

# SIRIUS Engineering

## Selection Data for Fuseless Load Feeders



sirius  
LOAD FEEDERS

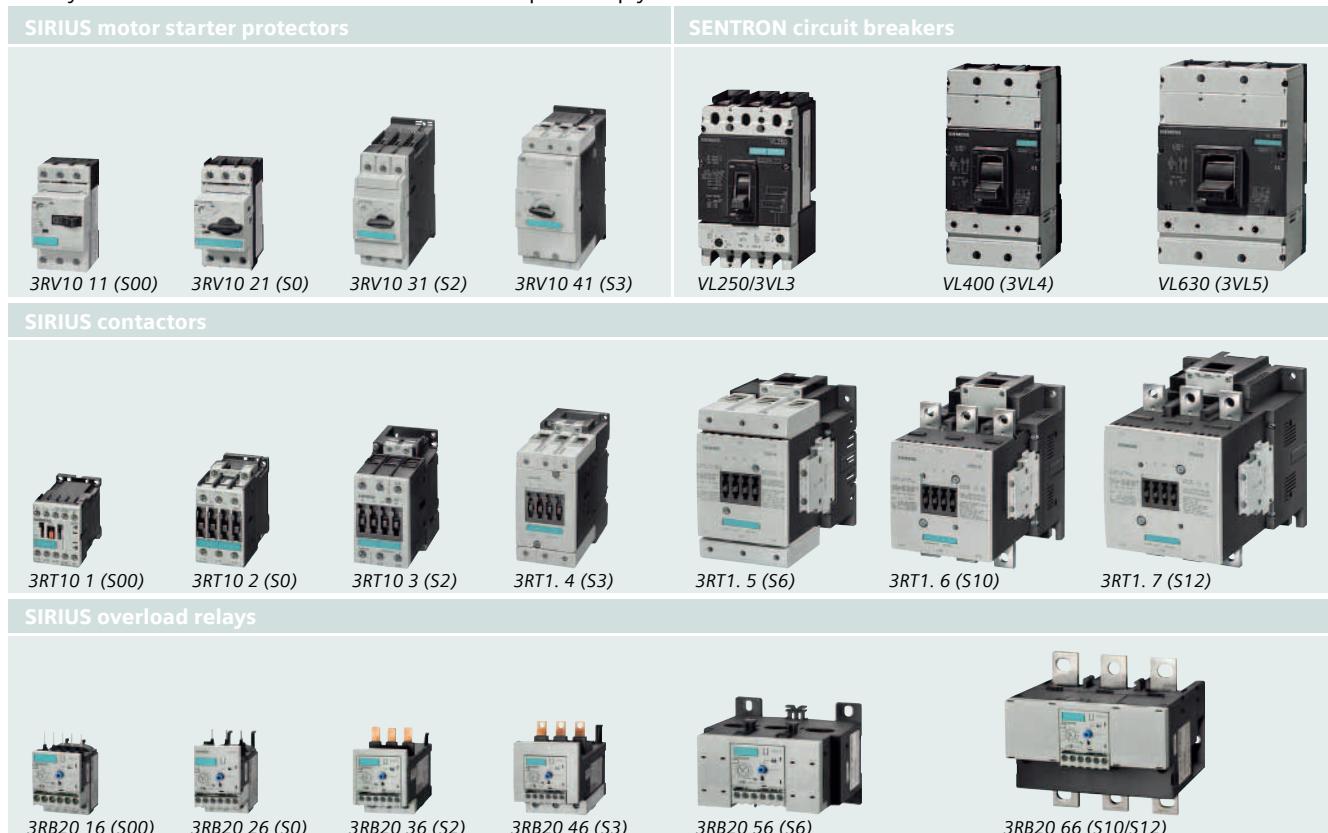
**SIEMENS**

# Introduction

## SIRIUS – the modular system to switch, protect and start motors

In order to simplify the configuration of load feeders, the modular SIRIUS system includes standard components that are optimally harmonized with one another and can be quite simply

combined. The complete power range up to 250 kW can be covered with just 7 different sizes. The individual switching devices can be assembled to form complete load feeders using wiring connectors or by directly mounting.



## Highlights

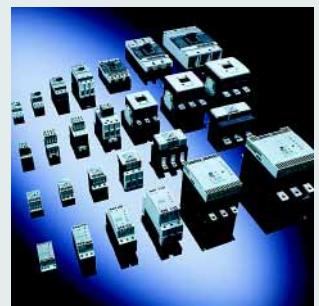


- Load feeders
- Modular design
- Versions and sizes
- Accessories
- Design
- Assembly
- Communications
- Maintenance
- Approvals
- Mounting
- Spring-load- terminals
- Environment
- Optical design

- Can be simply implemented using standard devices up to 250 kW/400 V
- Everything fits together and can be combined
- Cost-effective and flexible using 7 compact sizes
- Optimum variants with a standard, unified range of accessories
- Space-saving as a result of the low device width and side-by-side mounting up to 60 °C
- Fast commissioning, short equipping times, simple wiring
- Connection to AS-Interface and PROFIBUS DP possible
- Extremely long service life, low maintenance and reliable
- Approved and certified worldwide, UL, CSA, CCE, marine engineering ...
- Screwed or snapped-on for permanent, reliable mounting over its service life
- Fast, safe and reliable connections, vibration-proof and maintenance-free
- Environmentally compatible production and materials, can be recycled, low power loss devices
- Simple, ergonomic and has been awarded the iF Product Design Award

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# General information

## Information when selecting the various devices

The motor starter protectors/circuit breakers, contactors and overload relays, listed in the following tables, are specified in their basic versions. This means that they are specified without any accessories. It goes without saying that accessories such as auxiliary contacts, auxiliary releases etc. can be used at any time.

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 3RU11 thermal overload relay as well as the 3RB20/3RB21 solid-state overload relay can generally be directly mounted onto the contactor. Exceptions are specified in the footnotes to the various tables. The 3RB22/3RB23 solid-state overload relay and the SIMOCODE 3UF5 motor protection and control device are essentially used for stand-alone mounting. In their basic version, these devices are specified with a rated control supply voltage of 230 V AC.

## Mounting the combinations

When mounting the devices, specific arcing spaces must be maintained so that short circuits can be safely and reliably interrupted. The appropriate mounting regulations are listed separately for 400/500 V AC and 690 V AC from page 54.

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

## 400, 500, 690 V AC

The subsequent tables are structured according to the line supply voltage of 400 V, 500 V and 690 V found in IEC regions (for 50 and 60 Hz). Tests are carried out with a test voltage which lies 10 % above these values (440 V, 550 V and 760 V). This means that the specified combinations can also be used for other line supplies as long as the maximum voltage in this line supply does not exceed the test voltage. This means, for instance, the combinations for 400 V can also be used for 415 V line supplies which have a line supply tolerance of +5%.

## Tripping classes

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

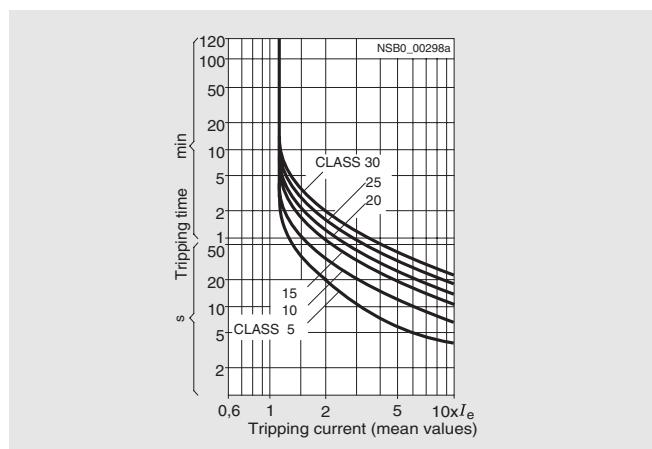
The tripping classes, according to IEC 60947-4-1, define the time intervals within which the protective devices (overload release of a motor starter protector/circuit breaker or overload relay) must trip from the cold state, for a symmetrical, three-phase load with a 7.2-fold setting current  $I_e$ .

These 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, generally, devices having starting CLASS 5 and CLASS 10 are used. These devices are designed for standard applications. CLASS 5 and CLASS 10 is frequently called normal starting.

Combinations for CLASS 20, CLASS 30 and CLASS 40 are available for applications where a higher starting current is required over a longer period of time. If standard devices CLASS 5 and CLASS 10 were used for these applications, this would result in an undesirable trip when starting. CLASS 20, CLASS 30 and CLASS 40 are also known as heavy-duty starting devices. Large fan motors are an example for applications such as these. In addition to the overload protective devices themselves, the contactors and short-circuit protection devices must also be dimensioned for these long starting times. This is the reason that the combinations according to CLASS 5 and CLASS 10 are generally somewhat more cost-effective. CLASS 20, CLASS 30 and CLASS 40 are generally only used if the application actually requires this.



## Coordination type 1 or 2

When selecting the combinations, in many cases, either coordination 1 or 2 can be selected. The coordination type defines, in compliance with IEC 60947-4-1, the permissible degree of damage that a device can manifest after a short circuit.

- Coordination type 1:

After a short circuit, it is permissible that the starter is no longer in a functioning state, and damage to the contactor and overload relay are permissible.

- Coordination type 2:

The starter can still function. The devices may not manifest any damage with the exception of slightly welded contactor contacts if these can be easily separated without noticeably deforming them.

In both cases, the short circuit is reliably and safely interrupted. Combinations of coordination type 2 are therefore of a higher quality and after a short circuit, they can be quickly reused. Generally, combinations with coordination type 1 represent the somewhat more favorably priced solution. Combinations with coordination type 2 simultaneously 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 circuit breaker (for protecting starters), contactor and overload relay.

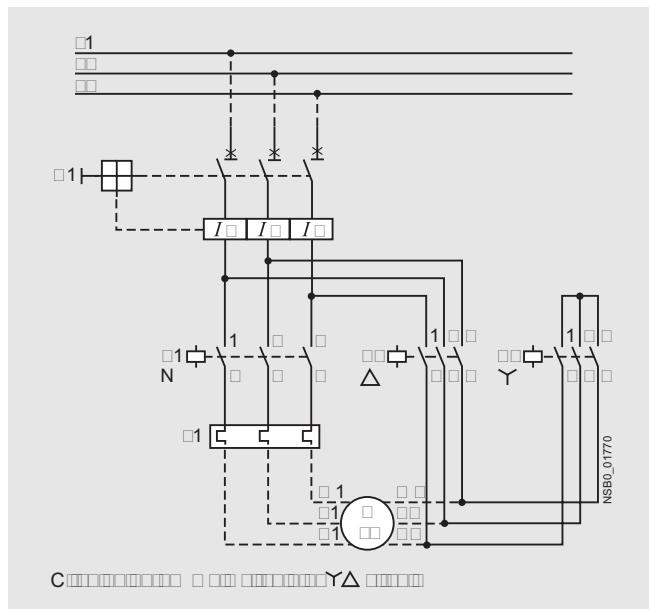
In the first case, the motor starter protector assumes the double function of overload protection and short-circuit protection, while in the second case, the circuit breaker only assumes the short-circuit protection function and the overload relay the overload protection function. As for the tripping behavior under overload and short-circuit conditions, both of these solutions are technically comparable. The combinations with motor starter protector and contactor represent, in this case, the more cost-effective solution. However, the combinations with overload relay do offer some advantages for several applications:

- Using the 3RB20/3RB21 and 3RB22/3RB23 solid-state overload relays or also SIMOCODE 3UF, in addition to starting CLASS 5 and CLASS 10, solutions for heavy-duty starting – CLASS 20, CLASS 30 and CLASS 40 – can be implemented.
- When solid-state overload relays are used, a wide setting range 1:4 or 1:10 can be set for the motor current. This offers various advantages when engineering the application (for example, if the motor current is not precisely known) and helps to reduce the number of versions.
- Overload protection and short-circuit protection are separately realized and can also be separately signaled. Instead of the overload relay, the 3RV1921-1M signaling block can be alternatively used for the SIRIUS 3RV motor starter protector. This signaling block also provides a separate signal for overload and short circuit.
- When the overload relay is set to "automatic reset", when an overload trip occurs, a technician does not have to go to the cabinet to manually reclose the device. This function can be alternatively realized using the SIRIUS 3RV11 "motor starter protector with overload relay function". These devices can be used in the tables motor starter protector + contactor instead of the 3RV10 motor starter protector.

## Star( $\text{Y}$ )-delta( $\Delta$ ) starting

In order to keep the current peaks in the line supply as low as possible, frequently, contactor combinations are used as star-delta starters to start three-phase motors. In order to be able to practically use  $\text{Y}\Delta$  starting, a low load torque is necessary while starting. Only then can the motor approximately reach its rated speed in the  $\text{Y}$  stage before changing over to  $\Delta$  operation.

An overload relay is to 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. For this arrangement, the overload protection is effective in the  $\text{Y}$  and  $\Delta$  circuit. The overload relay should be set to 58% of the rated motor current.

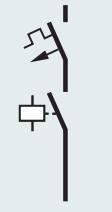


A  $\text{Y}\Delta$  timing relay is to be used when changing over from the  $\text{Y}$  to the  $\Delta$  circuit. These timing relays have been specifically designed for these types of applications and ensure safe, reliable changeover. The appropriate time relays are listed in the Catalog LV 1 "Low-Voltage Controls and Distribution". The specified combinations are designed for an accelerating time of 10 seconds in  $\text{Y}$  operation. In order to prevent the  $\text{Y}$  contactor from being damaged if the motor rotor is locked, a changeover should be made to  $\Delta$  operation at the latest after 10 seconds.

In the tables, circuit breakers are used for starter combinations (without overload releases). However, instead of these, SIRIUS 3RV10 motor starter protectors, with the same rated current, can be used for motor protection. In this case, the rated motor current of the motor starter protector is to be set to the maximum value. This avoids the motor starter protector and overload relay being simultaneously tripped.

# Motor starter protector/circuit breaker + contactor

CLASS 10, coordination type 1,  
Short-circuit breaking capacity  $I_q = 50 \text{ kA}/80 \text{ kA}$



**400 V AC**

Standard three-phase motor 4-pole at 400 V AC <sup>1)</sup>		Setting range Overload release	Motor starter protec- tor/circuit breaker	Contactor <sup>2)</sup>	Size	Short-circuit breaking $I_q$
Rated power $P$ kW	Motor current (nominal value) $I$ A	A	Order No.	Order No.		kA
0.06	0.2	0.14 ... 0.20	3RV10 11-0BA10	3RT10 15-1AP01	S00	50
0.06	0.2	0.18 ... 0.25	3RV10 11-0CA10	3RT10 15-1AP01	S00	50
0.09	0.3	0.22 ... 0.32	3RV10 11-0DA10	3RT10 15-1AP01	S00	50
0.09	0.3	0.28 ... 0.40	3RV10 11-0EA10	3RT10 15-1AP01	S00	50
0.12	0.4	0.35 ... 0.50	3RV10 11-0FA10	3RT10 15-1AP01	S00	50
0.18	0.6	0.45 ... 0.63	3RV10 11-0GA10	3RT10 15-1AP01	S00	50
0.25	0.85	0.55 ... 0.80	3RV10 11-0HA10	3RT10 15-1AP01	S00	50
0.25	0.85	0.70 ... 1.00	3RV10 11-0JA10	3RT10 15-1AP01	S00	50
0.37	1.1	0.90 ... 1.25	3RV10 11-0KA10	3RT10 15-1AP01	S00	50
0.55	1.5	1.10 ... 1.60	3RV10 11-1AA10	3RT10 15-1AP01	S00	50
0.75	1.9	1.40 ... 2.00	3RV10 11-1BA10	3RT10 15-1AP01	S00	50
0.75	1.9	1.80 ... 2.50	3RV10 11-1CA10	3RT10 15-1AP01	S00	50
1.1	2.7	2.20 ... 3.20	3RV10 11-1DA10	3RT10 15-1AP01	S00	50
1.5	3.6	2.80 ... 4.00	3RV10 11-1EA10	3RT10 15-1AP01	S00	50
1.5	3.6	3.50 ... 5.00	3RV10 11-1FA10	3RT10 15-1AP01	S00	50
2.2	5.0	4.50 ... 6.30	3RV10 11-1GA10	3RT10 15-1AP01	S00	50
3	6.5	5.50 ... 8.00	3RV10 11-1HA10	3RT10 15-1AP01	S00	50
4	8.5	7.00 ... 10.0	3RV10 11-1JA10	3RT10 16-1AP01	S00	50
5.5	11.5	9.00 ... 12.0	3RV10 11-1KA10	3RT10 17-1AP01	S00	50
7.5	15.5	11.0 ... 16.0	3RV10 21-4AA10	3RT10 25-1AP00	S0	50
7.5	15.5	14.0 ... 20.0	3RV10 21-4BA10	3RT10 25-1AP00	S0	50
11	22	17.0 ... 22.0	3RV10 21-4CA10	3RT10 26-1AP00	S0	50
11	22	20.0 ... 25.0	3RV10 21-4DA10	3RT10 26-1AP00	S0	50
15	29	22.0 ... 32.0	3RV10 31-4EA10	3RT10 34-1AP00	S2	50
18.5	35	28.0 ... 40.0	3RV10 31-4FA10	3RT10 35-1AP00	S2	50
22	41	36.0 ... 45.0	3RV10 31-4GA10	3RT10 36-1AP00	S2	50
22	41	40.0 ... 50.0	3RV10 31-4HA10	3RT10 36-1AP00	S2	50
30	55	45.0 ... 63.0	3RV10 41-4JA10	3RT10 44-1AP00	S3	50
30	55	45.0 ... 63.0	3RV10 42-4JA10	3RT10 44-1AP00	S3	80
37	66	57.0 ... 75.0	3RV10 41-4KA10	3RT10 45-1AP00	S3	50
37	66	57.0 ... 75.0	3RV10 42-4KA10	3RT10 45-1AP00	S3	80
45	80	70.0 ... 90.0	3RV10 41-4LA10	3RT10 46-1AP00	S3	50
45	80	70.0 ... 90.0	3RV10 42-4LA10	3RT10 46-1AP00	S3	80
45	80	80.0 ... 100	3RV10 41-4MA10	3RT10 46-1AP00	S3	50
45	80	80.0 ... 100	3RV10 42-4MA10	3RT10 46-1AP00	S3	80
55	97	40.0 ... 100	3VL27 10-2AP33 <sup>3)</sup>	3RT10 54-1AP36	S6	50
75	132	64.0 ... 160	3VL27 16-2AP33	3RT10 55-6AP36	S6	50
90	160	80.0 ... 200	3VL37 20-2AP36 <sup>3)</sup>	3RT10 56-6AP36	S6	50
110	195	80.0 ... 200	3VL37 20-2AP36 <sup>4)</sup>	3RT10 64-6AP36	S10	50
110	195	80.0 ... 200	3VL37 20-2AP36 <sup>4)</sup>	3RT12 64-6AP56	S10V	50
132	230	100 ... 250	3VL37 25-2AP36 <sup>5)</sup>	3RT10 65-6AP36	S10	50
132	230	100 ... 250	3VL37 25-2AP36 <sup>5)</sup>	3RT12 65-6AP36	S10V	50
160	280	125 ... 315	3VL47 31-2AP36	3RT10 66-6AP36	S10	50
160	280	125 ... 315	3VL47 31-2AP36	3RT12 66-6AP36	S10V	50
200	350	200 ... 500	3VL57 50-2AP36	3RT10 75-6AP36	S12	50
200	350	200 ... 500	3VL57 50-2AP36	3RT12 75-6AP36	S12V	50
250	430	200 ... 500	3VL57 50-2AP36	3RT10 76-6AP36	S12	50
250	430	200 ... 500	3VL57 50-2AP36	3RT12 76-6AP36	S12V	50

<sup>1)</sup> Nominal value at 400 V AC, 50 Hz for 4-pole standard motors. The specific starting and rated data of the motor to be protected are decisive when selecting devices.

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

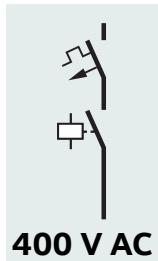
<sup>3)</sup> Alternatively, 3VL27 16-2AP33 is possible.

<sup>4)</sup> Alternatively, 3VL27 25-2AP36 is possible.

<sup>5)</sup> Alternatively, 3VL47 31-2AP36 is possible.

# Motor starter protector/circuit breaker + contactor

CLASS 10, coordination type 2,  
Short-circuit breaking capacity  $I_q = 50 \text{ kA}$



Standard three-phase motor 4-pole at 400 V AC <sup>1)</sup>		Setting range Overload release Motor starter protector/circuit breaker	Motor starter protec- tor/circuit breaker	Contactor <sup>2)</sup>	Size	Short-circuit breaking capacity $I_q$
Rated power $P$ kW	Motor current (nominal value) A	A	Order No.	Order No.		kA
0.06	0.2	0.14 ... 0.20	3RV10 11-0BA10	3RT10 15-1AP01	S00	50
0.06	0.2	0.18 ... 0.25	3RV10 11-0CA10	3RT10 15-1AP01	S00	50
0.09	0.3	0.22 ... 0.32	3RV10 11-0DA10	3RT10 15-1AP01	S00	50
0.09	0.3	0.28 ... 0.40	3RV10 11-0EA10	3RT10 15-1AP01	S00	50
0.12	0.4	0.35 ... 0.50	3RV10 11-0FA10	3RT10 15-1AP01	S00	50
0.18	0.6	0.45 ... 0.63	3RV10 11-0GA10	3RT10 15-1AP01	S00	50
0.25	0.85	0.55 ... 0.80	3RV10 11-0HA10	3RT10 15-1AP01	S00	50
0.25	0.85	0.70 ... 1.00	3RV10 11-0JA10	3RT10 15-1AP01	S00	50
0.37	1.1	0.90 ... 1.25	3RV10 11-0KA10	3RT10 15-1AP01	S00	50
0.55	1.5	1.10 ... 1.60	3RV10 11-1AA10	3RT10 15-1AP01	S00	50
0.75	1.9	1.40 ... 2.00	3RV10 11-1BA10	3RT10 15-1AP01	S00	50
0.75	1.9	1.80 ... 2.50	3RV10 21-1CA10	3RT10 24-1AP00	S0	50
1.1	2.7	2.20 ... 3.20	3RV10 21-1DA10	3RT10 24-1AP00	S0	50
1.5	3.6	2.80 ... 4.00	3RV10 21-1EA10	3RT10 24-1AP00	S0	50
1.5	3.6	3.50 ... 5.00	3RV10 21-1FA10	3RT10 24-1AP00	S0	50
2.2	5.0	4.50 ... 6.30	3RV10 21-1GA10	3RT10 24-1AP00	S0	50
3	6.5	5.50 ... 8.00	3RV10 21-1HA10	3RT10 24-1AP00	S0	50
4	8.5	7.00 ... 10.0	3RV10 21-1JA10	3RT10 26-1AP00	S0	50
5.5	11.5	9.00 ... 12.5	3RV10 21-1KA10	3RT10 26-1AP00	S0	50
7.5	15.5	11.0 ... 16.0	3RV10 21-4AA10	3RT10 26-1AP00	S0	50
7.5	15.5	14.0 ... 20.0	3RV10 21-4BA10	3RT10 26-1AP00	S0	50
11	22	18.0 ... 25.0	3RV10 31-4DA10	3RT10 34-1AP00	S2	50
15	29	22.0 ... 32.0	3RV10 31-4EA10	3RT10 34-1AP00	S2	50
18.5	35	28.0 ... 40.0	3RV10 31-4FA10	3RT10 35-1AP00	S2	50
22	41	36.0 ... 45.0	3RV10 31-4GA10	3RT10 36-1AP00	S2	50
22	41	40.0 ... 50.0	3RV10 31-4HA10	3RT10 36-1AP00	S2	50
30	55	45.0 ... 63.0	3RV10 41-4JA10	3RT10 44-1AP00	S3	50
37	66	57.0 ... 75.0	3RV10 41-4KA10	3RT10 45-1AP00	S3	50
45	80	70.0 ... 90.0	3RV10 41-4LA10	3RT10 46-1AP00	S3	50
45	80	80.0 ... 100	3RV10 41-4MA10	3RT10 46-1AP00	S3	50
55	97	40.0 ... 100	3VL27 10-2AP33 <sup>3)</sup>	3RT10 54-1AP36	S6	50
75	132	64.0 ... 160	3VL27 16-2AP33	3RT10 55-6AP36	S6	50
90	160	80.0 ... 200	3VL37 20-2AP36 <sup>3)</sup>	3RT10 56-6AP36	S6	50
110	195	80.0 ... 200	3VL37 20-2AP36 <sup>4)</sup>	3RT10 64-6AP36	S10	50
110	195	80.0 ... 200	3VL37 20-2AP36 <sup>4)</sup>	3RT12 64-6AP56	S10V	50
132	230	100 ... 250	3VL37 25-2AP36 <sup>5)</sup>	3RT10 65-6AP36	S10	50
132	230	100 ... 250	3VL37 25-2AP36 <sup>5)</sup>	3RT12 65-6AP36	S10V	50
160	280	125 ... 315	3VL47 31-2AP36	3RT10 66-6AP36	S10	50
160	280	125 ... 315	3VL47 31-2AP36	3RT12 66-6AP36	S10V	50
200	350	200 ... 500	3VL57 50-2AP36	3RT10 75-6AP36	S12	50
200	350	200 ... 500	3VL57 50-2AP36	3RT12 75-6AP36	S12V	50
250	430	200 ... 500	3VL57 50-2AP36	3RT10 76-6AP36	S12	50
250	430	200 ... 500	3VL57 50-2AP36	3RT12 76-6AP36	S12V	50

<sup>1)</sup> Nominal value at 400 V AC, 50 Hz for 4-pole standard motors. The specific starting and rated data of the motor to be protected are decisive when selecting devices.

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

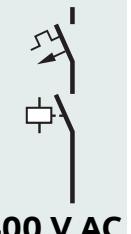
<sup>3)</sup> Alternatively, 3VL27 16-2AP33 is possible.

<sup>4)</sup> Alternatively, 3VL27 25-2AP36 is possible.

<sup>5)</sup> Alternatively, 3VL47 31-2AP36 is possible.

