <sup>2)</sup>	Setting range Overload release Motor starter protector	Motor starter protector Starter protection <sup>3)</sup>	Contactor <sup>4)</sup>	Size	Overload relay (electronic) or current measuring module <sup>5)</sup> Maximum permitted setting range overload release			
Stand- ard output P	Motor cur- rent I						Article No.	IE1 / IE2 motors	IE3 / IE4 motors	I <sub>q</sub>
kW	A	Article No.	Article No.	Article No.	A	A	A	A	kA	
7.5	8.9	–	14 ... 20	3RV2031-4BB10	3RT2035-1AP00	S2/S2/-	3UF71x1-1AA00-0/3RB2906-2DG1	2.4 ... 9.5	2.4 ... 9.5	70
11	12.8	–	18 ... 25	3RV2031-4DB10	3RT2035-1AP00	S2/S2/-	3UF71x1-1AA00-0/3RB2906-2DG1	2.4 ... 13.0	2.4 ... 13.0	70
15	17	3RV2331-4RC10	22 ... 32	3RV2031-4EB10	3RT2037-1AP00	S2/S2/-	3UF71x1-1AA00-0/3RB2906-2DG1	2.4 ... 17.0	2.4 ... 17.0	70
15	17		22 ... 32	3RV2031-4EB10	3RT2037-1AP00	S2/S2/-	3UF71x2-1AA00-0/3RB2906-2JG1	10 ... 17.0	10 ... 17.0	70
18.5	21		32 ... 40	3RV2031-4UB10	3RT2037-1AP00	S2/S2/-	3UF71x2-1AA00-0/3RB2906-2JG1	10 ... 22	10 ... 22	70
22	24		35 ... 45	3RV2031-4VB10	3RT2037-1AP00	S2/S2/-	3UF71x2-1AA00-0/3RB2906-2JG1	10 ... 25	10 ... 25	70
30	32		49 ... 59	3RV2031-4XB10	3RT2038-1AP00	S2/S2/-	3UF71x2-1AA00-0/3RB2906-2JG1	10 ... 31	10 ... 31	70
30	32		54 ... 65	3RV2031-4JB10	3RT2038-1AP00	S2/S2/-	3UF71x2-1AA00-0/3RB2906-2JG1	10 ... 35	10 ... 35	70

## 5.4 Motor starter protector + contactor + 3RB22, 3RB23, 3RB24 electronic overload relay, or 3UF7

Standard three-phase motor 4-pole at 690 V AC <sup>1)</sup>		Standard motor starter protector with limiter function <sup>2)</sup>	Setting range Overload release Motor starter protector	Motor starter protector Starter protection <sup>3)</sup>	Contactor <sup>4)</sup>	Size	Overload relay (electronic) or current measuring module <sup>5)</sup> Maximum permitted setting range overload release			
Standard output P	Motor current I						IE1 / IE2 motors	IE3 / IE4 motors	I <sub>q</sub>	
kW	A	Article No.					Article No.	A	A	kA
<b>CLASS 40, short-circuit breaking capacity I<sub>q</sub> = 100 kA / 70 kA / 50 kA / 20 kA</b>										
0.12	0.23	–	1.1 ... 1.6	3RV2011-1AA10	3RT2015-1AP01	S00/S00/-	3UF71x0-1AA00-0	0.3 ... 0.35	0.3 ... 0.35	100
0.18	0.35	–	1.1 ... 1.6	3RV2011-1AA10	3RT2015-1AP01	S00/S00/-	3UF71x0-1AA00-0	0.3 ... 0.35	0.3 ... 0.35	100
0.25	0.49	–	1.1 ... 1.6	3RV2011-1AA10	3RT2015-1AP01	S00/S00/-	3UF71x0-1AA00-0	0.3 ... 0.49	0.3 ... 0.49	100
0.37	0.64	3RV2321-4EC10	1.8 ... 2.5	3RV2011-1CA10	3RT2015-1AP01	S00/S00/-	3UF71x0-1AA00-0	0.3 ... 0.64	0.3 ... 0.64	100
0.55	0.87		2.2 ... 3.2	3RV2021-1DA10	3RT2024-1AP00	S0/S0/-	3UF71x0-1AA00-0	0.3 ... 0.87	0.3 ... 0.87	100
0.75	1.1		3.5 ... 5.0	3RV2021-1FA10	3RT2024-1AP00	S0/S0/-	3UF71x0-1AA00-0	0.3 ... 1.1	0.3 ... 1.1	100
1.1	1.6		3.5 ... 5.0	3RV2021-1FA10	3RT2024-1AP00	S0/S0/-	3UF71x0-1AA00-0	0.3 ... 1.6	0.3 ... 1.6	100
1.5	2.1		5.5 ... 8.0	3RV2021-1HA10	3RT2024-1AP00	S0/S0/-	3UF71x0-1AA00-0	0.3 ... 2.1	0.3 ... 2.1	100
2.2	2.8		7 ... 10	3RV2021-1JA10	3RT2024-1AP00	S0/S0/-	3UF71x0-1AA00-0	0.3 ... 2.8	0.3 ... 2.8	100
3	3.8		10 ... 16	3RV2021-4AA10	3RT2027-1AP00	S0/S0/-	3UF71x1-1AA00-0	2.4 ... 3.8	2.4 ... 3.8	20
4	4.9		10 ... 16	3RV2021-4AA10	3RT2027-1AP00	S0/S0/-	3UF71x1-1AA00-0	2.4 ... 4.9	2.4 ... 4.9	20
5.5	6.7		18 ... 25	3RV2021-4DA10	3RT2027-1AP00	S0/S0/-	3UF71x1-1AA00-0	2.4 ... 6.7	2.4 ... 6.7	20
2.2	2.8	3RV1331-4HC10	10 ... 16	3RV2021-4AA10	3RT2027-1AP00	S0/S0/-	3UF71x0-1AA00-0	0.3 ... 2.8	0.3 ... 2.8	100
3	3.8		10 ... 16	3RV2021-4AA10	3RT2027-1AP00	S0/S0/-	3UF71x1-1AA00-0	2.4 ... 3.8	2.4 ... 3.8	100
4	4.9		10 ... 16	3RV2021-4AA10	3RT2027-1AP00	S0/S0/-	3UF71x1-1AA00-0	2.4 ... 4.9	2.4 ... 4.9	100
5.5	6.7		18 ... 25	3RV2021-4DA10	3RT2028-1AP00	S0/S0/-	3UF71x1-1AA00-0	2.4 ... 6.7	2.4 ... 6.7	100

*Selection tables up to 690 V*

*5.4 Motor starter protector + contactor + 3RB22, 3RB23, 3RB24 electronic overload relay, or 3UF7*

Standard three-phase motor 4-pole at 690 V AC <sup>1)</sup>		Standard motor starter protector with limiter function <sup>2)</sup>	Setting range Overload release Motor starter protector	Motor starter protector Starter protection <sup>3)</sup>	Contactor <sup>4)</sup>	Size	Overload relay (electronic) or current measuring module <sup>5)</sup> Maximum permitted setting range overload release			
Stand- ard output P	Motor cur- rent I						Article No.	IE1 / IE2 motors	IE3 / IE4 motors	I <sub>q</sub>
kW	A	Article No.	Article No.	Article No.	A	A	A	A	kA	
4	4.9	–	9.5 ... 14	3RV2031-4SB10	3RT2035-1AP00	S2/S2/–	3UF71x1-1AA00-0	2.4 ... 5.5	2.4 ... 5.5	50
5.5	6.7	–	14 ... 20	3RV2031-4BB10	3RT2035-1AP00	S2/S2/–	3UF71x1-1AA00-0	2.4 ... 7.5	2.4 ... 7.5	70
7.5	8.9	–	18 ... 25	3RV2031-4DB10	3RT2035-1AP00	S2/S2/–	3UF71x1-1AA00-0	2.4 ... 10.5	2.4 ... 10.5	70
11	12.8	3RV2331-4RC10	22 ... 32	3RV2031-4EB10	3RT2037-1AP00	S2/S2/–	3UF71x1-1AA00-0	2.4 ... 14.0	2.4 ... 14.0	70
11	12.8		22 ... 32	3RV2031-4EB10	3RT2037-1AP00	S2/S2/–	3UF71x2-1AA00-0	10 ... 14.0	10 ... 14.0	70
15	17		32 ... 40	3RV2031-4UB10	3RT2037-1AP00	S2/S2/–	3UF71x1-1AA00-0	2.4 ... 17.5	2.4 ... 17.5	70
15	17		32 ... 40	3RV2031-4UB10	3RT2037-1AP00	S2/S2/–	3UF71x2-1AA00-0	10 ... 17.5	10 ... 17.5	70
18.5	21		42 ... 52	3RV2031-4WB10	3RT2037-1AP00	S2/S2/–	3UF71x1-1AA00-0	2.4 ... 23.0	2.4 ... 23.0	70
18.5	21		42 ... 52	3RV2031-4WB10	3RT2037-1AP00	S2/S2/–	3UF71x2-1AA00-0	10 ... 23.0	10 ... 23.0	70
22	24		49 ... 59	3RV2031-4XB10	3RT2038-1AP00	S2/S2/–	3UF71x1-1AA00-0	2.4 ... 25.0	2.4 ... 25.0	70
22	24		49 ... 59	3RV2031-4XB10	3RT2038-1AP00	S2/S2/–	3UF71x2-1AA00-0	10 ... 26.0	10 ... 26.0	70
22	24		54 ... 65	3RV2031-4JB10	3RT2038-1AP00	S2/S2/–	3UF71x2-1AA00-0	10 ... 30.0	10 ... 30.0	70

Article numbers for basic versions with screw terminals and spring-loaded terminals also possible. 3RA2921-1BA00 link module can only be used with screw terminals.

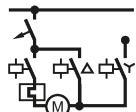
- 1) Guide value for 4-pole standard motors at 690 V AC, 50 Hz. Selection depends on the concrete startup and rated data of the protected motor.
- 2) The motor starter protector must be set to the maximum current value.
- 3) The motor starter protector is to be set to maximum current value.
- 4) Rated control supply voltage 230 V AC, 50 Hz, other control voltages possible.
- 5) The necessary current measuring modules (x = 0) or the current measuring modules / voltage measuring modules (x = 1) are specified. The corresponding basic units 3RB22 / 3RB23 / 3RB24 and 3UF7 are additionally required.

## 5.5 Motor starter protector + contactor assembly for star-delta (wye-delta) start + 3RU21 thermal overload relay

## 5.5 Motor starter protector + contactor assembly for star-delta (wye-delta) start + 3RU21 thermal overload relay

### 5.5.1 CLASS 10, types of coordination 1 and 2, short-circuit breaking capacity $I_q = 100 \text{ kA} / 20 \text{ kA}$

CLASS 10, types of coordination 1 and 2,  
short-circuit breaking capacity  $I_q = 100 \text{ kA} / 20 \text{ kA}$



AC 690V

Standard three-phase motor 4-pole at 690 V AC <sup>1)</sup>		Standard motor starter protector with limiter function <sup>2)</sup>	Motor starter protector	Contactors <sup>3)</sup>		Size	Overload relay (thermal)	Setting range Overload release Overload relay	$I_q$
Stand- ard output P	Motor cur- rent I			Line contactor + delta contactor	Star contactor				
kW	A	Article No.	Article No.	Article No.	Article No.	Article No.	A	kA	
<b>Type of coordination 1</b>									
0.06	0.12	–	3RV2311-0AC10	3RT2015-1AP01	3RT2015-1AP01	–/S00/S00/S00	4)	4)	100
0.09	0.17	–	3RV2311-0BC10	3RT2015-1AP01	3RT2015-1AP01	–/S00/S00/S00	4)	4)	100
0.12	0.23	–	3RV2311-0CC10	3RT2015-1AP01	3RT2015-1AP01	–/S00/S00/S00	3RU2116-0AB0	0.11 ... 0.16	100
0.12	0.23	–	3RV2311-0DC10	3RT2015-1AP01	3RT2015-1AP01	–/S00/S00/S00	3RU2116-0AB0	0.11 ... 0.16	100
0.18	0.35	–	3RV2311-0EC10	3RT2015-1AP01	3RT2015-1AP01	–/S00/S00/S00	3RU2116-0CB0	0.18 ... 0.25	100
0.25	0.49	–	3RV2311-0FC10	3RT2015-1AP01	3RT2015-1AP01	–/S00/S00/S00	3RU2116-0DB0	0.22 ... 0.32	100
0.25	0.49	–	3RV2311-0GC10	3RT2015-1AP01	3RT2015-1AP01	–/S00/S00/S00	3RU2116-0DB0	0.22 ... 0.32	100
0.37	0.64	–	3RV2311-0HC10	3RT2015-1AP01	3RT2015-1AP01	–/S00/S00/S00	3RU2116-0FB0	0.35 ... 0.50	100
0.55	0.87	–	3RV2311-0JC10	3RT2015-1AP01	3RT2015-1AP01	–/S00/S00/S00	3RU2116-0GB0	0.45 ... 0.63	100
0.75	1.1	–	3RV2311-0KC10	3RT2015-1AP01	3RT2015-1AP01	–/S00/S00/S00	3RU2116-0HB0	0.55 ... 0.80	100

*Selection tables up to 690 V*

*5.5 Motor starter protector + contactor assembly for star-delta (wye-delta) start + 3RU21 thermal overload relay*

Standard three-phase motor 4-pole at 690 V AC <sup>1)</sup>		Standard motor starter protector with limiter function <sup>2)</sup>	Motor starter protector	Contactors <sup>3)</sup>		Size	Overload relay (thermal)	Setting range Overload release Overload relay	I <sub>q</sub>
Stand-ard output P	Motor cur-rent I			Line contactor + delta contactor	Star contactor				
kW	A	Article No.	Article No.	Article No.	Article No.	Article No.	A	kA	
1.1	1.6	–	3RV2311-1AC10	3RT2015-1AP01	3RT2015-1AP01	–/S00/S00/S00	3RU2116-0JB0	0.7 ... 1.00	100
1.1	1.6	–	3RV2311-1BC10	3RT2015-1AP01	3RT2015-1AP01	–/S00/S00/S00	3RU2116-0JB0	0.7 ... 1.00	100
1.5	2.1	3RV2321-4EC10	3RV2311-1CC10	3RT2015-1AP01	3RT2015-1AP01	S0/S00/S00/S00	3RU2116-1AB0	1.1 ... 1.6	100
2.2	2.8		3RV2311-1DC10	3RT2015-1AP01	3RT2015-1AP01	S0/S00/S00/S00	3RU2116-1BB0	1.4 ... 2.0	100
3	3.8		3RV2311-1EC10	3RT2015-1AP01	3RT2015-1AP01	S0/S00/S00/S00	3RU2116-1CB0	1.8 ... 2.5	100
3	3.8		3RV2311-1FC10	3RT2015-1AP01	3RT2015-1AP01	S0/S00/S00/S00	3RU2116-1CB0	1.8 ... 2.5	100
4	4.9		3RV2311-1FC10	3RT2015-1AP01	3RT2015-1AP01	S0/S00/S00/S00	3RU2116-1DB0	2.2 ... 3.2	100
4	4.9		3RV2311-1GC10	3RT2015-1AP01	3RT2015-1AP01	S0/S00/S00/S00	3RU2116-1DB0	2.2 ... 3.2	100
5.5	6.7		3RV2311-1HC10	3RT2018-1AP01	3RT2018-1AP01	S0/S00/S00/S00	3RU2116-1FB0	3.5 ... 5.0	100
7.5	8.9		3RV2311-1JC10	3RT2018-1AP01	3RT2018-1AP01	S0/S00/S00/S00	3RU2116-1GB0	4.5 ... 6.3	100
11	12.8		3RV2321-4AC10	3RT2025-1AP00	3RT2025-1AP00	S0/S0/S0/S0	3RU2126-1HB0	5.5 ... 8.0	20
15	17		3RV2321-4BC10	3RT2027-1AP00	3RT2025-1AP00	S0/S0/S0/S0	3RU2126-1KB0	9.0 ... 12.5	20
18.5	21		3RV2321-4CC10	3RT2027-1AP00	3RT2025-1AP00	S0/S0/S0/S0	3RU2126-4AB0	11 ... 16	20
18.5	21		3RV2321-4DC10	3RT2027-1AP00	3RT2025-1AP00	S0/S0/S0/S0	3RU2126-4AB0	11 ... 16	20
11	12.8	3RV1331-4HC10	3RV2321-4AC10	3RT2025-1AP00	3RT2025-1AP00	S2/S0/S0/S0	3RU2126-1HB0	5.5 ... 8.0	100
15	17		3RV2321-4BC10	3RT2028-1AP00	3RT2025-1AP00	S2/S0/S0/S0	3RU2126-1KB0	9.0 ... 12.5	100
18.5	21		3RV2321-4CC10	3RT2028-1AP00	3RT2025-1AP00	S2/S0/S0/S0	3RU2126-4AB0	11 ... 16	100
18.5	21		3RV2321-4DC10	3RT2028-1AP00	3RT2025-1AP00	S2/S0/S0/S0	3RU2126-4AB0	11 ... 16	100
15	17		3RV2332-4TC10	3RT2035-1AP00	3RT2025-1AP00	–/S2/S2/S0/S2	3RU2136-1KB0	9.0 ... 12.5	100
15	17	–	3RV2332-4BC10	3RT2035-1AP00	3RT2025-1AP00	–/S2/S2/S0/S2	3RU2136-1KB0	9.0 ... 12.5	100

## 5.5 Motor starter protector + contactor assembly for star-delta (wye-delta) start + 3RU21 thermal overload relay

Standard three-phase motor 4-pole at 690 V AC <sup>1)</sup>		Standard motor starter protector with limiter function <sup>2)</sup>	Motor starter protector	Contactors <sup>3)</sup>		Size	Overload relay (thermal)	Setting range Overload release Overload relay	I <sub>q</sub>
Standard output P	Motor current I			Line contactor + delta contactor	Star contactor				
kW	A	Article No.	Article No.	Article No.	Article No.		Article No.	A	KA
18.5	21	–	3RV2332-4DC10	3RT2035-1AP00	3RT2026-1AP00	–/S2/S2/S0/S2	3RU2136-4AB0	11 ... 16	100
22	24	–	3RV2332-4DC10	3RT2035-1AP00	3RT2026-1AP00	–/S2/S2/S0/S2	3RU2136-4AB0	11 ... 16	100
22	24	3RV2331-4RC10	3RV2332-4EC10	3RT2037-1AP00	3RT2026-1AP00	S2/S2/S2/S0/S2	3RU2136-4BB0	14 ... 20	100
30	32		3RV2332-4UC10	3RT2037-1AP00	3RT2027-1AP00	S2/S2/S2/S0/S2	3RU2136-4DB0	18 ... 25	100
37	39		3RV2332-4VC10	3RT2037-1AP00	3RT2028-1AP00	S2/S2/S2/S0/S2	3RU2136-4EB0	22 ... 32	100
45	47		3RV2332-4WC10	3RT2037-1AP00	3RT2035-1AP00	S2/S2/S2/S2/S2	3RU2136-4EB0	22 ... 32	100
45	47		3RV2332-4WC10	3RT2037-1AP00	3RT2035-1AP00	S2/S2/S2/S2/S2	3RU2136-4FB0	28 ... 40	100
45	47		3RV2332-4XC10	3RT2038-1AP00	3RT2035-1AP00	S2/S2/S2/S2/S2	3RU2136-4FB0	28 ... 40	100
45	47		3RV2332-4JC10	3RT2038-1AP00	3RT2035-1AP00	S2/S2/S2/S2/S2	3RU2136-4FB0	28 ... 40	100
<b>Type of coordination 2</b>									
0.06	0.12	–	3RV2311-0AC10	3RT2015-1AP01	3RT2015-1AP01	–/S00/S00/S00	4)	4)	100
0.09	0.17	–	3RV2311-0BC10	3RT2015-1AP01	3RT2015-1AP01	–/S00/S00/S00	4)	4)	100
0.12	0.23	–	3RV2311-0CC10	3RT2015-1AP01	3RT2015-1AP01	–/S00/S00/S00	3RU2116-0AB0	0.11 ... 0.16	100
0.12	0.23	–	3RV2311-0DC10	3RT2015-1AP01	3RT2015-1AP01	–/S00/S00/S00	3RU2116-0AB0	0.11 ... 0.16	100
0.18	0.35	–	3RV2311-0EC10	3RT2015-1AP01	3RT2015-1AP01	–/S00/S00/S00	3RU2116-0CB0	0.18 ... 0.25	100
0.25	0.49	–	3RV2311-0FC10	3RT2015-1AP01	3RT2015-1AP01	–/S00/S00/S00	3RU2116-0DB0	0.22 ... 0.32	100
0.25	0.49	–	3RV2311-0GC10	3RT2015-1AP01	3RT2015-1AP01	–/S00/S00/S00	3RU2116-0DB0	0.22 ... 0.32	100
0.37	0.64	–	3RV2311-0HC10	3RT2015-1AP01	3RT2015-1AP01	–/S00/S00/S00	3RU2116-0FB0	0.35 ... 0.50	100
0.55	0.87	–	3RV2311-0JC10	3RT2015-1AP01	3RT2015-1AP01	–/S00/S00/S00	3RU2116-0GB0	0.45 ... 0.63	100
0.75	1.1	–	3RV2311-0KC10	3RT2015-1AP01	3RT2015-1AP01	–/S00/S00/S00	3RU2116-0HB0	0.55 ... 0.80	100

*Selection tables up to 690 V*

*5.5 Motor starter protector + contactor assembly for star-delta (wye-delta) start + 3RU21 thermal overload relay*

Standard three-phase motor 4-pole at 690 V AC <sup>1)</sup>		Standard motor starter protector with limiter function <sup>2)</sup>	Motor starter protector	Contactors <sup>3)</sup>		Size	Overload relay (thermal)	Setting range Overload release Overload relay	I <sub>q</sub>
Stand-ard output P	Motor cur-rent I			Line contactor + delta contactor	Star contactor				
kW	A	Article No.	Article No.	Article No.	Article No.	Article No.	A	kA	
1.1	1.6	–	3RV2311-1AC10	3RT2015-1AP01	3RT2015-1AP01	–/S00/S00/S00	3RU2116-0JB0	0.7 ... 1.00	100
1.1	1.6	–	3RV2311-1BC10	3RT2015-1AP01	3RT2015-1AP01	–/S00/S00/S00	3RU2116-0JB0	0.7 ... 1.00	100
1.5	2.1	3RV2321-4EC10	3RV2311-1CC10	3RT2015-1AP01	3RT2015-1AP01	S0/S00/S00/S00	3RU2116-1AB0	1.1 ... 1.6	100
2.2	2.8		3RV2321-1DC10	3RT2024-1AP00	3RT2015-1AP01	S0/S0/S00/S00	3RU2116-1BB0	1.4 ... 2.0	100
3	3.8		3RV2321-1EC10	3RT2024-1AP00	3RT2015-1AP01	S0/S0/S00/S0	3RU2126-1CB0	1.8 ... 2.5	100
3	3.8		3RV2321-1FC10	3RT2024-1AP00	3RT2015-1AP01	S0/S0/S00/S0	3RU2126-1CB0	1.8 ... 2.5	100
4	4.9		3RV2321-1FC10	3RT2024-1AP00	3RT2018-1AP01	S0/S0/S00/S0	3RU2126-1DB0	2.2 ... 3.2	100
4	4.9		3RV2321-1GC10	3RT2024-1AP00	3RT2018-1AP01	S0/S0/S00/S0	3RU2126-1DB0	2.2 ... 3.2	100
5.5	6.7		3RV2321-1HC10	3RT2024-1AP00	3RT2024-1AP00	S0/S0/S0/S0	3RU2126-1FB0	3.5 ... 5.0	100
7.5	8.9		3RV2321-1JC10	3RT2024-1AP00	3RT2024-1AP00	S0/S0/S0/S0	3RU2126-1GB0	4.5 ... 6.3	100
11	12.8		3RV2321-4AC10	3RT2027-1AP00	3RT2025-1AP00	S0/S0/S0/S0	3RU2126-1HB0	5.5 ... 8.0	20
15	17		3RV2321-4BC10	3RT2027-1AP00	3RT2025-1AP00	S0/S0/S0/S0	3RU2126-1KB0	9.0 ... 12.5	20
18.5	21		3RV2321-4CC10	3RT2027-1AP00	3RT2027-1AP00	S0/S0/S0/S0	3RU2126-4AB0	11 ... 16	20
18.5	21		3RV2321-4DC10	3RT2027-1AP00	3RT2027-1AP00	S0/S0/S0/S0	3RU2126-4AB0	11 ... 16	20
11	12.8	3RV1331-4HC10	3RV2321-4AC10	3RT2027-1AP00	3RT2025-1AP00	S2/S0/S0/S0	3RU2126-1HB0	5.5 ... 8.0	100
15	17		3RV2321-4BC10	3RT2028-1AP00	3RT2025-1AP00	S0/S0/S0/S0	3RU2126-1KB0	9.0 ... 12.5	100
18.5	21		3RV2321-4CC10	3RT2028-1AP00	3RT2027-1AP00	S0/S0/S0/S0	3RU2126-4AB0	11 ... 16	100
18.5	21		3RV2321-4DC10	3RT2028-1AP00	3RT2027-1AP00	S0/S0/S0/S0	3RU2126-4AB0	11 ... 16	100
15	17	–	3RV2332-4TC10	3RT2035-1AP00	3RT2025-1AP00	–/S2/S2/S0/S2	3RU2136-1KB0	9.0 ... 12.5	100
15	17	–	3RV2332-4BC10	3RT2035-1AP00	3RT2025-1AP00	–/S2/S2/S0/S2	3RU2136-1KB0	9.0 ... 12.5	100

## 5.5 Motor starter protector + contactor assembly for star-delta (wye-delta) start + 3RU21 thermal overload relay

Standard three-phase motor 4-pole at 690 V AC <sup>1)</sup>		Standard motor starter protector with limiter function <sup>2)</sup>	Motor starter protector	Contactors <sup>3)</sup>		Size	Overload relay (thermal)	Setting range Overload release Overload relay	$I_q$
Standard output P	Motor cur- rent I			Line contactor + delta contactor	Star contactor				
kW	A	Article No.	Article No.	Article No.	Article No.		Article No.	A	kA
18.5	21	–	3RV2332-4DC10	3RT2035-1AP00	3RT2026-1AP00	–/S2/S2/S0/S2	3RU2136-4AB0	11 ... 16	100
22	24	–	3RV2332-4DC10	3RT2035-1AP00	3RT2026-1AP00	–/S2/S2/S0/S2	3RU2136-4AB0	11 ... 16	100
22	24	3RV2331-4RC10	3RV2332-4EC10	3RT2037-1AP00	3RT2026-1AP00	S2/S2/S2/S0/S2	3RU2136-4BB0	14 ... 20	100
30	32		3RV2332-4UC10	3RT2037-1AP00	3RT2027-1AP00	S2/S2/S2/S0/S2	3RU2136-4DB0	18 ... 25	100
37	39		3RV2332-4VC10	3RT2037-1AP00	3RT2028-1AP00	S2/S2/S2/S0/S2	3RU2136-4EB0	22 ... 32	100
45	47		3RV2332-4WC10	3RT2037-1AP00	3RT2035-1AP00	S2/S2/S2/S2/S2	3RU2136-4EB0	22 ... 32	100
45	47		3RV2332-4WC10	3RT2037-1AP00	3RT2035-1AP00	S2/S2/S2/S2/S2	3RU2136-4FB0	28 ... 40	100
45	47		3RV2332-4XC10	3RT2038-1AP00	3RT2035-1AP00	S2/S2/S2/S2/S2	3RU2136-4FB0	28 ... 40	100
45	47		3RV2332-4JC10	3RT2038-1AP00	3RT2035-1AP00	S2/S2/S2/S2/S2	3RU2136-4FB0	28 ... 40	100

Article numbers for basic versions with screw terminals and spring-loaded terminals also possible.

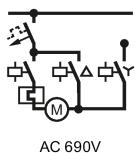
- <sup>1)</sup> Guide value for 4-pole standard motors at 690 V AC, 50 Hz. Selection depends on the concrete startup and rated data of the protected motor.
- <sup>2)</sup> The motor starter protector must be set to the maximum current value.
- <sup>3)</sup> Rated control supply voltage 230 V AC, 50 Hz, other control voltages possible.
- <sup>4)</sup> The user is responsible for providing reliable overload protection.

5.6 Motor starter protector + contactor assembly for star-delta (wye-delta) start + 3RB22, 3RB23, 3RB24 electronic overload relay, or 3UF7, 3RB3

**5.6 Motor starter protector + contactor assembly for star-delta (wye-delta) start + 3RB22, 3RB23, 3RB24 electronic overload relay, or 3UF7, 3RB3**

**5.6.1 CLASS 10, types of coordination 1 and 2, short-circuit breaking capacity  $I_q = 100 \text{ kA} / 70 \text{ kA} / 20 \text{ kA}$**

CLASS 10, types of coordination 1 and 2,  
short-circuit breaking capacity  $I_q = 100 \text{ kA} / 70 \text{ kA} / 20 \text{ kA}$



AC 690V

Standard three-phase motor 4-pole at 690 V AC <sup>1)</sup>		Standard motor starter protector with limiter function <sup>2)</sup>	Motor starter protector	Contactors <sup>3)</sup>		Size	Overload relay (electronic) or current measuring module <sup>4)</sup>	Setting range Overload release Overload relay	$I_q$
Stand- ard output P	Motor cur- rent I			Line contactor + delta contactor	Star contactor				
kW	A	Article No.	Article No.	Article No.	Article No.	Article No.	A	kA	
<b>Type of coordination 1 with 3RB3, short-circuit breaking capacity <math>I_q = 100 \text{ kA} / 70 \text{ kA} / 20 \text{ kA}</math></b>									
0.12	0.23	–	3RV2311-0CC10	3RT2015-1AP01	3RT2015-1AP01	S00/S00/S00/ S00	3RB3016-1RB0	0.1 ... 0.4	100
0.12	0.23	–	3RV2311-0DC10	3RT2015-1AP01	3RT2015-1AP01	S00/S00/S00/ S00	3RB3016-1RB0	0.1 ... 0.4	100
0.18	0.35	–	3RV2311-0EC10	3RT2015-1AP01	3RT2015-1AP01	S00/S00/S00/ S00	3RB3016-1RB0	0.1 ... 0.4	100
0.25	0.49	–	3RV2311-0FC10	3RT2015-1AP01	3RT2015-1AP01	S00/S00/S00/ S00	3RB3016-1RB0	0.1 ... 0.4	100
0.25	0.49	–	3RV2311-0GC10	3RT2015-1AP01	3RT2015-1AP01	S00/S00/S00/ S00	3RB3016-1RB0	0.1 ... 0.4	100
0.37	0.64	–	3RV2311-0HC10	3RT2015-1AP01	3RT2015-1AP01	S00/S00/S00/ S00	3RB3016-1NB0	0.32 ... 1.25	100
0.55	0.87	–	3RV2311-0JC10	3RT2015-1AP01	3RT2015-1AP01	S00/S00/S00/ S00	3RB3016-1NB0	0.32 ... 1.25	100
0.75	1.1	–	3RV2311-0KC10	3RT2015-1AP01	3RT2015-1AP01	S00/S00/S00/ S00	3RB3016-1NB0	0.32 ... 1.25	100
1.1	1.6	–	3RV2311-1BC10	3RT2015-1AP01	3RT2015-1AP01	S00/S00/S00/ S00	3RB3016-1NB0	0.32 ... 1.25	100

*5.6 Motor starter protector + contactor assembly for star-delta (wye-delta) start + 3RB22, 3RB23, 3RB24 electronic overload relay, or 3UF7, 3RB3*

Standard three-phase motor 4-pole at 690 V AC <sup>1)</sup>		Standard motor starter protector with limiter function <sup>2)</sup>	Motor starter protector	Contactors <sup>3)</sup>		Size	Overload relay (electronic) or current measuring module <sup>4)</sup>	Setting range Overload release Overload relay	I <sub>q</sub>
Stand- ard output P	Motor cur- rent I			Line contactor + delta contactor	Star contactor				
kW	A	Article No.	Article No.	Article No.	Article No.	Article No.	A	kA	
1.5	2.1	3RV2321-4EC10	3RV2311-1CC10	3RT2015-1AP01	3RT2015-1AP01	S00/S00/S00/ S00	3RB3016-1PB0	1 ... 4	100
2.2	2.8		3RV2311-1DC10	3RT2015-1AP01	3RT2015-1AP01	S00/S00/S00/ S00	3RB3016-1PB0	1 ... 4	100
3	3.8		3RV2311-1FC10	3RT2015-1AP01	3RT2015-1AP01	S00/S00/S00/ S00	3RB3016-1PB0	1 ... 4	100
4	4.9		3RV2311-1GC10	3RT2015-1AP01	3RT2015-1AP01	S00/S00/S00/ S00	3RB3016-1PB0	1 ... 4	100
5.5	6.7		3RV2311-1HC10	3RT2018-1AP01	3RT2018-1AP01	S00/S00/S00/ S00	3RB3016-1SB0	3 ... 12	100
7.5	8.9		3RV2311-1JC10	3RT2018-1AP01	3RT2018-1AP01	S00/S00/S00/ S00	3RB3016-1SB0	3 ... 12	100
11	12.8		3RV2321-4AC10	3RT2025-1AP00	3RT2025-1AP00	S0/S0/S0/S0	3RB3026-1QB0	6 ... 25	20
15	17		3RV2321-4CC10	3RT2027-1AP00	3RT2025-1AP00	S0/S0/S0/S0	3RB3026-1QB0	6 ... 25	20
18.5	21		3RV2321-4DC10	3RT2027-1AP00	3RT2025-1AP00	S0/S0/S0/S0	3RB3026-1QB0	6 ... 25	20
11	12.8	3RV1331-4HC10	3RV2321-4AC10	3RT2025-1AP00	3RT2025-1AP00	S0/S0/S0/S0	3RB3026-1QB0	6 ... 25	100
15	17		3RV2321-4CC10	3RT2028-1AP00	3RT2025-1AP00	S0/S0/S0/S0	3RB3026-1QB0	6 ... 25	100
18.5	21		3RV2321-4DC10	3RT2028-1AP00	3RT2025-1AP00	S0/S0/S0/S0	3RB3026-1QB0	6 ... 25	100
22	24	3RV2331-4RC10	3RV2331-4PC10	3RT2037-1AP00	3RT2027-1AP00	S2/S2/S0/S2	3RB3036-1UB0	12.5 ... 50	70
30	32		3RV2331-4UC10	3RT2037-1AP00	3RT2027-1AP00	S2/S2/S0/S2	3RB3036-1UB0	12.5 ... 50	70
37	39		3RV2331-4VC10	3RT2037-1AP00	3RT2027-1AP00	S2/S2/S0/S2	3RB3036-1UB0	12.5 ... 50	70
37	39		3RV2031-4VB10	3RT2037-1AP00	3RT2027-1AP00	S2/S2/S0/S2	3RB3036-1UB0	12.5 ... 50	70
45	47		3RV2031-4WB10	3RT2037-1AP00	3RT2027-1AP00	S2/S2/S0/S2	3RB3036-1UB0	12.5 ... 50	70
55	57		3RV2031-4JB10	3RT2038-1AP00	3RT2035-1AP00	S2/S2/S2/S2	3RB3036-1UB0	12.5 ... 50	70

*Selection tables up to 690 V*

**5.6 Motor starter protector + contactor assembly for star-delta (wye-delta) start + 3RB22, 3RB23, 3RB24 electronic overload relay, or 3UF7, 3RB3**

Standard three-phase motor 4-pole at 690 V AC <sup>1)</sup>		Standard motor starter protector with limiter function <sup>2)</sup>	Motor starter protector	Contactors <sup>3)</sup>		Size	Overload relay (electronic) or current measuring module <sup>4)</sup>	Setting range Overload release Overload relay	I <sub>q</sub>
Stand- ard output P	Motor cur- rent I			Line contactor + delta contactor	Star contactor				
kW	A	Article No.	Article No.	Article No.	Article No.				
<b>Type of coordination 2 with 3RB3, short-circuit breaking capacity I<sub>q</sub> = 100 kA / 70 kA / 20 kA</b>									
0.12	0.23	–	3RV2311-0CC10	3RT2015-1AP01	3RT2015-1AP01	S00/S00/S00/S00	3RB3016-1RB0	0.1 ... 0.4	100
0.12	0.23	–	3RV2311-0DC10	3RT2015-1AP01	3RT2015-1AP01	S00/S00/S00/S00	3RB3016-1RB0	0.1 ... 0.4	100
0.18	0.35	–	3RV2311-0EC10	3RT2015-1AP01	3RT2015-1AP01	S00/S00/S00/S00	3RB3016-1RB0	0.1 ... 0.4	100
0.25	0.49	–	3RV2311-0FC10	3RT2015-1AP01	3RT2015-1AP01	S00/S00/S00/S00	3RB3016-1RB0	0.1 ... 0.4	100
0.25	0.49	–	3RV2311-0GC10	3RT2015-1AP01	3RT2015-1AP01	S00/S00/S00/S00	3RB3016-1RB0	0.1 ... 0.4	100
0.37	0.64	–	3RV2311-0HC10	3RT2015-1AP01	3RT2015-1AP01	S00/S00/S00/S00	3RB3016-1NB0	0.32 ... 1.25	100
0.55	0.87	–	3RV2311-0JC10	3RT2015-1AP01	3RT2015-1AP01	S00/S00/S00/S00	3RB3016-1NB0	0.32 ... 1.25	100
0.75	1.1	–	3RV2311-0KC10	3RT2015-1AP01	3RT2015-1AP01	S00/S00/S00/S00	3RB3016-1NB0	0.32 ... 1.25	100
1.1	1.6	–	3RV2311-1BC10	3RT2015-1AP01	3RT2015-1AP01	S00/S00/S00/S00	3RB3016-1NB0	0.32 ... 1.25	100
1.5	2.1	3RV2321-4EC10	3RV2311-1CC10	3RT2015-1AP01	3RT2015-1AP01	S00/S00/S00/S00	3RB3016-1PB0	1 ... 4	100
2.2	2.8		3RV2321-1DC10	3RT2024-1AP00	3RT2015-1AP01	S0/S0/S00/S0	3RB3026-1PB0	1 ... 4	100
3	3.8		3RV2321-1FC10	3RT2024-1AP00	3RT2015-1AP01	S0/S0/S00/S0	3RB3026-1PB0	1 ... 4	100
4	4.9		3RV2321-1GC10	3RT2024-1AP00	3RT2018-1AP01	S0/S0/S00/S0	3RB3026-1PB0	1 ... 4	100
5.5	6.7		3RV2321-1HC10	3RT2024-1AP00	3RT2024-1AP00	S0/S0/S0/S0	3RB3026-1SB0	3 ... 12	100
7.5	8.9		3RV2321-1JC10	3RT2024-1AP00	3RT2024-1AP00	S0/S0/S0/S0	3RB3026-1SB0	3 ... 12	100
11	12.8		3RV2321-4AC10	3RT2027-1AP00	3RT2025-1AP00	S0/S0/S0/S0	3RB3026-1QB0	6 ... 25	20
15	17		3RV2321-4CC10	3RT2027-1AP00	3RT2025-1AP00	S0/S0/S0/S0	3RB3026-1QB0	6 ... 25	20
18.5	21		3RV2321-4DC10	3RT2027-1AP00	3RT2027-1AP00	S0/S0/S0/S0	3RB3026-1QB0	6 ... 25	20

*5.6 Motor starter protector + contactor assembly for star-delta (wye-delta) start + 3RB22, 3RB23, 3RB24 electronic overload relay, or 3UF7, 3RB3*

Standard three-phase motor 4-pole at 690 V AC <sup>1)</sup>		Standard motor starter protector with limiter function <sup>2)</sup>	Contactors <sup>3)</sup>		Size	Overload relay (electronic) or current measuring module <sup>4)</sup>	Setting range Overload release Overload relay	I <sub>q</sub>
Stand- ard output P	Motor cur- rent I		Line contactor + delta contactor	Star contactor				
kW	A		Article No.	Article No.	Article No.			
11	12.8	3RV1331-4HC10	3RV2321-4AC10	3RT2027-1AP00	3RT2025-1AP00	S0/S0/S0/S0	3RB3026-1QB0	6 ... 25 100
15	17		3RV2321-4CC10	3RT2028-1AP00	3RT2025-1AP00	S0/S0/S0/S0	3RB3026-1QB0	6 ... 25 100
18.5	21		3RV2321-4DC10	3RT2028-1AP00	3RT2027-1AP00	S0/S0/S0/S0	3RB3026-1QB0	6 ... 25 100
22	24	3RV2331-4RC10	3RV2331-4PC10	3RT2037-1AP00	3RT2027-1AP00	S2/S2/S0/S2	3RB3036-1UB0	12.5 ... 50 70
30	32		3RV2331-4UC10	3RT2037-1AP00	3RT2027-1AP00	S2/S2/S0/S2	3RB3036-1UB0	12.5 ... 50 70
37	39		3RV2331-4VC10	3RT2037-1AP00	3RT2027-1AP00	S2/S2/S0/S2	3RB3036-1UB0	12.5 ... 50 70
37	39		3RV2031-4VB10	3RT2037-1AP00	3RT2027-1AP00	S2/S2/S0/S2	3RB3036-1UB0	12.5 ... 50 70
45	47		3RV2031-4WB10	3RT2037-1AP00	3RT2027-1AP00	S2/S2/S0/S2	3RB3036-1UB0	12.5 ... 50 70
55	57		3RV2031-4JB10	3RT2038-1AP00	3RT2035-1AP00	S2/S2/S2/S2	3RB3036-1UB0	12.5 ... 50 70

*Selection tables up to 690 V*

**5.6 Motor starter protector + contactor assembly for star-delta (wye-delta) start + 3RB22, 3RB23, 3RB24 electronic overload relay, or 3UF7, 3RB3**

Standard three-phase motor 4-pole at 690 V AC <sup>1)</sup>		Standard motor starter protector with limiter function <sup>2)</sup>	Motor starter protector	Contactors <sup>3)</sup>		Size	Overload relay (electronic) or current measuring module <sup>4)</sup>	Setting range Overload release Overload relay	I <sub>q</sub>
Stand- ard output P	Motor cur- rent I			Line contactor + delta contactor	Star contactor				
kW	A	Article No.	Article No.	Article No.	Article No.				
<b>Types of coordination 1 and 2 with 3RB22, 3RB23, 3RB24 or 3UF7, short-circuit breaking capacity I<sub>q</sub> = 100 kA / 70 kA / 20 kA</b>									
0.37	0.64	3RV2321-4EC10	3RV2311-0EC10	3RT2015-1AP01	3RT2015-1AP01	S00/S00/S00/-	3UF71x0-1AA00-0/3RB2906-2BG1	0.3 ... 3.0	100
0.55	0.87		3RV2311-0JC10	3RT2015-1AP01	3RT2015-1AP01	S00/S00/S00/-	3UF71x0-1AA00-0/3RB2906-2BG1	0.3 ... 3.0	100
0.75	1.1		3RV2311-0KC10	3RT2015-1AP01	3RT2015-1AP01	S00/S00/S00/-	3UF71x0-1AA00-0/3RB2906-2BG1	0.3 ... 3.0	100
1.1	1.6		3RV2311-1BC10	3RT2015-1AP01	3RT2015-1AP01	S00/S00/S00/-	3UF71x0-1AA00-0/3RB2906-2BG1	0.3 ... 3.0	100
1.5	2.1		3RV2311-1CC10	3RT2015-1AP01	3RT2015-1AP01	S00/S00/S00/-	3UF71x0-1AA00-0/3RB2906-2BG1	0.3 ... 3.0	100
2.2	2.8		3RV2321-1DC10	3RT2024-1AP00	3RT2015-1AP01	S0/S0/S00/-	3UF71x0-1AA00-0/3RB2906-2BG1	0.3 ... 3.0	100
3	3.8		3RV2321-1FC10	3RT2024-1AP00	3RT2015-1AP01	S0/S0/S00/-	3UF71x0-1AA00-0/3RB2906-2BG1	0.3 ... 3.0	100
4	4.9		3RV2321-1GC10	3RT2024-1AP00	3RT2018-1AP01	S0/S0/S00/-	3UF71x1-1AA00-0/3RB2906-2DG1	2.4 ... 25	100
5.5	6.7		3RV2321-1HC10	3RT2024-1AP00	3RT2024-1AP00	S0/S0/S0/-	3UF71x1-1AA00-0/3RB2906-2DG1	2.4 ... 25	100
7.5	8.9		3RV2321-1JC10	3RT2024-1AP00	3RT2024-1AP00	S0/S0/S0/-	3UF71x1-1AA00-0/3RB2906-2DG1	2.4 ... 25	100