# Motor starter protector + contactor

CLASS 10, coordination type 2,  
Short-circuit breaking capacity  $I_q \geq 100 \text{ kA}$



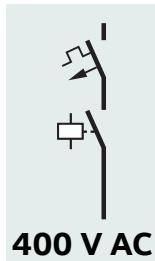
Standard three-phase motor 4-pole at 400 V AC <sup>1)</sup>		Setting range Overload release Motor starter protector	Motor starter protector	Contactor <sup>2)</sup>	Size	Short-circuit breaking capacity $I_q$
Rated power <b>P</b> <b>kW</b>	Motor current (nominal value) <b>I</b> <b>A</b>					<b>kA</b>
0.04	0.16	0.11 ... 0.16	3RV10 11-0AA10	3RT10 15-1AP01	S00	130
0.06	0.2	0.14 ... 0.20	3RV10 11-0BA10	3RT10 15-1AP01	S00	130
0.06	0.2	0.18 ... 0.25	3RV10 11-0CA10	3RT10 15-1AP01	S00	130
0.09	0.3	0.22 ... 0.32	3RV10 11-0DA10	3RT10 15-1AP01	S00	130
0.09	0.3	0.28 ... 0.40	3RV10 11-0EA10	3RT10 15-1AP01	S00	130
0.12	0.4	0.35 ... 0.50	3RV10 11-0FA10	3RT10 15-1AP01	S00	130
0.18	0.6	0.45 ... 0.63	3RV10 11-0GA10	3RT10 15-1AP01	S00	130
0.18	0.6	0.55 ... 0.80	3RV10 11-0HA10	3RT10 15-1AP01	S00	130
0.25	0.85	0.70 ... 1.00	3RV10 11-0JA10	3RT10 15-1AP01	S00	130
0.37	1.1	0.90 ... 1.25	3RV10 11-0KA10	3RT10 15-1AP01	S00	130
0.55	1.5	1.10 ... 1.60	3RV10 11-1AA10	3RT10 15-1AP01	S00	130
0.75	1.9	1.40 ... 2.00	3RV10 11-1BA10	3RT10 15-1AP01	S00	130
0.04	0.16	0.11 ... 0.16	3RV10 21-0AA10	3RT10 24-1AP00	S0	130
0.06	0.2	0.14 ... 0.20	3RV10 21-0BA10	3RT10 24-1AP00	S0	130
0.06	0.2	0.18 ... 0.25	3RV10 21-0CA10	3RT10 24-1AP00	S0	130
0.09	0.3	0.22 ... 0.32	3RV10 21-0DA10	3RT10 24-1AP00	S0	130
0.09	0.3	0.28 ... 0.40	3RV10 21-0EA10	3RT10 24-1AP00	S0	130
0.12	0.4	0.35 ... 0.50	3RV10 21-0FA10	3RT10 24-1AP00	S0	130
0.18	0.6	0.45 ... 0.63	3RV10 21-0GA10	3RT10 24-1AP00	S0	130
0.18	0.6	0.55 ... 0.80	3RV10 21-0HA10	3RT10 24-1AP00	S0	130
0.25	0.85	0.70 ... 1.00	3RV10 21-0JA10	3RT10 24-1AP00	S0	130
0.37	1.1	0.90 ... 1.25	3RV10 21-0KA10	3RT10 24-1AP00	S0	130
0.55	1.5	1.10 ... 1.60	3RV10 21-1AA10	3RT10 24-1AP00	S0	130
0.75	1.9	1.40 ... 2.00	3RV10 21-1BA10	3RT10 24-1AP00	S0	130
0.75	1.9	1.80 ... 2.50	3RV10 21-1CA10	3RT10 24-1AP00	S0	130
1.1	2.7	2.20 ... 3.20	3RV10 21-1DA10	3RT10 24-1AP00	S0	130
1.5	3.6	2.80 ... 4.00	3RV10 21-1EA10	3RT10 24-1AP00	S0	130
1.5	3.6	3.50 ... 5.00	3RV10 21-1FA10	3RT10 24-1AP00	S0	130
2.2	5	4.50 ... 6.30	3RV10 21-1GA10	3RT10 24-1AP00	S0	130
3	6.5	5.50 ... 8.00	3RV10 21-1HA10	3RT10 24-1AP00	S0	130
4	8.5	7.00 ... 10.0	3RV10 21-1JA10	3RT10 26-1AP00	S0	130
5.5	11.5	9.00 ... 12.5	3RV10 21-1KA10	3RT10 26-1AP00	S0	130
7.5	15.5	11.0 ... 16.0	3RV10 21-4AA10	3RT10 26-1AP00	S0	100
7.5	15.5	14.0 ... 20.0	3RV10 21-4BA10	3RT10 26-1AP00	S0	100
11	22	18.0 ... 25.0	3RV10 31-4DA10	3RT10 34-1AP00	S2	100
15	29	22.0 ... 32.0	3RV10 31-4EA10	3RT10 34-1AP00	S2	100
18.5	35	28.0 ... 40.0	3RV10 31-4FA10	3RT10 35-1AP00	S2	100
22	41	36.0 ... 45.0	3RV10 31-4GA10	3RT10 36-1AP00	S2	100
22	41	40.0 ... 50.0	3RV10 31-4HA10	3RT10 36-1AP00	S2	100
30	55	45.0 ... 63.0	3RV10 42-4JA10	3RT10 54-1AP36	S3/S6	100
37	66	57.0 ... 75.0	3RV10 42-4KA10	3RT10 54-1AP36	S3/S6	100
45	80	70.0 ... 90.0	3RV10 42-4LA10	3RT10 54-1AP36	S3/S6	100
45	80	80.0 ... 100	3RV10 42-4MA10	3RT10 54-1AP36	S3/S6	100

<sup>1)</sup> Nominal value at 400 V AC, 50 Hz for 4-pole standard motors. The specific starting and rated data of the motor to be protected are decisive when selecting devices.

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

# Circuit breaker + contactor

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



Standard three-phase motor 4-pole at 400 V AC <sup>1)</sup>		Setting range Overload release Circuit breaker	Circuit breaker	Contactor <sup>2)</sup>	Size	Short-circuit breaking capacity $I_q$
Rated power $P$ kW	Motor current (nominal value) A	A	Order No.	Order No.	kA	
55	97	40.0 ... 160	3VL27 16-3AP33 <sup>3)</sup>	3RT10 54-1AP36	3VL/S6	100
75	132	64.0 ... 160	3VL27 16-3AP33	3RT10 55-6AP36	3VL/S6	100
90	160	80.0 ... 250	3VL37 25-3AP36 <sup>4)</sup>	3RT10 56-6AP36	3VL/S6	100
110	195	80.0 ... 200	3VL37 20-3AP36 <sup>5)</sup>	3RT10 64-6AP36	3VL/S10	100
110	195	80.0 ... 200	3VL37 20-3AP36 <sup>5)</sup>	3RT12 64-6AP36	3VL/S10V	100
132	230	100 ... 250	3VL37 25-3AP36	3RT10 65-6AP36	3VL/S10	100
132	230	100 ... 250	3VL37 25-3AP36 <sup>6)</sup>	3RT12 65-6AP36	3VL/S10V	100
160	280	125 ... 315	3VL47 31-3AP36	3RT10 75-6AP36	3VL/S12	100
160	280	125 ... 315	3VL47 31-3AP36	3RT12 66-6AP36	3VL/S10V	100
200	350	200 ... 500	3VL57 50-3AP36	3RT10 75-6AP36	3VL/S12	100
200	350	200 ... 500	3VL57 50-3AP36	3RT12 75-6AP36	3VL/S12V	100
250	430	200 ... 500	3VL57 50-3AP36	3RT10 76-6AP36	3VL/S12	100
250	430	200 ... 500	3VL57 50-3AP36	3RT12 76-6AP36	3VL/S12V	100

<sup>1)</sup> Nominal value at 400 V AC, 50 Hz for 4-pole standard motors. The specific starting and rated data of the motor to be protected are decisive when selecting devices.

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

<sup>3)</sup> Alternatively, 3VL27 10-3AP33 is possible.

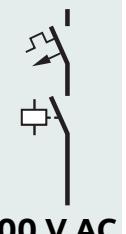
<sup>4)</sup> Alternatively, 3VL27 20-3AP33 is possible.

<sup>5)</sup> Alternatively, 3VL27 25-3AP36 is possible.

<sup>6)</sup> Alternatively, 3VL47 31-3AP36 is possible.

# Motor starter protector/circuit breaker + contactor

CLASS 20, coordination type 2,  
Short-circuit breaking capacity  $I_q = 50 \text{ kA}/100 \text{ kA}$



Standard three-phase motor 4-pole at 400 V AC <sup>1)</sup>	Setting range Overload release	Motor starter protector/circuit breaker	Motor starter protec- tor/circuit breaker	Contactor <sup>2)</sup>	Size	Short-circuit breaking $I_q$
Rated power $P$	Motor current (nominal value) $I$	A	Order No.	Order No.		kA
kW	A	A				
<b><math>I_q = 50 \text{ kA}</math></b>						
5.5	11.5	11.0 ... 16.0	3RV10 31-4AB10	3RT10 34-1AP00	S2	50
7.5	15.5	14.0 ... 20.0	3RV10 31-4BB10	3RT10 34-1AP00	S2	50
11	22	18.0 ... 25.0	3RV10 31-4DB10	3RT10 35-1AP00	S2	50
11	22	22.0 ... 32.0	3RV10 31-4EB10	3RT10 35-1AP00	S2	50
15	29	28.0 ... 40.0	3RV10 42-4FB10	3RT10 44-1AP00	S3	50
18.5	35	28.0 ... 40.0	3RV10 42-4FB10	3RT10 44-1AP00	S3	50
18.5	35	36.0 ... 50.0	3RV10 42-4HB10	3RT10 44-1AP00	S3	50
22	41	36.0 ... 50.0	3RV10 42-4HB10	3RT10 44-1AP00	S3	50
30	55	45.0 ... 63.0	3RV10 42-4JB10	3RT10 46-1AP00	S3	50
30	55	57.0 ... 75.0	3RV10 42-4KB10	3RT10 46-1AP00	S3	50
37	66	57.0 ... 75.0	3RV10 42-4KB10	3RT10 46-1AP00	S3	50
45	80	70.0 ... 90.0	3RV10 42-4LB10	3RT10 54-1AP36	S3/S6	50
45	80	80.0 ... 100	3RV10 42-4MB10	3RT10 54-1AP36	S3/S6	50
55	97	40.0 ... 100	3VL27 10-2AS33 <sup>3)</sup>	3RT10 55-6AP36	S6	50
75	132	64.0 ... 160	3VL27 16-2AS33	3RT10 56-6AP36	S6	50
90	160	80.0 ... 200	3VL37 20-2AS36 <sup>3)</sup>	3RT10 64-6AP36	S10	50
90	160	80.0 ... 200	3VL37 20-2AS36 <sup>3)</sup>	3RT10 65-6AP36	S10	50
110	195	80.0 ... 200	3VL37 20-2AS36 <sup>4)</sup>	3RT10 66-6AP36	S10	50
110	195	80.0 ... 200	3VL37 20-2AS36 <sup>4)</sup>	3RT12 64-6AP36	S10V	50
132	230	100 ... 250	3VL37 25-2AS36 <sup>5)</sup>	3RT12 65-6AP36	S10V	50
160	280	125 ... 315	3VL47 31-2AS36	3RT12 66-6AP36	S10V	50
160	280	125 ... 315	3VL47 31-2AS36	3RT10 75-6AP36	S12	50
200	350	200 ... 500	3VL57 50-2AS36	3RT10 76-6AP36	S12	50
200	350	200 ... 500	3VL57 50-2AS36	3RT12 75-6AP36	S12V	50
250	430	200 ... 500	3VL57 50-2AS36	3RT12 76-6AP36	S12V	50
<b><math>I_q = 100 \text{ kA}</math></b>						
45	80	40.0 ... 100	3VL27 10-3AS33	3RT10 54-1AP36	S6	100
55	97	40.0 ... 100	3VL27 10-3AS33 <sup>6)</sup>	3RT10 55-6AP36	S6	100
75	132	64.0 ... 160	3VL27 16-3AS33	3RT10 56-6AP36	S6	100
90	160	80.0 ... 200	3VL37 20-3AS36 <sup>7)</sup>	3RT10 64-6AP36	S10	100
90	160	80.0 ... 200	3VL37 20-3AS36 <sup>7)</sup>	3RT10 65-6AP36	S10	100
110	195	80.0 ... 200	3VL37 20-3AS36 <sup>8)</sup>	3RT10 66-6AP36	S10	100
110	195	80.0 ... 200	3VL37 20-3AS36 <sup>8)</sup>	3RT12 64-6AP36	S10V	100
132	230	100 ... 250	3VL37 25-3AS36 <sup>9)</sup>	3RT12 65-6AP36	S10V	100
160	280	125 ... 315	3VL47 31-3AS36	3RT12 66-6AP36	S10V	100
160	280	125 ... 315	3VL47 31-3AS36	3RT10 75-6AP36	S12	100
200	350	200 ... 500	3VL57 50-3AS36	3RT10 76-6AP36	S12	100
200	350	200 ... 500	3VL57 50-3AS36	3RT12 75-6AP36	S12V	100
250	430	200 ... 500	3VL57 50-3AS36	3RT12 76-6AP36	S12V	100

<sup>1)</sup> Nominal value at 400 V AC, 50 Hz for 4-pole standard motors. The specific starting and rated data of the motor to be protected are decisive when selecting devices.

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

<sup>3)</sup> Alternatively, 3VL27 16-2AS33 is possible.

<sup>4)</sup> Alternatively, 3VL37 25-2AS36 is possible.

<sup>5)</sup> Alternatively, 3VL47 31-2AS36 is possible.

<sup>6)</sup> Alternatively, 3VL27 16-3AS33 is possible.

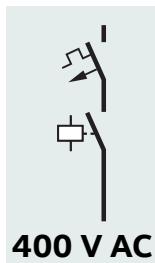
<sup>7)</sup> Alternatively, 3VL27 16-3AS33 is possible.

<sup>8)</sup> Alternatively, 3VL37 25-3AS36 is possible.

<sup>9)</sup> Alternatively, 3VL47 31-3AS36 is possible.

# Circuit breaker + contactor

CLASS 30, coordination type 2,  
Short-circuit breaking capacity  $I_q = 100 \text{ kA}$



Standard three-phase motor 4-pole at 400 V AC <sup>1)</sup>		Setting range Overload release Circuit breaker	Circuit breaker	Contactor <sup>2)</sup>	Size	Short-circuit breaking capacity $I_q$
Rated power $P$ kW	Motor current (nominal value) A	A	Order No.	Order No.	kA	
37	66	40.0 ... 100	3VL27 10-3AS33	3RT10 54-1AP36	3VL/S6	100
45	80	40.0 ... 100	3VL27 10-3AS33	3RT10 55-6AP36	3VL/S6	100
55	97	64.0 ... 160	3VL27 16-3AS33 <sup>3)</sup>	3RT10 56-6AP36	3VL/S6	100
75	132	64.0 ... 160	3VL27 16-3AS33	3RT10 64-6AP36	3VL/S10	100
90	160	80.0 ... 200	3VL37 20-3AS33 <sup>4)</sup>	3RT10 65-6AP36	3VL/S10	100
90	160	80.0 ... 200	3VL37 20-3AS33 <sup>4)</sup>	3RT12 64-6AP36	3VL/S10V	100
110	195	100 ... 250	3VL37 25-3AS36	3RT12 65-6AP36	3VL/S10V	100
132	230	100 ... 250	3VL37 25-3AS36 <sup>5)</sup>	3RT10 75-6AP36	3VL/S12	100
160	280	125 ... 315	3VL47 31-3AS36	3RT10 76-6AP36	3VL/S12	100
160	280	125 ... 315	3VL47 31-3AS36	3RT12 75-6AP36	3VL/S12V	100
200	350	200 ... 500	3VL57 50-3AS36	3RT12 76-6AP36	3VL/S12V	100

<sup>1)</sup> Nominal value at 400 V AC, 50 Hz for 4-pole standard motors. The specific starting and rated data of the motor to be protected are decisive when selecting devices.

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

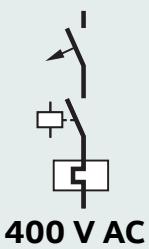
<sup>3)</sup> Alternatively, 3VL27 10-3AS33 is possible.

<sup>4)</sup> Alternatively, 3VL27 16-3AS33 is possible.

<sup>5)</sup> Alternatively, 3VL47 31-3AS33 is possible.

# Motor starter protector + contactor + thermal overload relay

CLASS 10, coordination type 1,  
Short-circuit breaking capacity  $I_q = 50 \text{ kA}/80 \text{ kA}$



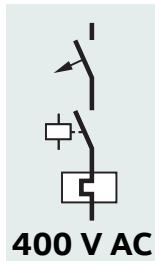
Standard three-phase motor 4-pole at 400 V AC <sup>1)</sup>		Setting range Overload release Motor starter protector	Motor starter protector	Contactor <sup>2)</sup>	Size	Overload relay	Setting range Overload release Overload relay	Short-circuit breaking capacity $I_q$
Rated power $P$	Motor current (nominal value) $I$	kW	A	Order No.	Order No.	Order No.	A	kA
0.06	0.2	0.06	0.2	3RV13 21-0BC10	3RT10 15-1AP01	3RU11 16-0BB0	0.14 ... 0.20	50
0.06	0.2	0.06	0.2	3RV13 21-0CC10	3RT10 15-1AP01	3RU11 16-OCB0	0.18 ... 0.25	50
0.09	0.3	0.09	0.3	3RV13 21-0DC10	3RT10 15-1AP01	3RU11 16-DB0	0.22 ... 0.32	50
0.09	0.3	0.09	0.3	3RV13 21-0EC10	3RT10 15-1AP01	3RU11 16-OEB0	0.28 ... 0.40	50
0.12	0.4	0.12	0.4	3RV13 21-0FC10	3RT10 15-1AP01	3RU11 16-OFB0	0.35 ... 0.50	50
0.18	0.6	0.18	0.6	3RV13 21-0GC10	3RT10 15-1AP01	3RU11 16-OGB0	0.45 ... 0.63	50
0.25	0.85	0.25	0.85	3RV13 21-0HC10	3RT10 15-1AP01	3RU11 16-OHB0	0.55 ... 0.80	50
0.25	0.85	0.25	0.85	3RV13 21-0JC10	3RT10 15-1AP01	3RU11 16-OJB0	0.70 ... 1.00	50
0.37	1.1	0.37	1.1	3RV13 21-0KC10	3RT10 15-1AP01	3RU11 16-OKB0	0.90 ... 1.25	50
0.55	1.5	0.55	1.5	3RV13 21-1AC10	3RT10 15-1AP01	3RU11 16-1AB0	1.10 ... 1.60	50
0.75	1.9	0.75	1.9	3RV13 21-1BC10	3RT10 15-1AP01	3RU11 16-1BB0	1.40 ... 2.00	50
1.1	2.7	1.1	2.7	3RV13 21-1DC10	3RT10 15-1AP01	3RU11 16-1DB0	2.20 ... 3.20	50
1.5	3.6	1.5	3.6	3RV13 21-1EC10	3RT10 15-1AP01	3RU11 16-1EB0	2.80 ... 4.00	50
1.5	3.6	1.5	3.6	3RV13 21-1FC10	3RT10 15-1AP01	3RU11 16-1FB0	3.50 ... 5.00	50
2.2	5.0	2.2	5.0	3RV13 21-1GC10	3RT10 15-1AP01	3RU11 16-1GB0	4.50 ... 6.30	50
3	6.5	3	6.5	3RV13 21-1HC10	3RT10 15-1AP01	3RU11 16-1HB0	5.50 ... 8.00	50
4	8.5	4	8.5	3RV13 21-1JC10	3RT10 16-1AP01	3RU11 16-1JB0	7.00 ... 10.0	50
5.5	11.5	5.5	11.5	3RV13 21-1KC10	3RT10 17-1AP01	3RU11 16-1KB0	9.00 ... 12.0	50
7.5	15.5	7.5	15.5	3RV13 21-4AC10	3RT10 24-1AP00	3RU11 26-4AB0	11.0 ... 16.0	50
7.5	15.5	7.5	15.5	3RV13 21-4BC10	3RT10 25-1AP00	3RU11 26-4BB0	14.0 ... 20.0	50
11	22	11	22	3RV13 21-4CC10	3RT10 26-1AP00	3RU11 26-4CB0	17.0 ... 22.0	50
11	22	11	22	3RV13 21-4DC10	3RT10 26-1AP00	3RU11 26-4DB0	20.0 ... 25.0	50
15	29	15	29	3RV13 31-4EC10	3RT10 34-1AP00	3RU11 36-4EB0	22.0 ... 32.0	50
18.5	35	18.5	35	3RV13 31-4FC10	3RT10 35-1AP00	3RU11 36-4FB0	28.0 ... 40.0	50
22	41	22	41	3RV13 31-4GC10	3RT10 36-1AP00	3RU11 36-4GB0	36.0 ... 45.0	50
22	41	22	41	3RV13 31-4HC10	3RT10 36-1AP00	3RU11 36-4HB0	40.0 ... 50.0	50
30	55	30	55	3RV13 41-4JC10	3RT10 44-1AP00	3RU11 46-4JB0	45.0 ... 63.0	50
30	55	30	55	3RV13 42-4JC10	3RT10 44-1AP00	3RU11 46-4JB0	45.0 ... 63.0	80
37	66	37	66	3RV13 41-4KC10	3RT10 45-1AP00	3RU11 46-4KB0	57.0 ... 75.0	50
37	66	37	66	3RV13 42-4KC10	3RT10 45-1AP00	3RU11 46-4KB0	57.0 ... 75.0	80
45	80	45	80	3RV13 41-4LC10	3RT10 46-1AP00	3RU11 46-4LB0	70.0 ... 90.0	50
45	80	45	80	3RV13 42-4LC10	3RT10 46-1AP00	3RU11 46-4LB0	70.0 ... 90.0	80
45	80	45	80	3RV13 41-4MC10	3RT10 46-1AP00	3RU11 46-4MB0	80.0 ... 100	50
45	80	45	80	3RV13 42-4MC10	3RT10 46-1AP00	3RU11 46-4MB0	80.0 ... 100	80

<sup>1)</sup> Nominal value at 400 V AC, 50 Hz for 4-pole standard motors. The specific starting and rated data of the motor to be protected are decisive when selecting devices.

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

# Motor starter protector + contactor + thermal overload relay

CLASS 10, coordination type 2,  
Short-circuit breaking capacity  $I_q = 50 \text{ kA}$



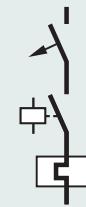
Standard three-phase motor 4-pole at 400 V AC <sup>1)</sup>		Setting range Overload release Motor starter protector	Motor starter protector	Contactor <sup>2)</sup>	Size	Overload relay	Setting range Overload release Overload relay	Short-circuit breaking capacity $I_q$
Rated power $P$	Motor current (nominal value) $I$	A	A	Order No.	Order No.	Order No.	A	kA
kW	A	A	Order No.	Order No.	Order No.	Order No.	A	kA
0.06	0.2	without	3RV13 21-0BC10	3RT10 15-1AP01	S0/S00	3RU11 16-0BB0	0.14 ... 0.20	50
0.06	0.2	without	3RV13 21-0CC10	3RT10 15-1AP01	S0/S00	3RU11 16-0CB0	0.18 ... 0.25	50
0.09	0.3	without	3RV13 21-0DC10	3RT10 15-1AP01	S0/S00	3RU11 16-0DB0	0.22 ... 0.32	50
0.09	0.3	without	3RV13 21-0EC10	3RT10 15-1AP01	S0/S00	3RU11 16-0EB0	0.28 ... 0.40	50
0.12	0.4	without	3RV13 21-0FC10	3RT10 15-1AP01	S0/S00	3RU11 16-0FB0	0.35 ... 0.50	50
0.18	0.6	without	3RV13 21-0GC10	3RT10 15-1AP01	S0/S00	3RU11 16-0GB0	0.45 ... 0.63	50
0.25	0.85	without	3RV13 21-0HC10	3RT10 15-1AP01	S0/S00	3RU11 16-0HB0	0.55 ... 0.80	50
0.25	0.85	without	3RV13 21-0JC10	3RT10 15-1AP01	S0/S00	3RU11 16-0JB0	0.70 ... 1.00	50
0.37	1.1	without	3RV13 21-0KC10	3RT10 15-1AP01	S0/S00	3RU11 16-0KB0	0.90 ... 1.25	50
0.55	1.5	without	3RV13 21-1AC10	3RT10 15-1AP01	S0/S00	3RU11 16-1AB0	1.10 ... 1.60	50
0.75	1.9	without	3RV13 21-1BC10	3RT10 15-1AP01	S0/S00	3RU11 16-1BB0	1.40 ... 2.00	50
0.75	1.9	without	3RV13 21-1CC10	3RT10 24-1AP00	S0	3RU11 26-1CB0	1.80 ... 2.50	50
1.1	2.7	without	3RV13 21-1DC10	3RT10 24-1AP00	S0	3RU11 26-1DB0	2.20 ... 3.20	50
1.5	3.6	without	3RV13 21-1EC10	3RT10 24-1AP00	S0	3RU11 26-1EB0	2.80 ... 4.00	50
1.5	3.6	without	3RV13 21-1FC10	3RT10 24-1AP00	S0	3RU11 26-1FB0	3.50 ... 5.00	50
2.2	5.0	without	3RV13 21-1GC10	3RT10 24-1AP00	S0	3RU11 26-1GB0	4.50 ... 6.30	50
3	6.5	without	3RV13 21-1HC10	3RT10 24-1AP00	S0	3RU11 26-1HB0	5.50 ... 8.00	50
4	8.5	without	3RV13 21-1JC10	3RT10 26-1AP00	S0	3RU11 26-1JB0	7.00 ... 10.0	50
5.5	11.5	without	3RV13 21-1KC10	3RT10 26-1AP00	S0	3RU11 26-1KB0	9.00 ... 12.5	50
7.5	15.5	without	3RV13 21-4AC10	3RT10 26-1AP00	S0	3RU11 26-4AB0	11.0 ... 16.0	50
7.5	15.5	without	3RV13 21-4BC10	3RT10 26-1AP00	S0	3RU11 26-4BB0	14.0 ... 20.0	50
11	22	without	3RV13 31-4DC10	3RT10 34-1AP00	S2	3RU11 36-4DB0	18.0 ... 25.0	50
15	29	without	3RV13 31-4EC10	3RT10 34-1AP00	S2	3RU11 36-4EB0	22.0 ... 32.0	50
18.5	35	without	3RV13 31-4FC10	3RT10 35-1AP00	S2	3RU11 36-4FB0	28.0 ... 40.0	50
22	41	without	3RV13 31-4GC10	3RT10 36-1AP00	S2	3RU11 36-4GB0	36.0 ... 45.0	50
22	41	without	3RV13 31-4HC10	3RT10 36-1AP00	S2	3RU11 36-4HB0	40.0 ... 50.0	50
30	55	without	3RV13 41-4JC10	3RT10 44-1AP00	S3	3RU11 46-4JB0	45.0 ... 63.0	50
37	66	without	3RV13 41-4KC10	3RT10 45-1AP00	S3	3RU11 46-4KB0	57.0 ... 75.0	50
45	80	without	3RV13 41-4LC10	3RT10 46-1AP00	S3	3RU11 46-4LB0	70.0 ... 90.0	50
45	80	without	3RV13 41-4MC10	3RT10 46-1AP00	S3	3RU11 46-4MB0	80.0 ... 100	50

<sup>1)</sup> Nominal value at 400 V AC, 50 Hz for 4-pole standard motors. The specific starting and rated data of the motor to be protected are decisive when selecting devices.