*5.6 Motor starter protector + contactor assembly for star-delta (wye-delta) start + 3RB22, 3RB23, 3RB24 electronic overload relay, or 3UF7, 3RB3*

Standard three-phase motor 4-pole at 690 V AC <sup>1)</sup>		Standard motor starter protector with limiter function <sup>2)</sup>	Motor starter protector	Contactors <sup>3)</sup>		Size	Overload relay (electronic) or current measuring module <sup>4)</sup>	Setting range Overload release Overload relay	I <sub>q</sub>
Stand- ard output P	Motor cur- rent I			Line contactor + delta contactor	Star contactor				
kW	A	Article No.	Article No.	Article No.	Article No.	Article No.	A	kA	
11	12.8	3RV2321-4AC10	3RT2027-1AP00	3RT2025-1AP00	S0/S0/S0/-	3UF71x1-1AA00-0/ 3RB2906-2DG1	2.4 ... 25	20	
15	17		3RT2027-1AP00	3RT2025-1AP00	S0/S0/S0/-	3UF71x1-1AA00-0/ 3RB2906-2DG1	2.4 ... 25	20	
18.5	21		3RT2027-1AP00	3RT2027-1AP00	S0/S0/S0/-	3UF71x1-1AA00-0/ 3RB2906-2DG1	2.4 ... 25	20	
11	12.8	3RV1331-4HC10	3RT2027-1AP00	3RT2025-1AP00	S0/S0/S0/-	3UF71x1-1AA00-0/ 3RB2906-2DG1	2.4 ... 25	100	
15	17		3RT2028-1AP00	3RT2025-1AP00	S0/S0/S0/-	3UF71x1-1AA00-0/ 3RB2906-2DG1	2.4 ... 25	100	
18.5	21		3RT2028-1AP00	3RT2027-1AP00	S0/S0/S0/-	3UF71x1-1AA00-0/ 3RB2906-2DG1	2.4 ... 25	100	

*Selection tables up to 690 V*

*5.6 Motor starter protector + contactor assembly for star-delta (wye-delta) start + 3RB22, 3RB23, 3RB24 electronic overload relay, or 3UF7, 3RB3*

Standard three-phase motor 4-pole at 690 V AC <sup>1)</sup>		Standard motor starter protector with limiter function <sup>2)</sup>	Contactors <sup>3)</sup>		Size	Overload relay (electronic) or current measuring module <sup>4)</sup>	Setting range Overload release Overload relay	$I_q$	
Stand- ard output P	Motor cur- rent I		Line contactor + delta contactor	Star contactor					
kW	A		Article No.	Article No.	Article No.				
18.5	21	3RV2331- 4RC10	3RV2331- 4EC10	3RT2037- 1AP00	3RT2026- 1AP00	S2/S2/S0/-	3UF71x2- 1AA00-0/ 3RB2906- 2JG1	10 ... 100	70
22	24		3RV2331- 4PC10	3RT2037- 1AP00	3RT2027- 1AP00	S2/S2/S0/-	3UF71x2- 1AA00-0/ 3RB2906- 2JG1	10 ... 100	70
30	32		3RV2331- 4UC10	3RT2037- 1AP00	3RT2027- 1AP00	S2/S2/S0/-	3UF71x2- 1AA00-0/ 3RB2906- 2JG1	10 ... 100	70
37	39		3RV2331- 4VC10	3RT2037- 1AP00	3RT2027- 1AP00	S2/S2/S0/-	3UF71x2- 1AA00-0/ 3RB2906- 2JG1	10 ... 100	70
37	39		3RV2031- 4VB10	3RT2037- 1AP00	3RT2027- 1AP00	S2/S2/S0/-	3UF71x2- 1AA00-0/ 3RB2906- 2JG1	10 ... 100	70
45	47		3RV2031- 4WB10	3RT2037- 1AP00	3RT2027- 1AP00	S2/S2/S0/-	3UF71x2- 1AA00-0/ 3RB2906- 2JG1	10 ... 100	70
55	57		3RV2031- 4JB10	3RT2038- 1AP00	3RT2035- 1AP00	S2/S2/S2/-	3UF71x2- 1AA00-0/ 3RB2906- 2JG1	10 ... 100	70

Article numbers for basic versions with screw terminals and spring-loaded terminals also possible.

- <sup>1)</sup> Guide value for 4-pole standard motors at 690 V AC, 50 Hz. Selection depends on the concrete startup and rated data of the protected motor.
  - <sup>2)</sup> The motor starter protector must be set to the maximum current value.
  - <sup>3)</sup> Rated control supply voltage 230 V AC, 50 Hz, other control voltages possible.
  - <sup>4)</sup> The necessary current measuring modules ( $x = 0$ ) or the current measuring modules / voltage measuring modules ( $x = 1$ ) are specified.
- The corresponding basic units 3RB22 / 3RB23 / 3RB24 or 3UF7 are additionally required.

## 5.7 Motor starter protector + 3RW44 soft starter

### 5.7.1 CLASS 10, type of coordination 1

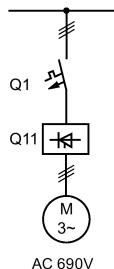
#### Restrictions

The soft starters are dimensioned in accordance with IEC60947-4-2. In accordance with the device standard, the maximum motor current to be taken into account is 8 times the rated motor current (locked rotor current).

For the correct dimensioning of soft starters for motors with high starting current ratios ( $I/I_e \geq 8$ ), we recommend our "Simulation Tool for Soft Starters (STS)":

- Download (<http://support.automation.siemens.com/WW/view/en/101494917>)
- Readme (<http://support.automation.siemens.com/WW/view/en/101494773>)

**CLASS 10, type of coordination 1,  
short-circuit breaking capacity  $I_q = 15 \text{ kA} / 10 \text{ kA} / 6 \text{ kA}$**



Standard three-phase motor 4-pole at 690 V AC <sup>1)</sup>		Setting range Overload release Motor starter protector	Motor starter protector Motor protection <sup>2)</sup>	Soft starter	Size MSP / 3RW44	$I_q$
Standard output P	Motor current I					
kW	A	A	Article No.	Article No.		kA
30 <sup>3)</sup>	29	22 ... 32	3RV2031-4EA10	3RW4422-1BC46	S2/FS1	15
37 <sup>3)</sup>	36	35 ... 45	3RV2031-4VA10	3RW4423-1BC46	S2/FS1	15
45 <sup>3)</sup>	47	42 ... 52	3RV2031-4WA10	3RW4424-1BC46	S2/FS1	15
55 <sup>3)</sup>	57	54 ... 65	3RV2031-4JA10	3RW4425-1BC46	S2/FS1	10
75 <sup>3)</sup>	77	70 ... 80	3RV2031-4RA10	3RW4426-1BC46	S2/FS1	10

## 5.7 Motor starter protector + 3RW44 soft starter

Standard three-phase motor 4-pole at 690 V AC <sup>1)</sup>		Setting range Overload release Motor starter protector	Motor starter protector Motor protection <sup>2)</sup>	Soft starter	Size MSP / 3RW44	I <sub>q</sub>
Standard output P	Motor current I					
kW	A	A	Article No.	Article No.		kA
75 <sup>3)</sup>	77	75 ... 93	3RV2042-4YA10	3RW4426-1BC46	S3/FS1	6
90 <sup>3)</sup>	93	80 ... 100	3RV2042-4MA10	3RW4427-1BC46	S3/FS1	6

Article numbers for basic versions with screw terminals and spring-loaded terminals also possible. 3RA2921-1BA00 link module can only be used with screw terminals.

- <sup>1)</sup> Guide value for 4-pole standard motors at 690 V AC, 50 Hz. Selection depends on the concrete startup and rated data of the protected motor.
- <sup>2)</sup> Rated currents taken into account at 40 °C ambient temperature. Rated control supply voltage 230 V AC, 50 Hz, other control voltages possible. Screw terminals, or spring-loaded terminals can be selected as an alternative connection method.
- <sup>3)</sup> Discrete mounting only, without a link module.

# 6

## Fused selection tables up to 690 V

### 6.1 Short-circuit protection: 3RT, 3TF6 contactor, types of coordination 1 and 2

Short-circuit protection up to 100 kA (sizes S6 / S10 / S12 / 14: 50 kA),  
types of coordination 1 and 2

Table 6- 1 Fuse links for protection according to IEC 60947-4-1

Contactor		Fuse links <sup>1)</sup>					
		gG [A]		aM [A]		British Standards BS88 <sup>3)</sup> (415 V / 80 kA) [A]	
Article No.	P [kW]	Type of coordination <sup>2)</sup>					
		1	2	1	2	1	2
<b>Size S00</b>							
3RT2015	3	35	20	20	16	35	20
3RT2016	4	35	20	20	16	35	20
3RT2017	5.5	50	20	20	16	35	20
3RT2018	7.5	50	25	25	20	50	25
<b>Size S0</b>							
3RT2023	4	63	25	32	20	63	25
3RT2024	5.5	63	25	32	20	63	25
3RT2025	7.5	63	25	32	20	63	25
3RT2026	11	100	35	50	20	100	35
3RT2027	15	125	50	50	25	125	50
3RT2028	18.5	125	50	50	25	125	50
<b>Size S2</b>							
3RT2035	18.5	160	80	80	50	125	63
3RT2036	22	160	80	80	50	125	63
3RT2037	30	250	125	160	63	200	100
3RT2038	37	250	160	160	80	200	125
<b>Size S3</b>							
3RT2045	37	250	160	160	80	200	125
3RT2046	45	250	160	160	100	200	125
3RT2047	55	250	200	160	100	200	160
<b>Size S6 (up to 50 kA)</b>							
3RT1054	55	355	315	—	160	—	250
3RT1055	75	355	315	—	200	—	315
3RT1056	90	355	315	—	200	—	315

*Fused selection tables up to 690 V*

*6.1 Short-circuit protection: 3RT, 3TF6 contactor, types of coordination 1 and 2*

Contactor		Fuse links <sup>1)</sup>					
		gG [A]	aM [A]	British Standards BS88 <sup>3)</sup> (415 V / 80 kA) [A]			
Article No.	P [kW]	Type of coordination <sup>2)</sup>					
		1	2	1	2	1	2
<b>Size S10 (up to 50 kA)</b>							
3RT1064	110	500	400	—	250	—	400
3RT1264	110	500	500	—	400	—	450
3RT1065	132	500	400	—	315	—	400
3RT1265	132	500	500	—	400	—	450
3RT1066	160	500	400	—	315	—	400
3RT1266	160	500	500	—	400	—	450
<b>Size S12 (up to 50 kA)</b>							
3RT1075	200	630	500	—	400	—	450
3RT1275	200	800	800	—	630	—	800
3RT1076	250	630	500	—	500	—	500
3RT1276	250	800	800	—	630	—	800
<b>Size 14 (up to 50 kA)</b>							
3TF68	335	1,000	500	—	630	—	500
3TF69	450	1,250	630	—	630	—	630

<sup>1)</sup> Please take account of the operating voltage.

<sup>2)</sup> Assignment and short-circuit protective devices acc. to IEC 60947-4-1

<sup>3)</sup> Fuse links as specified in the table "BS88 fuse links (Page 231)" must be used for BS88 fuses.

## 6.2 Short-circuit protection 3RU2 thermal overload relay, type of coordination 1 and 2

**Short-circuit protection up to 690 V / 100 kA**  
**Types of coordination 1 and 2**

Table 6- 2    Fuse links for protection according to IEC 60947-4-1

Thermal overload relay		Fuse links <sup>1)</sup>					
		gG [A]		aM [A]		British Standards BS88 <sup>3)</sup> (415 V / 80 kA) [A]	
Article No.	Setting range [A]	Type of coordination <sup>2)</sup>					
		1	2	1	2	1	2
<b>Size S00</b>							
3RU2116-0A..	0.11 ... 0.16	35	0.5	35	-	25	-
3RU2116-0B..	0.14 ... 0.20	35	1	35	-	25	-
3RU2116-0C..	0.18 ... 0.25	35	1	35	-	25	-
3RU2116-0D..	0.22 ... 0.32	35	1.6	35	-	25	2
3RU2116-0E..	0.28 ... 0.40	35	2	35	-	25	2
3RU2116-0F..	0.35 ... 0.50	35	2	35	-	25	2
3RU2116-0G..	0.45 ... 0.63	35	2	35	-	25	4
3RU2116-0H..	0.55 ... 0.80	35	4	35	-	25	4
3RU2116-0J..	0.70 ... 1.0	35	4	35	-	25	6
3RU2116-0K..	0.90 ... 1.25	35	4	35	-	25	6
3RU2116-1A..	1.10 ... 1.60	40	6	35	-	40	10
3RU2116-1B..	1.4 ... 2.0	40	6	35	-	40	10
3RU2116-1C..	1.8 ... 2.5	40	10	35	-	40	10
3RU2116-1D..	2.2 ... 3.2	40	10	35	-	40	16
3RU2116-1E..	2.8 ... 4.0	40	16	35	6	40	16
3RU2116-1F..	3.5 ... 5.0	40	20	35	6	40	20
3RU2116-1G..	4.5 ... 6.3	40	20	35	10	40	25
3RU2116-1H..	5.5 ... 8.0	40	25	35	10	40	32
3RU2116-1J..	7.0 ... 10	40	35	35	16	40	35
3RU2116-1K..	9.0 ... 12.5	40	35	35	20	40	35
3RU2116-4A..	11 ... 16	50	40	40	20	50	40

*Fused selection tables up to 690 V*

*6.2 Short-circuit protection 3RU2 thermal overload relay, type of coordination 1 and 2*

Thermal overload relay		Fuse links <sup>1)</sup>					
		gG [A]	aM [A]	British Standards BS88 <sup>3)</sup> (415 V / 80 kA) [A]			
Article No.	Setting range [A]	Type of coordination <sup>2)</sup>					
		1	2	1	2	1	2
<b>Size S0</b>							
3RU2126-1C..	1.8 ... 2.5	125	10	35	-	125	10
3RU2126-1D..	2.2 ... 3.2	125	10	35	-	125	16
3RU2126-1E..	2.8 ... 4.0	125	16	35	6	125	16
3RU2126-1F..	3.5 ... 5.0	125	20	35	6	125	20
3RU2126-1G..	4.5 ... 6.3	125	20	35	10	125	25
3RU2126-1H..	5.5 ... 8.0	125	25	35	10	125	32
3RU2126-1J..	7.0 ... 10	125	35	35	16	125	35
3RU2126-1K..	9.0 ... 12.5	125	35	35	20	125	35
3RU2126-4A..	11 ... 16	125	40	35	20	125	40
3RU2126-4B..	14 ... 20	125	50	35	25	125	50
3RU2126-4C..	17 ... 22	125	63	63	35	125	63
3RU2126-4D..	20 ... 25	125	63	63	35	125	63
3RU2126-4N..	23 ... 28	125	80	63	40	125	63
3RU2126-4E..	27 ... 32	125	80	63	40	125	63
3RU2126-4P..	30 ... 36	125	80	63	50	125	63
3RU2126-4F..	34 ... 40	125	80	63	50	125	80

## 6.2 Short-circuit protection 3RU2 thermal overload relay, type of coordination 1 and 2

Thermal overload relay		Fuse links <sup>1)</sup>					
		gG [A]	aM [A]	British Standards BS88 <sup>3)</sup> (415 V / 80 kA) [A]			
Article No.	Setting range [A]	Type of coordination <sup>2)</sup>					
		1	2	1	2	1	2
<b>Size S2</b>							
3RU2136-4A..	11 ... 16	80	40	50	20	80	40
3RU2136-4B..	14 ... 20	125	50	100	25	125	50
3RU2136-4D..	18 ... 25	125	63	100	35	125	63
3RU2136-4E..	22 ... 32	125	80	100	50	125	80
3RU2136-4F..	28 ... 40	125	80	100	50	125	80
3RU2136-4G..	36 ... 45	125	100	100	63	125	100
3RU2136-4H..	40 ... 50	125	100	100	80	125	100
3RU2136-4Q..	47 ... 57	200	100	160	80	200	100
3RU2136-4J..	54 ... 65	250	125	224	100	250	125
3RU2136-4K..	62 ... 73	250	160	224	125	250	160
3RU2136-4R..	70 ... 80	250	160	224	125	250	160
<b>Size S3</b>							
3RU2146-4F..	28 ... 40	160	80	125	50	160	80
3RU2146-4H..	36 ... 50	160	125	125	100	160	125
3RU2146-4J..	45 ... 63	200	125	160	100	200	125
3RU2146-4K..	57 ... 75	250	160	224	125	250	160
3RU2146-4L..	70 ... 90	250	160	224	125	250	160
3RU2146-4M..	80 ... 100	250	200	224	160	250	200

<sup>1)</sup> Please take account of the operating voltage.

<sup>2)</sup> Assignment and short-circuit protective devices acc. to IEC 60947-4-1

<sup>3)</sup> Fuse links as specified in the table "BS88 fuse links (Page 231)" must be used for BS88 fuses.

## 6.3 Short-circuit protection: 3RT2 contactor + 3RU2 thermal overload relay, types of coordination 1 and 2

### Short-circuit protection up to 690 V / 100 kA Types of coordination 1 and 2

Table 6- 3 Fuse links according to IEC 60947-4-1 operating class gG,  
(NH DIAZED, NEOZED; type 3NA, 5SB, 5SE)

Thermal overload relay	Overload relay Setting range	Contactor CLASS 10			Fuse links 1)									
		Article No.	[A]	Article No.	AC-3 derating values [A]			Operating class gG [A]		Operating class aM [A]				
Type of coordination 2)						400 V	500 V	690 V	1	2	1	2	1	2
3RU2116-0A..	0.11 ... 0.16	Stand-alone assembly	0.16	0.16	0.16	35	0.5	35	-	25	-			
3RU2116-0A..	0.11 ... 0.16	3RT2015..	0.16	0.16	0.16	35	0.5	20	-	25	-			
3RU2116-0B..	0.14 ... 0.20	Stand-alone assembly	0.2	0.2	0.2	35	1	35	-	25	-			
3RU2116-0B..	0.14 ... 0.20	3RT2015..	0.2	0.2	0.2	35	1	20	-	25	-			
3RU2116-0C..	0.18 ... 0.25	Stand-alone assembly	0.25	0.25	0.25	35	1	35	-	25	-			
3RU2116-0C..	0.18 ... 0.25	3RT2015..	0.25	0.25	0.25	35	1	20	-	25	-			
3RU2116-0D..	0.22 ... 0.32	Stand-alone assembly	0.32	0.32	0.32	35	1.6	35	-	25	2			
3RU2116-0D..	0.22 ... 0.32	3RT2015..	0.32	0.32	0.32	35	1.6	20	-	25	2			
3RU2116-0E..	0.28 ... 0.40	Stand-alone assembly	0.4	0.4	0.4	35	2	35	-	25	2			
3RU2116-0E..	0.28 ... 0.40	3RT2015..	0.4	0.4	0.4	35	2	20	-	25	2			
3RU2116-0F..	0.35 ... 0.50	Stand-alone assembly	0.5	0.5	0.5	35	2	35	-	25	2			
3RU2116-0F..	0.35 ... 0.50	3RT2015..	0.5	0.5	0.5	35	2	20	-	25	2			

## 6.3 Short-circuit protection: 3RT2 contactor + 3RU2 thermal overload relay, types of coordination 1 and 2

Thermal overload relay	Overload relay Setting range	Contactor CLASS 10			Fuse links <sup>1)</sup>						
Article No.	[A]	Article No.	AC-3 derating values [A]			Operating class gG [A]		Operating class aM [A]		British Standards BS88 <sup>3)</sup> [A]	
			400 V	500 V	690 V	1	2	1	2	1	2
3RU2116-0G..	0.45 ... 0.63	Stand-alone assembly	0.63	0.63	0.63	35	2	35	-	25	4
3RU2116-0G..	0.45 ... 0.63	3RT2015..	0.63	0.63	0.63	35	2	20	-	25	4
3RU2116-0H..	0.55 ... 0.80	Stand-alone assembly	0.8	0.8	0.8	35	4	35	-	25	4
3RU2116-0H..	0.55 ... 0.80	3RT2015..	0.8	0.8	0.8	35	4	20	-	25	4
3RU2116-0J..	0.70 ... 1.0	Stand-alone assembly	1	1	1	35	4	35	-	25	6
3RU2116-0J..	0.70 ... 1.0	3RT2015..	1	1	1	35	4	20	-	25	6
3RU2116-0K..	0.90 ... 1.25	Stand-alone assembly	1.25	1.25	1.25	35	4	35	-	25	6
3RU2116-0K..	0.90 ... 1.25	3RT2015..	1.25	1.25	1.25	35	4	20	-	25	6
3RU2116-1A..	1.10 ... 1.60	Stand-alone assembly	1.6	1.6	1.6	40	6	35	-	40	10
3RU2116-1A..	1.10 ... 1.60	3RT2015..	1.6	1.6	1.6	35	6	20	-	35	10
3RU2116-1B..	1.4 ... 2.0	Stand-alone assembly	2	2	2	40	6	35	-	40	10
3RU2116-1B..	1.4 ... 2.0	3RT2015..	2	2	2	35	6	20	-	35	10
3RU2116-1C..	1.8 ... 2.5	Stand-alone assembly	2.5	2.5	2.5	40	10	35	-	40	10
3RU2116-1C..	1.8 ... 2.5	3RT2015..	2.5	2.5	2.5	35	10	20	-	35	10
3RU2116-1D..	2.2 ... 3.2	Stand-alone assembly	3.2	3.2	3.2	40	10	35	-	40	16
3RU2116-1D..	2.2 ... 3.2	3RT2015..	3.2	3.2	3.2	35	10	20	-	35	16

*Fused selection tables up to 690 V*

*6.3 Short-circuit protection: 3RT2 contactor + 3RU2 thermal overload relay, types of coordination 1 and 2*

Thermal overload relay	Overload relay Setting range	Contactor CLASS 10			Fuse links <sup>1)</sup>						
Article No.	[A]	Article No.	AC-3 derating values [A]			Operating class gG [A]		Operating class aM [A]		British Standards BS88 <sup>3)</sup> [A]	
						Type of coordination <sup>2)</sup>					
			400 V	500 V	690 V	1	2	1	2	1	2
3RU2116-1E..	2.8 ... 4.0	Stand-alone assembly	4	4	4	40	16	35	6	40	16
3RU2116-1E..	2.8 ... 4.0	3RT2015..	4	4	4	35	16	20	6	35	16
3RU2116-1F..	3.5 ... 5.0	Stand-alone assembly	5	5	5	40	20	35	6	40	20
3RU2116-1F..	3.5 ... 5.0	3RT2015..	5	5	-	35	20	20	6	35	20
3RU2116-1F..	3.5 ... 5.0	3RT2016..	5	5	5	35	20	20	6	35	20
3RU2116-1G..	4.5 ... 6.3	Stand-alone assembly	6.3	6.3	6.3	40	20	35	10	40	25
3RU2116-1G..	4.5 ... 6.3	3RT2015..	6.3	-	-	35	20	20	10	35	20
3RU2116-1G..	4.5 ... 6.3	3RT2016..	6.3	6.3	6.3	35	20	20	10	35	20
3RU2116-1H..	5.5 ... 8.0	Stand-alone assembly	8	8	8	40	25	35	10	40	32
3RU2116-1H..	5.5 ... 8.0	3RT2015..	-	-	-	-	-	-	-	-	-
3RU2116-1H..	5.5 ... 8.0	3RT2016..	8	-	-	35	20	20	10	35	20
3RU2116-1H..	5.5 ... 8.0	3RT2017..	8	8	-	40	20	20	10	35	20
3RU2116-1H..	5.5 ... 8.0	3RT2018..	8	8	8	40	25	25	10	40	25
3RU2116-1J..	7.0 ... 10	Stand-alone assembly	10	10	10	40	35	35	16	40	35
3RU2116-1J..	7.0 ... 10	3RT2016..	-	-	-	-	-	-	-	-	-
3RU2116-1J..	7.0 ... 10	3RT2017..	10	-	-	40	20	20	16	35	20
3RU2116-1J..	7.0 ... 10	3RT2018..	10	10	-	40	25	25	16	40	25

## 6.3 Short-circuit protection: 3RT2 contactor + 3RU2 thermal overload relay, types of coordination 1 and 2

Thermal overload relay	Overload relay Setting range	Contactor CLASS 10			Fuse links <sup>1)</sup>						
Article No.	[A]	Article No.	AC-3 derating values [A]			Operating class gG [A]		Operating class aM [A]		British Standards BS88 <sup>3)</sup> [A]	
			400 V	500 V	690 V	1	2	1	2	1	2
3RU2116-1J.. <sup>4)</sup>	7.0 ... 10	3RT2024..	10	10	-	40	25	32	16	40	25
3RU2116-1J.. <sup>4)</sup>	7.0 ... 10	3RT2025..	10	10	10	40	25	32	16	40	25
3RU2116-1K..	9.0 ... 12.5	Stand-alone assembly	12.5	12.5	12.5	40	35	35	20	40	35
3RU2116-1K..	9.0 ... 12.5	3RT2017..	-	-	-	-	-	-	-	-	-
3RU2116-1K..	9.0 ... 12.5	3RT2018..	12.5	-	-	40	25	25	20	40	25
3RU2116-1K.. <sup>4)</sup>	9.0 ... 12.5	3RT2024..	-	-	-	-	-	-	-	-	-
3RU2116-1K.. <sup>4)</sup>	9.0 ... 12.5	3RT2025..	12.5	12.5	12.5	40	25	32	20	40	25
3RU2116-1K.. <sup>4)</sup>	9.0 ... 12.5	3RT2026..	12.5	12.5	12.5	40	35	35	20	40	35
3RU2116-4A..	11 ... 16	Stand-alone assembly	16	16	16	50	40	40	20	50	40
3RU2116-4A..	11 ... 16	3RT2017..	-	-	-	-	-	-	-	-	-
3RU2116-4A..	11 ... 16	3RT2018..	16	-	-	50	25	25	20	50	25
3RU2116-4A.. <sup>4)</sup>	11 ... 16	3RT2024..	-	-	-	-	-	-	-	-	-
3RU2116-4A.. <sup>4)</sup>	11 ... 16	3RT2025..	16	16	-	50	25	32	20	50	25
3RU2116-4A.. <sup>4)</sup>	11 ... 16	3RT2026..	16	16	-	50	35	40	20	50	35
3RU2116-4A.. <sup>4)</sup>	11 ... 16	3RT2027..	16	16	16	50	40	40	20	50	40
3RU2116-4A.. <sup>4)</sup>	11 ... 16	3RT2028..	16	16	16	50	40	40	20	50	40
3RU2126-1C..	1.8 ... 2.5	Stand-alone assembly	2.5	2.5	2.5	125	10	35	-	125	10
3RU2126-1C.. <sup>4)</sup>	1.8 ... 2.5	3RT2015..	2.5	2.5	2.5	35	10	20	-	35	10

*Fused selection tables up to 690 V*

*6.3 Short-circuit protection: 3RT2 contactor + 3RU2 thermal overload relay, types of coordination 1 and 2*

Thermal overload relay	Overload relay Setting range	Contactor CLASS 10			Fuse links <sup>1)</sup>						
Article No.	[A]	Article No.	AC-3 derating values [A]			Operating class gG [A]		Operating class aM [A]		British Standards BS88 <sup>3)</sup> [A]	
						Type of coordination <sup>2)</sup>					
			400 V	500 V	690 V	1	2	1	2	1	2
3RU2126-1C..	1.8 ... 2.5	3RT2024..	2.5	2.5	2.5	63	10	32	-	63	10
3RU2126-1D..	2.2 ... 3.2	Stand-alone assembly	3.2	3.2	3.2	125	10	35	-	125	16
3RU2126-1D.. <sup>4)</sup>	2.2 ... 3.2	3RT2015..	3.2	3.2	3.2	35	10	20	-	35	16
3RU2126-1D..	2.2 ... 3.2	3RT2024..	3.2	3.2	3.2	63	10	32	-	63	16
3RU2126-1E..	2.8 ... 4.0	Stand-alone assembly	4	4	4	125	16	35	6	125	16
3RU2126-1E.. <sup>4)</sup>	2.8 ... 4.0	3RT2015..	4	4	4	35	16	20	6	35	16
3RU2126-1E..	2.8 ... 4.0	3RT2024..	4	4	4	63	16	32	6	63	16
3RU2126-1F..	3.5 ... 5.0	Stand-alone assembly	5	5	5	125	20	35	6	125	20
3RU2126-1F.. <sup>4)</sup>	3.5 ... 5.0	3RT2015..	5	5	-	35	20	20	6	35	20
3RU2126-1F.. <sup>4)</sup>	3.5 ... 5.0	3RT2016..	5	5	5	35	20	20	6	35	20
3RU2126-1F..	3.5 ... 5.0	3RT2024..	5	5	5	63	20	32	6	63	20
3RU2126-1G..	4.5 ... 6.3	Stand-alone assembly	6.3	6.3	6.3	125	20	35	10	125	25
3RU2126-1G.. <sup>4)</sup>	4.5 ... 6.3	3RT2015..	6.3	-	-	35	20	20	10	35	20
3RU2126-1G.. <sup>4)</sup>	4.5 ... 6.3	3RT2016..	6.3	6.3	6.3	35	20	20	10	35	20
3RU2126-1G..	4.5 ... 6.3	3RT2024..	6.3	6.3	6.3	63	20	32	10	63	25
3RU2126-1H..	5.5 ... 8.0	Stand-alone assembly	8	8	8	125	25	35	10	125	32
3RU2126-1H.. <sup>4)</sup>	5.5 ... 8.0	3RT2015..	-	-	-	-	-	-	-	-	-
3RU2126-1H.. <sup>4)</sup>	5.5 ... 8.0	3RT2016..	8	-	-	35	20	20	10	35	20

## 6.3 Short-circuit protection: 3RT2 contactor + 3RU2 thermal overload relay, types of coordination 1 and 2

Thermal overload relay	Overload relay Setting range	Contactor CLASS 10			Fuse links <sup>1)</sup>						
Article No.	[A]	Article No.	AC-3 derating values [A]			Operating class gG [A]	Operating class aM [A]	British Standards BS88 <sup>3)</sup> [A]			
			400 V	500 V	690 V			1	2	1	2
3RU2126-1H.. <sup>4)</sup>	5.5 ... 8.0	3RT2017..	8	8	-	50	20	20	10	35	20
3RU2126-1H.. <sup>4)</sup>	5.5 ... 8.0	3RT2018..	8	8	8	50	25	25	10	50	25
3RU2126-1H..	5.5 ... 8.0	3RT2024..	8	8	8	63	25	32	10	63	25
3RU2126-1J..	7.0 ... 10	Stand-alone assembly	10	10	10	125	35	35	16	125	35
3RU2126-1J.. <sup>4)</sup>	7.0 ... 10	3RT2016..	-	-	-	-	-	-	-	-	-
3RU2126-1J.. <sup>4)</sup>	7.0 ... 10	3RT2017..	10	-	-	50	20	20	16	35	20
3RU2126-1J.. <sup>4)</sup>	7.0 ... 10	3RT2018..	10	10	-	50	25	25	16	50	25
3RU2126-1J..	7.0 ... 10	3RT2024..	10	10	-	63	25	32	16	63	25
3RU2126-1J..	7.0 ... 10	3RT2025..	10	10	10	63	25	32	16	63	25
3RU2126-1K..	9.0 ... 12.5	Stand-alone assembly	12.5	12.5	12.5	125	35	35	20	125	35
3RU2126-1K.. <sup>4)</sup>	9.0 ... 12.5	3RT2017..	-	-	-	-	-	-	-	-	-
3RU2126-1K.. <sup>4)</sup>	9.0 ... 12.5	3RT2018..	12.5	-	-	50	25	25	20	50	25
3RU2126-1K..	9.0 ... 12.5	3RT2024..	-	-	-	-	-	-	-	-	-
3RU2126-1K..	9.0 ... 12.5	3RT2025..	12.5	12.5	12.5	63	25	32	20	63	25
3RU2126-4A..	11 ... 16	Stand-alone assembly	16	16	16	125	40	35	20	125	40
3RU2126-4A.. <sup>4)</sup>	11 ... 16	3RT2017..	-	-	-	-	-	-	-	-	-
3RU2126-4A.. <sup>4)</sup>	11 ... 16	3RT2018..	16	-	-	50	25	25	20	50	25
3RU2126-4A..	11 ... 16	3RT2024..	-	-	-	-	-	-	-	-	-

*Fused selection tables up to 690 V*

*6.3 Short-circuit protection: 3RT2 contactor + 3RU2 thermal overload relay, types of coordination 1 and 2*

Thermal overload relay	Overload relay Setting range	Contactor CLASS 10			Fuse links <sup>1)</sup>						
Article No.	[A]	Article No.	AC-3 derating values [A]			Operating class gG [A]		Operating class aM [A]		British Standards BS88 <sup>3)</sup> [A]	
						Type of coordination <sup>2)</sup>					
			400 V	500 V	690 V	1	2	1	2	1	2
3RU2126-4A..	11 ... 16	3RT2025..	16	16	-	63	25	32	20	63	25
3RU2126-4A..	11 ... 16	3RT2026..	16	16	-	100	35	35	20	100	35
3RU2126-4A..	11 ... 16	3RT2027..	16	16	16	125	40	35	20	125	40
3RU2126-4A..	11 ... 16	3RT2028..	16	16	16	125	40	35	20	125	40
3RU2126-4B..	14 ... 20	Stand-alone assembly	20	20	20	125	50	35	25	125	50
3RU2126-4B..	14 ... 20	3RT2025..	-	-	-	-	-	-	-	-	-
3RU2126-4B..	14 ... 20	3RT2026..	20	-	-	100	35	35	20	100	35
3RU2126-4B..	14 ... 20	3RT2027..	20	20	20	125	50	35	25	125	50
3RU2126-4B..	14 ... 20	3RT2028..	20	20	20	125	50	35	25	125	50
3RU2126-4C..	17 ... 22	Stand-alone assembly	22	22	22	125	63	63	35	125	63
3RU2126-4C..	17 ... 22	3RT2025..	-	-	-	-	-	-	-	-	-
3RU2126-4C..	17 ... 22	3RT2026..	22	-	-	100	35	50	20	100	35
3RU2126-4C..	17 ... 22	3RT2027..	22	22	-	125	50	50	25	125	50
3RU2126-4C..	17 ... 22	3RT2028..	22	22	-	125	50	50	25	125	50
3RU2126-4C.. <sup>4)</sup>	17 ... 22	3RT2035..	22	22	22	125	63	63	35	125	63
3RU2126-4D..	20 ... 25	Stand-alone assembly	25	25	25	125	63	63	35	125	63
3RU2126-4D..	20 ... 25	3RT2025..	-	-	-	-	-	-	-	-	-
3RU2126-4D..	20 ... 25	3RT2026..	25	-	-	100	35	50	20	100	35

## 6.3 Short-circuit protection: 3RT2 contactor + 3RU2 thermal overload relay, types of coordination 1 and 2

Thermal overload relay	Overload relay Setting range	Contactor CLASS 10			Fuse links <sup>1)</sup>						
Article No.	[A]	Article No.	AC-3 derating values [A]			Operating class gG [A]		Operating class aM [A]		British Standards BS88 <sup>3)</sup> [A]	
			400 V	500 V	690 V	1	2	1	2	1	2
3RU2126-4D..	20 ... 25	3RT2027..	25	25	-	125	50	50	25	125	50
3RU2126-4D..	20 ... 25	3RT2028..	25	25	-	125	50	50	25	125	50
3RU2126-4D.. <sup>4)</sup>	20 ... 25	3RT2035..	25	25	-	125	63	63	35	125	63
3RU2126-4D.. <sup>4)</sup>	20 ... 25	3RT2036..	25	25	-	125	63	63	35	125	63
3RU2126-4D.. <sup>4)</sup>	20 ... 25	3RT2037..	25	25	25	125	63	63	35	125	63
3RU2126-4N..	23 ... 28	Stand-alone assembly	28	28	28	125	80	63	40	125	63
3RU2126-4N..	23 ... 28	3RT2026..	-	-	-	-	-	-	-	-	-
3RU2126-4N..	23 ... 28	3RT2027..	28	28	-	125	50	50	25	125	50
3RU2126-4N..	23 ... 28	3RT2028..	28	28	-	125	50	50	25	125	50
3RU2126-4N.. <sup>4)</sup>	23 ... 28	3RT2035..	28	28	-	125	80	63	40	125	63
3RU2126-4N.. <sup>4)</sup>	23 ... 28	3RT2036..	28	28	-	125	80	63	40	125	63
3RU2126-4N.. <sup>4)</sup>	23 ... 28	3RT2037..	28	28	28	125	80	63	40	125	63
3RU2126-4E..	27 ... 32	Stand-alone assembly	32	32	32	125	80	63	40	125	63
3RU2126-4E..	27 ... 32	3RT2026..	-	-	-	-	-	-	-	-	-
3RU2126-4E..	27 ... 32	3RT2027..	32	32	-	125	50	50	25	125	50
3RU2126-4E..	27 ... 32	3RT2028..	32	32	-	125	50	50	25	125	50
3RU2126-4E.. <sup>4)</sup>	27 ... 32	3RT2035..	32	32	-	125	80	63	40	125	63
3RU2126-4E.. <sup>4)</sup>	27 ... 32	3RT2036..	32	32	-	125	80	63	40	125	63

*Fused selection tables up to 690 V*

*6.3 Short-circuit protection: 3RT2 contactor + 3RU2 thermal overload relay, types of coordination 1 and 2*

Thermal overload relay	Overload relay Setting range	Contactor CLASS 10			Fuse links 1)						
Article No.	[A]	Article No.	AC-3 derating values [A]			Operating class gG [A]		Operating class aM [A]		British Standards BS88 3) [A]	
						Type of coordination 2)					
			400 V	500 V	690 V	1	2	1	2	1	2
3RU2126-4E.. <sup>4)</sup>	27 ... 32	3RT2037..	32	32	32	125	80	63	40	125	63
3RU2126-4P..	30 ... 36	Stand-alone assembly	36	36	36	125	80	63	50	125	63
3RU2126-4P..	30 ... 36	3RT2027..	-	-	-	-	-	-	-	-	-
3RU2126-4P..	30 ... 36	3RT2028..	36	-	-	125	50	50	25	125	50
3RU2126-4P.. <sup>4)</sup>	30 ... 36	3RT2035..	36	36	-	125	80	63	50	125	63
3RU2126-4P.. <sup>4)</sup>	30 ... 36	3RT2036..	36	36	-	125	80	63	50	125	63
3RU2126-4P.. <sup>4)</sup>	30 ... 36	3RT2037..	36	36	36	125	80	63	50	125	63
3RU2126-4F..	34 ... 40	Stand-alone assembly	40	40	40	125	80	63	50	125	80
3RU2126-4F..	34 ... 40	3RT2028..	-	-	-	-	-	-	-	-	-
3RU2126-4F.. <sup>4)</sup>	34 ... 40	3RT2035..	40	40	-	125	80	63	50	125	63
3RU2126-4F.. <sup>4)</sup>	34 ... 40	3RT2036..	40	40	-	125	80	63	50	125	63
3RU2126-4F.. <sup>4)</sup>	34 ... 40	3RT2037..	40	40	40	125	80	63	50	125	80
3RU2136-4A..	11 ... 16	Stand-alone assembly	16	16	16	80	40	50	20	80	40
3RU2136-4A.. <sup>4)</sup>	11 ... 16	3RT2017..	-	-	-	-	-	-	-	-	-
3RU2136-4A.. <sup>4)</sup>	11 ... 16	3RT2018..	16	-	-	50	25	25	20	50	25
3RU2136-4A.. <sup>4)</sup>	11 ... 16	3RT2024..	-	-	-	-	-	-	-	-	-
3RU2136-4A.. <sup>4)</sup>	11 ... 16	3RT2025..	16	16	-	63	25	32	20	63	25
3RU2136-4A.. <sup>4)</sup>	11 ... 16	3RT2026..	16	16	-	80	35	50	20	80	35

## 6.3 Short-circuit protection: 3RT2 contactor + 3RU2 thermal overload relay, types of coordination 1 and 2

Thermal overload relay	Overload relay Setting range	Contactor CLASS 10			Fuse links <sup>1)</sup>						
Article No.	[A]	Article No.	AC-3 derating values [A]			Operating class gG [A]		Operating class aM [A]		British Standards BS88 <sup>3)</sup> [A]	
			400 V	500 V	690 V	1	2	1	2	1	2
3RU2136-4A.. <sup>4)</sup>	11 ... 16	3RT2027..	16	16	16	80	40	50	20	80	40
3RU2136-4A.. <sup>4)</sup>	11 ... 16	3RT2028..	16	16	16	80	40	50	20	80	40
3RU2136-4A..	11 ... 16	3RT2035..	16	16	16	80	40	50	20	80	40
3RU2136-4B..	14 ... 20	Stand-alone assembly	20	20	20	125	50	100	25	125	50
3RU2136-4B.. <sup>4)</sup>	14 ... 20	3RT2025..	-	-	-	-	-	-	-	-	-
3RU2136-4B.. <sup>4)</sup>	14 ... 20	3RT2026..	20	-	-	100	35	50	20	100	35
3RU2136-4B.. <sup>4)</sup>	14 ... 20	3RT2027..	20	20	20	125	50	50	25	125	50
3RU2136-4B..	14 ... 20	3RT2028..	20	20	20	125	50	50	25	125	50
3RU2136-4D..	18 ... 25	Stand-alone assembly	25	25	25	125	63	100	35	125	63
3RU2136-4D.. <sup>4)</sup>	18 ... 25	3RT2025..	-	-	-	-	-	-	-	-	-
3RU2136-4D.. <sup>4)</sup>	18 ... 25	3RT2026..	25	-	-	100	35	50	20	100	35
3RU2136-4D.. <sup>4)</sup>	18 ... 25	3RT2027..	25	25	-	125	50	50	25	125	50
3RU2136-4D.. <sup>4)</sup>	18 ... 25	3RT2028..	25	25	-	125	50	50	25	125	50
3RU2136-4D..	18 ... 25	3RT2035..	25	25	-	125	63	80	35	125	63
3RU2136-4D..	18 ... 25	3RT2036..	25	25	-	125	63	80	35	125	63
3RU2136-4D..	18 ... 25	3RT2037..	25	25	25	125	63	100	35	125	63
3RU2136-4E..	22 ... 32	Stand-alone assembly	32	32	32	125	80	100	50	125	80
3RU2136-4E.. <sup>4)</sup>	22 ... 32	3RT2026..	-	-	-	-	-	-	-	-	-

*Fused selection tables up to 690 V*

*6.3 Short-circuit protection: 3RT2 contactor + 3RU2 thermal overload relay, types of coordination 1 and 2*