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

# Motor starter protector + contactor + thermal overload relay

CLASS 10, coordination type 2,  
Short-circuit breaking capacity  $I_q \geq 100$  kA



400 V AC

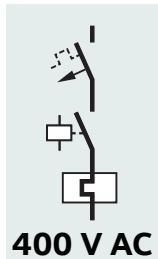
Standard three-phase motor 4-pole at 400 V AC <sup>1)</sup>		Setting range Overload release Motor starter protector	Motor starter protector	Contactor <sup>2)</sup>	Size	Overload relay	Setting range Overload release Overload relay	Short-circuit breaking capacity $I_q$
Rated power $P$	Motor current (nominal value) $I$	A	Order No.	Order No.		Order No.	A	kA
kW	A	A						
0.04	0.16	without	3RV13 21-0AC10	3RT10 15-1AP01	S0/S00	3RU11 16-0AB0	0.11 ... 0.16	130
0.06	0.2	without	3RV13 21-0BC10	3RT10 15-1AP01	S0/S00	3RU11 16-0BB0	0.14 ... 0.20	130
0.06	0.2	without	3RV13 21-0CC10	3RT10 15-1AP01	S0/S00	3RU11 16-0CB0	0.18 ... 0.25	130
0.09	0.3	without	3RV13 21-0DC10	3RT10 15-1AP01	S0/S00	3RU11 16-0DB0	0.22 ... 0.32	130
0.09	0.3	without	3RV13 21-0EC10	3RT10 15-1AP01	S0/S00	3RU11 16-0EB0	0.28 ... 0.40	130
0.12	0.4	without	3RV13 21-0FC10	3RT10 15-1AP01	S0/S00	3RU11 16-0FB0	0.35 ... 0.50	130
0.18	0.6	without	3RV13 21-0GC10	3RT10 15-1AP01	S0/S00	3RU11 16-0GB0	0.45 ... 0.63	130
0.18	0.6	without	3RV13 21-0HC10	3RT10 15-1AP01	S0/S00	3RU11 16-0HB0	0.55 ... 0.80	130
0.25	0.85	without	3RV13 21-0JC10	3RT10 15-1AP01	S0/S00	3RU11 16-0JB0	0.70 ... 1.00	130
0.37	1.1	without	3RV13 21-0KC10	3RT10 15-1AP01	S0/S00	3RU11 16-0KB0	0.90 ... 1.25	130
0.55	1.5	without	3RV13 21-1AC10	3RT10 15-1AP01	S0/S00	3RU11 16-1AB0	1.10 ... 1.60	130
0.75	1.9	without	3RV13 21-1BC10	3RT10 15-1AP01	S0/S00	3RU11 16-1BB0	1.40 ... 2.00	130
0.75	1.9	without	3RV13 21-1CC10	3RT10 24-1AP00	S0	3RU11 26-1CB0	1.80 ... 2.50	130
1.1	2.7	without	3RV13 21-1DA10	3RT10 24-1AP00	S0	3RU11 26-1DB0	2.20 ... 3.20	130
1.5	3.6	without	3RV13 21-1EA10	3RT10 24-1AP00	S0	3RU11 26-1EB0	2.80 ... 4.00	130
1.5	3.6	without	3RV13 21-1FA10	3RT10 24-1AP00	S0	3RU11 26-1FB0	3.50 ... 5.00	130
2.2	5	without	3RV13 21-1GC10	3RT10 24-1AP00	S0	3RU11 26-1GB0	4.50 ... 6.30	130
3	6.5	without	3RV13 21-1HC10	3RT10 24-1AP00	S0	3RU11 26-1HB0	5.50 ... 8.00	130
4	8.5	without	3RV13 21-1JC10	3RT10 26-1AP00	S0	3RU11 26-1JB0	7.00 ... 10.0	130
5.5	11.5	without	3RV13 21-1KC10	3RT10 26-1AP00	S0	3RU11 26-1KB0	9.00 ... 12.5	130
7.5	15.5	without	3RV13 21-4AC10	3RT10 26-1AP00	S0	3RU11 26-4AB0	11.0 ... 16.0	100
7.5	15.5	without	3RV13 21-4BC10	3RT10 26-1AP00	S0	3RU11 26-4BB0	14.0 ... 20.0	100
11	22	without	3RV13 31-4DC10	3RT10 34-1AP00	S2	3RU11 36-4DB0	18.0 ... 25.0	100
15	29	without	3RV13 31-4EC10	3RT10 34-1AP00	S2	3RU11 36-4EB0	22.0 ... 32.0	100
18.5	35	without	3RV13 31-4FC10	3RT10 35-1AP00	S2	3RU11 36-4FB0	28.0 ... 40.0	100
22	41	without	3RV13 31-4GC10	3RT10 36-1AP00	S2	3RU11 36-4GB0	36.0 ... 45.0	100
22	41	without	3RV13 31-4HC10	3RT10 36-1AP00	S2	3RU11 36-4HB0	40.0 ... 50.0	100

<sup>1)</sup> Nominal value at 400 V AC, 50 Hz for 4-pole standard motors. The specific starting and rated data of the motor to be protected are decisive when selecting devices.

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

# Motor starter protector/circuit breaker + contactor + 3RB20/3RB21 solid-state overload relay

CLASS 5 and CLASS 10, coordination types 2 and 1,  
Short-circuit breaking capacity  $I_q = 50 \text{ kA}$



Standard three-phase motor 4-pole at 400 V AC <sup>1)</sup>		Setting range Overload release Motor star- tor/circuit breaker	Motor starter protector/circuit breaker	Contactor <sup>2)</sup>	Size	Overload relay	Setting range Overload release Overload relay	Short-circuit breaking capacity $I_q$
Rated power $P$ kW	Motor current (nominal value) $I$ A	A	Order No.	Order No.		Order No.	A	kA
<b>Coordination type 2</b>								
0.06	0.2	0.22 ... 0.32	3RV10 11-0DA10	3RT10 15-1AP01	S00	3RB20 16-1RB0 or 3RB21 13-4RB0	0.10 ... 0.40	50
0.09	0.3	0.28 ... 0.40	3RV10 11-0EA10	3RT10 15-1AP01	S00		0.10 ... 0.40	50
0.12	0.4	0.70 ... 1.00	3RV10 11-0JA10	3RT10 15-1AP01	S00	3RB20 16-1NB0 or 3RB21 13-4NB0	0.32 ... 1.25	50
0.18	0.6	0.70 ... 1.00	3RV10 11-0JA10	3RT10 15-1AP01	S00		0.32 ... 1.25	50
0.25	0.85	1.10 ... 1.60	3RV10 11-1AA10	3RT10 15-1AP01	S00		0.32 ... 1.25	50
0.37	1.1	1.10 ... 1.60	3RV10 11-1AA10	3RT10 15-1AP01	S00	3RB20 16-1PB0 or 3RB21 13-4PB0	1.00 ... 4.00	50
0.55	1.5	1.40 ... 2.00	3RV10 11-1BA10	3RT10 24-1AP00	S00	3RB20 16-1PB0 or 3RB21 13-4PB0	1.00 ... 4.00	50
0.55	1.5	without	3RV13 21-1BC10	3RT10 24-1AP00	S0	3RB21 23-4PB0	1.00 ... 4.00	50
0.75	1.9	without	3RV13 21-1CC10	3RT10 24-1AP00	S0		1.00 ... 4.00	50
1.1	2.7	without	3RV13 21-1DC10	3RT10 24-1AP00	S0		1.00 ... 4.00	50
1.5	3.5	without	3RV13 21-1EC10	3RT10 24-1AP00	S0	3RB20 26-1SB0 or 3RB21 23-4SB0	3.00 ... 12.0	50
2.2	5	without	3RV13 21-1GC10	3RT10 24-1AP00	S0		3.00 ... 12.0	50
3	6.5	without	3RV13 21-1HC10	3RT10 24-1AP00	S0		3.00 ... 12.0	50
4	8.5	without	3RV13 21-1JC10	3RT10 26-1AP00	S0	3RB20 26-1QB0 or 3RB21 23-4QB0	6.00 ... 25.0	50
5.5	11.5	without	3RV13 21-1KC10	3RT10 26-1AP00	S0		6.00 ... 25.0	50
7.5	15.5	14.0 ... 20.0	3RV10 21-4BA10	3RT10 26-1AP00	S0		6.00 ... 25.0	50
11	22	without	3RV13 31-4EC10	3RT10 34-1AP00	S2	3RB20 36-1UB0 or 3RB21 33-4UB0	12.5 ... 50.0	50
15	29	without	3RV10 41-4FC10	3RT10 44-1AP00	S3	3RB20 46-1EB0 or 3RB21 43-4EB0	25.0 ... 100	50
18.5	35	without	3RV13 41-4FC10	3RT10 44-1AP00	S3		25.0 ... 100	50
22	41	without	3RV13 41-4HC10	3RT10 44-1AP00	S3		25.0 ... 100	50
30	55	without	3RV13 41-4JC10	3RT10 44-1AP00	S3		25.0 ... 100	50
37	66	57.0 ... 75.0	3RV13 41-4KC10	3RT10 45-1AP00	S3		25.0 ... 100	50
45	80	70.0 ... 90.0	3RV10 41-4LA10	3RT10 46-1AP00	S3		25.0 ... 100	50
55	97	without	3VL27 10-2DK33	3RT10 54-1AP36	3VL/S6	3RB20 56-1FW2 or 3RB21 53-4FW2	50.0 ... 200	50
55	97	without	3VL27 16-2DK33	3RT10 54-1AP36	3VL/S6		50.0 ... 200	50
75	132	without	3VL27 16-2DK33	3RT10 55-6AP36	3VL/S6	3RB20 56-1FC2 or 3RB21 53-4FC2	50.0 ... 200	50
90	160	without	3VL27 16-2DK33	3RT10 56-6AP36	3VL/S6		50.0 ... 200	50
90	160	without	3VL37 25-2DK36	3RT10 56-6AP36	3VL/S6		50.0 ... 200	50
110	195	without	3VL37 25-2DK36	3RT10 64-6AP36	3VL/S10	3RB20 66-1GC2 or 3RB21 63-4GC2	55.0 ... 250	50
110	195	without	3VL37 25-2DK36	3RT12 64-6AP36	3VL/S10V		55.0 ... 250	50
132	230	without	3VL47 25-2DK36	3RT10 65-6AP36	3VL/S10		55.0 ... 250	50
132	230	without	3VL47 25-2DK36	3RT12 65-6AP36	3VL/S10V		55.0 ... 250	50
132	230	without	3VL47 31-2DK36	3RT10 65-6AP36	3VL/S10		55.0 ... 250	50
132	230	without	3VL47 31-2DK36	3RT12 65-6AP36	3VL/S10V		55.0 ... 250	50
160	280	without	3VL47 31-2DK36	3RT10 66-6AP36	3VL/S10	3RB20 66-1MC2 or 3RB21 63-4MC2	160 ... 630	50
160	280	without	3VL47 31-2DK36	3RT12 66-6AP36	3VL/S10V		160 ... 630	50
200	350	without	3VL57 50-2DK36	3RT10 75-6AP36	3VL/S12		160 ... 630	50
200	350	without	3VL57 50-2DK36	3RT12 75-6AP36	3VL/S12V		160 ... 630	50
250	430	without	3VL57 50-2DK36	3RT10 76-6AP36	3VL/S12		160 ... 630	50
250	430	without	3VL57 50-2DK36	3RT12 76-6AP36	3VL/S12V		160 ... 630	50
<b>Coordination type 1</b>								
315	540	without	3VL77 12-1DE36	3TF68 44-0CM7	3VL/14	3RB20 6--M.2 or 3RB21 63-4MC2	160 ... 630	50
355	610	without	3VL77 12-1DE36	3TF68 44-0CM7	3VL/14		160 ... 630	50
400	690	without	3VL87 16-1DE36	3TF69 44-0CM7	3VL/14	3UF1 868-3GA00 and 3RB20 16-1RB0	205 ... 820	50

Footnotes for pages 16 and 17:

<sup>1)</sup> Nominal value at 400 V AC, 50 Hz for 4-pole standard motors. The specific starting and rated data of the motor to be protected are decisive when selecting devices.

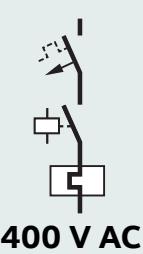
<sup>2)</sup> Rated control supply voltage 230 V AC, 50 Hz.  
Other control voltages are also possible.

<sup>3)</sup> Alternatively, 3VL47 31-3DK36 is possible.

<sup>4)</sup> Use terminal bracket for stand-alone mounting for overload relay.

# Motor starter protector/circuit breaker + contactor + 3RB20/3RB21 solid-state overload relay

CLASS 5 and CLASS 10, coordination types 2 and 1,  
Short-circuit breaking capacity  $I_q \geq 100$  kA

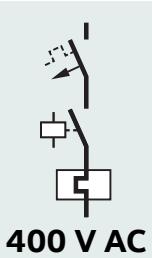


Standard three-phase motor 4-pole at 400 V AC <sup>1)</sup>		Setting range Overload release Motor starter protector/circuit breaker	Motor starter protector/circuit breaker	Contactor <sup>2)</sup>	Size	Overload relay	Setting range Overload release Overload relay	Short-circuit breaking capacity $I_q$
Rated power P kW	Motor current (nominal value) I A	A	Order No.	Order No.		Order No.	A	kA
<b>Coordination type 2</b>								
0.06	0.2	0.22 ... 0.32	3RV10 11-0DA10	3RT10 15-1AP01	S00	3RB20 16-1RB0 or 3RB21 13-4RB0	0.10 ... 0.40	130
0.09	0.3	0.28 ... 0.40	3RV10 11-0EA10	3RT10 15-1AP01	S00		0.10 ... 0.40	130
0.12	0.4	0.70 ... 1.00	3RV10 11-0JA10	3RT10 15-1AP01	S00	3RB20 16-1NB0 or 3RB21 13-4NB0	0.32 ... 1.25	130
0.18	0.6	0.70 ... 1.00	3RV10 11-0JA10	3RT10 15-1AP01	S00		0.32 ... 1.25	130
0.25	0.85	1.10 ... 1.60	3RV10 11-1AA10	3RT10 15-1AP01	S00		0.32 ... 1.25	130
0.37	1.1	1.10 ... 1.60	3RV10 11-1AA10	3RT10 15-1AP01	S00	3RB20 16-1PB0 or 3RB21 13-4PB0	1.00 ... 4.00	130
0.37	1.1	without	3RV13 21-1AC10	3RT10 24-1AP00	S0	3RB21 23-4PB0	1.00 ... 4.00	130
0.55	1.5	1.40 ... 2.00	3RV10 11-1BA10	3RT10 15-1AP01	S00	3RB20 16-1PB0 or 3RB21 13-4PB0	1.00 ... 4.00	130
0.55	1.5	without	3RV13 21-1BC10	3RT10 24-1AP00	S0	3RB21 23-4PB0	1.00 ... 4.00	130
0.75	1.9	without	3RV13 21-1CC10	3RT10 24-1AP00	S0		1.00 ... 4.00	130
1.1	2.7	without	3RV13 21-1DC10	3RT10 24-1AP00	S0		1.00 ... 4.00	130
1.5	3.5	without	3RV13 21-1EC10	3RT10 24-1AP00	S0	3RB20 26-1SB0 or 3RB21 23-4SB0	3.00 ... 12.0	130
2.2	5	without	3RV13 21-1GC10	3RT10 24-1AP00	S0		3.00 ... 12.0	130
3	6.5	without	3RV13 21-1HC10	3RT10 24-1AP00	S0		3.00 ... 12.0	130
4	8.5	without	3RV13 21-1JC10	3RT10 26-1AP00	S0	3RB20 26-1QB0 or 3RB21 23-4QB0	6.00 ... 25.0	130
5.5	11.5	without	3RV13 21-1KC10	3RT10 26-1AP00	S0		6.00 ... 25.0	130
7.5	15.5	14.0 ... 20.0	3RV10 21-4BA10	3RT10 26-1AP00	S0		6.00 ... 25.0	100
11	22	without	3RV13 31-4EC10	3RT10 34-1AP00	S2	3RB20 36-1UB0 or 3RB21 33-4UB0	12.5 ... 50.0	100
15	29	28.0 ... 40.0	3RV10 31-4FA10	3RT10 36-1AP00	S2		12.5 ... 50.0	100
15	29	without	3RV13 42-4FC10	3RT10 54-1AP36	S3/S6	3RB20 46-1EW1 or 3RB21 43-4EW1	25.0 ... 100	100
18.5	35	without	3RV13 42-4FC10	3RT10 54-1AP36	S3/S6		25.0 ... 100	100
22	41	without	3RV13 42-4HC10	3RT10 54-1AP36	S3/S6		25.0 ... 100	100
30	55	without	3RV13 42-4JC10	3RT10 54-1AP36	S3/S6		25.0 ... 100	100
30	55	without	3RV13 42-4JC10	3RT10 54-1AP36	S3/S6	3RB20 56-1FW2 or 3RB21 53-4FW2	50.0 ... 200	100
37	66	without	3RV13 42-4KC10	3RT10 54-1AP36	S3/S6	3RB20 46-1EW1 or 3RB21 43-4EW1	25.0 ... 100	100
37	66	without	3RV13 42-4KC10	3RT10 54-1AP36	S3/S6	3RB20 56-1FW2 or 3RB21 53-4FW2	50.0 ... 200	100
45	80	70.0 ... 90.0	3RV10 42-4LA10	3RT10 54-1AP36	S3/S6	3RB20 46-1EW1 or 3RB21 43-4EW1	25.0 ... 100	100
45	80	70.0 ... 90.0	3RV10 42-4LA10	3RT10 54-1AP36	S3/S6	3RB20 56-1FW2 or 3RB21 53-4FW2	50.0 ... 200	100
55	97	without	3VL27 10-3DK33	3RT10 54-1AP36	3VL/S6		50.0 ... 200	100
55	97	without	3VL27 16-3DK33	3RT10 54-1AP36	3VL/S6		50.0 ... 200	100
75	132	without	3VL27 16-3DK33	3RT10 55-6AP36	3VL/S6	3RB20 56-1FC2 or 3RB21 53-4FC2	50.0 ... 200	100
90	160	without	3VL27 16-3DK33	3RT10 56-6AP36	3VL/S6		50.0 ... 200	100
90	160	without	3VL27 25-3DK36	3RT10 56-6AP36	3VL/S6		50.0 ... 200	100
110	195	without	3VL27 25-3DK36	3RT10 64-6AP36	3VL/S10	3RB20 66-1GC2 or 3RB21 63-4GC2	55.0 ... 250	100
110	195	without	3VL27 25-3DK36	3RT12 64-6AP36	3VL/S10V		55.0 ... 250	100
132	230	without	3VL47 25-3DK36 <sup>3)</sup>	3RT10 75-6AP36	3VL/S12		55.0 ... 250	100
132	230	without	3VL47 25-3DK36 <sup>3)</sup>	3RT12 65-6AP36	3VL/S10V		55.0 ... 250	100
160	280	without	3VL47 31-3DK36	3RT10 75-6AP36	3VL/S12	3RB20 66-1MC2 or 3RB21 63-4MC2	160 ... 630	100
160	280	without	3VL47 31-3DK36	3RT12 66-6AP36	3VL/S10V		160 ... 630	100
200	350	without	3VL57 50-3DK36	3RT10 75-6AP36	3VL/S12		160 ... 630	100
200	350	without	3VL57 50-3DK36	3RT12 75-6AP36	3VL/S12V		160 ... 630	100
250	430	without	3VL57 50-3DK36	3RT10 76-6AP36	3VL/S12		160 ... 630	100
250	430	without	3VL57 50-3DK36	3RT12 76-6AP36	3VL/S12V		160 ... 630	100
<b>Coordination type 1</b>								
315	540	without	3VL77 12-3DE36	3TF68 44-0CM7	3VL/14	3RB20 66-1M.2	160 ... 630	100
355	610	without	3VL77 12-3DE36	3TF68 44-0CM7	3VL/14	3RB21 6.-M.2	160 ... 630	100
400	690	without	3VL87 16-3DE36	3TF69 44-0CM7	3VL/14	3UF1 868-3GA00 and 3RB20 16-1NB0 <sup>4)</sup>	205 ... 820	100

Footnotes for this table see page 16.

# Motor starter protector/circuit breaker + contactor + 3RB20/3RB21 solid-state overload relay

CLASS 20, coordination types 2 and 1,  
Short-circuit breaking capacity  $I_q = 50$  kA



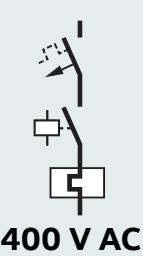
Standard three-phase motor 4-pole at 400 V AC <sup>1)</sup>		Setting range Overload release Motor starter protector/circuit breaker	Motor starter protector/circuit breaker	Contactor <sup>2)</sup>	Size	Overload relay	Setting range Overload release Overload relay	Short-circuit breaking capacity $I_q$
Rated power $P$ kW	Motor current (nominal value) $I$ A	A	Order No.	Order No.		Order No.	A	kA
<b>Coordination type 2</b>								
0.06	0.2	0.28 ... 0.40	3RV10 11-0EA10	3RT10 15-1AP01	S00	3RB20 16-2RB0 or 3RB21 13-4RB0	0.10 ... 0.40	50
0.09	0.3	0.70 ... 1.00	3RV10 11-0JA10	3RT10 15-1AP01	S00		0.10 ... 0.40	50
0.12	0.4	0.70 ... 1.00	3RV10 11-0JA10	3RT10 15-1AP01	S00	3RB20 16-2NB0 or 3RB21 13-4NB0	0.32 ... 1.25	50
0.18	0.6	1.10 ... 1.60	3RV10 11-1AA10	3RT10 15-1AP01	S00		0.32 ... 1.25	50
0.25	0.85	1.10 ... 1.60	3RV10 11-1AA10	3RT10 15-1AP01	S00		0.32 ... 1.25	50
0.37	1.1	1.40 ... 2.00	3RV10 11-1BA10	3RT10 15-1AP01	S00	3RB20 16-2PB0 or 3RB21 13-4PB0	1.00 ... 4.00	50
0.37	1.1	without	3RV13 21-1BC10	3RT10 24-1AP00	S0	3RB21 23-4PB0	1.00 ... 4.00	50
0.55	1.5	without	3RV13 21-1DC10	3RT10 24-1AP00	S0		1.00 ... 4.00	50
0.75	1.9	2.80 ... 4.00	3RV10 21-1EA10	3RT10 24-1AP00	S0		1.00 ... 4.00	50
1.1	2.7	3.50 ... 5.00	3RV10 21-1FA10	3RT10 24-1AP00	S0		1.00 ... 4.00	50
1.5	3.5	without	3RV13 21-1GC10	3RT10 24-1AP00	S0	3RB20 26-2SB0 or 3RB21 23-4SB0	3.00 ... 12.0	50
2.2	5	without	3RV13 21-1JC10	3RT10 26-1AP00	S0		3.00 ... 12.0	50
3	6.5	11.0 ... 16.0	3RV10 31-4AA10	3RT10 34-1AP00	S2	3RB20 36-2QB0 or 3RB21 33-4QB0	6.00 ... 25.0	50
4	8.5	11.0 ... 16.0	3RV10 31-4AA10	3RT10 34-1AP00	S2		6.00 ... 25.0	50
5.5	11.5	18.0 ... 25.0	3RV10 31-4DA10	3RT10 34-1AP00	S2		6.00 ... 25.0	50
7.5	15.5	22.0 ... 32.0	3RV10 31-4EA10	3RT10 35-1AP00	S2		6.00 ... 25.0	50
11	22	28.0 ... 40.0	3RV10 31-4FA10	3RT10 36-1AP00	S2	3RB20 36-2UB0 or 3RB21 33-4UB0	12.5 ... 50.0	50
15	29	36.0 ... 50.0	3RV10 42-4HA10	3RT10 54-1AP36	S3/S6		12.5 ... 50.0	50
15	29	36.0 ... 50.0	3RV10 41-4HA10	3RT10 44-1AP00	S3	3RB20 46-2UB0 or 3RB21 43-4UB0	12.5 ... 50.0	50
18.5	35	without	3RV13 41-4JC10	3RT10 45-1AP00	S3	3RB20 46-2EB0 or 3RB21 43-4EB0	25.0 ... 100	50
22	41	57.0 ... 75.0	3RV10 41-4KA10	3RT10 46-1AP00	S3		25.0 ... 100	50
30	55	70.0 ... 90.0	3RV10 42-4LB10	3RT10 46-1AP00	S3		25.0 ... 100	50
37	66	without	3VL27 10-2DK33	3RT10 54-1AP36	3VL/S6	3RB20 56-2FW2 or 3RB21 53-4FW2	50.0 ... 200	50
45	80	without	3VL27 10-2DK33	3RT10 54-1AP36	3VL/S6		50.0 ... 200	50
55	97	without	3VL27 10-2DK33	3RT10 55-6AP36	3VL/S6	3RB20 56-2FW2 or 3RB21 53-4FW2	50.0 ... 200	50
55	97	without	3VL27 16-2DK33	3RT10 55-6AP36	3VL/S6		50.0 ... 200	50
75	132	without	3VL37 25-2DK36	3RT10 56-6AP36	3VL/S6		50.0 ... 200	50
90	160	without	3VL27 16-2DK33	3RT10 64-6AP36	3VL/S10	3RB20 66-2GC2 or 3RB21 63-4GC2	55.0 ... 250	50
90	160	without	3VL37 25-2DK36	3RT10 65-6AP36	3VL/S10		55.0 ... 250	50
110	195	without	3VL37 25-2DK36	3RT10 66-6AP36	3VL/S10		55.0 ... 250	50
110	195	without	3VL37 25-2DK36	3RT12 64-6AP36	3VL/S10V		55.0 ... 250	50
132	230	without	3VL37 25-2DK36	3RT12 65-6AP36	3VL/S10V		55.0 ... 250	50
132	230	without	3VL47 31-2DK36	3RT12 65-6AP36	3VL/S10V		55.0 ... 250	50
160	280	without	3VL47 31-2DK36	3RT10 75-6AP36	3VL/S12	3RB20 66-2MC2 or 3RB21 63-4MC2	160 ... 630	50
160	280	without	3VL47 31-2DK36	3RT12 66-6AP36	3VL/S10V		160 ... 630	50
200	350	without	3VL57 50-2DK36	3RT10 76-6AP36	3VL/S12		160 ... 630	50
200	350	without	3VL57 50-2DK36	3RT12 75-6AP36	3VL/S12V		160 ... 630	50
250	430	without	3VL57 50-2DK36	3RT12 76-6AP36	3VL/S12V		160 ... 630	50
<b>Coordination type 1</b>								
315	540	without	3VL77 12-1DE36	3TF69 44-0CM7	3VL 14	3RB20 6--M.2 or 3RB21 6--M.2	160 ... 630	50

<sup>1)</sup> Nominal value at 400 V AC, 50 Hz for 4-pole standard motors. The specific starting and rated data of the motor to be protected are decisive when selecting devices.