Thermal overload relay	Overload relay Setting range	Contactor CLASS 10			Fuse links <sup>1)</sup>						
Article No.	[A]	Article No.	AC-3 derating values [A]			Operating class gG [A]		Operating class aM [A]		British Standards BS88 <sup>3)</sup> [A]	
						Type of coordination <sup>2)</sup>					
			400 V	500 V	690 V	1	2	1	2	1	2
3RU2136-4E.. <sup>4)</sup>	22 ... 32	3RT2027..	32	32	-	125	50	50	25	125	50
3RU2136-4E.. <sup>4)</sup>	22 ... 32	3RT2028..	32	32	-	125	50	50	25	125	50
3RU2136-4E..	22 ... 32	3RT2035..	32	32	-	125	80	80	50	125	63
3RU2136-4E..	22 ... 32	3RT2036..	32	32	-	125	80	80	50	125	63
3RU2136-4E..	22 ... 32	3RT2037..	32	32	32	125	80	100	50	125	80
3RU2136-4F..	28 ... 40	Stand-alone assembly	40	40	40	125	80	100	50	125	80
3RU2136-4F.. <sup>4)</sup>	28 ... 40	3RT2028..	-	-	-	-	-	-	-	-	-
3RU2136-4F..	28 ... 40	3RT2035..	40	40	-	125	80	80	50	125	63
3RU2136-4F..	28 ... 40	3RT2036..	40	40	-	125	80	80	50	125	63
3RU2136-4F..	28 ... 40	3RT2037..	40	40	40	125	80	100	50	125	80
3RU2136-4G..	36 ... 45	Stand-alone assembly	45	45	45	125	100	100	63	125	100
3RU2136-4G..	36 ... 45	3RT2035..	-	-	-	-	-	-	-	-	-
3RU2136-4G..	36 ... 45	3RT2036..	45	45	-	125	80	80	50	125	63
3RU2136-4G..	36 ... 45	3RT2037..	45	45	45	125	100	100	63	125	100
3RU2136-4H..	40 ... 50	Stand-alone assembly	50	50	50	125	100	100	80	125	100
3RU2136-4H..	40 ... 50	3RT2035..	-	-	-	-	-	-	-	-	-
3RU2136-4H..	40 ... 50	3RT2036..	50	50	-	125	80	80	50	125	63
3RU2136-4H..	40 ... 50	3RT2037..	50	50	-	125	100	100	63	125	100

## 6.3 Short-circuit protection: 3RT2 contactor + 3RU2 thermal overload relay, types of coordination 1 and 2

Thermal overload relay	Overload relay Setting range	Contactor CLASS 10			Fuse links <sup>1)</sup>						
Article No.	[A]	Article No.	AC-3 derating values [A]			Operating class gG [A]		Operating class aM [A]		British Standards BS88 <sup>3)</sup> [A]	
			400 V	500 V	690 V	1	2	1	2	1	2
3RU2136-4H..	40 ... 50	3RT2038..	50	50	50	125	100	100	80	125	100
3RU2136-4Q..	47 ... 57	Stand-alone assembly	57	57	57	200	100	160	80	200	100
3RU2136-4Q..	47 ... 57	3RT2036..	-	-	-	-	-	-	-	-	-
3RU2136-4Q..	47 ... 57	3RT2037..	57	57	-	200	100	160	63	200	100
3RU2136-4Q..	47 ... 57	3RT2038..	57	57	57	200	100	160	80	200	100
3RU2136-4J..	54 ... 65	Stand-alone assembly	65	65	65	250	125	224	100	250	125
3RU2136-4J..	54 ... 65	3RT2036..	-	-	-	-	-	-	-	-	-
3RU2136-4J..	54 ... 65	3RT2037..	65	65	-	250	125	160	63	200	100
3RU2136-4J..	54 ... 65	3RT2038..	65	65	-	250	125	160	80	200	125
3RU2136-4J.. <sup>4)</sup>	54 ... 65	3RT2045..	65	65	-	250	125	160	80	200	125
3RU2136-4J.. <sup>4)</sup>	54 ... 65	3RT2046..	65	65	65	250	125	160	100	200	125
3RU2136-4K..	62 ... 73	Stand-alone assembly	73	73	73	250	160	224	125	250	160
3RU2136-4K..	62 ... 73	3RT2037..	-	-	-	-	-	-	-	-	-
3RU2136-4K..	62 ... 73	3RT2038..	73	73	-	250	160	160	80	200	125
3RU2136-4K.. <sup>4)</sup>	62 ... 73	3RT2045..	73	73	-	250	160	160	80	200	125
3RU2136-4K.. <sup>4)</sup>	62 ... 73	3RT2046..	73	73	73	250	160	160	100	200	125
3RU2136-4R..	70 ... 80	Stand-alone assembly	80	80	80	250	160	224	125	250	160
3RU2136-4R..	70 ... 80	3RT2037..	-	-	-	-	-	-	-	-	-

*Fused selection tables up to 690 V*

*6.3 Short-circuit protection: 3RT2 contactor + 3RU2 thermal overload relay, types of coordination 1 and 2*

Thermal overload relay	Overload relay Setting range	Contactor CLASS 10			Fuse links <sup>1)</sup>						
Article No.	[A]	Article No.	AC-3 derating values [A]			Operating class gG [A]		Operating class aM [A]		British Standards BS88 <sup>3)</sup> [A]	
						Type of coordination <sup>2)</sup>					
			400 V	500 V	690 V	1	2	1	2	1	2
3RU2136-4R..	70 ... 80	3RT2038..	80	80	-	250	160	160	80	200	125
3RU2136-4R.. <sup>4)</sup>	70 ... 80	3RT2045..	80	80	-	250	160	160	80	200	125
3RU2136-4R.. <sup>4)</sup>	70 ... 80	3RT2046..	80	80	-	250	160	160	100	200	125
3RU2136-4R.. <sup>4)</sup>	70 ... 80	3RT2047..	80	80	80	250	160	160	100	200	160
3RU2146-4F..	28 ... 40	Stand-alone assembly	40	40	40	160	80	125	50	160	80
3RU2146-4F.. <sup>4)</sup>	28 ... 40	3RT2028..	-	-	-	-	-	-	-	-	-
3RU2146-4F.. <sup>4)</sup>	28 ... 40	3RT2035..	40	40	-	160	80	80	50	125	63
3RU2146-4F.. <sup>4)</sup>	28 ... 40	3RT2036..	40	40	-	160	80	80	50	125	63
3RU2146-4F.. <sup>4)</sup>	28 ... 40	3RT2037..	40	40	40	160	80	125	50	160	80
3RU2146-4F..	28 ... 40	3RT2045..	40	40	40	160	80	125	50	160	80
3RU2146-4H..	36 ... 50	Stand-alone assembly	50	50	50	160	125	125	100	160	125
3RU2146-4H.. <sup>4)</sup>	36 ... 50	3RT2035..	-	-	-	-	-	-	-	-	-
3RU2146-4H.. <sup>4)</sup>	36 ... 50	3RT2036..	50	50	-	160	80	80	50	125	63
3RU2146-4H.. <sup>4)</sup>	36 ... 50	3RT2037..	50	50	-	160	125	125	63	160	100
3RU2146-4H..	36 ... 50	3RT2045..	50	50	50	160	125	125	80	160	125
3RU2146-4J..	45 ... 63	Stand-alone assembly	63	63	63	200	125	160	100	200	125
3RU2146-4J.. <sup>4)</sup>	45 ... 63	3RT2036..	-	-	-	-	-	-	-	-	-
3RU2146-4J.. <sup>4)</sup>	45 ... 63	3RT2037..	63	63	-	200	125	160	63	200	100

## 6.3 Short-circuit protection: 3RT2 contactor + 3RU2 thermal overload relay, types of coordination 1 and 2

Thermal overload relay	Overload relay Setting range	Contactor CLASS 10			Fuse links <sup>1)</sup>						
Article No.	[A]	Article No.	AC-3 derating values [A]			Operating class gG [A]	Operating class aM [A]	British Standards BS88 <sup>3)</sup> [A]			
			400 V	500 V	690 V			1	2	1	2
3RU2146-4J..	45 ... 63	3RT2045..	63	63	-	200	125	160	80	200	125
3RU2146-4J..	45 ... 63	3RT2046..	63	63	63	200	125	160	100	200	125
3RU2146-4K..	57 ... 75	Stand-alone assembly	75	75	75	250	160	224	125	250	160
3RU2146-4K.. <sup>4)</sup>	57 ... 75	3RT2037..	-	-	-	-	-	-	-	-	-
3RU2146-4K..	57 ... 75	3RT2045..	75	75	-	250	160	160	80	200	125
3RU2146-4K..	57 ... 75	3RT2046..	75	75	75	250	160	160	100	200	125
3RU2146-4L..	70 ... 90	Stand-alone assembly	90	90	90	250	160	224	125	250	160
3RU2146-4L..	70 ... 90	3RT2045..	-	-	-	-	-	-	-	-	-
3RU2146-4L..	70 ... 90	3RT2046..	90	90	-	250	160	160	100	200	125
3RU2146-4L..	70 ... 90	3RT2047..	90	90	90	250	160	160	100	200	160
3RU2146-4M..	80 ... 100	Stand-alone assembly	100	100	100	250	200	224	160	250	200
3RU2146-4M..	80 ... 100	3RT2046..	-	-	-	-	-	-	-	-	-
3RU2146-4M..	80 ... 100	3RT2047..	100	100	-	250	200	160	100	200	160
3RU2146-4M.. <sup>4)</sup>	80 ... 100	3RT1054..	100	100	100	250 <sup>5)</sup>	200 <sup>5)</sup>	-	160 <sup>5)</sup>	-	200 <sup>5)</sup>

<sup>1)</sup> Take account of the operating voltage.<sup>2)</sup> Assignment and short-circuit protective devices acc. to IEC 60947-4-1<sup>3)</sup> Fuse links as specified in the table "BS88 fuse links (Page 231)" must be used for BS88 fuses.<sup>4)</sup> The thermal overload relay is only available for stand-alone installation.<sup>5)</sup> The specified data are valid for maximum 50 kA at 690 V.

## 6.4 Short-circuit protection: 3RT contactor, 3TF6 + 3RB3 electronic overload relay

**Short-circuit protection with fuses for motor feeders with 3RB30 and 3RB31, contactor mounting, and stand-alone assembly**

Table 6- 4 Derating values for overload relay and contactor size S00

Overload relay	Overload relay Setting range	Contactor	CLASS								
			5E / 10E			20E			30E		
			AC-3 derating values [A]								
Article No.	[A]	Article No. [kW]	400 V	500 V	690 V	400 V	500 V	690 V	400 V	500 V	690 V
3RB3.1.-.R..	0.1 ... 0.4	Stand-alone assembly	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4
		3RT2015 3.0	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4
3RB3.1.-.N..	0.32 ... 1.25	Stand-alone assembly	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.25
		3RT2015 3.0	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.25
3RB3.1.-.P..	1 ... 4	Stand-alone assembly	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
		3RT2015 3.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
		3RT2016 4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
		3RT2017 5.5	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
3RB3.1.-.S..	3 ... 12	Stand-alone assembly	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0
		3RT2015 3.0	7.0	6.0	4.9	7.0	6.0	4.9	7.0	6.0	4.9
		3RT2016 4.0	9.0	7.7	6.7	9.0	7.7	6.7	9.0	7.7	6.7
		3RT2017 5.5	12.0	9.2	6.7	10.0	9.2	6.7	9.0	9.0	6.7
3RB3.1.-.T..	4 ... 16	Stand-alone assembly	16.0	16.0	16.0	16.0	16.0	16.0	16.0	16.0	16.0
		3RT2017 5.5	12.0	9.2	6.7	10.0	9.2	6.7	9.0	9.0	6.7
		3RT2018 7.5	16.0	12.4	8.9	11.5	11.5	8.9	9.5	9.5	8.9

## 6.4 Short-circuit protection: 3RT contactor, 3TF6 + 3RB3 electronic overload relay

Table 6- 5 Derating values for overload relay and contactor size S0

Overload relay	Overload relay Setting range	Contactor	CLASS									
			5E / 10E			20E			30E			
			AC-3 derating values [A]									
Article No.	[A]	Article No.	[kW]	400 V	500 V	690 V	400 V	500 V	690 V	400 V	500 V	690 V
3RB3.2.-.R..	0.1 ... 0.4	Stand-alone assembly		0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4
		3RT2024	5.5	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4
3RB3.2.-.N..	0.32 ... 1.25	Stand-alone assembly		1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.25
		3RT2024	5.5	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.25
3RB3.2.-.P..	1 ... 4	Stand-alone assembly		4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
		3RT2024	5.5	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
3RB3.2.-.S..	3 ... 12	Stand-alone assembly		12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0
		3RT2024	5.5	12.0	12.0	9.0	12.0	12.0	9.0	12.0	12.0	9.0
		3RT2025	7.5	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0
3RB3.2.-.Q..	6 ... 25	Stand-alone assembly		25.0	25.0	25.0	25.0	25.0	25.0	23.0	23.0	23.0
		3RT2025	7.5	17.0	17.0	13.0	16.0	16.0	13.0	14.0	14.0	13.0
		3RT2026	11.0	25.0	18.0	13.0	16.0	16.0	13.0	14.0	14.0	13.0
		3RT2027	15.0	25.0	25.0	21.0	20.0	20.0	17.0	17.0	17.0	15.0
		3RT2028	18.5	25.0	25.0	21.0	20.0	20.0	17.0	17.0	17.0	15.0
3RB3.2.-.V..	10 ... 40	Stand-alone assembly		40.0	40.0	40.0	28.0	28.0	28.0	23.0	23.0	23.0
		3RT2027	15.0	32.0	32.0	21.0	20.0	20.0	17.0	17.0	17.0	15.0
		3RT2028	18.5	38.0	32.0	21.0	20.0	20.0	17.0	17.0	17.0	15.0

*Fused selection tables up to 690 V*

*6.4 Short-circuit protection: 3RT contactor, 3TF6 + 3RB3 electronic overload relay*

Table 6- 6 Derating values for overload relay and contactor size S2

Overload relay	Overload relay Setting range	Contactor	CLASS									
			5E / 10E			20E			30E			
			AC-3 derating values [A]									
Article No.	[A]	Article No.	[kW]	400 V	500 V	690 V	400 V	500 V	690 V	400 V	500 V	690 V
3RB3.3.-U..	12.5 ... 50	Stand-alone assembly	Through hole technology	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0
			Screw terminals	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0
		3RT2035	18.5	40.0	40.0	24.0	40.0	40.0	24.0	36.0	36.0	24.0
		3RT2036	22.0	50.0	50.0	24.0	45.0	45.0	24.0	38.0	38.0	24.0
		3RT2037	30.0	50.0	50.0	47.0	48.0	48.0	47.0	42.0	42.0	42.0
		3RT2038	37.0	50.0	50.0	50.0	49.0	49.0	49.0	43.0	43.0	43.0
		Stand-alone assembly	Through hole technology	80.0	80.0	80.0	80.0	80.0	80.0	80.0	80.0	80.0
			Screw terminals	80.0	80.0	80.0	60.0	60.0	60.0	50.0	50.0	50.0
		3RT2035	18.5	40.0	40.0	24.0	40.0	40.0	24.0	36.0	36.0	24.0
		3RT2036	22.0	50.0	50.0	24.0	45.0	45.0	24.0	39.0	39.0	24.0
		3RT2037	30.0	65.0	65.0	47.0	46.0	46.0	46.0	40.0	40.0	40.0
		3RT2038	37.0	80.0	80.0	58.0	48.0	48.0	48.0	42.0	42.0	42.0

## 6.4 Short-circuit protection: 3RT contactor, 3TF6 + 3RB3 electronic overload relay

Table 6- 7 Derating values for overload relay and contactor size S3

Overload relay	Overload relay Setting range	Contactor	CLASS									
			5E / 10E			20E			30E			
			AC-3 derating values [A]									
Article No.	[A]	Article No.	[kW]	400 V	500 V	690 V	400 V	500 V	690 V	400 V	500 V	690 V
3RB3.4.-U..	12.5 ... 50	Stand-alone assembly	Through hole technology	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0
			Screw terminals	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0
		3RT2045	37.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0
		3RT2046	45.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0
		3RT2047	55.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0
3RB3.4.-X..	32 ... 115	Stand-alone assembly	Through hole technology	115.0	115.0	115.0	100.0	100.0	100.0	100.0	100.0	100.0
			Screw terminals	115.0	115.0	115.0	100.0	100.0	100.0	100.0	100.0	100.0
		3RT2045	37.0	80.0	80.0	58.0	63.0	63.0	58.0	54.0	54.0	54.0
		3RT2046	45.0	95.0	95.0	78.0	65.0	65.0	65.0	56.0	56.0	56.0
		3RT2047	55.0	110.0	110.0	95.0	67.0	67.0	67.0	58.0	58.0	58.0

*Fused selection tables up to 690 V*

*6.4 Short-circuit protection: 3RT contactor, 3TF6 + 3RB3 electronic overload relay*

Table 6- 8 Derating values for overload relay and contactor size S6

Overload relay	Overload relay Setting range	Contactor	CLASS									
			5E / 10E			20E			30E			
			AC-3 derating values [A]									
Article No.	[A]	Article No.	[kW]	400 V	500 V	690 V	400 V	500 V	690 V	400 V	500 V	690 V
3RB2.5.-F..	50 ... 200	Stand-alone assembly	Through hole technology	200.0	200.0	200.0	200.0	200.0	200.0	200.0	200.0	200.0
			Screw terminals	200.0	200.0	200.0	200.0	200.0	200.0	200.0	200.0	200.0
		3RT1054	55	115.0	115.0	115.0	81.7	81.7	81.7	69.0	69.0	69.0
		3RT1055	75	150.0	150.0	150.0	107.0	107.0	107.0	90.0	90.0	90.0
		3RT1056	90	185.0	185.0	185.0	131.0	131.0	131.0	111.0	111.0	111.0

Table 6- 9 Derating values for overload relay and contactor size S10

Overload relay	Overload relay Setting range	Contactor	CLASS									
			5E / 10E			20E			30E			
			AC-3 derating values [A]									
Article No.	[A]	Article No.	[kW]	400 V	500 V	690 V	400 V	500 V	690 V	400 V	500 V	690 V
3RB2.6.-G..	55 ... 250	Stand-alone assembly	Through hole technology	250.0	250.0	250.0	250.0	250.0	250.0	250.0	250.0	250.0
			Screw terminals	250.0	250.0	250.0	250.0	250.0	250.0	250.0	250.0	250.0
		3RT1064	110	225.0	225.0	225.0	160.0	160.0	160.0	135.0	135.0	135.0
		3RT1264	110	225.0	225.0	225.0	225.0	225.0	225.0	173.0	173.0	173.0
		3RT1065	132	250.0	250.0	250.0	188.0	188.0	188.0	159.0	159.0	159.0
		3RT1265	132	250.0	250.0	250.0	250.0	250.0	250.0	204.0	204.0	204.0
		3RT1066	160	250.0	250.0	250.0	213.0	213.0	213.0	180.0	180.0	180.0
		3RT1266	160	250.0	250.0	250.0	250.0	250.0	250.0	231.0	231.0	231.0

## 6.4 Short-circuit protection: 3RT contactor, 3TF6 + 3RB3 electronic overload relay

Table 6- 10 Derating values for overload relay and contactor size S12

Overload relay	Overload relay Setting range	Contactor		CLASS								
				5E / 10E			20E			30E		
		AC-3 derating values [A]										
Article No.	[A]	Article No.	[kW]	400 V	500 V	690 V	400 V	500 V	690 V	400 V	500 V	690 V
3RB2.6.-.M..	160 ... 630	Stand-alone assembly	Through hole technology	630.0	630.0	630.0	630.0	630.0	630.0	630.0	630.0	630.0
			Screw terminals	630.0	630.0	630.0	630.0	630.0	630.0	630.0	630.0	630.0
		3RT1064	110	225.0	225.0	225.0	160.0	160.0	160.0	–	–	–
		3RT1264	110	225.0	225.0	225.0	225.0	225.0	225.0	173.0	173.0	173.0
		3RT1065	132	265.0	265.0	265.0	188.0	188.0	188.0	–	–	–
		3RT1265	132	265.0	265.0	265.0	265.0	265.0	265.0	204.0	204.0	204.0
		3RT1066	160	300.0	300.0	280.0	213.0	213.0	213.0	180.0	180.0	180.0
		3RT1266	160	300.0	300.0	300.0	300.0	300.0	300.0	231.0	231.0	231.0
		3RT1075	200	400.0	400.0	400.0	284.0	284.0	284.0	240.0	240.0	240.0
		3RT1275	200	400.0	400.0	400.0	400.0	400.0	400.0	316.0	316.0	316.0
		3RT1076	250	500.0	500.0	450.0	355.0	355.0	355.0	300.0	300.0	300.0
		3RT1276	250	500.0	500.0	500.0	500.0	500.0	500.0	385.0	385.0	385.0
		3TF68 <sup>1)</sup>	335	630.0	630.0	630.0	440.0	440.0	440.0	376.0	376.0	376.0
		3TF69 <sup>1)</sup>	450	630.0	630.0	630.0	572.0	572.0	572.0	500.0	500.0	500.0

<sup>1)</sup> 3TF68 and 3TF69 vacuum contactors cannot be mounted directly.

Table 6- 11 Derating values for overload relay and contactor size 14

Overload relay	Overload relay Setting range	Contactor		CLASS								
				5E / 10E			20E			30E		
		AC-3 derating values [A]										
Article No.	[A]	Article No.	[kW]	400 V	500 V	690 V	400 V	500 V	690 V	400 V	500 V	690 V
3RB3.1.-.N..	0.32 ... 1.25 <sup>2)</sup>	3TF69 <sup>1)</sup>	450	820.0	820.0	820.0	572.0	572.0	572.0	500.0	500.0	500.0

<sup>1)</sup> 3TF68 and 3TF69 vacuum contactors cannot be mounted directly.