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

# Motor starter protector/circuit breaker + contactor + 3RB20/3RB21 solid-state overload relay

CLASS 20, coordination types 2 and 1,  
Short-circuit breaking capacity  $I_q \geq 100$  kA



Standard three-phase motor 4-pole at 400 V AC <sup>1)</sup>		Setting range Overload release Motor starter protector/circuit breaker	Motor starter protector/circuit breaker	Contactor <sup>2)</sup>	Size	Overload relay	Setting range Overload release Overload relay	Short-circuit breaking capacity $I_q$
Rated power P kW	Motor current (nominal value) I A	A	Order No.	Order No.		Order No.	A	kA
<b>Coordination type 2</b>								
0.06	0.2	0.28 ... 0.40	3RV10 11-0EA10	3RT10 15-1AP01	S00	3RB20 16-2RB0 or 3RB21 13-4RB0	0.10 ... 0.40	130
0.09	0.3	0.70 ... 1.00	3RV10 11-0JA10	3RT10 15-1AP01	S00		0.10 ... 0.40	130
0.12	0.4	0.70 ... 1.00	3RV10 11-0JA10	3RT10 15-1AP01	S00	3RB20 16-2NB0 or 3RB21 13-4NB0	0.32 ... 1.25	130
0.18	0.6	1.10 ... 1.60	3RV10 11-1AA10	3RT10 15-1AP01	S00		0.32 ... 1.25	130
0.25	0.85	1.10 ... 1.60	3RV10 11-1AA10	3RT10 15-1AP01	S00		0.32 ... 1.25	130
0.37	1.1	1.40 ... 2.00	3RV10 11-1BA10	3RT10 15-1AP01	S00	3RB20 16-2PB0 or 3RB21 13-4PB0	1.00 ... 4.00	130
0.37	1.1	without	3RV13 21-1BC10	3RT10 24-1AP00	S0	3RB21 23-4PB0	1.00 ... 4.00	130
0.55	1.5	without	3RV13 21-1DC10	3RT10 24-1AP00	S0		1.00 ... 4.00	130
0.75	1.9	2.80 ... 4.00	3RV10 21-1EA10	3RT10 24-1AP00	S0		1.00 ... 4.00	130
1.1	2.7	3.50 ... 5.00	3RV10 21-1FA10	3RT10 24-1AP00	S0		1.00 ... 4.00	130
1.5	3.5	without	3RV13 21-1GC10	3RT10 24-1AP00	S0	3RB20 26-2SB0 or 3RB21 23-4SB0	3.00 ... 12.0	130
2.2	5	without	3RV13 21-1JC10	3RT10 26-1AP00	S0		3.00 ... 12.0	130
3	6.5	11.0 ... 16.0	3RV10 31-4AA10	3RT10 34-1AP00	S2	3RB20 36-2QB0 or 3RB21 33-4QB0	6.00 ... 25.0	100
4	8.5	11.0 ... 16.0	3RV10 31-4AA10	3RT10 34-1AP00	S2		6.00 ... 25.0	100
5.5	11.5	18.0 ... 25.0	3RV10 31-4DA10	3RT10 34-1AP00	S2		6.00 ... 25.0	100
7.5	15.5	22.0 ... 32.0	3RV10 31-4EA10	3RT10 35-1AP00	S2		6.00 ... 25.0	100
11	22	28.0 ... 40.0	3RV10 31-4FA10	3RT10 36-1AP00	S2	3RB20 36-2UB0 or 3RB21 33-4UB0	12.5 ... 50.0	100
15	29	36.0 ... 50.0	3RV1042-4HA10	3RT10 54-1AP36	S3/S6	3RB20 36-2UW1 or 3RB21 33-4UB0	12.5 ... 50.0	100
15	29	36.0 ... 50.0	3RV1042-4HA10	3RT10 54-1AP36	S3/S6	3RB20 46-2EW1 or 3RB21 43-4EW1	25.0 ... 100	100
18.5	35	without	3RV13 42-4JC10	3RT10 54-1AP36	S3/S6	3RB20 46-2EB0 or 3RB21 43-4EB0	25.0 ... 100	100
22	41	57.0 ... 75.0	3RV10 42-4KA10	3RT10 54-1AP36	S3/S6		25.0 ... 100	100
30	55	70.0 ... 90.0	3RV10 42-4LB10	3RT10 54-1AP36	S3/S6		25.0 ... 100	100
37	66	without	3VL27 10-3DK33	3RT10 54-1AP36	3VL/S6	3RB20 56-2FW2 or 3RB21 53-4FW2	50.0 ... 200	100
37	66	without	3VL27 16-3DK33	3RT10 54-1AP36	3VL/S6		50.0 ... 200	100
45	80	without	3VL27 10-3DK33	3RT10 54-1AP36	3VL/S6		50.0 ... 200	100
45	80	without	3VL27 16-3DK33	3RT10 54-1AP36	3VL/S6		50.0 ... 200	100
55	97	without	3VL27 10-3DK33	3RT10 55-6AP36	3VL/S6	3RB20 56-2FC2 or 3RB21 53-4FC2	50.0 ... 200	100
75	132	without	3VL27 16-3DK33	3RT10 56-6AP36	3VL/S6		50.0 ... 200	100
75	132	without	3VL37 25-3DK36	3RT10 56-6AP36	3VL/S6		50.0 ... 200	100
90	160	without	3VL27 16-3DK33	3RT10 64-6AP36	3VL/S10	3RB20 66-2GC2 or 3RB21 63-4GC2	55.0 ... 250	100
90	160	without	3VL37 25-3DK36	3RT10 64-6AP36	3VL/S10		55.0 ... 250	100
110	195	without	3VL37 25-3DK36	3RT10 64-6AP36	3VL/S10		55.0 ... 250	100
110	195	without	3VL37 25-3DK36	3RT12 64-6AP36	3VL/S10V		55.0 ... 250	100
132	230	without	3VL37 25-3DK36 <sup>3)</sup>	3RT10 75-6AP36	3VL/S12		55.0 ... 250	100
132	230	without	3VL37 25-3DK36 <sup>3)</sup>	3RT12 65-6AP36	3VL/S10V		55.0 ... 250	100
160	280	without	3VL47 31-3DK36	3RT10 75-6AP36	3VL/S12	3RB20 66-1MC2 or 3RB21 63-4MC2	160 ... 630	100
160	280	without	3VL47 31-3DK36	3RT12 66-6AP36	3VL/S10V		160 ... 630	100
200	350	without	3VL57 50-3DK36	3RT10 76-6AP36	3VL/S12		160 ... 630	100
200	350	without	3VL57 50-3DK36	3RT12 75-6AP36	3VL/S12V		160 ... 630	100
250	430	without	3VL57 50-3DK36	3RT12 76-6AP36	3VL/S12V		160 ... 630	100
<b>Coordination type 1</b>								
315	540	without	3VL77 12-3DE36	3TF69 44-0CM7	3VL 14	3RB20 6..M.2 or 3RB21 6..M.2	160 ... 630	100

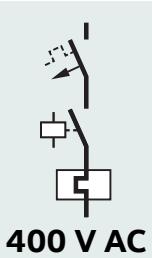
<sup>1)</sup> Nominal value at 400 V AC, 50 Hz for 4-pole standard motors. The specific starting and rated data of the motor to be protected are decisive when selecting devices.

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

<sup>3)</sup> Alternatively, 3VL47 31-3DK36 is possible.

# Motor starter protector/circuit breaker + contactor + 3RB20/3RB21 solid-state overload relay

CLASS 30, coordination types 2 and 1,  
Short-circuit breaking capacity  $I_q = 50 \text{ kA}$



Standard three-phase motor 4-pole at 400 V AC <sup>1)</sup>		Setting range Overload release Motor starter protector/circuit breaker	Motor starter protector/circuit breaker	Contactor <sup>2)</sup>	Size	Overload relay	Setting range Overload release Overload relay	Short-circuit breaking capacity $I_q$
Rated power $P$ kW	Motor current (nominal value) $I$ A	A	Order No.	Order No.		Order No.	A	kA
<b>Coordination type 2</b>								
0.06	0.2	0.45 ... 0.63	3RV10 11-0GA10	3RT10 15-1AP01	S00	3RB21 13-4RB0	0.10 ... 0.40	50
0.09	0.3	0.55 ... 0.80	3RV10 11-0HA10	3RT10 15-1AP01	S00		0.10 ... 0.40	50
0.12	0.4	0.70 ... 1.00	3RV10 11-0JA10	3RT10 15-1AP01	S00	3RB21 13-4NB0	0.32 ... 1.25	50
0.18	0.6	1.10 ... 1.60	3RV10 11-1AA10	3RT10 15-1AP01	S00		0.32 ... 1.25	50
0.25	0.85	1.40 ... 2.00	3RV10 11-1BA10	3RT10 15-1AP01	S00		0.32 ... 1.25	50
0.37	1.1	2.20 ... 3.20	3RV10 21-1DA10	3RT10 26-1AP00	S0	3RB21 23-4PB0	1.00 ... 4.00	50
0.55	1.5	2.80 ... 4.00	3RV10 21-1EA10	3RT10 26-1AP00	S0		1.00 ... 4.00	50
0.75	1.9	3.50 ... 5.00	3RV10 21-1FA10	3RT10 26-1AP00	S0		1.00 ... 4.00	50
1.1	2.7	3.50 ... 5.00	3RV10 21-1GA10	3RT10 26-1AP00	S0		1.00 ... 4.00	50
1.5	3.5	5.50 ... 8.00	3RV10 21-1HA10	3RT10 26-1AP00	S0	3RB21 23-4SB0	3.00 ... 12.0	50
2.2	5	9.00 ... 12.5	3RV10 21-1KA10	3RT10 26-1AP00	S0		3.00 ... 12.0	50
3	6.5	11.0 ... 16.0	3RV10 31-4AA10	3RT10 34-1AP00	S2	3RB21 33-4QB0	6.00 ... 25.0	50
4	8.5	14.0 ... 20.0	3RV10 31-4BA10	3RT10 34-1AP00	S2		6.00 ... 25.0	50
5.5	11.5	22.0 ... 32.0	3RV10 31-4EA10	3RT10 34-1AP00	S2		6.00 ... 25.0	50
7.5	15.5	28.0 ... 40.0	3RV10 31-4FA10	3RT10 35-1AP00	S2	3RB21 33-4UB0	12.5 ... 50.0	50
11	22	28.0 ... 40.0	3RV10 31-4FB10	3RT10 36-1AP00	S2		12.5 ... 50.0	50
15	29	36.0 ... 50.0	3RV10 42-4HB10	3RT10 44-1AP00	S3		12.5 ... 50.0	50
18.5	35	45.0 ... 63.0	3RV10 42-4JB10	3RT10 45-1AP00	S3	3RB21 43-4EB0	25.0 ... 100	50
22	41	57.0 ... 75.0	3RV10 42-4KB10	3RT10 46-1AP00	S3		25.0 ... 100	50
37	66	without	3VL27 10-2DK33	3RT10 54-1AP36	3VL/S6	3RB21 53-4FW2	50.0 ... 200	50
45	80	without	3VL27 10-2DK33	3RT10 55-6AP36	3VL/S6	3RB21 53-4FC2	50.0 ... 200	50
55	97	without	3VL27 10-2DK33	3RT10 56-6AP36	3VL/S6		50.0 ... 200	50
75	132	without	3VL37 25-2DK36	3RT10 64-6AP36	3VL/S10	3RB21 63-4GC2	55.0 ... 250	50
90	160	without	3VL27 16-2DK33 <sup>3)</sup>	3RT10 66-6AP36	3VL/S10		55.0 ... 250	50
90	160	without	3VL27 16-2DK33 <sup>3)</sup>	3RT12 64-6AP36	3VL/S10V		55.0 ... 250	50
110	195	without	3VL37 25-2DK36	3RT12 65-6AP36	3VL/S10V		55.0 ... 250	50
132	230	without	3VL37 25-2DK36 <sup>4)</sup>	3RT10 75-6AP36	3VL/S12		55.0 ... 250	50
132	230	without	3VL37 25-2DK36 <sup>4)</sup>	3RT12 66-6AP36	3VL/S10V		55.0 ... 250	50
160	280	without	3VL47 31-2DK36	3RT10 76-6AP36	3VL/S12	3RB21 63-4MC2	160 ... 630	50
160	280	without	3VL47 31-2DK36	3RT12 75-6AP36	3VL/S12V		160 ... 630	50
200	350	without	3VL57 50-2DK36	3RT12 76-6AP36	3VL/S12V		160 ... 630	50
<b>Coordination type 1</b>								
250	430	without	3VL57 50-1DK36	3TF69 44-0CM7	3VL/14	3RB21 6--M.2	160 ... 630	50

<sup>1)</sup> Nominal value at 400 V AC, 50 Hz for 4-pole standard motors. The specific starting and rated data of the motor to be protected are decisive when selecting devices.

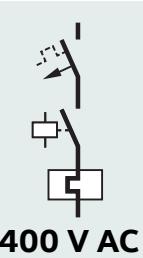
<sup>2)</sup> Rated control supply voltage 230 V AC, 50 Hz.  
Other control voltages are also possible.

<sup>3)</sup> Alternatively, 3VL37 25-2DK36 is possible.

<sup>4)</sup> Alternatively, 3VL47 31-2DK36 is possible.

# Motor starter protector/circuit breaker + contactor + 3RB21 solid-state overload relay

CLASS 30, coordination types 2 and 1,  
Short-circuit breaking capacity  $I_q \geq 100$  kA



Standard three-phase motor 4-pole at 400 V AC <sup>1)</sup>		Setting range Overload release	Motor starter protector/circuit breaker	Contactor <sup>2)</sup>	Size	Overload relay	Setting range Overload release	Short-circuit breaking capacity $I_q$
Rated power P kW	Motor current (nominal value) I A	Motor start-protector/circuit breaker	Order No.	Order No.		Order No.	A	kA
<b>Coordination type 2</b>								
0.06	0.2	0.45 ... 0.63	3RV10 11-0GA10	3RT10 15-1AP01	S00	3RB2113-4RB0	0.10 ... 0.40	130
0.09	0.3	0.55 ... 0.80	3RV10 11-0HA10	3RT10 15-1AP01	S00		0.10 ... 0.40	130
0.12	0.4	0.70 ... 1.00	3RV10 11-0JA10	3RT10 15-1AP01	S00	3RB2113-4NB0	0.32 ... 1.25	130
0.18	0.6	1.10 ... 1.60	3RV10 11-1AA10	3RT10 15-1AP01	S00		0.32 ... 1.25	130
0.25	0.85	1.40 ... 2.00	3RV10 11-1BA10	3RT10 15-1AP01	S00		0.32 ... 1.25	130
0.37	1.1	2.20 ... 3.20	3RV10 21-1DA10	3RT10 26-1AP00	S0	3RB21 23-4PB0	1.00 ... 4.00	130
0.55	1.5	2.80 ... 4.00	3RV10 21-1EA10	3RT10 26-1AP00	S0		1.00 ... 4.00	130
0.75	1.9	3.50 ... 5.00	3RV10 21-1FA10	3RT10 26-1AP00	S0		1.00 ... 4.00	130
1.1	2.7	4.50 ... 6.30	3RV10 21-1GA10	3RT10 26-1AP00	S0		1.00 ... 4.00	130
1.5	3.5	5.50 ... 8.00	3RV10 21-1HA10	3RT10 26-1AP00	S0	3RB21 23-4SB0	3.00 ... 12.0	130
2.2	5	9.00 ... 12.5	3RV10 21-1KA10	3RT10 26-1AP00	S0		3.00 ... 12.0	130
3	6.5	11.0 ... 16.0	3RV10 31-4AA10	3RT10 34-1AP00	S2	3RB21 33-4QB0	6.00 ... 25.0	100
4	8.5	14.0 ... 20.0	3RV10 31-4BA10	3RT10 34-1AP00	S2		6.00 ... 25.0	100
5.5	11.5	22.0 ... 32.0	3RV10 31-4EA10	3RT10 34-1AP00	S2		6.00 ... 25.0	100
7.5	15.5	28.0 ... 40.0	3RV10 31-4FA10	3RT10 35-1AP00	S2	3RB21 33-4UB0	12.5 ... 50.0	100
11	22	28.0 ... 40.0	3RV10 31-4FB10	3RT10 36-1AP00	S2		12.5 ... 50.0	100
15	29	36.0 ... 50.0	3RV10 42-4HB10	3RT10 54-1AP36	S3/S6	3RB21 33-4UW1	12.5 ... 50.0	100
15	29	36.0 ... 50.0	3RV10 42-4HB10	3RT10 54-1AP36	S3/S6	3RB21 43-4EW1	25.0 ... 100	100
18.5	35	45.0 ... 63.0	3RV10 42-4JB10	3RT10 54-1AP36	S3/S6	3RB21 43-4EB0	25.0 ... 100	100
22	41	57.0 ... 75.0	3RV10 42-4KB10	3RT10 54-1AP36	S3/S6		25.0 ... 100	100
30	55	70.0 ... 90.0	3RV10 42-4LB10	3RT10 54-1AP36	S3/S6		25.0 ... 100	100
30	55	70.0 ... 90.0	3RV10 42-4LB10	3RT10 54-1AP36	S3/S6	3RB21 53-4FW2	50.0 ... 200	100
37	66	without	3VL27 10-3DK33	3RT10 54-1AP36	3VL/S6		50.0 ... 200	100
37	66	without	3VL27 16-3DK33	3RT10 54-1AP36	3VL/S6		50.0 ... 200	100
45	80	without	3VL27 10-3DK33	3RT10 55-6AP36	3VL/S6	3RB21 53-4FC2	50.0 ... 200	100
45	80	without	3VL27 16-3DK33	3RT10 55-6AP36	3VL/S6		50.0 ... 200	100
55	97	without	3VL27 10-3DK33	3RT10 56-6AP36	3VL/S6		50.0 ... 200	100
55	97	without	3VL27 16-3DK33	3RT10 56-6AP36	3VL/S6		50.0 ... 200	100
75	132	without	3VL27 16-3DK33	3RT10 64-6AP36	3VL/S10		50.0 ... 200	100
75	132	without	3VL37 25-3DK36	3RT10 64-6AP36	3VL/S10	3RB21 63-4GC2	55.0 ... 250	100
90	160	without	3VL27 16-3DK33 <sup>3)</sup>	3RT10 66-6AP36	3VL/S10		55.0 ... 250	100
90	160	without	3VL27 16-3DK33 <sup>3)</sup>	3RT12 64-6AP36	3VL/S10V		55.0 ... 250	100
110	195	without	3VL37 25-3DK36	3RT12 65-6AP36	3VL/S10V		55.0 ... 250	100
132	230	without	3VL37 25-3DK36 <sup>4)</sup>	3RT10 75-6AP36	3VL/S12		55.0 ... 250	100
132	230	without	3VL37 25-3DK36 <sup>4)</sup>	3RT12 66-6AP36	3VL/S10V		55.0 ... 250	100
160	280	without	3VL47 31-3DK36	3RT10 76-6AP36	3VL/S12	3RB21 63-4MC2	160 ... 630	100
160	280	without	3VL47 31-3DK36	3RT12 75-6AP36	3VL/S12V		160 ... 630	100
200	350	without	3VL57 50-3DK36	3RT12 76-6AP36	3VL/S12V		160 ... 630	100
<b>Coordination type 1</b>								
250	430	without	3VL57 50-3DK36	3TF69 44-0CM7	3VL/14	3RB21 6--M.2	160 ... 630	100

<sup>1)</sup> Nominal value at 400 V AC, 50 Hz for 4-pole standard motors. The specific starting and rated data of the motor to be protected are decisive when selecting devices.

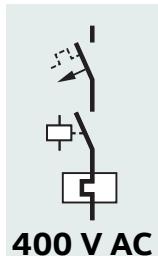
<sup>2)</sup> Rated control supply voltage 230 V AC, 50 Hz.  
Other control voltages are also possible.

<sup>3)</sup> Alternatively, 3VL37 25-3DK36 is possible.

<sup>4)</sup> Alternatively, 3VL47 31-3DK36 is possible.

# Motor starter protector/circuit breaker + contactor + SIMOCODE 3UF7/3RB22/3RB23 solid-state overload relay

CLASS 5 and CLASS 10, coordination type 2,  
Short-circuit breaking capacity  $I_q = 50 \text{ kA}$



Standard three-phase motor 4-pole at 400 V AC <sup>1)</sup>		Setting range Overload release Motor starter protector/circuit breaker	Motor starter protector/circuit breaker	Contactor <sup>2)</sup>	Size	Overload relay <sup>3)</sup>	Setting range Overload release Overload relay	Short-circuit breaking capacity $I_q$
Rated power $P$ kW	Motor current (nominal value) $I$ A	A	Order No.	Order No.		Order No.	A	kA
0.09	0.3	without	3RV13 21-0HC10	3RT10 24-1AP00	S0	3UF7 100-1AA0 or 3RB29 06-2BG1	0.30 ... 3.00	50
0.12	0.4	without	3RV13 21-0HC10	3RT10 24-1AP00	S0		0.30 ... 3.00	50
0.18	0.6	without	3RV13 21-0JC10	3RT10 24-1AP00	S0		0.30 ... 3.00	50
0.25	0.85	without	3RV13 21-0KC10	3RT10 24-1AP00	S0		0.30 ... 3.00	50
0.37	1.1	without	3RV13 21-1AC10	3RT10 24-1AP00	S0		0.30 ... 3.00	50
0.55	1.5	without	3RV13 21-1AC10	3RT10 24-1AP00	S0		0.30 ... 3.00	50
0.75	1.9	without	3RV13 21-1BC10	3RT10 24-1AP00	S0		0.30 ... 3.00	50
1.1	2.7	without	3RV13 21-1DC10	3RT10 24-1AP00	S0		0.30 ... 3.00	50
1.5	3.5	without	3RV13 21-1EC10	3RT10 24-1AP00	S0	3UF7 101-1AA0 or 3RB29 06-2DG1	2.40 ... 25.0	50
2.2	5	without	3RV13 21-1GC10	3RT10 24-1AP00	S0		2.40 ... 25.0	50
3	6.5	without	3RV13 21-1HC10	3RT10 24-1AP00	S0		2.40 ... 25.0	50
4	8.5	without	3RV13 21-1JC10	3RT10 26-1AP00	S0		2.40 ... 25.0	50
5.5	11.5	without	3RV13 21-1KC10	3RT10 26-1AP00	S0		2.40 ... 25.0	50
7.5	15.5	14.0 ... 20.0	3RV10 21-4BA10	3RT10 26-1AP00	S0		2.40 ... 25.0	50
7.5	15.5	without	3RV13 31-4BC10	3RT10 34-1AP00	S2		2.40 ... 25.0	50
11	22	without	3RV13 31-4EC10	3RT10 34-1AP00	S2	3UF7 102-1AA0 or 3RB29 06-2JG1	10.0 ... 100	50
15	29	40.0 ... 50.0	3RV10 31-4HA10	3RT10 36-1AP00	S2		10.0 ... 100	50
15	29	without	3RV13 41-4FC10	3RT10 44-1AP00	S3		10.0 ... 100	50
18.5	35	without	3RV13 41-4FC10	3RT10 44-1AP00	S3		10.0 ... 100	50
22	41	without	3RV13 41-4HC10	3RT10 44-1AP00	S3		10.0 ... 100	50
30	55	without	3RV13 41-4JC10	3RT10 44-1AP00	S3		10.0 ... 100	50
37	66	without	3RV13 41-4KC10	3RT10 45-1AP00	S3		10.0 ... 100	50
45	80	70.0 ... 90.0	3RV10 41-4LA10	3RT10 46-1AP00	S3		10.0 ... 100	50
55	97	without	3VL27 10-2DK33	3RT10 54-1AP36	3VLS/6	3UF7 103-1AA0 or 3RB29 56-2TG2	20.0 ... 200	50
55	97	without	3VL27 16-2DK33	3RT10 54-1AP36	3VLS/6		20.0 ... 200	50
75	132	without	3VL27 16-2DK33	3RT10 55-1AP36	3VLS/6		20.0 ... 200	50
90	160	without	3VL37 25-2DK36	3RT10 56-6AP36	3VLS/6		20.0 ... 200	50
110	195	without	3VL37 25-2DK36	3RT10 64-6AP36	3VLS/10	3UF7 104-1BA0 or 3RB29 66-2WH2	63.0 ... 630	50
110	195	without	3VL37 25-2DK36	3RT12 64-6AP36	3VLS/10V		63.0 ... 630	50
132	230	without	3VL47 25-2DK36	3RT10 65-6AP36	3VLS/10		63.0 ... 630	50
132	230	without	3VL47 25-2DK36	3RT12 65-6AP36	3VLS/10V		63.0 ... 630	50
132	230	without	3VL47 31-2DK36	3RT10 65-6AP36	3VLS/10		63.0 ... 630	50
132	230	without	3VL47 31-2DK36	3RT12 65-6AP36	3VLS/10V		63.0 ... 630	50
160	280	without	3VL47 31-2DK36	3RT10 66-6AP36	3VLS/10		63.0 ... 630	50
160	280	without	3VL47 31-2DK36	3RT12 66-6AP36	3VLS/10V		63.0 ... 630	50
200	350	without	3VL57 50-2DK36	3RT10 75-6AP36	3VLS/12		63.0 ... 630	50
200	350	without	3VL57 50-2DK36	3RT12 75-6AP36	3VLS/12V		63.0 ... 630	50
250	430	without	3VL57 50-2DK36	3RT10 76-6AP36	3VLS/12		63.0 ... 630	50
250	430	without	3VL57 50-2DK36	3RT12 76-6AP36	3VLS/12V		63.0 ... 630	50
315	540	without	3VL77 12-1DE36	3RTF68 44-0CM7	3VL/14		63.0 ... 630	50
355	610	without	3VL77 12-1DE36	3RTF68 44-0CM7	3VL/14		63.0 ... 630	50

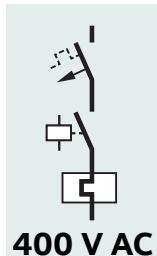
<sup>1)</sup> Nominal value at 400 V AC, 50 Hz for 4-pole standard motors. The specific starting and rated data of the motor to be protected are decisive when selecting devices.

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

<sup>3)</sup> The necessary current detection modules are stated. In addition, the corresponding 3RB22/3RB23 and 3UF7 basic units are required.

# Motor starter protector/circuit breaker + contactor + SIMOCODE 3UF7/3RB22/3RB23 solid-state overload relay

CLASS 5 and CLASS 10, coordination type 2,  
Short-circuit breaking capacity  $I_q \geq 100$  kA



Standard three-phase motor 4-pole at 400 V AC <sup>1)</sup>	Setting range Overload release Motor starter protector/circuit breaker	Motor starter protector/circuit breaker	Contactor <sup>2)</sup>	Size	Overload relay <sup>3)</sup>	Setting range Overload release Overload relay	Short-circuit breaking capacity $I_q$	
Rated power P kW	Motor current (nominal value) I A	Order No.	Order No.		Order No.	A	kA	
0.09	0.3	without	3RV13 21-0HC10	3RT10 24-1AP00	S0	3UF7 100-1AA0 or 3RB29 06-2BG1	0.30 ... 3.00 130	
0.12	0.4	without	3RV13 21-0HC10	3RT10 24-1AP00	S0		0.30 ... 3.00 130	
0.18	0.6	without	3RV13 21-0JC10	3RT10 24-1AP00	S0		0.30 ... 3.00 130	
0.25	0.85	without	3RV13 21-0KC10	3RT10 24-1AP00	S0		0.30 ... 3.00 130	
0.37	1.1	without	3RV13 21-1AC10	3RT10 24-1AP00	S0		0.30 ... 3.00 130	
0.55	1.5	without	3RV13 21-1AC10	3RT10 24-1AP00	S0		0.30 ... 3.00 130	
0.75	1.9	without	3RV13 21-1BC10	3RT10 24-1AP00	S0		0.30 ... 3.00 130	
1.1	2.7	without	3RV13 21-1DC10	3RT10 24-1AP00	S0		0.30 ... 3.00 130	
1.5	3.5	without	3RV13 21-1EC10	3RT10 24-1AP00	S0		2.40 ... 25.0 130	
2.2	5	without	3RV13 21-1GC10	3RT10 24-1AP00	S0		2.40 ... 25.0 130	
3	6.5	without	3RV13 21-1HC10	3RT10 24-1AP00	S0	3UF7 101-1AA0 or 3RB29 06-2DG1	2.40 ... 25.0 130	
4	8.5	without	3RV13 21-1JC10	3RT10 26-1AP00	S0		2.40 ... 25.0 130	
5.5	11.5	without	3RV13 21-1KC10	3RT10 26-1AP00	S0		2.40 ... 25.0 130	
7.5	15.5	14.0 ... 20.0	3RV10 21-4BA10	3RT10 26-1AP00	S0		2.40 ... 25.0 100	
11	22	without	3RV13 31-4EC10	3RT10 34-1AP00	S2		3UF7 102-1AA0 or 3RB29 06-2JG1	10.0 ... 100 100
15	29	28.0 ... 40.0	3RV10 31-4FA10	3RT10 36-1AP00	S2			10.0 ... 100 100
15	29	without	3RV13 42-4FC10	3RT10 44-1AP00	S3			10.0 ... 100 100
15	29	without	3RV13 42-4FC10	3RT10 54-1AP36	S3/S6			10.0 ... 100 100
18.5	35	without	3RV13 42-4FC10	3RT10 44-1AP00	S3			10.0 ... 100 100
18.5	35	without	3RV13 42-4FC10	3RT10 54-1AP36	S3/S6			10.0 ... 100 100
22	41	without	3RV13 42-4HC10	3RT10 44-1AP00	S3			10.0 ... 100 100
22	41	without	3RV13 42-4HC10	3RT10 54-1AP36	S3/S6			10.0 ... 100 100
30	55	without	3RV13 42-4JC10	3RT10 44-1AP00	S3			10.0 ... 100 100
30	55	without	3RV13 42-4JC10	3RT10 54-1AP36	S3/S6			10.0 ... 100 100
37	66	without	3RV13 42-4KC10	3RT10 45-1AP00	S3	3UF7 103-1AA0 or 3RB29 06-2TG2	10.0 ... 100 100	
37	66	without	3RV13 42-4KC10	3RT10 54-1AP36	S3/S6		10.0 ... 100 100	
45	80	70.0 ... 90.0	3RV10 42-4LA10	3RT10 46-1AP00	S3		10.0 ... 100 100	
45	80	without	3RV13 42-4LC10	3RT10 54-1AP36	S3/S6		20.0 ... 200 100	
55	97	without	3VL27 10-3DK33	3RT10 54-1AP36	3VL/S6		20.0 ... 200 100	
55	97	without	3VL27 16-3DK33	3RT10 54-1AP36	3VL/S6		20.0 ... 200 100	
75	132	without	3VL27 16-3DK33	3RT10 55-6AP36	3VL/S6		20.0 ... 200 100	
90	160	without	3VL27 16-3DK36	3RT10 56-6AP36	3VL/S6		20.0 ... 200 100	
90	160	without	3VL27 25-3DK36	3RT10 56-6AP36	3VL/S6		20.0 ... 200 100	
110	195	without	3VL27 25-3DK36	3RT10 64-6AP36	3VL/S10	3UF7 104-1BA00 or 3RB29 66-2WH2	63.0 ... 630 100	
110	195	without	3VL27 25-3DK36	3RT12 64-6AP36	3VL/S10V		63.0 ... 630 100	
132	230	without	3VL47 25-3DK36 <sup>4)</sup>	3RT10 75-6AP36	3VL/S12		63.0 ... 630 100	
132	230	without	3VL47 25-3DK36 <sup>4)</sup>	3RT12 65-6AP36	3VL/S10V		63.0 ... 630 100	
160	280	without	3VL47 31-3DK36	3RT10 75-6AP36	3VL/S12		63.0 ... 630 100	
160	280	without	3VL47 31-3DK36	3RT12 66-6AP36	3VL/S10V		63.0 ... 630 100	
200	350	without	3VL57 50-3DK36	3RT10 75-6AP36	3VL/S12		63.0 ... 630 100	
200	350	without	3VL57 50-3DK36	3RT12 75-6AP36	3VL/S12V		63.0 ... 630 100	
250	430	without	3VL57 50-3DK36	3RT10 76-6AP36	3VL/S12		63.0 ... 630 100	
250	430	without	3VL57 50-3DK36	3RT12 76-6AP36	3VL/S12V		63.0 ... 630 100	

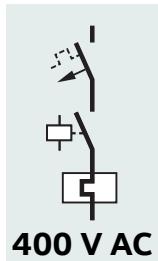
- 1) Nominal value at 400 V AC, 50 Hz for 4-pole standard motors. The specific starting and rated data of the motor to be protected are decisive when selecting devices.
- 2) Rated control supply voltage 230 V AC, 50 Hz.  
Other control voltages are also possible.

3) The necessary current detection modules are stated. In addition, the corresponding 3RB22/3RB23 and 3UF7 basic units are required.

4) Alternatively, 3VL47 31-3DK36 is possible.

# Motor starter protector/circuit breaker + contactor + SIMOCODE 3UF7/ 3RB22/3RB23 solid-state overload relay

CLASS 20, coordination types 2 and 1,  
Short-circuit breaking capacity  $I_q = 50 \text{ kA}$



Standard three-phase motor 4-pole at 400 V AC <sup>1)</sup>		Setting range Overload release	Motor starter protector/circuit breaker	Contactor <sup>2)</sup>	Size	Overload relay <sup>3)</sup>	Setting range Overload release	Short-circuit breaking capacity $I_q$
Rated power $P$ kW	Motor cur- rent (nomi- nal value) $I$ A	Motor star- ter protec- tor/circuit breaker A	Order No.	Order No.		Order No.	A	kA
<b>Coordination type 2</b>								
0.09	0.3	without	3RV13 21-0HC10	3RT10 24-1AP00	S0	3UF7 100-1AA0 or 3RB29 06-2BG1	0.30 ... 3.00	50
0.12	0.4	without	3RV13 21-0JC10	3RT10 24-1AP00	S0		0.30 ... 3.00	50
0.18	0.6	without	3RV13 21-0KC10	3RT10 24-1AP00	S0		0.30 ... 3.00	50
0.25	0.85	without	3RV13 21-1AC10	3RT10 24-1AP00	S0		0.30 ... 3.00	50
0.37	1.1	without	3RV13 21-1BC10	3RT10 24-1AP00	S0		0.30 ... 3.00	50
0.55	1.5	without	3RV13 21-1DC10	3RT10 24-1AP00	S0		0.30 ... 3.00	50
0.75	1.9	without	3RV13 21-1EC10	3RT10 24-1AP00	S0		0.30 ... 3.00	50
1.1	2.7	without	3RV13 21-1EC10	3RT10 24-1AP00	S0	3UF7 101-1AA0 or 3RB29 06-2DG1	2.40 ... 25.0	50
1.5	3.5	without	3RV13 21-1GC10	3RT10 24-1AP00	S0		2.40 ... 25.0	50
2.2	5	without	3RV13 21-1HC10	3RT10 24-1AP00	S0		2.40 ... 25.0	50
3	6.5	without	3RV13 21-1JC10	3RT10 26-1AP00	S0		2.40 ... 25.0	50
4	8.5	11.0 ... 16.0	3RV10 31-4AA10	3RT10 34-1AP00	S2		2.40 ... 25.0	50
5.5	11.5	18.0 ... 25.0	3RV10 31-4DA10	3RT10 34-1AP00	S2	3UF7 102-1AA0 or 3RB29 06-2JG1	2.40 ... 25.0	50
7.5	15.5	22.0 ... 32.0	3RV10 31-4EA10	3RT10 35-1AP00	S2		2.40 ... 25.0	50
11	22	28.0 ... 40.0	3RV10 31-4FA10	3RT10 36-1AP00	S2		10.0 ... 100	50
15	29	36.0 ... 50.0	3RV10 41-4HA10	3RT10 44-1AP00	S3		10.0 ... 100	50
18.5	35	without	3RV13 41-4JC10	3RT10 45-1AP00	S3		10.0 ... 100	50
22	41	57.0 ... 75.0	3RV10 41-4KA10	3RT10 46-1AP00	S3	3UF7 103-1AA0 or 3RB29 56-2TG2	10.0 ... 100	50
30	55	70.0 ... 90.0	3RV10 42-4LB10	3RT10 46-1AP00	S3		10.0 ... 100	50
37	66	without	3VL27 10-2DK33	3RT10 54-1AP36	3VL/S6		20.0 ... 200	50
45	80	without	3VL27 10-2DK33	3RT10 55-1AP36	3VL/S6		20.0 ... 200	50
55	97	without	3VL27 10-2DK33	3RT10 54-1AP36	3VL/S6		20.0 ... 200	50
75	132	without	3VL27 16-2DK33	3RT10 55-1AP36	3VL/S6	3UF7 104-1BA0 or 3RB29 66-2WH2	20.0 ... 200	50
90	160	without	3VL27 16-2DK33	3RT10 64-6AP36	3VL/S10		63.0 ... 630	50
110	195	without	3VL37 25-2DK36	3RT10 66-6AP36	3VL/S10		63.0 ... 630	50
110	195	without	3VL37 25-2DK36	3RT12 64-6AP36	3VL/S10V		63.0 ... 630	50
132	230	without	3VL37 25-2DK36	3RT12 65-6AP36	3VL/S10V		63.0 ... 630	50
160	280	without	3VL47 31-2DK36	3RT10 75-6AP36	3VL/S12	3UF7 104-... or 3RB29 66-...	63.0 ... 630	50
160	280	without	3VL47 31-2DK36	3RT12 66-6AP36	3VL/S10V		63.0 ... 630	50
200	350	without	3VL57 50-2DK36	3RT10 76-6AP36	3VL/S12		63.0 ... 630	50
200	350	without	3VL57 50-2DK36	3RT12 75-6AP36	3VL/S12V		63.0 ... 630	50
250	430	without	3VL57 50-2DK36	3RT12 76-6AP36	3VL/S12V		63.0 ... 630	50
<b>Coordination type 1</b>								
315	540	without	3VL77 12-1DE36	3TF69 44-0CM7	3VL/14	3UF7 104-... or 3RB29 66-...	63.0 ... 630	50

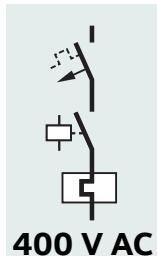
<sup>1)</sup> Nominal value at 400 V AC, 50 Hz for 4-pole standard motors. The specific starting and rated data of the motor to be protected are decisive when selecting devices.

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

<sup>3)</sup> The necessary current detection modules are stated. In addition, the corresponding 3RB22/3RB23 and 3UF7 basic units are required.

# Motor starter protector/circuit breaker + contactor + SIMOCODE 3UF7/ 3RB22/3RB23 solid-state overload relay

CLASS 20, coordination types 2 and 1,  
Short-circuit breaking capacity  $I_q \geq 100$  kA



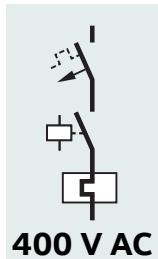
Standard three-phase motor 4-pole at 400 V AC <sup>1)</sup>		Setting range Overload release Motor star- tor protec- tor/circuit breaker	Motor starter protector/circuit breaker	Contactor <sup>2)</sup>	Size	Overload relay <sup>3)</sup>	Setting range Overload release Overload relay	Short-circuit breaking capacity $I_q$
Rated power P kW	Motor current (nominal value) I A	A	Order No.	Order No.		Order No.	A	kA
<b>Coordination type 2</b>								
0.09	0.3	without	3RV13 21-0HC10	3RT10 24-1AP00	S0	3UF7 100-1AA0 or 3RB29 06-2BG1	0.30 ... 3.00	130
0.12	0.4	without	3RV13 21-0JC10	3RT10 24-1AP00	S0		0.30 ... 3.00	130
0.18	0.6	without	3RV13 21-0KC10	3RT10 24-1AP00	S0		0.30 ... 3.00	130
0.25	0.85	without	3RV13 21-1AC10	3RT10 24-1AP00	S0		0.30 ... 3.00	130
0.37	1.1	without	3RV13 21-1BC10	3RT10 24-1AP00	S0		0.30 ... 3.00	130
0.55	1.5	without	3RV13 21-1DC10	3RT10 24-1AP00	S0		0.30 ... 3.00	130
0.75	1.9	without	3RV13 21-1EC10	3RT10 24-1AP00	S0		0.30 ... 3.00	130
1.1	2.7	without	3RV13 21-1EC10	3RT10 24-1AP00	S0	3UF7 101-1AA0 or 3RB29 06-2DG1	2.40 ... 25.0	130
1.5	3.5	without	3RV13 21-1GC10	3RT10 24-1AP00	S0		2.40 ... 25.0	130
2.2	5	without	3RV13 21-1HC10	3RT10 24-1AP00	S0		2.40 ... 25.0	130
3	6.5	without	3RV13 21-1JC10	3RT10 26-1AP00	S0		2.40 ... 25.0	130
4	8.5	11.0 ... 16.0	3RV10 31-4AA10	3RT10 34-1AP00	S2		2.40 ... 25.0	100
5.5	11.5	18.0 ... 25.0	3RV10 31-4DA10	3RT10 34-1AP00	S2		2.40 ... 25.0	100
7.5	15.5	22.0 ... 32.0	3RV10 31-4EA10	3RT10 35-1AP00	S2		2.40 ... 25.0	100
11	22	28.0 ... 40.0	3RV10 31-4FA10	3RT10 36-1AP00	S2	3UF7 102-1AA0 or 3RB29 06-2JG1	10.0 ... 100	100
15	29	36.0 ... 50.0	3RV10 42-4HA10	3RT10 44-1AP00	S3		10.0 ... 100	100
18.5	35	without	3RV13 42-4JC10	3RT10 45-1AP00	S3		10.0 ... 100	100
22	41	57.0 ... 75.0	3RV10 42-4KA10	3RT10 46-1AP00	S3		10.0 ... 100	100
30	55	70.0 ... 90.0	3RV10 42-1LB10	3RT10 46-1AP00	S3		10.0 ... 100	100
37	66	without	3VL27 10-3DK33	3RT10 54-1AP36	3VL/S6	3UF7 103-1AA0 or 3RB29 06-2TG2	20.0 ... 200	100
37	66	without	3VL27 16-3DK33	3RT10 54-1AP36	3VL/S6		20.0 ... 200	100
45	80	without	3VL27 10-3DK33 <sup>4)</sup>	3RT10 54-1AP36	3VL/S6		20.0 ... 200	100
55	97	without	3VL27 10-3DK33 <sup>4)</sup>	3RT10 55-1AP36	3VL/S6		20.0 ... 200	100
75	132	without	3VL27 16-3DK33 <sup>5)</sup>	3RT10 56-6AP36	3VL/S6		20.0 ... 200	100
90	160	without	3VL27 16-3DK33 <sup>5)</sup>	3RT10 64-6AP36	3VL/S10	3UF7 104-1BA0 or 3RB29 66-2WH2	63.0 ... 630	100
110	195	without	3VL37 25-3DK36	3RT10 66-6AP36	3VL/S10		63.0 ... 630	100
110	195	without	3VL37 25-3DK36	3RT12 64-6AP36	3VL/S10V		63.0 ... 630	100
132	230	without	3VL37 25-3DK36 <sup>6)</sup>	3RT10 75-6AP36	3VL/S12		63.0 ... 630	100
132	230	without	3VL37 25-3DK36 <sup>6)</sup>	3RT12 65-6AP36	3VL/S10V		63.0 ... 630	100
160	280	without	3VL47 31-3DK36	3RT10 75-6AP36	3VL/S12		63.0 ... 630	100
160	280	without	3VL47 31-3DK36	3RT12 66-6AP36	3VL/S10V		63.0 ... 630	100
200	350	without	3VL57 50-3DK36	3RT10 76-6AP36	3VL/S12		63.0 ... 630	100
200	350	without	3VL57 50-3DK36	3RT12 75-6AP36	3VL/S12V		63.0 ... 630	100
250	430	without	3VL57 50-3DK36	3RT12 76-6AP36	3VL/S12V		63.0 ... 630	100
<b>Coordination type 1</b>								
315	540	without	3VL77 12-3DE36	3TF69 44-0CM7	3VL/14	3UF7 104.. or 3RB29 66..	63.0 ... 630	100

- <sup>1)</sup> Nominal value at 400 V AC, 50 Hz for 4-pole standard motors. The specific starting and rated data of the motor to be protected are decisive when selecting devices.
- <sup>2)</sup> Rated control supply voltage 230 V AC, 50 Hz. Other control voltages are also possible.
- <sup>3)</sup> The necessary current detection modules are stated. In addition, the corresponding 3RB22/3RB23 and 3UF7 basic units are required.

- <sup>4)</sup> Alternatively, 3VL37 16-3DK33 is possible.
- <sup>5)</sup> Alternatively, 3VL37 25-3DK36 is possible.
- <sup>6)</sup> Alternatively, 3VL47 31-3DK36 is possible.

# Motor starter protector/circuit breaker + contactor + SIMOCODE 3UF7/ 3RB22/3RB23 solid-state overload relay

CLASS 30, coordination types 2 and 1,  
Short-circuit breaking capacity  $I_q = 50 \text{ kA}$



Standard three-phase motor 4-pole at 400 V AC <sup>1)</sup>		Setting range Overload release Motor starter protector/circuit breaker	Motor starter protector/circuit breaker	Contactor <sup>2)</sup>	Size	Overload relay <sup>3)</sup>	Setting range Overload release Overload relay	Short-circuit breaking capacity $I_q$
Rated power $P$ kW	Motor current (nominal value) $I$ A	A	Order No.	Order No.		Order No.	A	kA
<b>Coordination type 2</b>								
0.09	0.3	without	3RV13 21-1AC10	3RT10 24-1AP00	S0	3UF7 100-1AA0 or 3RB29 06-2BG1	0.30 ... 3.00	50
0.12	0.4	without	3RV13 21-1AC10	3RT10 24-1AP00	S0		0.30 ... 3.00	50
0.18	0.6	without	3RV13 21-1BC10	3RT10 24-1AP00	S0		0.30 ... 3.00	50
0.25	0.85	without	3RV13 21-1CC10	3RT10 26-1AP00	S0		0.30 ... 3.00	50
0.37	1.1	without	3RV10 21-1DA10	3RT10 26-1AP00	S0		0.30 ... 3.00	50
0.55	1.5	without	3RV13 21-1EC10	3RT10 26-1AP00	S0		0.30 ... 3.00	50
0.75	1.9	3.50 ... 5.00	3RV10 21-1FA10	3RT10 26-1AP00	S0		0.30 ... 3.00	50
1.1	2.7	without	3RV13 21-1GC10	3RT10 26-1AP00	S0		2.40 ... 25.0	50
1.5	3.5	without	3RV13 21-1HC10	3RT10 26-1AP00	S0		2.40 ... 25.0	50
2.2	5	9.00 ... 12.5	3RV10 21-1KA10	3RT10 26-1AP00	S0		2.40 ... 25.0	50
3	6.5	11.0 ... 16.0	3RV10 31-4AA10	3RT10 34-1AP00	S2	3UF7 101-1AA0 or 3RB29 06-2DG1	2.40 ... 25.0	50
4	8.5	14.0 ... 20.0	3RV10 31-4BA10	3RT10 34-1AP00	S2		2.40 ... 25.0	50
5.5	11.5	22.0 ... 32.0	3RV10 31-4EA10	3RT10 34-1AP00	S2		2.40 ... 25.0	50
7.5	15.5	28.0 ... 40.0	3RV10 31-4FA10	3RT10 35-1AP00	S2		2.40 ... 25.0	50
11	22	28.0 ... 40.0	3RV10 31-4FB10	3RT10 36-1AP00	S2		10.0 ... 100	50
15	29	36.0 ... 50.0	3RV10 42-4HB10	3RT10 44-1AP00	S3		10.0 ... 100	50
18.5	35	45.0 ... 63.0	3RV10 42-4JB10	3RT10 45-1AP00	S3		10.0 ... 100	50
22	41	57.0 ... 75.0	3RV10 42-4KB10	3RT10 46-1AP00	S3		10.0 ... 100	50
30	55	70.0 ... 90.0	3RV10 42-4LB10	3RT10 54-1AP36	S3/S6		10.0 ... 100	50
37	66	without	3VL27 10-2DK33	3RT10 54-1AP36	3VL/S6	3UF7 103-1AA0 or 3RB29 56-2TG2	20.0 ... 200	50
45	80	without	3VL27 10-2DK33	3RT10 55-1AP36	3VL/S6		20.0 ... 200	50
55	97	without	3VL27 16-2DK33	3RT10 56-6AP36	3VL/S6		20.0 ... 200	50
75	132	without	3VL27 16-2DK33	3RT10 64-6AP36	3VL/S10	3UF7 104-1BA0 or 3RB29 66-2WH2	63.0 ... 630	50
90	160	without	3VL27 16-2DK33 <sup>4)</sup>	3RT10 66-6AP36	3VL/S10		63.0 ... 630	50
90	160	without	3VL27 16-2DK33 <sup>4)</sup>	3RT12 64-6AP36	3VLS10V		63.0 ... 630	50
110	195	without	3VL37 25-2DK36	3RT12 65-6AP36	3VLS10V		63.0 ... 630	50
132	230	without	3VL37 25-2DK36 <sup>5)</sup>	3RT10 75-6AP36	3VLS12		63.0 ... 630	50
132	230	without	3VL37 25-2DK36 <sup>5)</sup>	3RT12 66-6AP36	3VLS10V		63.0 ... 630	50
160	280	without	3VL47 31-2DK36	3RT10 76-6AP36	3VLS12		63.0 ... 630	50
160	280	without	3VL47 31-2DK36	3RT12 75-6AP36	3VLS12V		63.0 ... 630	50
200	350	without	3VL57 50-2DK36	3RT12 76-6AP36	3VLS12V		63.0 ... 630	50
<b>Coordination type 1</b>								
250	430	without	3VL57 50-1DK36	3TF69 44-0CM7	3VL/14	3UF7 104... or 3RB29 66...	63.0 ... 630	50

<sup>1)</sup> Nominal value at 400 V AC, 50 Hz for 4-pole standard motors. The specific starting and rated data of the motor to be protected are decisive when selecting devices.

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

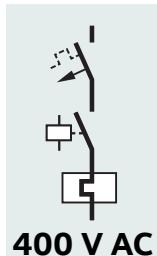
<sup>3)</sup> The necessary current detection modules are stated. In addition, the corresponding 3RB22/3RB23 and 3UF7 basic units are required.

<sup>4)</sup> Alternatively, 3VL37 25-2DK36 is possible.

<sup>5)</sup> Alternatively, 3VL47 31-2DK36 is possible.

# Motor starter protector/circuit breaker + contactor + SIMOCODE 3UF7/ 3RB22/3RB23 solid-state overload relay

CLASS 30, coordination types 2 and 1,  
Short-circuit breaking capacity  $I_q \geq 100$  kA



Standard three-phase motor 4-pole at 400 V AC <sup>1)</sup>		Setting range Overload release	Motor starter protector/circuit breaker	Contactor <sup>3)</sup>	Size	Overload relay <sup>4)</sup>	Setting range Overload release	Short-circuit breaking capacity $I_q$
Rated power P kW	Motor current (nominal value) I A	Motor star- ter protec- tor/circuit breaker <sup>2)</sup>	Order No.	Order No.		Order No.	A	kA
<b>Coordination type 2</b>								
0.09	0.3	without	3RV13 21-1AC10	3RT10 24-1AP00	S0	3UF7 100-1AA0 or 3RB29 06-2BG1	0.30 ... 3.00	130
0.12	0.4	without	3RV13 21-1AC10	3RT10 24-1AP00	S0		0.30 ... 3.00	130
0.18	0.6	without	3RV13 21-1BC10	3RT10 24-1AP00	S0		0.30 ... 3.00	130
0.25	0.85	without	3RV13 21-1CC10	3RT10 26-1AP00	S0		0.30 ... 3.00	130
0.37	1.1	2.20 ... 3.20	3RV10 21-1DA10	3RT10 26-1AP00	S0		0.30 ... 3.00	130
0.55	1.5	2.80 ... 4.00	3RV10 21-1EA10	3RT10 26-1AP00	S0		0.30 ... 3.00	130
0.75	1.9	3.50 ... 5.00	3RV10 21-1FA10	3RT10 26-1AP00	S0		0.30 ... 3.00	130
1.1	2.7	4.50 ... 6.30	3RV10 21-1GA10	3RT10 26-1AP00	S0		0.30 ... 3.00	130
1.5	3.5	5.50 ... 8.00	3RV10 21-1HA10	3RT10 26-1AP00	S0	3UF7 101-1AA0 or 3RB29 06-2DG1	2.40 ... 25.0	130
2.2	5	9.00 ... 12.5	3RV10 21-1KA10	3RT10 26-1AP00	S0		2.40 ... 25.0	130
3	6.5	11.0 ... 16.0	3RV10 31-4AA10	3RT10 34-1AP00	S2		2.40 ... 25.0	100
4	8.5	14.0 ... 20.0	3RV10 31-4BA10	3RT10 34-1AP00	S2		2.40 ... 25.0	100
5.5	11.5	22.0 ... 32.0	3RV10 31-4EA10	3RT10 34-1AP00	S2		2.40 ... 25.0	100
7.5	15.5	28.0 ... 40.0	3RV10 31-4FA10	3RT10 35-1AP00	S2		2.40 ... 25.0	100
11	22	28.0 ... 40.0	3RV10 31-4FB10	3RT10 36-1AP00	S2		10.0 ... 100	100
15	29	36.0 ... 50.0	3RV10 42-4HB10	3RT10 44-1AP00	S3		10.0 ... 100	100
18.5	35	45.0 ... 63.0	3RV10 42-4JB10	3RT10 45-1AP00	S3	3UF7 102-1AA0 or 3RB29 06-2JG1	10.0 ... 100	100
22	41	57.0 ... 75.0	3RV10 42-4KB10	3RT10 46-1AP00	S3		10.0 ... 100	100
30	55	70.0 ... 90.0	3RV10 42-4LB10	3RT10 54-1AP36	S3/S6		10.0 ... 100	100
30	55	70.0 ... 90.0	3RV10 42-4LB10	3RT10 54-1AP36	S3/S6		20.0 ... 200	100
37	66	without	3VL27 10-3DK33	3RT10 54-1AP36	3VL/S6		20.0 ... 200	100
37	66	without	3VL27 16-3DK33	3RT10 54-1AP36	3VL/S6		20.0 ... 200	100
45	80	without	3VL27 10-3DK33	3RT10 55-1AP36	3VL/S6		20.0 ... 200	100
45	80	without	3VL27 16-3DK33	3RT10 55-1AP36	3VL/S6		20.0 ... 200	100
55	97	without	3VL27 10-3DK33	3RT10 56-6AP36	3VL/S6	3UF7 103-1AA0 or 3RB29 56-2TG2	20.0 ... 200	100
55	97	without	3VL27 16-3DK33	3RT10 56-6AP36	3VL/S6		20.0 ... 200	100
75	132	without	3VL27 16-3DK33	3RT10 64-6AP36	3VL/S10		63.0 ... 630	100
90	160	without	3VL27 16-3DK33 <sup>5)</sup>	3RT10 65-6AP36	3VL/S10		63.0 ... 630	100
90	160	without	3VL27 16-3DK33 <sup>5)</sup>	3RT12 64-6AP36	3VL/S10V		63.0 ... 630	100
110	195	without	3VL37 25-3DK36	3RT12 65-6AP36	3VL/S10V		63.0 ... 630	100
132	230	without	3VL37 25-3DK36 <sup>6)</sup>	3RT10 75-6AP36	3VL/S12		63.0 ... 630	100
132	230	without	3VL37 25-3DK36 <sup>6)</sup>	3RT12 66-6AP36	3VL/S10V		63.0 ... 630	100
160	280	without	3VL47 31-3DK36	3RT10 76-6AP36	3VL/S12	3UF7 104-1BA0 or 3RB29 66-2WH2	63.0 ... 630	100
160	280	without	3VL47 31-3DK36	3RT12 75-6AP36	3VL/S12V		63.0 ... 630	100
200	350	without	3VL57 50-3DK36	3RT12 76-6AP36	3VL/S12V		63.0 ... 630	100
<b>Coordination type 1</b>								
250	430	without	3VL57 50-3DK36	3TF69 44-0CM7	3VL/14	3UF7 104-.. or 3RB29 66-..	63.0 ... 630	100

- 1) Nominal value at 400 V AC, 50 Hz for 4-pole standard motors. The specific starting and rated data of the motor to be protected are decisive when selecting devices.
- 2) The motor starter protector/circuit breaker must be set to the maximum current value.
- 3) Rated control supply voltage 230 V AC, 50 Hz.  
Other control voltages are also possible.

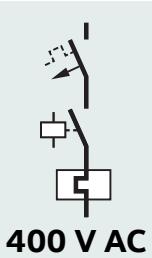
4) The necessary current detection modules are stated. In addition, the corresponding 3RB22/3RB23 and 3UF7 basic units are required.

5) Alternatively, 3VL37 25-3DK36 is possible.

6) Alternatively, 3VL47 31-3DK36 is possible.