<sup>2)</sup> With 3UF1868-3GA00 current transformer.

### Environmental conditions

For the 3RB20 and 3RB21 electronic overload relays in the sizes S6, S10 and S12, the upper setting of the setting range must be reduced by a certain factor for ambient temperatures of > 50 °C.

Table 6- 12 Derating values for overload relay sizes S6 to S12

Overload relay	Overload relay Setting range	Configuration	
Article No.	[A]		
		Derating values for the upper setting of the setting range with <b>stand-alone assembly</b> and the following ambient temperature:	
		+ 50 °C	60 °C
3RB2056 / 3RB2153	50 ... 200	100 %	100 %
3RB2066-1G 3RB2066-2G 3RB2163-4G	55 ... 250	100 %	100 %
3RB2066-1M 3RB2066-2M 3RB2163-4M	160 ... 630	100 %	100 %
		Derating values for the upper setting of the setting range with <b>contactor mounting</b> and the following ambient temperature:	
		+ 50 °C	60 °C
3RB2056 / 3RB2153	50 ... 200	100 %	70 %
3RB2066-1G 3RB2066-2G 3RB2163-4G	55 ... 250	100 %	70 %
3RB2066-1M 3RB2066-2M 3RB2163-4M	160 ... 630	100 %	70 %

**Fuse links according to IEC 60947-4-1**

Short-circuit protection up to 690 V / 100 kA

Type of coordination 1 and 2

Table 6- 13 Fuse links for overload relay and contactor size S00

Overload relay	Overload relay Setting range	Contactor	Fuse links <sup>1)</sup>						
			According to IEC 60947-4-1 <sup>3)</sup>						
			Operating class gG (690 V / 100 kA) [A]		Operating class aM (690 V / 100 kA) (≥ S6 690 V / 50 kA) [A]		British Standards BS88 <sup>3)</sup> (415 V / 80 kA) (≥ S6 415 V / 50 kA) [A]		
			NH type 3NA DIAZED type 5SB NEOZED type 5SE		NH type 3ND				
Type of coordination <sup>2)</sup>									
Article No.	[A]	Article No.	[kW]	1	2	1	2	1	2
3RB3.1.-.R..	0.1 ... 0.4	Stand-alone assembly		35	4	20	4	35	4
		3RT2015	3.0	35	4	20	4	35	4
3RB3.1.-.N..	0.32 ... 1.25	Stand-alone assembly		35	6	20	6	35	6
		3RT2015	3.0	35	6	20	6	35	6
3RB3.1.-.P..	1 ... 4	Stand-alone assembly		35	20	20	16	35	20
		3RT2015	3.0	35	20	20	16	35	20
		3RT2016	4.0	35	20	20	16	35	20
		3RT2017	5.5	35	20	20	16	35	20
3RB3.1.-.S..	3 ... 12	Stand-alone assembly		50	50	20	16	35	20
		3RT2015	3.0	35	20	20	16	35	20
		3RT2016	4.0	35	20	20	16	35	20
		3RT2017	5.5	50	25	20	16	35	20
3RB3.1.-.T..	4 ... 16	Stand-alone assembly		50	50	25	20	50	25
		3RT2017	5.5	50	25	20	16	35	20
		3RT2018	7.5	50	25	25	20	50	25

<sup>1)</sup> Take account of the operating voltage.<sup>2)</sup> Assignment and short-circuit protective devices acc. to IEC 60947-4-1<sup>3)</sup> Fuse links as specified in the table "BS88 fuse links (Page 231)" must be used for BS88 fuses.

*Fused selection tables up to 690 V*

*6.4 Short-circuit protection: 3RT contactor, 3TF6 + 3RB3 electronic overload relay*

Table 6- 14 Fuse links for overload relay and contactor size S0

Overload relay	Overload relay Setting range	Contactor	Fuse links <sup>1)</sup>					
			According to IEC 60947-4-1 <sup>3)</sup>					
			Operating class gG (690 V / 100 kA) [A]		Operating class aM (690 V / 100 kA) (≥ S6 690 V / 50 kA) [A]		British Standards BS88 <sup>3)</sup> (415 V / 80 kA) (≥ S6 415 V / 50 kA) [A]	
			NH type 3NA DIAZED type 5SB NEOZED type 5SE		NH type 3ND			
Type of coordination <sup>2)</sup>								
Article No.	[A]	Article No. [kW]	1	2	1	2	1	2
3RB3.2.-R..	0.1 ... 0.4	Stand-alone assembly	35	4	32	4	63	4
		3RT2024 5.5	35	4	32	4	63	4
3RB3.2.-N..	0.32 ... 1.25	Stand-alone assembly	35	6	32	6	63	6
		3RT2024 5.5	35	6	32	6	63	6
3RB3.2.-P..	1 ...4	Stand-alone assembly	35	20	32	20	63	25
		3RT2024 5.5	35	20	32	20	63	25
3RB3.2.-S..	3 ... 12	Stand-alone assembly	63	50	32	20	63	25
		3RT2024 5.5	63	25	32	20	63	25
		3RT2025 7.5	63	25	32	20	63	25
3RB3.2.-Q..	6 ... 25	Stand-alone assembly	125	63	50	25	63	50
		3RT2025 7.5	63	25	32	20	63	25
		3RT2026 11.0	100	35	50	20	63	35
		3RT2027 15.0	125	50	50	25	63	50
		3RT2028 18.5	125	50	50	25	63	50
3RB3.2.-V..	10 ... 40	Stand-alone assembly	125	80	50	25	125	50
		3RT2027 15.0	125	50	50	25	125	50
		3RT2028 18.5	125	50	50	25	125	50

<sup>1)</sup> Take account of the operating voltage.

<sup>2)</sup> Assignment and short-circuit protective devices acc. to IEC 60947-4-1

<sup>3)</sup> Fuse links as specified in the table "BS88 fuse links (Page 231)" must be used for BS88 fuses.

## 6.4 Short-circuit protection: 3RT contactor, 3TF6 + 3RB3 electronic overload relay

Table 6- 15 Fuse links for overload relay and contactor size S2

Overload relay	Overload relay Setting range	Contactor	Fuse links <sup>1)</sup>						
			According to IEC 60947-4-1 <sup>3)</sup>						
			Operating class gG (690 V / 100 kA) [A]		Operating class aM (690 V / 100 kA) (≥ S6 690 V / 50 kA) [A]		British Standards BS88 <sup>3)</sup> (415 V / 80 kA) (≥ S6 415 V / 50 kA) [A]		
			NH type 3NA DIAZED type 5SB NEOZED type 5SE		NH type 3ND				
Type of coordination <sup>2)</sup>									
Article No.	[A]	Article No.	[kW]	1	2	1	2	1	2
3RB3.3.-.U..	12.5 ... 50	Stand-alone assembly	Through hole technology	250	200	160	80	200	125
			Screw terminals	250	200	160	80	200	125
	3RT2035	18.5	160	80	80	50	125	63	
	3RT2036	22.0	160	80	80	50	125	63	
	3RT2037	30.0	250	125	160	63	200	100	
	3RT2038	37.0	250	160	160	80	200	125	
3RB3.3.-.W..	20 ... 80	Stand-alone assembly	Through hole technology	250	250	160	80	200	125
			Screw terminals	250	250	160	80	200	125
	3RT2035	18.5	160	80	80	50	125	63	
	3RT2036	22.0	160	80	80	50	125	63	
	3RT2037	30.0	250	125	160	63	200	100	
	3RT2038	37.0	250	160	160	80	200	125	

<sup>1)</sup> Take account of the operating voltage.<sup>2)</sup> Assignment and short-circuit protective devices acc. to IEC 60947-4-1<sup>3)</sup> Fuse links as specified in the table "BS88 fuse links (Page 231)" must be used for BS88 fuses.

Table 6- 16 Fuse links for overload relay and contactor size S3

Overload relay	Overload relay Setting range	Contactor	Fuse links <sup>1)</sup>						
			According to IEC 60947-4-1 <sup>3)</sup>						
			Operating class gG (690 V / 100 kA) [A]	Operating class aM (690 V / 100 kA) (≥ S6 690 V / 50 kA) [A]	British Standards BS88 <sup>3)</sup> (415 V / 80 kA) (≥ S6 415 V / 50 kA) [A]				
			NH type 3NA DIAZED type 5SB NEOZED type 5SE	NH type 3ND					
Type of coordination <sup>2)</sup>									
Article No.	[A]	Article No.	[kW]	1	2	1	2	1	2
3RB3.4.-.U..	12.5 ... 50	Stand-alone assembly	Through hole technology	200	200	160	100	200	160
			Screw terminals	200	200	160	100	200	160
		3RT2045	37.0	200	160	160	80	200	125
		3RT2046	45.0	200	160	160	100	200	125
		3RT2047	55.0	200	200	160	100	200	160
		Stand-alone assembly	Through hole technology	315	315	160	100	200	160
			Screw terminals	315	315	160	100	200	160
3RB3.4.-.X..	20 ... 80	3RT2045	37.0	250	160	160	80	200	125
		3RT2046	45.0	250	160	160	100	200	125
		3RT2047	55.0	250	200	160	100	200	160

<sup>1)</sup> Take account of the operating voltage.<sup>2)</sup> Assignment and short-circuit protective devices acc. to IEC 60947-4-1<sup>3)</sup> Fuse links as specified in the table "BS88 fuse links (Page 231)" must be used for BS88 fuses.

## 6.4 Short-circuit protection: 3RT contactor, 3TF6 + 3RB3 electronic overload relay

Table 6- 17 Fuse links for overload relay and contactor size S6

Overload relay	Overload relay Setting range	Contactor	Fuse links <sup>1)</sup>						
			According to IEC 60947-4-1 <sup>3)</sup>						
			Operating class gG (690 V / 100 kA) [A]		Operating class aM (690 V / 100 kA) (≥ S6 690 V / 50 kA) [A]		British Standards BS88 <sup>3)</sup> (415 V / 80 kA) (≥ S6 415 V / 50 kA) [A]		
			NH type 3NA DIAZED type 5SB NEOZED type 5SE		NH type 3ND				
Type of coordination <sup>2)</sup>									
Article No.	[A]	Article No.	[kW]	1	2	1	2	1	2
3RB2.5.-F..	50 ... 200	Stand-alone assembly	Through hole technology	355	315	–	200	–	315
			Screw terminals	355	315	–	200	–	315
	3RT1054	55	315	315	–	160	–	250	
	3RT1055	75	315	315	–	200	–	315	
	3RT1056	90	315	315	–	200	–	315	

<sup>1)</sup> Take account of the operating voltage.<sup>2)</sup> Assignment and short-circuit protective devices acc. to IEC 60947-4-1<sup>3)</sup> Fuse links as specified in the table "BS88 fuse links (Page 231)" must be used for BS88 fuses.

Table 6- 18 Fuse links for overload relay and contactor size S10

Overload relay	Overload relay Setting range	Contactor	Fuse links <sup>1)</sup>						
			According to IEC 60947-4-1 <sup>3)</sup>						
			Operating class gG (690 V / 100 kA) [A]	Operating class aM (690 V / 100 kA) (≥ S6 690 V / 50 kA) [A]	British Standards BS88 <sup>3)</sup> (415 V / 80 kA) (≥ S6 415 V / 50 kA) [A]				
			NH type 3NA DIAZED type 5SB NEOZED type 5SE	NH type 3ND					
Type of coordination <sup>2)</sup>									
Article No.	[A]	Article No.	[kW]	1	2	1	2	1	2
3RB2.6.-.G..	55 ... 250	Stand-alone assembly	Screw terminals	500	500	–	400	–	450
		3RT1064	110			–		–	
		3RT1264	110	400	400	–	250	–	400
		3RT1065	132	500	500	–	400	–	450
		3RT1265	132	400	400	–	315	–	400
		3RT1066	160	500	500	–	400	–	450
		3RT1266	160	400	400	–	315	–	400

<sup>1)</sup> Take account of the operating voltage.<sup>2)</sup> Assignment and short-circuit protective devices acc. to IEC 60947-4-1<sup>3)</sup> Fuse links as specified in the table "BS88 fuse links (Page 231)" must be used for BS88 fuses.

## 6.4 Short-circuit protection: 3RT contactor, 3TF6 + 3RB3 electronic overload relay

Table 6- 19 Fuse links for overload relay and contactor size S12

Overload relay	Overload relay Setting range	Contactor	Fuse links <sup>1)</sup>						
			According to IEC 60947-4-1 <sup>5)</sup>						
			Operating class gG (690 V / 100 kA) [A]		Operating class aM (690 V / 100 kA) (≥ S6 690 V / 50 kA) [A]		British Standards BS88 <sup>5)</sup> (415 V / 80 kA) (≥ S6 415 V / 50 kA) [A]		
			NH type 3NA DIAZED type 5SB NEOZED type 5SE		NH type 3ND				
Type of coordination <sup>2)</sup>									
Article No.	[A]	Article No.	[kW]	1	2	1	2	1	2
3RB2.6.-.M..	160 ... 630	Stand-alone assembly	Screw terminals	800	630	–	630	–	630
				3RT1064	400	400	–	–	–
				3RT1264	500	500	–	250	400
				3RT1065	400	400	–	400	450
				3RT1265	500	500	–	315	400
				3RT1066	400	400	–	400	450
				3RT1266	500	500	–	315	400
				3RT1075	500	500	–	400	450
				3RT1275	800	500	–	400	450
				3RT1076	500	500	–	630	800
				3RT1276	800	500	–	500	500
				3TF68 <sup>3)</sup>	500	500 <sup>4)</sup>	–	630	800
				3TF69 <sup>3)</sup>	630 <sup>4)</sup>	500	–	630	500

<sup>1)</sup> Take account of the operating voltage.<sup>2)</sup> Assignment and short-circuit protective devices acc. to IEC 60947-4-1<sup>3)</sup> 3TF68 and 3TF69 vacuum contactors cannot be mounted directly.<sup>4)</sup> Make sure that there is a sufficiently large safety margin between the maximum AC-3 operating current and the nominal current of the fuses.<sup>5)</sup> Fuse links as specified in the table "BS88 fuse links (Page 231)" must be used for BS88 fuses.

Table 6- 20 Fuse links for overload relay and contactor size 14

Overload relay	Overload relay Setting range	Contactor	Fuse links <sup>1)</sup>						
			According to IEC 60947-4-1 <sup>3)</sup>						
			Operating class gG (690 V / 100 kA) [A]	Operating class aM (690 V / 100 kA) (≥ S6 690 V / 50 kA) [A]	British Standards BS88 <sup>3)</sup> (415 V / 80 kA) (≥ S6 415 V / 50 kA) [A]				
			NH type 3NA DIAZED type 5SB NEOZED type 5SE	NH type 3ND	Type of coordination <sup>2)</sup>				
Article No.	[A]	Article No.	[kW]	1	2	1	2	1	2
3RB3.1.-.N..	0.32 ... 1.25 <sup>5)</sup>	Stand-alone assembly	Screw terminals	800	630	–	630	–	630
	3TF69 <sup>4)</sup>	450	630 <sup>6)</sup>	500	–	630	–	630	

<sup>1)</sup> Take account of the operating voltage.

<sup>2)</sup> Assignment and short-circuit protective devices acc. to IEC 60947-4-1

<sup>3)</sup> Fuse links as specified in the table "BS88 fuse links (Page 231)" must be used for BS88 fuses.

<sup>4)</sup> 3TF68 and 3TF69 vacuum contactors cannot be mounted directly.

<sup>5)</sup> With 3UF1868-3GA00 current transformer.

<sup>6)</sup> Make sure that there is a sufficiently large safety margin between the maximum AC-3 operating current and the nominal current of the fuses.

## 6.5 Short-circuit protection: 3RT, 3TF6 contactor + 3RB22, 3RB23, 3RB24 electronic overload relay, and 3UF7

**Short-circuit protection with fuses for motor feeders with 3UF7 and 3RB22/23/24 contactor mounting, and stand-alone installation**

Table 6- 21 Derating values CLASS 5 / 10, 15 and 20

Overload relay	Overload relay Setting range	Contactor	CLASS									
			5 / 10			15 (3UF7 only)			20			
			AC-3 derating values [A]									
Article No.	[A]	Article No.	[kW]	400 V	500 V	690 V	400 V	500 V	690 V	400 V	500 V	690 V
<b>Size S00</b>												
3UF7100-1AA00-0/ 3UF7110-1AA00-0/ 3RB2906-2BG1	0.3 ... 3.0	Stand-alone assembly		3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
		3RT2015	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
		3RT2016	4.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
		3RT2017	5.5	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
		3RT2018	7.5	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
3UF7101-1AA00-0/ 3UF7111-1AA00-0/ 3RB2906-2DG1	2.4 ... 25	Stand-alone assembly		25	25	25	25	25	25	25	25	25
		3RT2015	3.0	7.0	6.0	4.9	7.0	6.0	4.9	7.0	6.0	4.9
		3RT2016	4.0	9.0	7.7	6.7	9.0	7.7	6.7	9.0	7.7	6.7
		3RT2017	5.5	12.0	9.2	6.7	10.7	9.2	6.7	10.0	9.2	6.7
		3RT2018	7.5	16.0	12.4	8.9	13.0	12.4	8.9	11.5	11.5	8.9
<b>Size S0</b>												
3UF7101-1AA00-0/ 3UF7111-1AA00-0/ 3RB2906-2DG1	2.4 ... 25	Stand-alone assembly		25	25	25	25	25	25	25	25	25
		3RT2023	4.0	9.0	7.6	6.7	9.0	7.6	6.7	9.0	7.6	6.7
		3RT2024	5.5	12.0	12.0	9.0	12.0	12.0	9.0	12.0	12.0	9.0
		3RT2025	7.5	17.0	17.0	13.0	17.0	17.0	13.0	16.0	16.0	13.0
		3RT2026	11.0	25.0	18.0	13.0	18.0	18.0	13.0	16.0	16.0	13.0
		3RT2027	15.0	25.0	25.0	21.0	23.0	20.0	20.0	20.0	20.0	17.0
		3RT2028	18.5	25.0	25.0	21.0	23.0	20.0	20.0	20.0	20.0	17.0
3UF7102-1AA00-0/ 3UF7112-1AA00-0/ 3RB2906-2JG1	10 ... 100	Stand-alone assembly		100	100	100	100	100	100	100	100	100
		3RT2024	5.5	12.0	12.0	–	12.0	12.0	–	12.0	12.0	–
		3RT2025	7.5	17.0	17.0	13.0	17.0	17.0	13.0	16.0	16.0	13.0
		3RT2026	11.0	25.0	18.0	13.0	18.0	18.0	13.0	16.0	16.0	13.0
		3RT2027	15.0	32.0	32.0	21.0	23.0	20.0	20.0	20.0	20.0	17.0
		3RT2028	18.5	38.0	32.0	21.0	23.0	20.0	20.0	20.0	20.0	17.0

*Fused selection tables up to 690 V*

*6.5 Short-circuit protection: 3RT, 3TF6 contactor + 3RB22, 3RB23, 3RB24 electronic overload relay, and 3UF7*

Overload relay	Overload relay Setting range	Contactor	CLASS									
			5 / 10			15 (3UF7 only)			20			
			AC-3 derating values [A]									
Article No.	[A]	Article No.	[kW]	400 V	500 V	690 V	400 V	500 V	690 V	400 V	500 V	690 V
<b>Size S2</b>												
3UF7102-1AA00-0/ 3UF7112-1AA00-0/ 3RB2906-2JG1	10 ... 100	Stand-alone assembly		100	100	100	100	100	100	100	100	
		3RT2035	18.5	40.0	40.0	24.0	40.0	40.0	24.0	40.0	40.0	
		3RT2036	22.0	50.0	50.0	24.0	49.0	49.0	24.0	45.0	45.0	
		3RT2037	30.0	65.0	65.0	47.0	50.0	50.0	47.0	46.0	46.0	
		3RT2038	37.0	80.0	80.0	58.0	57.0	57.0	57.0	48.0	48.0	
<b>Size S3</b>												
3UF7102-1AA00-0/ 3UF7112-1AA00-0/ 3RB2906-2JG1	10 ... 100	Stand-alone assembly		100	100	100	100	100	100	100	100	
		3RT2045	37	80	80	58	70	70	58	63	63	
		3RT2046	45	95	95	78	74	74	78	65	65	
		3RT2047	55	110	110	98	76	76	98	67	67	
3UF7103-1.A00-0/ 3UF7113-1.A00-0/ 3RB2956-2T.2	20 ... 200	Stand-alone assembly		200	200	200	200	200	200	200	200	
		3RT1054	55	115	115	115	93.2	93.2	93.2	81.7	81.7	
<b>Size S6</b>												
3UF7103-1.A00-0/ 3UF7113-1.A00-0/ 3RB2956-2T.2	20 ... 200	Stand-alone assembly		200	200	200	200	200	200	200	200	
		3RT1054	55	115	115	115	93.2	93.2	93.2	81.7	81.7	
		3RT1055	75	150	150	150	122	122	122	107	107	
		3RT1056	90	185	185	170	150	150	150	131	131	

## 6.5 Short-circuit protection: 3RT, 3TF6 contactor + 3RB22, 3RB23, 3RB24 electronic overload relay, and 3UF7

Overload relay	Overload relay Setting range	Contactor	CLASS									
			5 / 10		15 (3UF7 only)			20				
			AC-3 derating values [A]									
Article No.	[A]	Article No.	[kW]	400 V	500 V	690 V	400 V	500 V	690 V	400 V	500 V	690 V
<b>Sizes S10 / S12</b>												
3UF7104-1BA00-0/ 3UF7113-1AA00-0/ 3RB2966-2WH2	63 ... 630	Stand-alone assembly		630	630	630	630	630	630	630	630	630
		3RT1064	110	225	225	225	182	182	182	160	160	160
		3RT1264	110	225	225	225	225	225	225	225	225	225
		3RT1065	132	265	265	265	215	215	215	188	188	188
		3RT1265	132	265	265	265	265	265	265	265	265	265
		3RT1066	160	300	300	280	243	243	243	213	213	213
		3RT1266	160	300	300	300	300	300	300	300	300	300
		3RT1075	200	400	400	400	324	324	324	284	284	284
		3RT1275	200	400	400	400	400	400	400	400	400	400
		3RT1076	250	500	500	450	405	405	405	355	355	355
		3RT1276	250	500	500	500	500	500	500	500	500	500
		3TF68 <sup>1)</sup>	335	630	630	630	502	502	502	440	440	440
		3TF69 <sup>1)</sup>	450	630	630	630	630	630	630	572	572	572
<b>Size 14</b>												
3UF7100-1AA00-0/ 3UF7110-1AA00-0/ 3RB2906-2BG1	0.3 ... 3.0 <sup>2)</sup>	3TF69 <sup>1)</sup>	450	820	820	820	662	662	662	572	572	572

<sup>1)</sup> 3TF68 and 3TF69 vacuum contactors cannot be mounted directly.