# Motor starter protector/circuit breaker + contactor + SIMOCODE 3UF7

CLASS 40, coordination type 2,  
Short-circuit breaking capacity  $I_q = 50 \text{ kA}$



Standard three-phase motor 4-pole at 400 V AC <sup>1)</sup>		Setting range Overload release Motor starter protector/circuit breaker	Motor starter protector/circuit breaker	Contactor <sup>2)</sup>	Size	Overload relay <sup>3)</sup>	Setting range Overload release Overload relay	Short-circuit breaking capacity $I_q$
Rated power $P$ kW	Motor current (nominal value) $I$ A	A	Order No.	Order No.		Order No.	A	kA
0.09	0.3	without	3RV13 21-1AC10	3RT10 24-1AP00	S0	3UF7 100-1AA0	0.30 ... 3.00	50
0.12	0.4	without	3RV13 21-1BC10	3RT10 24-1AP00	S0		0.30 ... 3.00	50
0.18	0.6	without	3RV10 21-1BA10	3RT10 24-1AP00	S0		0.30 ... 3.00	50
0.25	0.85	1.80 ... 2.50	3RV10 21-1CA10	3RT10 26-1AP00	S0		0.30 ... 3.00	50
0.37	1.1	2.20 ... 3.20	3RV10 21-1DA10	3RT10 34-1AP00	S0/S2		0.30 ... 3.00	50
0.55	1.5	3.50 ... 5.00	3RV10 21-1FA10	3RT10 34-1AP00	S0/S2		0.30 ... 3.00	50
0.75	1.9	4.50 ... 6.30	3RV10 21-1GA10	3RT10 34-1AP00	S0/S2		0.30 ... 3.00	50
1.1	2.7	5.50 ... 8.00	3RV10 21-1HA10	3RT10 34-1AP00	S0/S2	3UF7 101-1AA0	2.40 ... 25.0	50
1.5	3.5	9.00 ... 12.5	3RV10 21-1KA10	3RT10 34-1AP00	S0/S2		2.40 ... 25.0	50
2.2	5	11.0 ... 16.0	3RV10 31-4AA10	3RT10 34-1AP00	S2		2.40 ... 25.0	50
3	6.5	14.0 ... 20.0	3RV10 31-4BA10	3RT10 34-1AP00	S2		2.40 ... 25.0	50
4	8.5	18.0 ... 25.0	3RV10 31-4DA10	3RT10 34-1AP00	S2		2.40 ... 25.0	50
5.5	11.5	22.0 ... 32.0	3RV10 31-4EA10	3RT10 34-1AP00	S2		2.40 ... 25.0	50
7.5	15.5	22.0 ... 32.0	3RV10 31-4EB10	3RT10 44-1AP00	S2/S3		10.0 ... 100	50
11	22	36.0 ... 50.0	3RV10 42-4HB10	3RT10 44-1AP00	S3	3UF7 102-1AA0	10.0 ... 100	50
15	29	45.0 ... 63.0	3RV10 42-4JB10	3RT10 45-1AP00	S3		10.0 ... 100	50
18.5	35	57.0 ... 75.0	3RV10 42-4KB10	3RT10 45-1AP00	S3		10.0 ... 100	50
22	41	70.0 ... 90.0	3RV10 42-4LB10	3RT10 54-1AP36	S3/S6		10.0 ... 100	50
30	55	70.0 ... 90.0	3RV10 42-4LB10	3RT10 54-1AP36	S3/S6		10.0 ... 100	50
37	66	without	3VL27 10-2DK33	3RT10 55-1AP36	3VLS6		20.0 ... 200	50
45	80	without	3VL27 16-2DK33	3RT10 56-6AP36	3VLS6		20.0 ... 200	50
55	97	without	3VL27 16-2DK33	3RT10 64-6AP36	3VLS10	3UF7 104-1BA0	63.0 ... 630	50
75	132	without	3VL37 25-2DK36	3RT12 65-6AP36	3VLS10V		63.0 ... 630	50
90	160	without	3VL37 25-2DK36	3RT12 66-6AP36	3VLS10V		63.0 ... 630	50
110	195	without	3VL47 31-2DK36	3RT10 76-6AP36	3VLS12		63.0 ... 630	50
132	230	without	3VL47 31-2DK36	3RT10 76-6AP36	3VLS12		63.0 ... 630	50
160	280	without	3VL57 50-2DK36	3RT12 76-6AP36	3VLS12V		63.0 ... 630	50
200	350	without	3VL67 80-1DE36	3RTF69 44-0CM7	3VL14		63.0 ... 630	50
250	430	without	3VL67 80-1DE36	3RTF69 44-0CM7	3VL14		63.0 ... 630	50

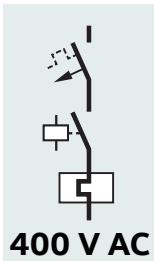
<sup>1)</sup> Nominal value at 400 V AC, 50 Hz for 4-pole standard motors. The specific starting and rated data of the motor to be protected are decisive when selecting devices.

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

<sup>3)</sup> The necessary current detection modules are stated. In addition, the corresponding 3RB22/3RB23 and 3UF7 basic units are required.

# Motor starter protector/circuit breaker + contactor + SIMOCODE 3UF7

CLASS 40, coordination type 2,  
Short-circuit breaking capacity  $I_q \geq 100$  kA



Standard three-phase motor 4-pole at 400 V AC <sup>1)</sup>		Setting range Overload release Motor starter protector/circuit breaker	Motor starter protector/circuit breaker	Contactor <sup>3)</sup>	Size	Overload relay <sup>4)</sup>	Setting range Overload release Overload relay	Short-circuit breaking capacity $I_q$
Rated power $P$ kW	Motor current (nominal value) $I$ A	A	Order No.	Order No.		Order No.	A	kA
0.09	0.3	without	3RV13 21-1AC10	3RT10 24-1AP00	S0	3UF7 100-1AA0	0.30 ... 3.00	130
0.12	0.4	without	3RV13 21-1BC10	3RT10 24-1AP00	S0		0.30 ... 3.00	130
0.18	0.6	without	3RV10 21-1BA10	3RT10 24-1AP00	S0		0.30 ... 3.00	130
0.25	0.85	1.80 ... 2.50	3RV10 21-1CA10	3RT10 26-1AP00	S0		0.30 ... 3.00	130
0.37	1.1	2.20 ... 3.20	3RV10 21-1DA10	3RT10 34-1AP00	S0/S2		0.30 ... 3.00	130
0.55	1.5	3.50 ... 5.00	3RV10 21-1FA10	3RT10 34-1AP00	S0/S2		0.30 ... 3.00	130
0.75	1.9	4.50 ... 6.30	3RV10 21-1GA10	3RT10 34-1AP00	S0/S2		0.30 ... 3.00	130
1.1	2.7	5.50 ... 8.00	3RV10 21-1HA10	3RT10 34-1AP00	S0/S2		2.40 ... 25.0	130
1.5	3.5	9.00 ... 12.5	3RV10 21-1KA10	3RT10 34-1AP00	S0/S2		2.40 ... 25.0	130
2.2	5	11.0 ... 16.0	3RV10 31-4AA10	3RT10 34-1AP00	S2		2.40 ... 25.0	100
3	6.5	14.0 ... 20.0	3RV10 31-4BA10	3RT10 34-1AP00	S2	3UF7 101-1AA0	2.40 ... 25.0	100
4	8.5	18.0 ... 25.0	3RV10 31-4DA10	3RT10 34-1AP00	S2		2.40 ... 25.0	100
5.5	11.5	22.0 ... 32.0	3RV10 31-4EA10	3RT10 34-1AP00	S2		2.40 ... 25.0	100
7.5	15.5	22.0 ... 32.0	3RV10 31-4EB10	3RT10 44-1AP00	S2/S3		10.0 ... 100	100
7.5	15.5	22.0 ... 32.0	3RV10 31-4EB10	3RT10 54-1AP36	S2/S6		10.0 ... 100	100
11	22	36.0 ... 50.0	3RV10 42-4HB10	3RT10 44-1AP00	S3		10.0 ... 100	100
11	22	36.0 ... 50.0	3RV10 42-4HB10	3RT10 54-1AP36	S3/S6		10.0 ... 100	100
15	29	45.0 ... 63.0	3RV10 42-4JB10	3RT10 45-1AP00	S3		10.0 ... 100	100
15	29	45.0 ... 63.0	3RV10 42-4JB10	3RT10 54-1AP36	S3/S6		10.0 ... 100	100
18.5	35	57.0 ... 75.0	3RV10 42-4KB10	3RT10 45-1AP00	S3		10.0 ... 100	100
18.5	35	57.0 ... 75.0	3RV10 42-4KB10	3RT10 54-1AP36	S3/S6	3UF7 103-1AA0	20.0 ... 200	100
22	41	70.0 ... 90.0	3RV10 42-4LB10	3RT10 54-1AP36	S3/S6	3UF7 102-1AA0	10.0 ... 100	100
22	41	70.0 ... 90.0	3RV10 42-4LB10	3RT10 54-1AP36	S3/S6	3UF7 103-1AA0	20.0 ... 200	100
30	55	70.0 ... 90.0	3RV10 42-4LB10	3RT10 54-1AP36	S3/S6	3UF7 102-1AA0	10.0 ... 100	100
30	55	70.0 ... 90.0	3RV10 42-4LB10	3RT10 54-1AP36	S3/S6	3UF7 103-1AA0	20.0 ... 200	100
37	66	without	3VL27 16-3DK33	3RT10 55-1AP36	3VL/S6	3UF7 104-1BA0	20.0 ... 200	100
45	80	without	3VL27 16-3DK33	3RT10 56-6AP36	3VL/S6		20.0 ... 200	100
55	97	without	3VL37 25-3DK36	3RT10 64-6AP36	3VL/S10		63.0 ... 630	100
55	97	without	3VL37 25-3DK36	3RT12 64-6AP36	3VL/S10V		63.0 ... 630	100
75	132	without	3VL47 31-3DK36	3RT10 75-6AP36	3VL/S12		63.0 ... 630	100
90	160	without	3VL47 31-3DK36	3RT10 75-6AP36	3VL/S12		63.0 ... 630	100
110	195	without	3VL47 31-3DK36	3RT10 75-6AP36	3VL/S12		63.0 ... 630	100
132	230	without	3VL57 50-3DK36	3RT10 76-6AP36	3VL/S12		63.0 ... 630	100
160	280	without	3VL57 50-3DK36	3RT12 76-6AP36	3VL/S12V		63.0 ... 630	100

<sup>1)</sup> Nominal value at 400 V AC, 50 Hz for 4-pole standard motors. The specific starting and rated data of the motor to be protected are decisive when selecting devices.

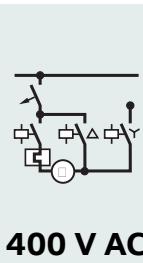
<sup>2)</sup> The motor starter protector/circuit breaker must be set to the maximum current value.

<sup>3)</sup> Rated control supply voltage 230 V AC, 50 Hz.  
Other control voltages are also possible.

<sup>4)</sup> The necessary current detection modules are stated. In addition, the corresponding 3RB22/3RB23 and 3UF7 basic units are required.

# Motor starter protector + star-delta combination + thermal overload relay

CLASS 10, coordination types 2 and 1,  
Short-circuit breaking capacity  $I_q = 50$  kA



Standard three-phase motor 4-pole at 400 V AC <sup>1)</sup>		Setting range Overload release	Motor starter protector	Contactors <sup>2)</sup>		Size	Overload relay	Setting range Overload release	Short-circuit breaking capacity $I_q$
Rated power $P$	Motor current (nominal value) $I$	Motor starter protector		Line contactor + delta contactor	Star contactor			Overload relay	
kW	A	A	Order No.	Order No.	Order No.		Order No.	A	kA
<b>Coordination type 2</b>									
5.5	11.5	without	3RV13 21-4AC10	3RT10 26-1AP00	3RT10 24-1AP00	S0	3RU11 26-1HB0	5.50 ... 8.00	50
7.5	15.5	without	3RV13 21-4BC10	3RT10 26-1AP00	3RT10 24-1AP00	S0	3RU11 26-1JB0	7.00 ... 10.0	50
11	22	without	3RV13 31-4DC10	3RT10 34-1AP00	3RT10 24-1AP00	S2/S0	3RU11 36-4AB0	11.0 ... 16.0	50
15	29	without	3RV13 31-4FC10	3RT10 34-1AP00	3RT10 24-1AP00	S2/S0	3RU11 36-4BB0	14.0 ... 20.0	50
18.5	35	without	3RV13 31-4FC10	3RT10 35-1AP00	3RT10 24-1AP00	S2/S0	3RU11 36-4DB0	18.0 ... 25.0	50
22	41	without	3RV13 31-4GC10	3RT10 36-1AP00	3RT10 26-1AP00	S2/S0	3RU11 36-4EB0	22.0 ... 32.0	50
30	55	without	3RV13 41-4JC10	3RT10 44-1AP00	3RT10 26-1AP00	S3/S0	3RU11 46-4FB0	28.0 ... 40.0	50
37	66	without	3RV13 41-4KC10	3RT10 44-1AP00	3RT10 34-1AP00	S3/S2	3RU11 46-4HB0	36.0 ... 50.0	50
45	80	without	3RV13 41-4LC10	3RT10 45-1AP00	3RT10 34-1AP00	S3/S2	3RU11 46-4JB0	45.0 ... 63.0	50
<b>Coordination type 1</b>									
5.5	11.5	9.00 ... 12.0 <sup>3)</sup>	3RV10 11-1KA10	3RT10 15-1AP01	3RT10 15-1AP00	S00	3RU11 16-1HB0	5.50 ... 8.00	50
7.5	15.5	without	3RV13 21-4BC10	3RT10 16-1AP01	3RT10 15-1AP00	S0/S00	3RU11 16-1JB0	7.00 ... 10.0	50
11	22	without	3RV13 21-4DC10	3RT10 24-1AP00	3RT10 24-1AP00	S0	3RU11 26-4AB0	11.0 ... 16.0	50
15	29	without	3RV13 31-4FC10	3RT10 26-1AP00	3RT10 24-1AP00	S2/S0	3RU11 26-4BB0	14.0 ... 20.0	50
18.5	35	without	3RV13 31-4FC10	3RT10 26-1AP00	3RT10 24-1AP00	S2/S0	3RU11 26-4DB0	20.0 ... 25.0	50
22	41	without	3RV13 31-4GC10	3RT10 34-1AP00	3RT10 26-1AP00	S2/S0	3RU11 36-4EB0	22.0 ... 32.0	50
30	55	without	3RV13 41-4JC10	3RT10 34-1AP00	3RT10 26-1AP00	S3/S2/S0	3RU11 36-4FB0	28.0 ... 40.0	50
37	66	without	3RV13 41-4KC10	3RT10 35-1AP00	3RT10 34-1AP00	S3/S2	3RU11 36-4GB0	36.0 ... 45.0	50
45	80	without	3RV13 41-4LC10	3RT10 36-1AP00	3RT10 34-1AP00	S3/S2	3RU11 36-4HB0	40.0 ... 50.0	50

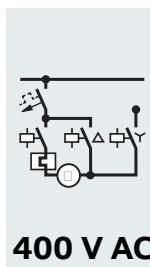
<sup>1)</sup> Nominal value at 400 V AC, 50 Hz for 4-pole standard motors. The specific starting and rated data of the motor to be protected are decisive when selecting devices.

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

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

# Motor starter protector/circuit breaker + star-delta combination + 3RB20/3RB21 solid-state overload relay

CLASS 5 and CLASS 10, coordination type 2,  
Short-circuit breaking capacity  $I_q = 50 \text{ kA}$



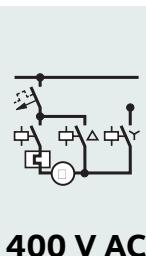
Standard three-phase motor 4-pole at 400 V AC <sup>1)</sup>	Setting range Overload release	Motor starter protector/circuit breaker	Contactors <sup>2)</sup>		Size	Overload relay	Setting range Overload release	Short-circuit breaking capacity $I_q$	
Rated power $P$	Motor current (nominal value) $I$	Motor starter protector/circuit breaker	Order No.	Order No.	Order No.	Order No.	Overload relay	kA	
kW	A	A					A	kA	
5.5	11.5	without	3RV13 21-1KC10	3RT10 26-1AP00	3RT10 24-1AP00	S0	3RB20 26-1QBO or 3RB21 23-4QBO	6.00 ... 25.0	50
7.5	15.5	14.0 ... 20.0	3RV10 21-4BA10 <sup>3)</sup>	3RT10 26-1AP00	3RT10 24-1AP00	S0		6.00 ... 25.0	50
11	22	without	3RV13 31-4EC10	3RT10 34-1AP00	3RT10 24-1AP00	S2/S0	3RB20 36-1UB0 or 3RB2133-4UB0	12.5 ... 50.0	50
15	29	28.0 ... 40.0	3RV10 31-4FA10 <sup>3)</sup>	3RT10 35-1AP00	3RT10 24-1AP00	S2/S0		12.5 ... 50.0	50
18.5	35	without	3RV13 41-4FC10	3RT10 44-1AP00	3RT10 34-1AP00	S3/S2	3RB20 46-1UB0 or 3RB2143-4UB0	12.5 ... 50.0	50
22	41	without	3RV13 41-4HC10	3RT10 44-1AP00	3RT10 34-1AP00	S3/S2		12.5 ... 50.0	50
30	55	without	3RV13 41-4JC10	3RT10 44-1AP00	3RT10 34-1AP00	S3/S2	3RB20 46-1EB0 or 3RB2143-4EB0	25.0 ... 100	50
37	66	57.0 ... 75.0	3RV13 41-4KC10 <sup>3)</sup>	3RT10 45-1AP00	3RT10 34-1AP00	S3/S2		25.0 ... 100	50
45	80	70.0 ... 90.0	3RV1 041-4LA10 <sup>3)</sup>	3RT10 46-1AP00	3RT10 34-1AP00	S3/S2		25.0 ... 100	50
55	97	without	3VL27 10-2DK33	3RT10 54-1AP36	3RT10 44-1AP00	S6/S3	3RB20 56-1FW2 or 3RB2153-4FW2	50.0 ... 200	50
75	132	without	3VL27 16-2DK33	3RT10 55-6AP36	3RT10 44-1AP00	S6/S3	3RB20 56-1FC2 or 3RB2153-4FC2	50.0 ... 200	50
90	160	without	3VL27 16-2DK33	3RT10 55-6AP36	3RT10 44-1AP00	S6/S3		50.0 ... 200	50
110	195	without	3VL37 25-2DK36	3RT10 64-6AP36	3RT10 54-1AP36	S10/S6	3RB20 66-1GC2 or 3RB2163-4GC2	55.0 ... 250	50
132	230	without	3VL47 25-2DK36	3RT10 65-6AP36	3RT10 54-1AP36	S10/S6		55.0 ... 250	50
160	280	without	3VL47 31-2DK36	3RT10 66-6AP36	3RT10 54-1AP36	S10/S6	3RB20 66-1MC2	160 ... 630	50
200	350	without	3VL57 50-2DK36	3RT10 75-6AP36	3RT10 64-6AP36	S12/S10	3RB20 66-1MC2 or 3RB2163-4MC2	160 ... 630	50
250	430	without	3VL57 50-2DK36	3RT10 75-6AP36	3RT10 64-6AP36	S12/S10		160 ... 630	50

<sup>1)</sup> Nominal value at 400 V AC, 50 Hz for 4-pole standard motors. The specific starting and rated data of the motor to be protected are decisive when selecting devices.

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

<sup>3)</sup> The motor starter protector/circuit breaker must be set to the maximum current value.

**Motor starter protector/circuit breaker +  
star-delta combination +  
SIMOCODE 3UF7/3RB22/3RB23 solid-state overload relay  
CLASS 5 and CLASS 10, coordination type 2,  
Short-circuit breaking capacity  $I_q = 50 \text{ kA}$**



Standard three-phase motor 4-polig bei AC 400 V <sup>1)</sup>		Setting range Overload release	Motor starter protector/circuit breaker	Contactors <sup>2)</sup>		Size	Overload relay	Setting range Overload release	Short-circuit breaking capacity $I_q$
Rated power $P$	Motor current (nominal value) $I$	Motor starter protector/circuit breaker		Line contactor + delta contactor	Star contactor		Order No.	A	kA
kW	A	A	Order No.	Order No.	Order No.				
5.5	11.5	without	3RV13 21-1KC10	3RT10 26-1AP00	3RT10 24-1AP00	S0	3UF7 101-1AA0 or 3RB29 06-2DG1	2.40 ... 25.0	50
7.5	15.5	14.0 ... 20.0	3RV10 21-4BA10 <sup>3)</sup>	3RT10 26-1AP00	3RT10 24-1AP00	S2/S0		2.40 ... 25.0	50
11	22	without	3RV13 31-4EC10	3RT10 34-1AP00	3RT10 24-1AP00	S2/S0	3UF7 102-1AA0 or 3RB29 06-2JG1	10.0 ... 100	50
15	29	28.0 ... 40.0	3RV10 31-4FA10 <sup>3)</sup>	3RT10 35-1AP00	3RT10 24-1AP00	S2/S0		10.0 ... 100	50
18.5	35	without	3RV13 41-4FC10	3RT10 44-1AP00	3RT10 34-1AP00	S3/S2		10.0 ... 100	50
22	41	without	3RV13 41-4HC10	3RT10 44-1AP00	3RT10 34-1AP00	S3/S2		10.0 ... 100	50
30	55	without	3RV13 41-4JC10	3RT10 44-1AP00	3RT10 34-1AP00	S3/S2		10.0 ... 100	50
37	66	without	3RV13 41-4KC10	3RT10 45-1AP00	3RT10 34-1AP00	S3/S2		10.0 ... 100	50
45	80	70.0 ... 90.0	3RV13 41-4LA10 <sup>3)</sup>	3RT10 46-1AP00	3RT10 34-1AP00	S3/S2		10.0 ... 100	50
55	97	without	3VL27 10-2DK33	3RT10 54-1AP36	3RT10 44-1AP00	S6/S3	3UF7 103-1AA0 or 3RB29 56-2TG2	20.0 ... 200	50
75	132	without	3VL27 16-2DK33	3RT10 55-6AP36	3RT10 44-1AP00	S6/S3		20.0 ... 200	50
90	160	without	3VL27 16-2DK33	3RT10 55-6AP36	3RT10 44-1AP00	S6/S3		20.0 ... 200	50
110	195	without	3VL37 25-2DK36	3RT10 64-6AP36	3RT10 54-1AP36	S10/S6	3UF7 104-1BA0 or 3RB29 66-2WH2	63.0 ... 630	50
132	230	without	3VL47 25-2DK36	3RT10 65-6AP36	3RT10 54-1AP36	S10/S6		63.0 ... 630	50
160	280	without	3VL47 31-2DK36	3RT10 66-6AP36	3RT10 54-1AP36	S10/S6		63.0 ... 630	50
200	350	without	3VL57 50-2DK36	3RT10 75-6AP36	3RT10 64-6AP36	S12/S10		63.0 ... 630	50
250	430	without	3VL57 50-2DK36	3RT10 75-6AP36	3RT10 64-6AP36	S12/S10		63.0 ... 630	50

<sup>1)</sup> Nominal value at 400 V AC, 50 Hz for 4-pole standard motors. The specific starting and rated data of the motor to be protected are decisive when selecting devices.

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

<sup>3)</sup> The motor starter protector/circuit breaker must be set to the maximum current value.

# Motor starter protector/circuit breaker + contactor

CLASS 10, coordination type 1,  
Short-circuit breaking capacity  $I_q = 50 \text{ kA}$



**500 V AC**

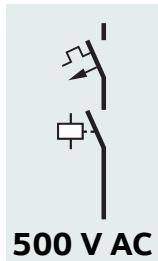
Standard three-phase motor 4-pole at 500 V AC <sup>1)</sup>		Setting range Overload release Motor starter pro- tector/circuit brea- ker	Motor starter protector/ circuit breaker	Contactor <sup>2)</sup>	Size	Short-circuit breaking capacity $I_q$
Rated power $P$ kW	Motor current (nominal value) $I$ A	A	Order No.	Order No.		kA
0.06	0.16	0.14 ... 0.20	3RV10 11-0BA10	3RT10 15-1AP01	S00	50
0.09	0.24	0.18 ... 0.25	3RV10 11-0CA10	3RT10 15-1AP01	S00	50
0.12	0.32	0.22 ... 0.32	3RV10 11-0DA10	3RT10 15-1AP01	S00	50
0.12	0.32	0.28 ... 0.40	3RV10 11-0EA10	3RT10 15-1AP01	S00	50
0.18	0.48	0.35 ... 0.50	3RV10 11-0FA10	3RT10 15-1AP01	S00	50
0.18	0.48	0.45 ... 0.63	3RV10 11-0GA10	3RT10 15-1AP01	S00	50
0.25	0.68	0.55 ... 0.80	3RV10 11-0HA10	3RT10 15-1AP01	S00	50
0.37	0.88	0.70 ... 1.00	3RV10 11-0JA10	3RT10 15-1AP01	S00	50
0.55	1.2	0.90 ... 1.25	3RV10 11-0KA10	3RT10 15-1AP01	S00	50
0.75	1.5	1.10 ... 1.60	3RV10 11-1AA10	3RT10 15-1AP01	S00	50
0.75	1.5	1.40 ... 2.00	3RV10 11-1BA10	3RT10 15-1AP01	S00	50
1.1	2.2	1.80 ... 2.50	3RV10 11-1CA10	3RT10 15-1AP01	S00	50
1.5	2.9	2.20 ... 3.20	3RV10 11-1DA10	3RT10 15-1AP01	S00	50
2.2	4.0	3.50 ... 5.00	3RV10 11-1FA10	3RT10 15-1AP01	S00	50
3	5.2	4.50 ... 6.30	3RV10 11-1GA10	3RT10 15-1AP01	S00	50
4	6.8	5.50 ... 8.00	3RV10 11-1HA10	3RT10 16-1AP01	S00	50
5.5	9.2	7.00 ... 10.0	3RV10 11-1JA10	3RT10 17-1AP01	S00	50
7.5	12.4	9.00 ... 12.5	3RV10 21-1KA10	3RT10 25-1AP00	S0	50
7.5	12.4	11.0 ... 16.0	3RV10 21-4AA10	3RT10 25-1AP00	S0	50
11	17.6	14.0 ... 20.0	3RV10 21-4BA10	3RT10 26-1AP00	S0	50
15	23	18.0 ... 25.0	3RV10 31-4DA10	3RT10 34-1AP00	S2	50
18.5	28	22.0 ... 32.0	3RV10 31-4EA10	3RT10 34-1AP00	S2	50
22	33	28.0 ... 40.0	3RV10 31-4FA10	3RT10 35-1AP00	S2	50
30	44	36.0 ... 45.0	3RV10 31-4GA10	3RT10 36-1AP00	S2	50
30	44	40.0 ... 50.0	3RV10 31-4HA10	3RT10 36-1AP00	S2	50
37	53	45.0 ... 63.0	3RV10 41-4JA10	3RT10 44-1AP00	S3	50
45	64	57.0 ... 75.0	3RV10 41-4KA10	3RT10 44-1AP00	S3	50
55	78	70.0 ... 90.0	3RV10 41-4LA10	3RT10 45-1AP00	S3	50
75	106	64.0 ... 160	3VL27 16-2AP33	3RT10 54-6AP36	S6	50
90	128	64.0 ... 160	3VL27 16-2AP33	3RT10 55-6AP36	S6	50
110	156	64.0 ... 160	3VL27 16-2AP33 <sup>3)</sup>	3RT10 56-6AP36	S6	50
132	184	80.0 ... 200	3VL37 20-2AP36 <sup>4)</sup>	3RT10 64-6AP36	S10	50
132	184	80.0 ... 200	3VL37 20-2AP36 <sup>4)</sup>	3RT12 64-6AP36	S10V	50
160	224	100 ... 250	3VL37 25-2AP36 <sup>5)</sup>	3RT10 65-6AP36	S10	50
160	224	100 ... 250	3VL37 25-2AP36 <sup>5)</sup>	3RT12 65-6AP36	S10V	50
200	280	125 ... 315	3VL47 31-2AP36	3RT10 66-6AP36	S10	50
200	280	125 ... 315	3VL47 31-2AP36	3RT12 66-6AP36	S10V	50
250	344	200 ... 500	3VL57 50-2AP36	3RT10 75-6AP36	S12	50
250	344	200 ... 500	3VL57 50-2AP36	3RT12 75-6AP36	S12V	50
315	432	200 ... 500	3VL57 50-2AP36	3RT10 76-6AP36	S12	50
315	432	200 ... 500	3VL57 50-2AP36	3RT12 76-6AP36	S12V	50
355	488	200 ... 500	3VL57 50-2AP36	3RT10 76-6AP36	S12	50
355	488	200 ... 500	3VL57 50-2AP36	3RT12 76-6AP36	S12V	50

- 1) Nominal value at 500 V AC, 50 Hz for 4-pole standard motors. The specific starting and rated data of the motor to be protected are decisive when selecting devices.
- 2) Rated control supply voltage 230 V AC, 50 Hz.  
Other control voltages are also possible.

- 3) Alternatively, 3VL37 20-2AP36 is possible.  
4) Alternatively, 3VL37 25-2AP36 is possible.  
5) Alternatively, 3VL47 31-2AP36 is possible.

# Motor starter protector/circuit breaker + contactor

CLASS 10, coordination type 2,  
Short-circuit breaking capacity  $I_q = 50 \text{ kA}$



Standard three-phase motor 4-pole at 500 V AC <sup>1)</sup>		Setting range Overload release Motor starter protector/circuit breaker	Motor starter protector/circuit breaker	Contactor <sup>2)</sup>	Size	Short-circuit breaking capacity $I_q$
Rated power $P$ kW	Motor current (nominal value) $I$ A	A	Order No.	Order No.		kA
0.06	0.16	0.14 ... 0.20	3RV10 11-0BA10	3RT10 15-1AP01	S00	50
0.09	0.24	0.18 ... 0.25	3RV10 11-0CA10	3RT10 15-1AP01	S00	50
0.12	0.32	0.22 ... 0.32	3RV10 11-0DA10	3RT10 15-1AP01	S00	50
0.12	0.32	0.28 ... 0.40	3RV10 11-0EA10	3RT10 15-1AP01	S00	50
0.18	0.48	0.35 ... 0.50	3RV10 11-0FA10	3RT10 15-1AP01	S00	50
0.18	0.48	0.45 ... 0.63	3RV10 11-0GA10	3RT10 15-1AP01	S00	50
0.25	0.68	0.55 ... 0.80	3RV10 11-0HA10	3RT10 15-1AP01	S00	50
0.37	0.88	0.70 ... 1.00	3RV10 11-0JA10	3RT10 15-1AP01	S00	50
0.55	1.2	0.90 ... 1.25	3RV10 11-0KA10	3RT10 15-1AP01	S00	50
0.75	1.5	1.10 ... 1.60	3RV10 11-1AA10	3RT10 15-1AP01	S00	50
0.75	1.5	1.40 ... 2.00	3RV10 21-1BA10	3RT10 24-1AP00	S0	50
1.1	2.2	1.80 ... 2.50	3RV10 21-1CA10	3RT10 26-1AP00	S0	50
1.5	2.9	2.20 ... 3.20	3RV10 21-1DA10	3RT10 34-1AP00	S0/S2	50
2.2	4.0	3.50 ... 5.00	3RV10 21-1FA10	3RT10 34-1AP00	S0/S2	50
3	5.2	4.50 ... 6.30	3RV10 21-1GA10	3RT10 34-1AP00	S0/S2	50
4	6.8	5.50 ... 8.00	3RV10 21-1HA10	3RT10 34-1AP00	S0/S2	50
5.5	9.2	7.00 ... 10.0	3RV10 21-1JA10	3RT10 34-1AP00	S0/S2	50
7.5	12.4	9.00 ... 12.5	3RV10 21-1KA10	3RT10 34-1AP00	S0/S2	50
7.5	12.4	11.0 ... 16.0	3RV10 31-4AA10	3RT10 34-1AP00	S2	50
11	17.6	14.0 ... 20.0	3RV10 31-4BA10	3RT10 34-1AP00	S2	50
15	23	18.0 ... 25.0	3RV10 31-4DA10	3RT10 34-1AP00	S2	50
18.5	28	22.0 ... 32.0	3RV10 31-4EA10	3RT10 34-1AP00	S2	50
22	33	28.0 ... 40.0	3RV10 31-4FA10	3RT10 35-1AP00	S2	50
30	44	36.0 ... 45.0	3RV10 31-4GA10	3RT10 36-1AP00	S2	50
30	44	40.0 ... 50.0	3RV10 31-4HA10	3RT10 36-1AP00	S2	50
37	53	45.0 ... 63.0	3RV10 41-4JA10	3RT10 44-1AP00	S3	50
45	64	57.0 ... 75.0	3RV10 41-4KA10	3RT10 44-1AP00	S3	50
55	78	70.0 ... 90.0	3RV10 41-4LA10	3RT10 45-1AP00	S3	50
75	106	64.0 ... 160	3VL27 16-2AP33	3RT10 54-1AP36	S6	50
90	128	64.0 ... 160	3VL27 16-2AP33 <sup>3)</sup>	3RT10 55-6AP36	S6	50
110	156	64.0 ... 160	3VL27 16-2AP33 <sup>4)</sup>	3RT10 56-6AP36	S6	50
132	184	80.0 ... 200	3VL37 20-2AP36 <sup>4)</sup>	3RT10 64-6AP36	S10	50
132	184	80.0 ... 200	3VL37 20-2AP36 <sup>5)</sup>	3RT12 64-6AP36	S10V	50
160	224	100 ... 250	3VL37 25-2AP36 <sup>5)</sup>	3RT10 65-6AP36	S10	50
160	224	100 ... 250	3VL37 25-2AP36	3RT12 65-6AP36	S10V	50
200	280	125 ... 315	3VL47 31-2AP36	3RT10 66-6AP36	S10	50
200	280	125 ... 315	3VL47 31-2AP36	3RT12 66-6AP36	S10V	50
250	344	200 ... 500	3VL57 50-2AP36	3RT10 75-6AP36	S12	50
250	344	200 ... 500	3VL57 50-2AP36	3RT12 76-6AP36	S12V	50
315	432	200 ... 500	3VL57 50-2AP36	3RT10 76-6AP36	S12	50
315	432	200 ... 500	3VL57 50-2AP36	3RT12 76-6AP36	S12V	50
355	488	200 ... 500	3VL57 50-2AP36	3RT10 76-6AP36	S12	50
355	488	200 ... 500	3VL57 50-2AP36	3RT12 76-6AP36	S12V	50

1) Nominal value at 500 V AC, 50 Hz for 4-pole standard motors. The specific starting and rated data of the motor to be protected are decisive when selecting devices.

2) Rated control supply voltage 230 V AC, 50 Hz.  
Other control voltages are also possible.

3) Alternatively, 3VL37 20-2AS36 is possible.

4) Alternatively, VL37 25-2AS36 is possible.

5) Alternatively, 3VL47 31-2AS36 is possible.

# Motor starter protector/circuit breaker + contactor

CLASS 20, coordination type 2,  
Short-circuit breaking capacity  $I_q = 50 \text{ kA}$



**500 V AC**

Standard three-phase motor 4-pole at 500 V AC <sup>1)</sup>		Setting range Overload release Motor starter protector/circuit breaker	Motor starter protector/circuit breaker	Contactor <sup>2)</sup>	Size	Short-circuit breaking capacity $I_q$
Rated power $P$ kW	Motor current (nominal value) $I$ A	A	Order No.	Order No.		kA
7.5	12.4	11.0 ... 16.0	3RV10 31-4AB10	3RT10 34-1AP00	S2	50
11	17.6	14.0 ... 20.0	3RV10 31-4BB10	3RT10 34-1AP00	S2	50
11	17.6	18.0 ... 25.0	3RV10 31-4DB10	3RT10 34-1AP00	S2	50
15	23	22.0 ... 32.0	3RV10 31-4EB10	3RT10 35-1AP00	S2	50
18.5	28	22.0 ... 32.0	3RV10 31-4EB10	3RT10 44-1AP00	S2/S3	50
18.5	28	28.0 ... 40.0	3RV10 42-4FB10	3RT10 44-1AP00	S3	50
22	33	28.0 ... 40.0	3RV10 42-4FB10	3RT10 44-1AP00	S3	50
30	44	36.0 ... 50.0	3RV10 42-4HB10	3RT10 44-1AP00	S3	50
30	44	45.0 ... 63.0	3RV10 42-4JB10	3RT10 44-1AP00	S3	50
37	53	45.0 ... 63.0	3RV10 42-4JB10	3RT10 45-1AP00	S3	50
37	53	57.0 ... 75.0	3RV10 42-4KB10	3RT10 45-1AP00	S3	50
45	64	57.0 ... 75.0	3RV10 42-4KB10	3RT10 54-1AP36	S3/S6	50
55	79	70.0 ... 90.0	3RV10 42-4LB10	3RT10 54-1AP36	S3/S6	50
75	106	64.0 ... 160	3VL27 16-2AS33	3RT10 55-6AP36	S6	50
90	128	64.0 ... 160	3VL27 16-2AS33	3RT10 56-6AP36	S6	50
110	156	64.0 ... 160	3VL27 16-2AS33 <sup>3)</sup>	3RT10 64-6AP36	S10	50
132	184	80.0 ... 200	3VL37 20-2AS36 <sup>4)</sup>	3RT10 65-6AP36	S10	50
132	184	80.0 ... 200	3VL37 20-2AS36 <sup>4)</sup>	3RT10 66-6AP36	S10	50
132	184	80.0 ... 200	3VL37 20-2AS36 <sup>4)</sup>	3RT12 64-6AP36	S10V	50
160	224	100 ... 250	3VL37 25-2AS36 <sup>5)</sup>	3RT12 65-6AP36	S10V	50
200	280	125 ... 315	3VL47 31-2AS36	3RT12 66-6AP36	S10V	50
200	280	125 ... 315	3VL47 31-2AS36	3RT10 75-6AP36	S12	50
250	344	200 ... 500	3VL57 50-2AS36	3RT10 76-6AP36	S12	50
250	344	200 ... 500	3VL57 50-2AS36	3RT12 75-6AP36	S12V	50
315	432	200 ... 500	3VL57 50-2AS36	3RT12 76-6AP36	S12V	50
255	488	200 ... 500	3VL57 50-2AS36	3RT12 76-6AP36	S12V	50

<sup>1)</sup> Nominal value at 500 V AC, 50 Hz for 4-pole standard motors. The specific starting and rated data of the motor to be protected are decisive when selecting devices.

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

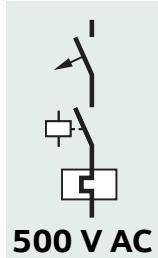
<sup>3)</sup> Alternatively, 3VL37 20-2AS36 is possible.

<sup>4)</sup> Alternatively, 3VL37 25-2AS36 is possible.

<sup>5)</sup> Alternatively, 3VL47 31-2AS36 is possible.

# Motor starter protector + contactor + thermal overload relay

CLASS 10, coordination type 1,  
Short-circuit breaking capacity  $I_q = 50 \text{ kA}$



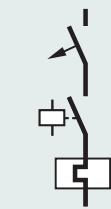
Standard three-phase motor 4-pole at 500 V AC <sup>1)</sup> Rated power $P$	Motor current (nominal value) $I$	Setting range Overload release Motor star- ter protector	Motor starter protector	Contactor <sup>2)</sup>	Size	Overload relay	Setting range Overload release Overload relay	Short-circuit breaking capacity $I_q$
kW	A	A	Order No.	Order No.		Order No.	A	kA
0.06	0.16	without	3RV13 21-0BC10	3RT10 15-1AP01	S0/S00	3RU11 16-0BB0	0.14 ... 0.20	50
0.09	0.24	without	3RV13 21-0CC10	3RT10 15-1AP01	S0/S00	3RU11 16-0CB0	0.18 ... 0.25	50
0.12	0.32	without	3RV13 21-0DC10	3RT10 15-1AP01	S0/S00	3RU11 16-0DB0	0.22 ... 0.32	50
0.12	0.32	without	3RV13 21-0EC10	3RT10 15-1AP01	S0/S00	3RU11 16-0EB0	0.28 ... 0.40	50
0.18	0.48	without	3RV13 21-0FC10	3RT10 15-1AP01	S0/S00	3RU11 16-0FB0	0.35 ... 0.50	50
0.18	0.48	without	3RV13 21-0GC10	3RT10 15-1AP01	S0/S00	3RU11 16-0GB0	0.45 ... 0.63	50
0.25	0.68	without	3RV13 21-0HC10	3RT10 15-1AP01	S0/S00	3RU11 16-0HB0	0.55 ... 0.80	50
0.37	0.88	without	3RV13 21-0JC10	3RT10 15-1AP01	S0/S00	3RU11 16-0JB0	0.70 ... 1.00	50
0.55	1.2	without	3RV13 21-0KC10	3RT10 15-1AP01	S0/S00	3RU11 16-0KB0	0.90 ... 1.25	50
0.75	1.5	without	3RV13 21-1AC10	3RT10 15-1AP01	S0/S00	3RU11 16-1AB0	1.10 ... 1.60	50
0.75	1.5	without	3RV13 21-1BC10	3RT10 15-1AP01	S0/S00	3RU11 16-1BB0	1.40 ... 2.00	50
1.1	2.2	without	3RV13 21-1CC10	3RT10 15-1AP01	S0/S00	3RU11 16-1CB0	1.80 ... 2.50	50
1.5	2.9	without	3RV13 21-1DC10	3RT10 15-1AP01	S0/S00	3RU11 16-1DB0	2.20 ... 3.20	50
2.2	4.0	without	3RV13 21-1FC10	3RT10 15-1AP01	S0/S00	3RU11 16-1FB0	3.50 ... 5.00	50
3	5.2	without	3RV13 21-1GC10	3RT10 15-1AP01	S0/S00	3RU11 16-1GB0	4.50 ... 6.30	50
4	6.8	without	3RV13 21-1HC10	3RT10 16-1AP01	S0/S00	3RU11 16-1HB0	5.50 ... 8.00	50
5.5	9.2	without	3RV13 21-1JC10	3RT10 17-1AP01	S0/S00	3RU11 16-1JB0	7.00 ... 10.0	50
7.5	12.4	without	3RV13 21-1KC10	3RT10 25-1AP00	S0	3RU11 26-1KB0	9.00 ... 12.5	50
7.5	12.4	without	3RV13 21-4AC10	3RT10 25-1AP00	S0	3RU11 26-4AB0	11.0 ... 16.0	50
11	17.6	without	3RV13 21-4BC10	3RT10 26-1AP00	S0	3RU11 26-4BB0	14.0 ... 20.0	50
15	23	without	3RV13 31-4DC10	3RT10 34-1AP00	S2	3RU11 36-4DB0	18.0 ... 25.0	50
18.5	28	without	3RV13 31-4EC10	3RT10 34-1AP00	S2	3RU11 36-4EB0	22.0 ... 32.0	50
22	33	without	3RV13 31-4FC10	3RT10 35-1AP00	S2	3RU11 36-4FB0	28.0 ... 40.0	50
30	44	without	3RV13 31-4GC10	3RT10 36-1AP00	S2	3RU11 36-4GB0	36.0 ... 45.0	50
30	44	without	3RV13 31-4HC10	3RT10 36-1AP00	S2	3RU11 36-4HB0	40.0 ... 50.0	50
37	53	without	3RV13 41-4JC10	3RT10 44-1AP00	S3	3RU11 46-4JB0	45.0 ... 63.0	50
45	64	without	3RV13 41-4KC10	3RT10 44-1AP00	S3	3RU11 46-4KB0	57.0 ... 75.0	50
55	78	without	3RV13 41-4LC10	3RT10 45-1AP00	S3	3RU11 46-4LB0	70.0 ... 90.0	50

<sup>1)</sup> Nominal value at 500 V AC, 50 Hz for 4-pole standard motors. The specific starting and rated data of the motor to be protected are decisive when selecting devices.

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

# Motor starter protector + contactor + thermal overload relay

CLASS 10, coordination type 2,  
Short-circuit breaking capacity  $I_q = 50 \text{ kA}$



500 V AC

Standard three-phase motor 4-pole at 500 V AC <sup>1)</sup>		Setting range Overload release Motor star- ter protector	Motor starter protector	Contactor <sup>2)</sup>	Size	Overload relay	Setting range Overload release Overload relay	Short- circuit breaking capacity $I_q$
Rated power $P$	Motor current (nominal value) $I$	A	Order No.	Order No.		Order No.	A	kA
kW	A	A						
0.06	0.16	without	3RV13 21-0BC10	3RT10 15-1AP01	S0/S00	3RU11 16-0BB0	0.14 ... 0.20	50
0.09	0.24	without	3RV13 21-0CC10	3RT10 15-1AP01	S0/S00	3RU11 16-0CB0	0.18 ... 0.25	50
0.12	0.32	without	3RV13 21-0DC10	3RT10 15-1AP01	S0/S00	3RU11 16-0DB0	0.22 ... 0.32	50
0.12	0.32	without	3RV13 21-0EC10	3RT10 15-1AP01	S0/S00	3RU11 16-0EB0	0.28 ... 0.40	50
0.18	0.48	without	3RV13 21-0FC10	3RT10 15-1AP01	S0/S00	3RU11 16-0FB0	0.35 ... 0.50	50
0.18	0.48	without	3RV13 21-0GC10	3RT10 15-1AP01	S0/S00	3RU11 16-0GB0	0.45 ... 0.63	50
0.25	0.68	without	3RV13 21-0HC10	3RT10 15-1AP01	S0/S00	3RU11 16-0HB0	0.55 ... 0.80	50
0.37	0.88	without	3RV13 21-0JC10	3RT10 15-1AP01	S0/S00	3RU11 16-0JB0	0.70 ... 1.00	50
0.55	1.2	without	3RV13 21-0KC10	3RT10 15-1AP01	S0/S00	3RU11 16-0KB0	0.90 ... 1.25	50
0.75	1.5	without	3RV13 21-1AC10	3RT10 15-1AP01	S0/S00	3RU11 16-1AB0	1.10 ... 1.60	50
0.75	1.5	without	3RV13 21-1BC10	3RT10 24-1AP00	S0	3RU11 16-1BB0	1.40 ... 2.00	50
1.1	2.2	without	3RV13 21-1CC10	3RT10 26-1AP00	S0	3RU11 26-1CB0	1.80 ... 2.50	50
1.5	2.9	without	3RV13 21-1DC10	3RT10 34-1AP00	S0/S2	3RU11 26-1DB0 <sup>3)</sup>	2.20 ... 3.20	50
2.2	4.0	without	3RV13 21-1FC10	3RT10 34-1AP00	S0/S2	3RU11 26-1FB0 <sup>3)</sup>	3.50 ... 5.00	50
3	5.2	without	3RV13 21-1GC10	3RT10 34-1AP00	S0/S2	3RU11 26-1GB0 <sup>3)</sup>	4.50 ... 6.30	50
4	6.8	without	3RV13 21-1HC10	3RT10 34-1AP00	S0/S2	3RU11 36-1HB0	5.50 ... 8.00	50
5.5	9.2	without	3RV13 21-1JC10	3RT10 34-1AP00	S0/S2	3RU11 36-1JB0	7.00 ... 10.0	50
7.5	12.4	without	3RV13 21-1KC10	3RT10 34-1AP00	S0/S2	3RU11 36-1KB0	9.00 ... 12.5	50
11	17.6	without	3RV13 31-4BC10	3RT10 34-1AP00	S2	3RU11 36-4BB0	14.0 ... 20.0	50
15	23	without	3RV13 31-4DC10	3RT10 34-1AP00	S2	3RU11 36-4DB0	18.0 ... 25.0	50
18.5	28	without	3RV13 31-4EC10	3RT10 34-1AP00	S2	3RU11 36-4EB0	22.0 ... 32.0	50
22	33	without	3RV13 31-4FC10	3RT10 35-1AP00	S2	3RU11 36-4FB0	28.0 ... 40.0	50
30	44	without	3RV13 31-4GC10	3RT10 36-1AP00	S2	3RU11 36-4GB0	36.0 ... 45.0	50
30	44	without	3RV13 31-4HC10	3RT10 36-1AP00	S2	3RU11 36-4HB0	40.0 ... 50.0	50
37	53	without	3RV13 41-4JC10	3RT10 44-1AP00	S3	3RU11 46-4JB0	45.0 ... 63.0	50
45	64	without	3RV13 41-4KC10	3RT10 44-1AP00	S3	3RU11 46-4KB0	57.0 ... 75.0	50
55	78	without	3RV13 41-4LC10	3RT10 45-1AP00	S3	3RU11 46-4LB0	70.0 ... 90.0	50

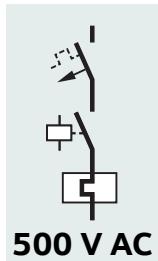
<sup>1)</sup> Nominal value at 500 V AC, 50 Hz for 4-pole standard motors. The specific starting and rated data of the motor to be protected are decisive when selecting devices.

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

<sup>3)</sup> Stand-alone mounting.

# Motor starter protector/circuit breaker + contactor + 3RB20/3RB21 solid-state overload relay

CLASS 10, coordination types 2 und 1,  
Short-circuit breaking capacity  $I_q = 50 \text{ kA}$



Standard three-phase motor 4-pole at 500 V AC <sup>1)</sup> Rated power $P$ kW	Setting range Overload release Motor current (nominal value) $I$ A	Motor starter protector/circuit breaker Order No.	Contactor <sup>3)</sup> Order No.	Size	Overload relay Order No.	Setting range Overload release Overload relay A	Short-circuit breaking capacity $I_q$ kA
<b>Coordination type 2</b>							
0.06	0.16	0.22 ... 0.32	3RV10 11-0DA10	3RT10 15-1AP01	S00	3RB20 16-1RB0 or 3RB21 13-4RB0	0.10 ... 0.40 50
0.09	0.24	0.28 ... 0.40	3RV10 11-0EA10	3RT10 15-1AP01	S00		0.10 ... 0.40 50
0.12	0.32	0.45 ... 0.63	3RV10 11-0GA10	3RT10 15-1AP01	S00		0.10 ... 0.40 50
0.18	0.48	0.60 ... 0.80	3RV10 11-0HA10	3RT10 15-1AP01	S00	3RB20 16-1NB0 or 3RB21 13-4NB0	0.32 ... 1.25 50
0.25	0.68	0.70 ... 1.00	3RV10 11-0JA10	3RT10 15-1AP01	S00		0.32 ... 1.25 50
0.37	0.88	1.10 ... 1.60	3RV10 11-1AA10	3RT10 15-1AP01	S00		0.32 ... 1.25 50
0.55	1.2	1.10 ... 1.60	3RV10 11-1AA10	3RT10 15-1AP01	S00	3RB20 16-1PB0 or 3RB21 23-4PB0	1.00 ... 4.00 50
0.55	1.2	without	3RV13 21-0KC10	3RT10 24-1AP01	S0	3RB21 23-4PB0 or 3RB21 13-4PB0	1.00 ... 4.00 50
0.75	1.5	without	3RV13 21-1BC10	3RT10 24-1AP00	S0		1.00 ... 4.00 50
1.1	2.2	without	3RV13 21-1CC10	3RT10 26-1AP00	S0		1.00 ... 4.00 50
1.5	2.9	without	3RV13 21-1DC10	3RT10 34-1AP00	S0/S2		1.00 ... 4.00 50
2.2	4	without	3RV13 21-1FC10	3RT10 34-1AP00	S0/S2	3RB20 26-1SB0 or 3RB21 23-4SB0	3.00 ... 12.0 50
3	5.2	without	3RV13 21-1GC10	3RT10 34-1AP00	S0/S2		3.00 ... 12.0 50
4	6.8	without	3RV13 21-1HC10	3RT10 34-1AP00	S0/S2	3RB20 36-1QB0 or 3RB21 23-4QB0	6.00 ... 25.0 50
5.5	9.2	without	3RV13 21-1JC10	3RT10 34-1AP00	S0/S2		6.00 ... 25.0 50
7.5	12.4	without	3RV13 31-4AC10	3RT10 34-1AP00	S2		6.00 ... 25.0 50
11	17.6	without	3RV13 31-4BC10	3RT10 34-1AP00	S2	3RB20 36-1UB0 or 3RB21 33-4UW1	12.5 ... 50.0 50
15	23	without	3RV13 31-4EC10	3RT10 34-1AP00	S2		12.5 ... 50.0 50
18.5	28	28.0 ... 40.0	3RV10 31-4FA10	3RT10 35-1AP00	S2		12.5 ... 50.0 50
22	33	40.0 ... 50.0	3RV10 31-4HA10	3RT10 36-1AP00	S2		12.5 ... 50.0 50
22	33	without	3RV13 41-4FC10	3RT10 44-1AP00	S3	3RB20 46-1UB0 or 3RB21 43-4UB0	12.5 ... 50.0 50
30	44	without	3RV13 41-4HC10	3RT10 44-1AP00	S3	3RB20 46-1EB0 or 3RB21 43-4EB0	25.0 ... 100 50
37	53	without	3RV13 41-4JC10	3RT10 44-1AP00	S3		25.0 ... 100 50
45	64	57.0 ... 75.0	3RV10 41-4KA10	3RT10 44-1AP00	S3		25.0 ... 100 50
55	78	70.0 ... 90.0	3RV10 41-4LA10	3RT10 45-1AP00	S3		25.0 ... 100 50
55	78	without	3VL27 10-3DK33	3RT10 54-1AP36	3VL/S6	3RB20 56-1FW2 or 3RB21 53-4FW2	50.0 ... 200 50
75	106	without	3VL27 16-3DK33	3RT10 54-1AP36	3VL/S6		50.0 ... 200 50
90	128	without	3VL27 16-3DK33	3RT10 55-6AP36	3VL/S6	3RB20 56-1FC2 or 3RB21 53-4FC2	50.0 ... 200 50
110	156	without	3VL27 16-3DK33	3RT10 56-6AP36	3VL/S6		50.0 ... 200 50
110	156	without	3VL37 25-3DK36	3RT10 56-6AP36	3VL/S6	3RB20 66-1GC2 or 3RB21 63-4GC2	55.0 ... 250 50
132	184	without	3VL37 25-3DK36	3RT10 64-6AP36	3VL/S10		55.0 ... 250 50
132	184	without	3VL37 25-3DK36	3RT12 64-6AP36	3VL/S10V		55.0 ... 250 50
160	224	without	3VL37 25-3DK36	3RT10 65-6AP36	3VL/S10		55.0 ... 250 50
160	224	without	3VL47 31-3DK36	3RT10 65-6AP36	3VL/S10		55.0 ... 250 50
160	224	without	3VL47 31-3DK36	3RT12 65-6AP36	3VL/S10V		55.0 ... 250 50
200	280	without	3VL47 31-3DK36	3RT10 66-6AP36	3VL/S10	3RB20 66-1MC2 or 3RB21 63-4MC2	160 ... 630 50
200	280	without	3VL47 31-3DK36	3RT12 66-6AP36	3VL/S10V		160 ... 630 50
250	344	without	3VL57 50-3DK36	3RT10 75-6AP36	3VL/S12		160 ... 630 50
250	344	without	3VL57 50-3DK36	3RT12 75-6AP36	3VL/S12V		160 ... 630 50
315	432	without	3VL57 50-2DK36	3RT10 76-6AP36	3VL/S12		160 ... 630 50
315	432	without	3VL57 50-2DK36	3RT12 76-6AP36	3VL/S12V		160 ... 630 50
355	488	without	3VL57 50-3DK36	3RT10 76-6AP36	3VL/S12		160 ... 630 50
355	488	without	3VL57 50-3DK36	3RT12 76-6AP36	3VL/S12V		160 ... 630 50
<b>Coordination type 1</b>							
400	552	without	3VL77 12-2DE36	3TF68 44-0CM7	3VL/S14	3RB20 66-2MC2 or 3RB21 63-4MC2	160 ... 630 50
500	680	without	3VL87 16-2DE36	3TF69 44-0CM7	3VL/S14	3UF1 868-3GA00 + 3RB20 16-1NB0 or 3UF1 868-3GA00 + 3RB21 13-4RB0 <sup>4)</sup>	205 ... 820 50
560	760	without	3VL87 16-2DE36	3TF69 44-0CM7	3VL/S14		160 ... 630 50

<sup>1)</sup> Nominal value at 500 V AC, 50 Hz for 4-pole standard motors. The specific starting and rated data of the motor to be protected are decisive when selecting devices.

<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 are also possible.

<sup>4)</sup> Use terminal bracket for stand-alone mounting for overload relay.