<sup>2)</sup> With 3UF1868-3GA00 current transformer.

*Fused selection tables up to 690 V*

*6.5 Short-circuit protection: 3RT, 3TF6 contactor + 3RB22, 3RB23, 3RB24 electronic overload relay, and 3UF7*

Table 6- 22 Derating values CLASS 25, 30 and 35

Overload relay	Overload relay Setting range	Contactor	CLASS									
			25 (3UF7 only)			30			35 (3UF7 only)			
			AC-3 derating values [A]									
Article No.	[A]	Article No.	[kW]	400 V	500 V	690 V	400 V	500 V	690 V	400 V	500 V	690 V
<b>Size S00</b>												
3UF7100-1AA00-0/ 3UF7110-1AA00-0/ 3RB2906-2BG1	0.3 ... 3.0	Stand-alone assembly		3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
		3RT2015	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
		3RT2016	4.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
		3RT2017	5.5	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
		3RT2018	7.5	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
3UF7101-1AA00-0/ 3UF7111-1AA00-0/ 3RB2906-2DG1	2.4 ... 25	Stand-alone assembly		25	25	25	25	25	25	25	25	25
		3RT2015	3.0	7.0	6.0	4.9	7.0	6.0	4.9	7.0	6.0	4.9
		3RT2016	4.0	9.0	7.7	6.7	9.0	7.7	6.7	8.5	7.7	6.7
		3RT2017	5.5	9.5	9.2	6.7	9.0	9.0	6.7	8.5	8.5	6.7
		3RT2018	7.5	10.3	10.3	8.9	9.5	9.5	8.9	8.8	8.8	8.8
<b>Size S0</b>												
3UF7101-1AA00-0/ 3UF7111-1AA00-0/ 3RB2906-2DG1	2.4 ... 25	Stand-alone assembly		25	25	25	25	25	25	25	25	25
		3RT2023	4.0	9.0	7.6	6.7	9.0	7.6	6.7	9.0	7.6	6.7
		3RT2024	5.5	12.0	12.0	9.0	12.0	12.0	9.0	12.0	12.0	9.0
		3RT2025	7.5	14.8	14.8	13.0	14.0	14.0	13.0	13.4	13.4	13.0
		3RT2026	11.0	14.8	14.8	13.0	14.0	14.0	13.0	13.4	13.4	13.0
		3RT2027	15.0	18.0	18.0	15.0	17.0	17.0	15.0	16.0	16.0	15.0
		3RT2028	18.5	18.0	18.0	15.0	17.0	17.0	15.0	16.0	16.0	15.0
3UF7102-1AA00-0/ 3UF7112-1AA00-0/ 3RB2906-2JG1	10 ... 100	Stand-alone assembly		100	100	100	100	100	100	100	100	100
		3RT2024	5.5	12.0	12.0	9	12.0	12.0	9	12.0	12.0	9
		3RT2025	7.5	14.8	14.8	13.0	14.0	14.0	13.0	13.4	13.4	13.0
		3RT2026	11.0	14.8	14.8	13.0	14.0	14.0	13.0	13.4	13.4	13.0
		3RT2027	15.0	18.0	18.0	15.0	17.0	17.0	15.0	16.0	16.0	15.0
		3RT2028	18.5	18.0	18.0	15.0	17.0	17.0	15.0	16.0	16.0	15.0
<b>Size S2</b>												
3UF7102-1AA00-0/ 3UF7112-1AA00-0/ 3RB2906-2JG1	10 ...100	Stand-alone assembly		100	100	100	100	100	100	100	100	100
		3RT2035	18.5	38.0	38.0	24.0	36.0	36.0	24.0	35.0	35.0	24.0
		3RT2036	22.0	41.0	41.0	24.0	39.0	39.0	24.0	38.0	38.0	24.0
		3RT2037	30.0	42.0	42.0	42.0	40.0	40.0	40.0	39.0	39.0	39.0
		3RT2038	37.0	43.0	43.0	43.0	42.0	42.0	42.0	40.0	40.0	40.0

## 6.5 Short-circuit protection: 3RT, 3TF6 contactor + 3RB22, 3RB23, 3RB24 electronic overload relay, and 3UF7

Overload relay	Overload relay Setting range	Contactor	CLASS									
			25 (3UF7 only)			30			35 (3UF7 only)			
			AC-3 derating values [A]									
Article No.	[A]	Article No.	[kW]	400 V	500 V	690 V	400 V	500 V	690 V	400 V	500 V	690 V
<b>Size S3</b>												
3UF7102-1AA00-0/ 3UF7112-1AA00-0/ 3RB2906-2JG1	10 ... 100	Stand-alone assembly		100	100	100	100	100	100	100	100	
		3RT2045	37	57	57	57	54	54	54	52	52	
		3RT2046	45	59	59	59	56	56	56	54	54	
		3RT2047	55	61	61	61	58	58	58	55	55	
3UF7103-1.A00-0/ 3UF7113-1.A00-0/ 3RB2956-2T.2	20 ... 200	Stand-alone assembly		200	200	200	200	200	200	200	200	
		3RT1054	55	74.8	74.8	74.8	69	69	69	64.0	64.0	
<b>Size S6</b>												
3UF7103-1.A00-0/ 3UF7113-1.A00-0/ 3RB2956-2T.2	20 ... 200	Stand-alone assembly		200	200	200	200	200	200	200	200	
		3RT1054	55	74.8	74.8	74.8	69	69	69	64.0	64.0	
		3RT1055	75	98	98	98	90	90	90	82	82	
		3RT1056	90	120	120	120	111	111	111	102	102	
<b>Sizes S10 / S12</b>												
3UF7104-1BA00-0/ 3UF7113-1AA00-0/ 3RB2966-2WH2	63 ... 630	Stand-alone assembly		630	630	630	630	630	630	630	630	
		3RT1064	110	146	146	146	135	135	135	126	126	
		3RT1264	110	194	194	194	173	173	173	152	152	
		3RT1065	132	172	172	172	159	159	159	146	146	
		3RT1265	132	228	228	228	204	204	204	180	180	
		3RT1066	160	195	195	195	180	180	180	165	165	
		3RT1266	160	258	258	258	231	231	231	204	204	
		3RT1075	200	260	260	260	240	240	240	220	220	
		3RT1275	200	344	344	344	316	316	316	270	270	
		3RT1076	250	325	325	325	300	300	300	275	275	
		3RT1276	250	430	430	430	385	385	385	340	340	
		3TF68 <sup>1)</sup>	335	408	408	408	376	376	376	344	344	
		3TF69 <sup>1)</sup>	450	531	531	531	500	500	500	469	469	
<b>Size 14</b>												
3UF7100-1AA00-0/ 3UF7110-1AA00-0/ 3RB2906-2BG1	0.3 ... 3.0 <sup>2)</sup>	3TF69 <sup>1)</sup>	450	531	531	531	500	500	500	469	469	

<sup>1)</sup> 3TF68 and 3TF69 vacuum contactors cannot be mounted directly.<sup>2)</sup> With 3UF1868-3GA00 current transformer.

*Fused selection tables up to 690 V*

*6.5 Short-circuit protection: 3RT, 3TF6 contactor + 3RB22, 3RB23, 3RB24 electronic overload relay, and 3UF7*

Table 6- 23 Derating values CLASS 40

Overload relay	Overload relay Setting range	Contactor	CLASS			
			40 (3UF7 only)			
			AC-3 derating values [A]			
Article No.	[A]	Article No.	[kW]	400 V	500 V	690 V
<b>Size S00</b>						
3UF7100-1AA00-0/ 3UF7110-1AA00-0	0.3 ... 3.0	Stand-alone assembly		3.0	3.0	3.0
		3RT2015	3.0	3.0	3.0	3.0
		3RT2016	4.0	3.0	3.0	3.0
		3RT2017	5.5	3.0	3.0	3.0
		3RT2018	7.5	3.0	3.0	3.0
3UF7101-1AA00-0/ 3UF7111-1AA00-0	2.4 ... 25	Stand-alone assembly		25	25	25
		3RT2015	3.0	7.0	6.0	4.9
		3RT2016	4.0	8.0	7.7	6.7
		3RT2017	5.5	8.0	8.0	6.7
		3RT2018	7.5	8.3	8.3	8.3
<b>Size S0</b>						
3UF7101-1AA00-0/ 3UF7111-1AA00-0	2.4 ... 25	Stand-alone assembly		25	25	25
		3RT2023	4.0	9.0	7.6	6.7
		3RT2024	5.5	12.0	12.0	9.0
		3RT2025	7.5	13.0	13.0	13.0
		3RT2026	11.0	13.0	13.0	13.0
		3RT2027	15.0	15.0	15.0	15.0
		3RT2028	18.5	15.0	15.0	15.0
3UF7102-1AA00-0/ 3UF7112-1AA00-0	10 ... 100	Stand-alone assembly		100	100	100
		3RT2024	5.5	12.0	12.0	9
		3RT2025	7.5	13.0	13.0	13.0
		3RT2026	11.0	13.0	13.0	13.0
		3RT2027	15.0	15.0	15.0	15.0
		3RT2028	18.5	15.0	15.0	15.0
<b>Size S2</b>						
3UF7102-1AA00-0/ 3UF7112-1AA00-0	10 ...100	Stand-alone assembly		100	100	100
		3RT2035	18.5	33.0	33.0	24.0
		3RT2036	22.0	35.0	35.0	24.0
		3RT2037	30.0	37.0	37.0	37.0
		3RT2038	37.0	38.0	38.0	38.0

## 6.5 Short-circuit protection: 3RT, 3TF6 contactor + 3RB22, 3RB23, 3RB24 electronic overload relay, and 3UF7

Overload relay	Overload relay Setting range	Contactor	CLASS			
			40 (3UF7 only)			
			AC-3 derating values [A]			
Article No.	[A]	Article No.	[kW]	400 V	500 V	690 V
<b>Size S3</b>						
3UF7102-1AA00-0/ 3UF7112-1AA00-0/ 3RB2906-2JG1	10 ...100	Stand-alone assembly		100	100	100
		3RT2045	37	50	50	50
		3RT2046	45	52	52	52
		3RT2047	55	53	53	53
3UF7103-1.A00-0/ 3UF7113-1.A00-0/ 3RB2956-2T.2	20 ...200	Stand-alone assembly		200	200	200
		3RT1054	55	57	57	57
<b>Size S6</b>						
3UF7103-1.A00-0/ 3UF7113-1.A00-0/ 3RB2956-2T.2	20 ... 200	Stand-alone assembly		200	200	200
		3RT1054	55	57	57	57
		3RT1055	75	74	74	74
		3RT1055	90	93	93	93
<b>Sizes S10 / S12</b>						
3UF7104-1BA00-0/ 3UF7113-1AA00-0/ 3RB2966-2WH2	63 ... 630	Stand-alone assembly		630	630	630
		3RT1064	110	111	111	111
		3RT1264	110	131	131	131
		3RT1065	132	133	133	133
		3RT1265	132	156	156	156
		3RT1066	160	150	150	150
		3RT1266	160	177	177	177
		3RT1075	200	200	200	200
		3RT1275	200		233	233
		3RT1076	250	250	250	250
		3RT1276	250	316	316	316
		3TF68 <sup>1)</sup>	335	317	317	317
<b>Size 14</b>						
3UF7100-1AA00-0/ 3UF7110-1AA00-0/ 3RB2906-2BG1	0.3 ... 3.0 <sup>2)</sup>	3TF69 <sup>1)</sup>	450	438	438	438

<sup>1)</sup> 3TF68 and 3TF69 vacuum contactors cannot be mounted directly.

<sup>2)</sup> With 3UF1868-3GA00 current transformer.

*Fused selection tables up to 690 V*

6.5 Short-circuit protection: 3RT, 3TF6 contactor + 3RB22, 3RB23, 3RB24 electronic overload relay, and 3UF7

**Fuse links according to IEC 60947-4-1**

Short-circuit protection up to 690 V / 100 kA, types of coordination 1 and 2

Table 6- 24 Fuse links for overload relay and contactor sizes S00 to 14

Overload relay	Overload relay Setting range	Contactor		Fuse links <sup>1)</sup>						
				According to IEC 60947-4-1						
				Operating class gG <sup>3)</sup> (690 V / 100 kA) [A]	Operating class aM (690 V / 100 kA) (≥ S6 690 V / 50 kA) [A]	British Standards BS88 <sup>4)</sup> (415 V / 80 kA) (≥ S6 415 V / 50 kA) [A]				
				Type of coordination <sup>2)</sup>						
Article No.	[A]	Article No.	[kW]	1	2	1	2	1	2	
<b>Size S00</b>										
3UF7100-1AA00-0/ 3UF7110-1AA00-0/ 3RB2906-2BG1	0.3 ... 3.0	Stand-alone assembly			35	35	20	16	35	20
		3RT2015	3.0	35	20	20	16	35	20	
		3RT2016	4.0	35	20	20	16	35	20	
		3RT2017	5.5	35	20	20	16	35	20	
		3RT2018	7.5	35	20	20	16	35	20	
3UF7101-1AA00-0/ 3UF7111-1AA00-0/ 3RB2906-2DG1	2.4 ... 25	3RT2015	3.0	35	20	20	16	35	20	
		3RT2016	4.0	35	20	20	16	35	20	
		3RT2017	5.5	50	25	20	16	35	20	
		3RT2018	7.5	50	25	25	20	50	25	
<b>Size S0</b>										
3UF7101-1AA00-0/ 3UF7111-1AA00-0/ 3RB2906-2DG1	2.4 ... 25	Stand-alone assembly			160	160	50	25	125	50
		3RT2023	4.0	63	25	32	20	63	25	
		3RT2024	5.5	63	25	32	20	63	25	
		3RT2025	7.5	63	25	32	20	63	25	
		3RT2026	11.0	100	35	50	20	100	35	
		3RT2027	15.0	125	50	50	25	125	50	
		3RT2028	18.5	125	50	50	25	125	50	
3UF7102-1AA00-0/ 3UF7112-1AA00-0/ 3RB2906-2JG1	10 ... 100	3RT2024	5.5	63	25	32	20	63	25	
		3RT2025	7.5	63	25	32	20	63	25	
		3RT2026	11.0	100	35	50	20	100	35	
		3RT2027	15.0	125	50	50	25	125	50	
		3RT2028	18.5	125	50	50	25	125	50	
<b>Size S2</b>										
3UF7102-1AA00-0/ 3UF7112-1AA00-0/ 3RB2906-2JG1	10 ... 100	3RT2035	18.5	160	80	80	50	125	63	
		3RT2036	22.0	160	80	80	50	125	63	
		3RT2037	30.0	250	125	160	63	200	100	
		3RT2038	37.0	250	125	160	80	200	125	

## 6.5 Short-circuit protection: 3RT, 3TF6 contactor + 3RB22, 3RB23, 3RB24 electronic overload relay, and 3UF7

Overload relay	Overload relay Setting range	Contactor		Fuse links <sup>1)</sup>					
				According to IEC 60947-4-1					
				Operating class gG <sup>3)</sup> (690 V / 100 kA) [A]	Operating class aM (690 V / 100 kA) (≥ S6 690 V / 50 kA) [A]	British Standards BS88 <sup>4)</sup> (415 V / 80 kA) (≥ S6 415 V / 50 kA) [A]			
				Type of coordination <sup>2)</sup>					
Article No.	[A]	Article No.	[kW]	1	2	1	2	1	2
<b>Size S3</b>									
3UF7102-1AA00-0/ 3UF7112-1AA00-0/ 3RB2906-2JG1	10 ...100	Stand-alone assembly		315	315	160	100	200	160
		3RT2045	37	250	160	160	80	200	125
		3RT2046	45	250	160	160	100	200	125
		3RT2047	55	250	200	160	100	200	160
3UF7103-1.A00-0/ 3UF7113-1.A00-0/ 3RB2956-2T.2	20 ...200	3RT1054	55	355	315	–	160	–	250
<b>Size S6</b>									
3UF7103-1.A00-0/ 3UF7113-1.A00-0/ 3RB2956-2T.2	20 ...200	Stand-alone assembly		400	400	–	200	–	315
		3RT1054	55	355	315	–	160	–	250
		3RT1055	75	355	315	–	200	–	315
		3RT1055	90	355	315	–	200	–	315
<b>Sizes S10 / S12</b>									
3UF7104-1BA00-0/ 3UF7113-1AA00-0/ 3RB2966-2WH2	63 ... 630	Stand-alone assembly		800	800	–	630	–	630
		3RT1064	110	500	400	–	250	–	400
		3RT1264	110	500	500	–	400	–	450
		3RT1065	132	500	400	–	315	–	400
		3RT1265	132	500	500	–	400	–	450
		3RT1066	160	500	400	–	315	–	400
		3RT1266	160	500	500	–	400	–	450
		3RT1075	200	630	500	–	400	–	450
		3RT1275	200	800	800	–	630	–	800
		3RT1076	250	630	500	–	500	–	500
		3RT1276	250	800	800	–	630	–	800
		3TF68 <sup>5)</sup>	335	800	500	–	630	–	500
		3TF69 <sup>5)</sup>	450	800	630	–	630	–	630

*Fused selection tables up to 690 V*

*6.5 Short-circuit protection: 3RT, 3TF6 contactor + 3RB22, 3RB23, 3RB24 electronic overload relay, and 3UF7*

Overload relay	Overload relay Setting range	Contactor		Fuse links <sup>1)</sup>					
				According to IEC 60947-4-1					
				Operating class gG <sup>3)</sup> (690 V / 100 kA) [A]	Operating class aM (690 V / 100 kA) (≥ S6 690 V / 50 kA) [A]	British Standards BS88 <sup>4)</sup> (415 V / 80 kA) (≥ S6 415 V / 50 kA) [A]			
Type of coordination <sup>2)</sup>									
Article No.	[A]	Article No.	[kW]	1	2	1	2	1	2
<b>Size 14</b>									
3UF7100-1AA00-0/ 3UF7110-1AA00-0/ 3RB2906-2BG1	0.3 ... 3.0 <sup>6)</sup>	3TF69 <sup>5)</sup>	450	630	500	–	630	–	630

<sup>1)</sup> Take account of the operating voltage.

<sup>2)</sup> Assignment and short-circuit protective devices acc. to IEC 60947-4-1

<sup>3)</sup> NH type 3NA, DIAZED type 5SB, NEOZED type 5SE, operating class gG

<sup>4)</sup> Fuse links as specified in the table "BS88 fuse links (Page 231)" must be used for BS88 fuses.

<sup>5)</sup> 3TF68 and 3TF69 vacuum contactors cannot be mounted directly.

<sup>6)</sup> With 3UF1868-3GA00 current transformer.

## 6.6 Short-circuit protection: 3RT2 contactor + 3RR2 monitoring relay, types of coordination 1 and 2

**Short-circuit protection with fuses for motor feeders with 3RR2, contactor mounting, and stand-alone assembly**

Fuse links according to IEC 60947-4-1  
Short-circuit protection up to 690 V / 100 kA, operating class gG,  
types of coordination 1 and 2

Table 6- 25 Fuse links for monitoring relay and contactor size S00, S0, and S2

Monitoring relay	Overload relay Setting range	Contactor	Fuse links <sup>1)</sup> [A]		
			According to IEC 60947-4-1 <sup>3)</sup>		
			Type of coordination <sup>2)</sup>		
Article No.	[A]	Article No.	[kW]	1	2
<b>Size S00</b>					
3RR2.41	1.6 ... 16	Stand-alone assembly		50	50
		3RT2015	35	35	20
		3RT2016	35	35	20
		3RT2017	50	50	25
		3RT2018	50	50	25
<b>Size S0</b>					
3RR2.42	4 ... 40	Stand-alone assembly		125	80
		3RT2024	5.5	63	25
		3RT2025	7.5	63	25
		3RT2026	11.0	100	35
		3RT2027	15.0	125	50
		3RT2028	18.5	125	50
<b>Size S2</b>					
3RR2.43	8 ... 80	Stand-alone assembly		250	250
		3RT2035	18.5	160	80
		3RT2036	22.0	160	80
		3RT2037	30.0	250	125
		3RT2038	37.0	250	160

<sup>1)</sup> Take account of the operating voltage.

<sup>2)</sup> Assignment and short-circuit protective devices acc. to IEC 60947-4-1

<sup>3)</sup> NH type 3NA, DIAZED type 5SB, NEOZED type 5SE, operating class gG

## 6.7 Short-circuit protection: 3RW30 soft starter + 3RT2 contactor + 3RU2 thermal overload relay

**Short-circuit protection with fuses for motor feeders with 3RW30 soft starter and 3RU21 thermal overload relay with contactor mounting up to 400 V / 65 kA, type of coordination 1**

Table 6- 26 Fuse links according to IEC 60947-4-2 operating class gG,  
(NH DIAZED, NEOZED; type 3NA, 5SB, 5SE)

Overload relay		Contactor		Soft starter		Fuse links <sup>1)</sup> [A]
Article No.	Setting range [A]	Article No.	[kW]	Article No.	[kW]	Type of coordination <sup>2)</sup>
<b>Size S00</b>						
3RT2015	1.8 ... 2.5	3RT2015	3	3RW3013	1.5	20
3RT2015	2.2 ... 3.2	3RT2015	3	3RW3013	1.5	20
3RT2015	2.8 ... 4.0	3RT2015	3	3RW3013	1.5	20
3RT2015	3.5 ... 5.0	3RT2015	3	3RW3014	3	20
3RT2015	4.5 ... 6.3	3RT2015	3	3RW3014	3	20
3RT2016	5.5 ... 8.0	3RT2016	4	3RW3016	4	20
3RT2016	7.0 ... 10	3RT2016	4	3RW3016	4	20
3RT2017	9.0 ... 12.5	3RT2017	5.5	3RW3017	5.5	25
3RT2018	11 ... 16	3RT2018	7.5	3RW3018	7.5	35
<b>Size S0</b>						
3RU2126-4B..	14 ... 20	3RT2026	11	3RW3026	11	63
3RU2126-4C..	17 ... 22	3RT2026	11	3RW3026	11	63
3RU2126-4D..	20 ... 25	3RT2026	11	3RW3026	11	63
3RU2126-4N..	23 ... 28	3RT2027	15	3RW3027	15	80
3RU2126-4E..	27 ... 32	3RT2027	15	3RW3027	15	80
3RU2126-4P..	30 ... 36	3RT2028	18.5	3RW3028	18.5	80
3RU2126-4F..	34 ... 40	3RT2028	18.5	3RW3028	18.5	80
<b>Size S2</b>						
3RU2136-4F..	28 ... 40	3RT2035	18.5	3RW3036	22	100
3RU2136-4G..	36 ... 45	3RT2036	22	3RW3036	22	100
3RU2136-4H..	40 - 50	3RT2036	22	3RW3036	22	100
3RU2136-4Q..	47 ... 57	3RT2037	30	3RW3037	30	125
3RU2136-4J..	54 ... 65	3RT2037	30	3RW3037	30	125
3RU2136-4K..	62 ... 73	3RT2038	37	3RW3038	37	125
3RU2136-4R..	70 ... 80	3RT2038	37	3RW3038	37	125

## 6.7 Short-circuit protection: 3RW30 soft starter + 3RT2 contactor + 3RU2 thermal overload relay

Overload relay		Contactor		Soft starter		Fuse links <sup>1)</sup> [A]
Article No.	Setting range [A]	Article No.	[kW]	Article No.	[kW]	Type of coordination <sup>2)</sup>
<b>Size S3</b>						
3RU2146-4F..	28 ... 40	3RT2045	37	3RW3046	45	160
3RU2146-4H..	36 ... 50	3RT2045	37	3RW3046	45	160
3RU2146-4J..	45 ... 63	3RT2045	37	3RW3046	45	160
3RU2146-4K..	57 ... 75	3RT2045	37	3RW3046	45	160
3RU2146-4L..	70 ... 90	3RT2046	45	3RW3047	55	160
3RU2146-4M..	80 ... 100	3RT2047	55	3RW3047	55	160

<sup>1)</sup> Please take account of the operating voltage.

<sup>2)</sup> Assignment and short-circuit protective devices acc. to IEC 60947-4-2

## 6.8 Short-circuit protection: Solid-state contactor, type of coordination 1 and 2

### Short-circuit protection with fuses for 3RF34 solid-state contactor

Fuse links according to IEC 60947-4-2

Short-circuit protection up to 600 V / 50 kA, types of coordination 1 and 2

Table 6- 27 Fuse links for solid-state contactor sizes S00 and S0

Solid-state contactor		Fuse links <sup>1)</sup> [A]	
		According to IEC 60947-4-2 <sup>3)</sup>	
Article No.	$I_e @ 40^\circ C$ [A]	500 V 3NW / 600 V 3NA 50 kA	
		Type of coordination <sup>2)</sup>	
		1	2
3RF3405-1BB54	5.2	25	On request
3RF3410-1BB54	9.2	40	
3RF3412-1BB54	12.5	40	
3RF3416-1BB54	16	40	
<b>Reversing contactors</b>			
3RF3403-1BD54	3.8	25	On request
3RF3405-1BD54	5.4	40	
3RF3410-1BD54	7.4	40	

<sup>1)</sup> Take account of the operating voltage.

<sup>2)</sup> Assignment and short-circuit protective devices acc. to IEC 60947-4-2

<sup>3)</sup> NH type 3NA, DIAZED type 5SB, NEOZED type 5SE, operating class gG

## 6.9 Short-circuit protection: Motor feeders with 3RW3 + 3RT2 + 3RB30/3RB31

**Short-circuit protection with fuses for motor feeders with 3RW30 soft starter and 3RB30 / 3RB31 electronic overload relay up to 480 V / 65 kA, type of coordination 1**

Table 6- 28 Fuse links according to IEC 60947-4-2 operating class gG,  
(NH DIAZED, NEOZED; type 3NA, 5SB, 5SE)

Overload relay		Contactor	Soft starter	Current carrying capacity [A]			Fuse links <sup>1)</sup> [A]
				$I_e$ at 400 V and			
Article No.	Setting range [A]	Article No.	Article No.	40 °C	50 °C	60 °C	Type of coordination <sup>2)</sup>
<b>Size S00</b>							
3RB3016-1P..	1 ... 4	3RT2015	3RW3013	3.6	3.3	3.0	20
		3RT2016	3RW3013	3.6	3.3	3.0	20
3RB3016-1P..	3 ... 12	3RT2015	3RW3014	6.5	6.0	5.5	20
		3RT2016	3RW3014	6.5	6.0	5.5	20
		3RT2017	3RW3016	9.0	8.0	7.0	20
3RB3016-1T..	4 ... 16	3RT2017	3RW3017	12.5	12.0	11.0	25
		3RT2018	3RW3018	17.6	17.0	14.0	35
<b>Size S0</b>							
3RB3026-1Q..	6 ... 25	3RT2025	3RW3026	17.0	17.0	17.0	63
		3RT2026	3RW3026	25.3	23.0	21.0	63
		3RT2027	3RW3027	32.2	29.0	26.0	80
3RB3026-1V..	10 ... 40	3RT2025	3RW3026	17.0	17.0	17.0	63
		3RT2026	3RW3026	25.3	23.0	21.0	63
		3RT2027	3RW3027	32.2	29.0	26.0	80
		3RT2028	3RW3028	38.0	34.0	31.0	80

*Fused selection tables up to 690 V*

*6.9 Short-circuit protection: Motor feeders with 3RW3 + 3RT2 + 3RB30/3RB31*

Overload relay		Contactor	Soft starter	Current carrying capacity [A]			Fuse links <sup>1)</sup> [A]
				$I_e$ at 400 V and			Type of coordination <sup>2)</sup>
Article No.	Setting range [A]	Article No.	Article No.	40 °C	50 °C	60 °C	1
<b>Size S2</b>							
3RB3036-1U..	12 ... 50	3RT2035	3RW3036	45.0	42.0	39.0	100
		3RT2036	3RW3036	45.0	42.0	39.0	100
3RB3036-1W..	20 ... 80	3RT2035	3RW3036	45.0	42.0	39.0	100
		3RT2036	3RW3036	45.0	42.0	39.0	100
		3RT2037	3RW3037	65.0	58.0	53.0	125
		3RT2038	3RW3038	72.0	62.1	60.0	125
<b>Size S3</b>							
3RB3046-1U..	12.5 ... 50	3RT2045	3RW3046	50	50	50	160
3RB3046-1X..	32 ... 115	3RT2045	3RW3046	80	73	66	160
		3RT2046	3RW3047	106	98	90	160
		3RT2047	3RW3047	106	98	90	160

<sup>1)</sup> Please take account of the operating voltage.

<sup>2)</sup> Assignment and short-circuit protective devices acc. to IEC 60947-4-2

## 6.10 BS88 fuse links

### BS88 fuse links

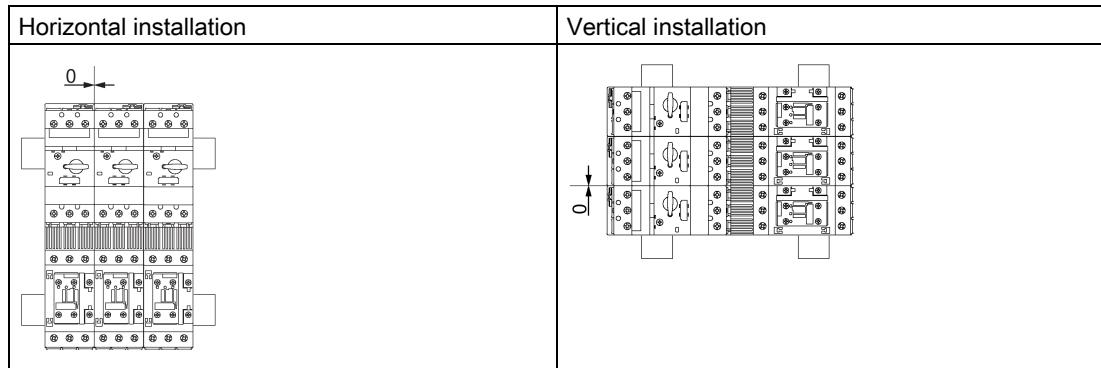
Table 6- 29 BS88 fuse links

Rated current [A]	Fuse link
4	NIT4
6	NIT6
10	NIT10
16	NIT16
20	NIT20
25	NIT20M25
32	NIT20M32
35	TIA32M35
40	TIA32M40
50	TIA32M50
63	TIA32M63
80	TIA63M80
100	TIS63M100
125	TCP100M125
160	TCP100M160
200	TCP100M200
250	TFP200M250
315	TFP200M315
400	TMF400
450	TMF400M450
500	TTM500
630	TTM630
800	TLM800

# Installation guidelines

## 7.1 Mounting variants under different conditions and frequency of use

The load feeders can be mounted horizontally or vertically.



The following table shows the installation guidelines for the fuseless load feeders.

Table 7- 1 Mounting variants - fuseless load feeders with link module

Combination	Setting range				
		Distance between feeders			
			Permissible installation: h = horizontal, v = vertical		
			Max. ambient temperature $T_a$	Use under increased vibration and shock load <sup>1)</sup>	
Motor starter protector and contactor	A	mm	h, v	°C	
<b>Direct-on-line starter, screw terminal, DIN rail or base plate</b>					
S00	$\leq 14$	0	h, v	60	Unlimited
	> 14 ... 16	10	h	60	
		0	h, v	40	
S0	$\leq 29$	0	h, v	60	Unlimited
	> 29 ... 32	10	h	60	
		0	h, v	40	
S2	$\leq 65$	0	h, v	60	Unlimited
S3 (with DIN rail adapter 3RA2942-1AA00 only)	$\leq 87$	0	h, v	60	On request
	> 87 ... 100	0	h, v	40	

Combination					
	Setting range				
		Distance between feeders			
			Permissible installation: h = horizontal, v = vertical		Max. ambient temperature $T_a$
<b>Motor starter protector and contactor</b>	<b>A</b>	<b>mm</b>	<b>h, v</b>	<b>°C</b>	<b>Use under increased vibration and shock load <sup>1)</sup></b>
<b>Direct-on-line starter, screw terminal, busbar</b>					
S00	$\leq 14$	0	h	40	Vibration and shock kit 8US1998-1CA10 required
		10	h	60	
		10	v	40	
	$> 14 \dots 16$	10	h	60	
		10	h, v	40	
S0	$\leq 29$	0	h	40	Vibration and shock kit 8US1998-1CA10 required
		10	h	60	
		10	v	40	
	$> 29 \dots 32$	10	h	60	
		10	h, v	40	
S2	$\leq 65$	10	h, v	60	Vibration and shock kit 8US1998-1DA10 required
	$\leq 65$	0	h, v	40	Vibration and shock kit 8US1998-1DA10 required
<b>Reversing starter, screw terminal, DIN rail or base plate</b>					
S00	$\leq 14$	0	h, v	60	Unlimited
	$> 14 \dots 16$	10	h	60	
		0	h, v	40	
S0	$\leq 29$	0	h, v	60	DIN rail adapter required (already included with 3RA22)
	$> 29 \dots 32$	10	h	60	
		0	h, v	40	
S2	$\leq 65$	0	h, v	60	Unlimited
S3 (with DIN rail adapter 3RA2942-1AA00 only)	$\leq 87$	0	h, v	60	On request
	$> 87 \dots 100$	0	h, v	40	

## Installation guidelines

### 7.1 Mounting variants under different conditions and frequency of use

Combination						
	Setting range	Distance between feeders				
			Permissible installation: h = horizontal, v = vertical			Max. ambient temperature T <sub>a</sub>
			Max. ambient temperature T <sub>a</sub>			
			Use under increased vibration and shock load <sup>1)</sup>			
Motor starter protector and contactor	A	mm	h, v	°C		
<b>Reversing starter, screw terminal, busbar</b>						
S00	$\leq 14$	0	h	60	Vibration and shock kit 8US1998-1CA10 required	
		0	v	40		
	$> 14 \dots 16$	10	h	60		
		10	v	40		
S0	$\leq 29$	0	h	60	Vibration and shock kit 8US1998-1CA10 required	
		0	v	40		
	$> 29 \dots 32$	10	h	60		
		10	v	40		
S2	$\leq 65$	10	h, v	60	Vibration and shock kit 8US1998-1DA10 required	
	$\leq 65$	0	h, v	40	Vibration and shock kit 8US1998-1DA10 required	
<b>Direct-on-line starter, spring-loaded connection, DIN rail or base plate</b>						
S00	$\leq 14$	0	h, v	60	Unlimited	
	$> 14 \dots 16$	10	h	60		
		0	h, v	40		
S0	$\leq 29$	0	h, v	60	Unlimited	
	$> 29 \dots 32$	10	h	60		
		0	h, v	40		
<b>Direct-on-line starter, spring-loaded connection, busbar</b>						
S00	$\leq 14$	0	h	40	Vibration and shock kit 8US1998-1CA10 required	
		10	h	60		
		10	v	40		
	$> 14 \dots 16$	10	h	60		
		10	v	40		
S0	$\leq 29$	0	h	40	Vibration and shock kit 8US1998-1CA10 required	
	$> 29 \dots 32$	10	h	60		
		10	v	40		
		10	h	60		
		10	v	40		

Combination					
	Setting range				
		Distance between feeders			
			Permissible installation: h = horizontal, v = vertical		Max. ambient temperature $T_a$
<b>Motor starter protector and contactor</b>	<b>A</b>	<b>mm</b>	<b>h, v</b>	<b>°C</b>	<b>Use under increased vibration and shock load <sup>1)</sup></b>
<b>Reversing starter, spring-loaded connection, DIN rail or base plate</b>					
S00	≤ 14	0	h, v	60	Unlimited
	> 14 ... 16	10	h	60	
		0	h, v	40	
S0	≤ 29	0	h, v	60	DIN rail adapter required (already included with 3RA22)
	> 29 ... 32	10	h	60	
		0	h, v	40	
<b>Reversing starter, spring-loaded connection, busbar</b>					
S00	≤ 14	0	h	60	Vibration and shock kit 8US1998-1CA10 required
		0	v	40	
	> 14 ... 16	10	h	60	
		10	v	40	
S0	≤ 29	0	h	60	Vibration and shock kit 8US1998-1CA10 required
		0	v	40	
	> 29 ... 32	10	h	60	
		10	v	40	
<b>Motor starter protector and soft starter, screw terminal, DIN rail or base plate</b>					
S00	16	2)	2)	2)	The feeder must be screwed tight to the top of the motor starter protector with two screws and fastened to the bottom of the soft starter with a self-locking screw. Not approved for railways, power plants, or shipbuilding.
S0	32	2)	2)	2)	The feeder must be screwed tight to the top of the motor starter protector with two screws and fastened to the bottom of the soft starter with a self-locking screw. Not approved for railways, power plants, or shipbuilding.
S2 (only with DIN rail adapter 3RA2932-1CA00)	65	2)	2)	2)	Unlimited
S3 (on base plate only)	On request				

## Installation guidelines

### 7.1 Mounting variants under different conditions and frequency of use

Combination					
	Setting range				
		Distance between feeders			
		Permissible installation: h = horizontal, v = vertical		Max. ambient temperature $T_a$	
Motor starter protector and contactor	A	mm	h, v	°C	Use under increased vibration and shock load <sup>1)</sup>
<b>Motor starter protector and soft starter, spring-loaded terminal, DIN rail or base plate</b>					
S00	16	2)	2)	2)	The feeder must be screwed tight to the top of the motor starter protector with two screws and fastened to the bottom of the soft starter with a self-locking screw. Not approved for railways, power plants, or shipbuilding.
S0	32	2)	2)	2)	The feeder must be screwed tight to the top of the motor starter protector with two screws and fastened to the bottom of the soft starter with a self-locking screw. Not approved for railways, power plants, or shipbuilding.
<b>Motor starter protector and solid-state contactor, screw terminal, DIN rail or base plate</b>					
Direct-on-line starters (sizes S00 / S0)	16	2)	2)	2)	Unlimited Not approved for railways, power plants, or shipbuilding.
Reversing starters (sizes S00 / S0)	7.4	2)	2)	2)	Unlimited Not approved for railways, power plants, or shipbuilding.

<sup>1)</sup> Vibration and shock tests are carried out in accordance with SN 31205 as well as with the relevant standards for railways, shipbuilding, and power plants.

<sup>2)</sup> Please consult Technical Assistance (<http://www.siemens.com/sirius/technical-assistance>).

## 7.2 Minimum clearances to grounded or live parts (400 V / 500 V / 690 V AC)

Maintain the following clearances when mounting the 3RA21 / 3RA22 assemblies:

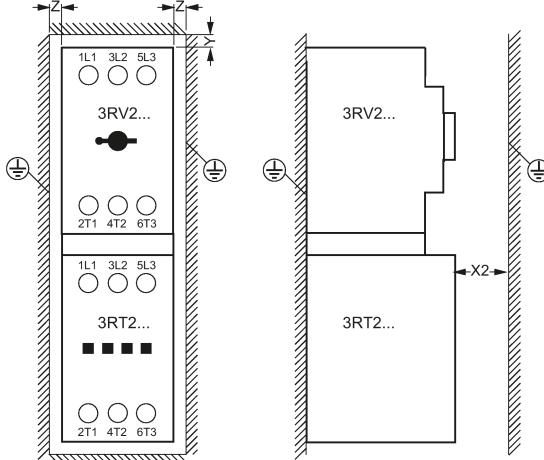
Table 7- 2 Installation guidelines for 400 V / 500 V / 690 V AC (size S00 / S0)

Clearance from grounded or live parts as well as from molded-plastic cable ducts according to IEC 60947-4				
Motor starter protector	Contactor	Y [mm]	X2 <sup>1)</sup> [mm]	Z [mm]
<b>Rated operating voltage 400 V</b>				
3RV2.1	3RT201	20	10	9
3RV2.2	3RT201	30	10	9
	3RT2.2	30	10	9
<b>Rated operating voltage 500 V</b>				
3RV201 3RV211	3RT201	20	10	9
3RV202 3RV212	3RT202	30	10	20
3RV202 + limiter (32 A) 3RV212 + limiter (32 A)	3RT202	30	10	9

## *Installation guidelines*

### *7.2 Minimum clearances to grounded or live parts (400 V / 500 V / 690 V AC)*

Clearance from grounded or live parts as well as from molded-plastic cable ducts according to IEC 60947-4				
Rated operating voltage 690 V				
3RV2.1	3RT201	50	10	20
3RV2.1 / 3RV2.2 + limiter (32 A)	3RT201 / 3RT202	80	10	20
3RV2.1 / 3RV2.2 + limiter (50 A)	3RT202	50	10	20



- 1) Minimum clearance from contactor at the front. There is no minimum clearance requirement at the front for the motor starter protector.

#### **Note**

#### **Installation instructions for S0 motor starter protectors from 36 A**

Minimum cable length between motor starter protector and contactor: 150 mm.

Minimum clearance between motor starter protector and contactor: 100 mm.

Table 7- 3 Installation guidelines for 400 V / 500 V / 690 V AC (size S2)

<b>Clearance from grounded or live parts as well as from molded-plastic cable ducts according to IEC 60947-4</b>						
Motor starter protector	Contactor	Y1 [mm]	Y2 [mm]	X1 [mm]	X2 [mm]	Z [mm]
<b>Rated operating voltage 400 V</b>						
3RV2.3	3RT203	50	10	---	10	10
<b>Rated operating voltage 500 V</b>						
3RV203 3RV213	3RT203	20	10	---	10	9
3RV203 + limiter (80 A) 3RV213 + limiter (80 A)	3RT203	50	10	---	10	10
<b>Rated operating voltage 690 V</b>						
3RV2.32 + limiter (80 A)	3RT203	50	10	10	32	10

## Installation guidelines

### 7.2 Minimum clearances to grounded or live parts (400 V / 500 V / 690 V AC)

Table 7- 4 Installation guidelines for 400 V / 500 V / 690 V AC (size S3)

Clearance from grounded or live parts as well as from molded-plastic cable ducts according to IEC 60947-4						
Motor starter protector	Contactor	Y1 [mm]	Y2 [mm]	X1 [mm]	X2 [mm]	Z [mm]
<b>Rated operating voltage 400 V</b>						
3RV2.4	3RT204	On request				
<b>Rated operating voltage 500 V</b>						
3RV2.4	3RT204	On request				
3RV2.4 + limiter (80 A)	3RT204	On request				
<b>Rated operating voltage 690 V</b>						
3RV2.42 + limiter (80 A)	3RT204	On request				

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## 8.2      **SIRIUS Innovations system configurator**

### **Reference**

To assist you with configuration, the "SIRIUS Innovations system configurator" is at your disposal on the Internet. Here, you can gather together all necessary products before the actual configuration process and you can realize complete projects virtually.

You can find the "SIRIUS Innovations system configurator" on the Internet  
(<http://www.siemens.com/sirius/configurators>).

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**or on the Internet at:**

E-mail: (<mailto:technical-assistance@siemens.com>)

Internet: (<http://www.siemens.com/sirius/technical-assistance>)

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