# Motor starter protector/circuit breaker + contactor + 3RB20/3RB21 solid-state overload relay

CLASS 20, coordination types 2 und 1,  
Short-circuit breaking capacity  $I_q = 50 \text{ kA}$



500 V AC

Standard three-phase motor 4-pole at 500 V AC <sup>1)</sup>		Setting range Overload release	Motor starter protector/circuit breaker	Contactor <sup>3)</sup>	Size	Overload relay	Setting range Overload release	Short-circuit breaking capacity $I_q$
Rated power $P$ kW	Motor current (nominal value) $I$ A	Motor starter protector/circuit breaker <sup>2)</sup> A	Order No.	Order No.		Order No.	A	kA
<b>Coordination type 2</b>								
0.06	0.16	0.28 ... 0.40	3RV10 11-0EA10	3RT10 15-1AP01	S00	3RB20 16-2RB0 or 3RB21 13-4RB0	0.10 ... 0.40	50
0.09	0.24	0.45 ... 0.63	3RV10 11-0GA10	3RT10 15-1AP01	S00		0.10 ... 0.40	50
0.12	0.32	0.55 ... 0.80	3RV10 11-0HA10	3RT10 15-1AP01	S00	3RB20 16-2NB0 or 3RB21 13-4NB0	0.32 ... 1.25	50
0.18	0.48	0.70 ... 1.00	3RV10 11-0JA10	3RT10 15-1AP01	S00		0.32 ... 1.25	50
0.25	0.68	0.90 ... 1.25	3RV10 11-0KA10	3RT10 15-1AP01	S00		0.32 ... 1.25	50
0.37	0.88	1.10 ... 1.60	3RV10 11-1AA10	3RT10 15-1AP01	S00		0.32 ... 1.25	50
0.55	1.2	without	3RV13 21-1BC10	3RT10 24-1AP00	S0	3RB21 23-4PB0 or 3RB21 13-4PB0	1.00 ... 4.00	50
0.75	1.5	without	3RV13 21-1DC10	3RT10 26-1AP00	S0		1.00 ... 4.00	50
1.1	2.2	2.80 ... 4.00	3RV10 21-1EA10	3RT10 34-1AP00	S0/S2		1.00 ... 4.00	50
1.5	2.9	4.50 ... 6.30	3RV10 21-1GA10	3RT10 34-1AP00	S0/S2	3RB21 23-4PB0	1.00 ... 4.00	50
2.2	4	without	3RV13 21-1HC10	3RT10 34-1AP00	S0/S2	3RB20 26-2SB0 or 3RB21 23-4SB0	3.00 ... 12.0	50
3	5.2	without	3RV13 21-1JC10	3RT10 34-1AP00	S0/S2		3.00 ... 12.0	50
4	6.8	without	3RV13 21-4AC10	3RT10 34-1AP00	S0/S2	3RB20 36-2QB0 or 3RB21 23-4QB0	6.00 ... 25.0	50
5.5	9.2	11.0 ... 16.0	3RV10 31-4AA10	3RT10 34-1AP00	S2		6.00 ... 25.0	50
7.5	12.4	18.0 ... 25.0	3RV10 31-4DA10	3RT10 34-1AP00	S2		6.00 ... 25.0	50
11	17.6	22.0 ... 32.0	3RV10 31-4EA10	3RT10 35-1AP00	S2		6.00 ... 25.0	50
15	23	28.0 ... 40.0	3RV10 31-4FA10	3RT10 36-1AP00	S2	3RB20 36-2UB0 or 3RB21 33-4UW1	12.5 ... 50.0	50
18.5	28	36.0 ... 50.0	3RV10 41-4HA10	3RT10 44-1AP00	S3		12.5 ... 50.0	50
22	33	45.0 ... 63.0	3RV10 41-4JA10	3RT10 44-1AP00	S3	3RB20 36-2UW1 or 3RB21 33-4UW1	12.5 ... 50.0	50
22	33	45.0 ... 63.0	3RV10 41-4JA10	3RT10 44-1AP00	S3	3RB20 46-2UB0 or 3RB21 43-4UB0	12.5 ... 50.0	50
30	44	57.0 ... 75.0	3RV10 41-4KA10	3RT10 44-1AP00	S3	3RB20 46-2EB0 or 3RB21 43-4EB0	25.0 ... 100	50
37	53	70.0 ... 90.0	3RV10 41-4LA10	3RT10 45-1AP00	S3		25.0 ... 100	50
45	64	70.0 ... 90.0	3RV10 42-4LB10	3RT10 54-1AP36	S3/S6	3RB20 56-2FW2 or 3RB21 53-4FW2	50.0 ... 200	50
45	64	70.0 ... 90.0	3RV10 42-4LB10	3RT10 54-1AP36	S3/S6		50.0 ... 200	50
55	78	without	3VL27 10-3DK33	3RT10 54-1AP36	3VL/S6		50.0 ... 200	50
75	106	without	3VL27 16-3DK33	3RT10 55-1AP36	3VL/S6	3RB20 56-2FC2 or 3RB21 53-4FC2	50.0 ... 200	50
90	128	without	3VL27 16-3DK33	3RT10 56-6AP36	3VL/S6		50.0 ... 200	50
110	156	without	3VL27 16-3DK33	3RT10 64-6AP36	3VL/S10	3RB20 66-2GC2 or 3RB21 63-4GC2	55.0 ... 250	50
132	184	without	3VL37 25-3DK36	3RT10 65-6AP36	3VL/S10		55.0 ... 250	50
132	184	without	3VL37 25-3DK36	3RT12 64-6AP36	3VL/S10V		55.0 ... 250	50
160	224	without	3VL37 25-3DK36 <sup>4)</sup>	3RT12 65-6AP36	3VL/S10V		55.0 ... 250	50
200	280	without	3VL47 31-3DK36	3RT10 75-6AP36	3VL/S12	3RB20 66-2MC2 or 3RB21 63-4MC2	160 ... 630	50
200	280	without	3VL47 31-3DK36	3RT12 66-6AP36	3VL/S10V		160 ... 630	50
250	344	without	3VL57 50-3DK36	3RT10 76-6AP36	3VL/S12		160 ... 630	50
250	344	without	3VL57 50-3DK36	3RT12 75-6AP36	3VL/S12V		160 ... 630	50
315	432	without	3VL57 50-2DK36	3RT12 76-6AP36	3VL/S12V		160 ... 630	50
355	488	without	3VL57 50-3DK36	3RT12 76-6AP36	3VL/S12V		160 ... 630	50
<b>Coordination type 1</b>								
400	552	without	3VL77 12-2DE36	3TF69 44-0CM7	3VL/S14	3RB20 66-2MC2 or 3RB21 63-4MC2	160 ... 630	50

<sup>1)</sup> Nominal value at 500 V AC, 50 Hz for 4-pole standard motors. The specific starting and rated data of the motor to be protected are decisive when selecting devices.

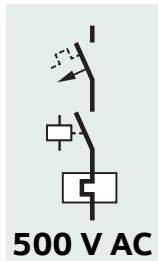
<sup>2)</sup> The motor starter protector/circuit breaker must be set to the maximum current value.

<sup>3)</sup> Rated control supply voltage 230 V AC, 50 Hz. Other control voltages are also possible.

<sup>4)</sup> Alternatively, 3VL47 31-3DK36 is possible.

# Motor starter protector/circuit breaker + contactor + 3RB21 solid-state overload relay

CLASS 30, coordination types 2 und 1,  
Short-circuit breaking capacity  $I_q = 50 \text{ kA}$



Standard three-phase motor 4-pole at 500 V AC <sup>1)</sup> Rated power $P$ kW	Setting range Overload release Motor starter protector/circuit breaker <sup>2)</sup> A	Motor starter protector/circuit breaker Order No.	Contactor <sup>3)</sup> Order No.	Size	Overload relay Order No.	Setting range Overload release Overload relay A	Short-circuit breaking capacity $I_q$ kA
<b>Coordination type 2</b>							
0.06	0.16	0.45 ... 0.63	3RV10 11-0GA10	3RT10 15-1AP01	S00	3RB21 13-4RBO	0.10 ... 0.40 50
0.09	0.24	0.55 ... 0.80	3RV10 11-0HA10	3RT10 15-1AP01	S00	3RB21 13-4NBO	0.10 ... 0.40 50
0.12	0.32	0.70 ... 1.00	3RV10 11-0JA10	3RT10 15-1AP01	S00	3RB21 13-4PB0	0.32 ... 1.25 50
0.18	0.48	0.90 ... 1.25	3RV10 11-0KA10	3RT10 15-1AP01	S00	3RB21 13-4PB0	0.32 ... 1.25 50
0.25	0.68	1.10 ... 1.60	3RV10 11-1AA10	3RT10 15-1AP01	S00	3RB21 13-4PB0	0.32 ... 1.25 50
0.37	0.88	1.40 ... 2.00	3RV10 11-1BA10	3RT10 15-1AP01	S00	3RB21 13-4PB0	0.32 ... 1.25 50
0.55	1.2	2.20 ... 3.20	3RV10 21-1DA10	3RT10 34-1AP00	S0/S2	3RB21 23-4PB0 or 3RB21 13-4PB0	1.00 ... 4.00 50
0.75	1.5	2.80 ... 4.00	3RV10 21-1EA10	3RT10 34-1AP00	S0/S2	3RB21 23-4PB0	1.00 ... 4.00 50
1.1	2.2	3.50 ... 5.00	3RV10 21-1FA10	3RT10 34-1AP00	S0/S2	3RB21 23-4PB0	1.00 ... 4.00 50
1.5	2.9	4.50 ... 6.30	3RV10 21-1GA10	3RT10 34-1AP00	S0/S2	3RB21 23-4SB0	1.00 ... 4.00 50
2.2	4	7.00 ... 10.0	3RV10 21-1JA10	3RT10 34-1AP00	S0/S2	3RB21 23-4SB0	3.00 ... 12.0 50
3	5.2	9.00 ... 12.5	3RV10 21-1KA10	3RT10 34-1AP00	S0/S2	3RB21 23-4SB0	3.00 ... 12.0 50
4	6.8	11.0 ... 16.0	3RV10 31-4AA10	3RT10 34-1AP00	S2	3RB21 33-4QB0 or 3RB21 23-4QB0	6.00... 25.0 50
5.5	9.2	14.0 ... 20.0	3RV10 31-4BA10	3RT10 34-1AP00	S2	3RB21 33-4QB0 or 3RB21 23-4QB0	6.00... 25.0 50
7.5	12.4	22.0 ... 32.0	3RV10 31-4EA10	3RT10 34-1AP00	S2	3RB21 33-4QB0 or 3RB21 23-4QB0	6.00... 25.0 50
11	17.6	28.0 ... 40.0	3RV10 31-4FA10	3RT10 35-1AP00	S2	3RB21 36-2UB0 or 3RB21 33-4UW1	12.5 ... 50.0 50
15	23	28.0 ... 40.0	3RV10 42-4FB10	3RT10 44-1AP00	S3	3RB21 33-4UW1	12.5 ... 50.0 50
15	23	28.0 ... 40.0	3RV10 42-4FB10	3RT10 44-1AP00	S3	3RB21 43-4UB0	12.5 ... 50.0 50
18.5	28	36.0 ... 50.0	3RV10 42-4HB10	3RT10 44-1AP00	S3	3RB21 33-4UW1	12.5 ... 50.0 50
18.5	28	36.0 ... 50.0	3RV10 42-4HB10	3RT10 44-1AP00	S3	3RB21 43-4UB0	12.5 ... 50.0 50
22	33	36.0 ... 50.0	3RV10 42-4HB10	3RT10 44-1AP00	S3	3RB21 33-4UW1	12.5 ... 50.0 50
22	33	36.0 ... 50.0	3RV10 42-4HB10	3RT10 44-1AP00	S3	3RB21 43-4UB0	12.5 ... 50.0 50
30	44	57.0 ... 75.0	3RV10 42-4KB10	3RT10 45-1AP00	S3	3RB21 43-4EB0	25.0 ... 100 50
37	53	70.0 ... 90.0	3RV10 42-4LB10	3RT10 54-1AP36	S3/S6	3RB21 53-4FW2	50.0 ... 200 50
45	64	without	3VL27 10-3DK33	3RT10 54-1AP36	3VL/S6	3RB21 53-4FW2	50.0 ... 200 50
55	78	without	3VL27 10-3DK33	3RT10 55-1AP36	3VL/S6	3RB21 53-4FW2	50.0 ... 200 50
75	106	without	3VL27 16-3DK33	3RT10 56-6AP36	3VL/S6	3RB21 53-4FC2	50.0 ... 200 50
90	128	without	3VL27 16-3DK33	3RT10 64-6AP36	3VL/S10	3RB21 63-4GC2	55.0 ... 250 50
110	156	without	3VL27 16-3DK33 <sup>4)</sup>	3RT10 65-6AP36	3VL/S10	3RB21 63-4GC2	55.0 ... 250 50
110	156	without	3VL27 16-3DK33	3RT12 64-6AP36	3VL/S10V	3RB21 63-4GC2	55.0 ... 250 50
132	184	without	3VL37 25-3DK36	3RT12 65-6AP36	3VL/S10V	3RB21 63-4GC2	55.0 ... 250 50
160	224	without	3VL37 25-3DK36	3RT10 75-6AP36	3VL/S12	3RB21 63-4GC2	55.0 ... 250 50
160	224	without	3VL37 25-3DK36	3RT12 66-6AP36	3VL/S10V	3RB21 63-4GC2	55.0 ... 250 50
200	280	without	3VL47 31-3DK36	3RT10 76-6AP36	3VL/S12	3RB21 63-4MC2	160 ... 630 50
200	280	without	3VL47 31-3DK36	3RT12 75-6AP36	3VL/S12V	3RB21 63-4MC2	160 ... 630 50
250	344	without	3VL57 50-3DK36	3RT12 76-6AP36	3VL/S12V	3RB21 63-4MC2	160 ... 630 50
<b>Coordination type 1</b>							
315	432	without	3VL57 50-2DK36	3TF69 44-0CM7	3VL/S14	3RB21 63-2MC2 or 3RB21 63-4MC2	160 ... 630 50
355	488	without	3VL57 50-2DK36	3TF69 44-0CM7	3VL/S14	3RB21 63-2MC2 or 3RB21 63-4MC2	160 ... 630 50

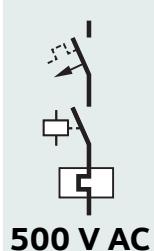
- <sup>1)</sup> Nominal value at 500 V AC, 50 Hz for 4-pole standard motors. The specific starting and rated data of the motor to be protected are decisive when selecting devices.
- <sup>2)</sup> The motor starter protector/circuit breaker must be set to the maximum current value.

<sup>3)</sup> Rated control supply voltage 230 V AC, 50 Hz.  
Other control voltages are also possible.

<sup>4)</sup> Alternatively, 3VL27 25-3DK33 is possible.

# Motor starter protector/ circuit breaker + contactor + SIMOCODE 3UF7/ 3RB22/3RB23 solid-state overload relay

CLASS 5 and CLASS 10, coordination types 2 and 1,  
Short-circuit breaking capacity  $I_q = 50 \text{ kA}$



Standard three-phase motor 4-pole at 500 V AC <sup>1)</sup> Rated power $P$	Motor current (nominal value) $I$	Setting range Overload release Motor starter protector/circuit breaker	Motor starter protector/circuit breaker Order No.	Contactor <sup>2)</sup> Order No.	Size	Overload relay <sup>3)</sup> Order No.	Setting range Overload release Overload relay	Short-circuit breaking capacity $I_q$
kW	A	A					A	kA
<b>Coordination type 2</b>								
0.12	0.32	without	3RV13 21-0HC10	3RT10 24-1AP00	S0	3UF7 100-1AA00 or 3RB29 06-2BG1	0.30 ... 3.00	50
0.18	0.48	without	3RV13 21-0HC10	3RT10 24-1AP00	S0		0.30 ... 3.00	50
0.25	0.68	without	3RV13 21-0JC10	3RT10 24-1AP00	S0		0.30 ... 3.00	50
0.37	0.88	without	3RV13 21-0KC10	3RT10 24-1AP00	S0		0.30 ... 3.00	50
0.55	1.2	without	3RV13 21-0KC10	3RT10 24-1AP00	S0		0.30 ... 3.00	50
0.75	1.5	without	3RV13 21-1BC10	3RT10 24-1AP00	S0		0.30 ... 3.00	50
1.1	2.2	without	3RV13 21-1CC10	3RT10 26-1AP00	S0		0.30 ... 3.00	50
1.5	2.9	without	3RV13 21-1DC10	3RT10 34-1AP00	S0/S2		0.30 ... 3.00	50
2.2	4	without	3RV13 21-1EC10	3RT10 34-1AP00	S0/S2	3UF7 101-1AA00 or 3RB29 06-2DG1	2.40 ... 25.0	50
3	5.2	without	3RV13 21-1GC10	3RT10 34-1AP00	S0/S2		2.40 ... 25.0	50
4	6.8	without	3RV13 21-1HC10	3RT10 34-1AP00	S0/S2		2.40 ... 25.0	50
5.5	9.2	without	3RV13 21-1JC10	3RT10 34-1AP00	S0/S2		2.40 ... 25.0	50
7.5	12.4	without	3RV13 21-1KC10	3RT10 34-1AP00	S0/S2		2.40 ... 25.0	50
7.5	12.4	without	3RV13 31-4AC10	3RT10 34-1AP00	S2		2.40 ... 25.0	50
11	17.6	without	3RV13 31-4BC10	3RT10 34-1AP00	S2		2.40 ... 25.0	50
15	23	without	3RV13 31-4EC10	3RT10 34-1AP00	S2	3UF7 102-1AA00 or 3RB29 06-2JG1	10.0 ... 100	50
18.5	28	without	3RV13 31-4FC10	3RT10 35-1AP00	S2		10.0 ... 100	50
22	33	40.0 ... 50.0	3RV10 31-4HA10	3RT10 36-1AP00	S2		10.0 ... 100	50
22	33	without	3RV13 41-4FC10	3RT10 44-1AP00	S3		10.0 ... 100	50
30	44	without	3RV13 41-4HC10	3RT10 44-1AP00	S3		10.0 ... 100	50
37	53	without	3RV13 41-4JC10	3RT10 44-1AP00	S3		10.0 ... 100	50
45	64	without	3RV13 41-4KC10	3RT10 44-1AP00	S3		10.0 ... 100	50
55	78	without	3RV13 41-4LC10	3RT10 45-1AP00	S3		10.0 ... 100	50
55	78	without	3VL27 10-3DK33	3RT10 54-1AP36	3VL/S6	3UF7 103-1AA00 or 3RB29 56-2TG2	20.0 ... 200	50
75	106	without	3VL27 16-3DK33	3RT10 54-1AP36	3VL/S6		20.0 ... 200	50
90	128	without	3VL27 16-3DK33	3RT10 55-6AP36	3VL/S6		20.0 ... 200	50
110	156	without	3VL27 16-3DK33	3RT10 56-6AP36	3VL/S6		20.0 ... 200	50
110	156	without	3VL27 25-3DK33	3RT10 56-6AP36	3VL/S6		20.0 ... 200	50
132	184	without	3VL37 25-3DK36	3RT10 64-6AP36	3VLS/10	3UF7 104-1AA00 or 3RB29 66-2WH2	63.0 ... 630	50
132	184	without	3VL37 25-3DK36	3RT12 64-6AP36	3VLS/10V		63.0 ... 630	50
160	224	without	3VL37 25-3DK36	3RT10 65-6AP36	3VLS/10		63.0 ... 630	50
160	224	without	3VL37 25-3DK36	3RT12 65-6AP36	3VLS/10V		63.0 ... 630	50
200	280	without	3VL47 31-3DK36	3RT10 66-6AP36	3VLS/10		63.0 ... 630	50
200	280	without	3VL47 31-3DK36	3RT12 66-6AP36	3VLS/10V		63.0 ... 630	50
250	344	without	3VL57 50-3DK36	3RT10 75-6AP36	3VLS/12		63.0 ... 630	50
250	344	without	3VL57 50-3DK36	3RT12 75-6AP36	3VLS/12V		63.0 ... 630	50
315	432	without	3VL57 50-2DK36	3RT10 76-6AP36	3VLS/12		63.0 ... 630	50
315	432	without	3VL57 50-2DK36	3RT12 76-6AP36	3VLS/12V		63.0 ... 630	50
355	488	without	3VL57 50-3DK36	3RT10 76-6AP36	3VLS/12	3UF7 104-1AA00 or 3RB29 66-2WH2	63.0 ... 630	50
355	488	without	3VL57 50-3DK36	3RT12 76-6AP36	3VLS/12V		63.0 ... 630	50
<b>Coordination type 1</b>								
400	552	without	3VL77 12-2DE36	3TF68 44-0CM7	3VL/S14	3UF7 104-1AA00 or 3RB29 66-2WH2	63.0 ... 630	50
500	680	without	3VL87 16-2DE36	3TF69 44-0CM7	3VL/S14	3UF18 68-3GA00 + 3UF7 100-1AA0 or 3UF18 68-3GA00 + 3RB29 06-2BG1	205 ... 820	50
560	760	without	3VL87 16-2DE36	3TF69 44-0CM7	3VL/S14		205 ... 820	50

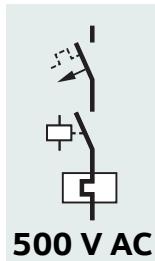
<sup>1)</sup> Nominal value at 500 V AC, 50 Hz for 4-pole standard motors. The specific starting and rated data of the motor to be protected are decisive when selecting devices.

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

<sup>3)</sup> The necessary current detection modules are stated. In addition, the corresponding 3RB22/3RB23 and 3UF7 basic units are required.

# Motor starter protector/circuit breaker + contactor + SIMOCODE 3UF7/3RB22/3RB23 solid-state overload relay

CLASS 20, coordination types 2 and 1,  
Short-circuit breaking capacity  $I_q = 50 \text{ kA}$



Standard three-phase motor 4-pole at 500 V AC <sup>1)</sup> Rated power P	Setting range Overload release Motor current (nominal value) I	Motor starter protector/circuit breaker Order No.	Contactor <sup>2)</sup> Order No.	Size	Overload relay <sup>3)</sup> Order No.	Setting range Overload release Overload relay	Short-circuit breaking capacity $I_q$
kW	A	A				A	kA
<b>Coordination type 2</b>							
0.12	0.32	without	3RV13 21-0HC10	3RT10 24-1AP00	S0	3UF7 100-1AA0 or 3RB29 06-2BG1	0.30 ... 3.00 50
0.18	0.48	without	3RV13 21-0JC10	3RT10 24-1AP00	S0		0.30 ... 3.00 50
0.25	0.68	without	3RV13 21-0KC10	3RT10 24-1AP00	S0		0.30 ... 3.00 50
0.37	0.88	without	3RV13 21-1AC10	3RT10 24-1AP00	S0		0.30 ... 3.00 50
0.55	1.2	without	3RV13 21-1BC10	3RT10 24-1AP00	S0		0.30 ... 3.00 50
0.75	1.5	without	3RV13 21-1DC10	3RT10 26-1AP00	S0		0.30 ... 3.00 50
1.1	2.2	2.80 ... 4.00	3RV10 21-1EA10	3RT10 34-1AP00	S0/S2		0.30 ... 3.00 50
1.5	2.9	without	3RV13 21-1EC10	3RT10 34-1AP00	S0/S2		2.40 ... 25.0 50
1.5	2.9	4.50 ... 6.30	3RV10 21-1GA10	3RT10 34-1AP00	S0/S2		2.40 ... 25.0 50
2.2	4	without	3RV13 21-1GC10	3RT10 34-1AP00	S0/S2		2.40 ... 25.0 50
3	5.2	without	3RV13 21-1HC10	3RT10 34-1AP00	S0/S2		2.40 ... 25.0 50
4	6.8	without	3RV13 21-1JC10	3RT10 34-1AP00	S0/S2		2.40 ... 25.0 50
5.5	9.2	11.0 ... 16.0	3RV10 31-4AA10	3RT10 34-1AP00	S2	3UF7 101-1AA0 or 3RB29 06-2DG1	2.40 ... 25.0 50
7.5	12.4	18.0 ... 25.0	3RV10 31-4DA10	3RT10 34-1AP00	S2		2.40 ... 25.0 50
11	17.6	22.0 ... 32.0	3RV10 31-4EA10	3RT10 35-1AP00	S2		2.40 ... 25.0 50
15	23	28.0 ... 40.0	3RV10 31-4FA10	3RT10 36-1AP00	S2		10.0 ... 100 50
18.5	28	36.0 ... 50.0	3RV10 41-4HA10	3RT10 44-1AP00	S3		10.0 ... 100 50
22	33	45.0 ... 63.0	3RV10 41-4JA10	3RT10 44-1AP00	S3		10.0 ... 100 50
30	44	57.0 ... 75.0	3RV10 41-4KA10	3RT10 44-1AP00	S3		10.0 ... 100 50
37	53	70.0 ... 90.0	3RV10 41-4LA10	3RT10 45-1AP00	S3		10.0 ... 100 50
45	64	70.0 ... 90.0	3RV10 42-4LB10	3RT10 54-1AP36	S3/S6		10.0 ... 100 50
45	64	70.0 ... 90.0	3RV10 42-4LB10	3RT10 54-1AP36	S3/S6		20.0 ... 200 50
55	78	without	3VL27 10-3DK33	3RT10 54-1AP36	3VL/S6	3UF7 103-1AA0 or 3RB29 56-2TG2	20.0 ... 200 50
75	106	without	3VL27 16-3DK33	3RT10 55-1AP36	3VL/S6		20.0 ... 200 50
90	128	without	3VL27 16-3DK33	3RT10 56-6AP36	3VL/S6		20.0 ... 200 50
110	156	without	3VL27 16-3DK33	3RT10 64-6AP36	3VL/S10		63.0 ... 630 50
132	184	without	3VL37 25-3DK36	3RT10 65-6AP36	3VL/S10	3UF7 104-1AA0 or 3RB29 66-2WH2	63.0 ... 630 50
132	184	without	3VL37 25-3DK36	3RT12 64-6AP36	3VL/S10V		63.0 ... 630 50
160	224	without	3VL37 25-3DK36	3RT12 65-6AP36	3VL/S10V		63.0 ... 630 50
160	224	without	3VL47 31-3DK36	3RT12 65-6AP36	3VL/S10V		63.0 ... 630 50
200	280	without	3VL47 31-3DK36	3RT10 75-6AP36	3VL/S12		63.0 ... 630 50
200	280	without	3VL47 31-3DK36	3RT12 66-6AP36	3VL/S10V		63.0 ... 630 50
250	344	without	3VL57 50-3DK36	3RT10 76-6AP36	3VL/S12		63.0 ... 630 50
250	344	without	3VL57 50-3DK36	3RT12 75-6AP36	3VL/S12V		63.0 ... 630 50
315	432	without	3VL57 50-2DK36	3RT12 76-6AP36	3VL/S12V		63.0 ... 630 50
355	488	without	3VL57 50-3DK36	3RT12 76-6AP36	3VL/S12V		63.0 ... 630 50
<b>Coordination type 1</b>							
400	552	without	3VL77 12-2DE36	3TF69 44-0CM7	3VL/S14	3UF7 104-1AA0 or 3RB29 66-2WH2	63.0 ... 630 50

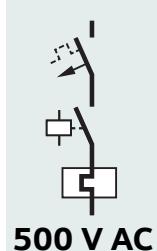
<sup>1)</sup> Nominal value at 500 V AC, 50 Hz for 4-pole standard motors. The specific starting and rated data of the motor to be protected are decisive when selecting devices.

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

<sup>3)</sup> The necessary current detection modules are stated. In addition, the corresponding 3RB22/3RB23 and 3UF7 basic units are required.

# Motor starter protector/circuit breaker + contactor + SIMOCODE 3UF7/3RB22/3RB23 solid-state overload relay

CLASS 30, coordination type 2,  
Short-circuit breaking capacity  $I_q = 50 \text{ kA}$



Standard three-phase motor 4-pole at 500 V AC <sup>1)</sup> Rated power $P$	Motor current (nominal value) $I$	Setting range Overload release Motor starter protector/circuit breaker	Motor starter protector/circuit breaker	Contactor <sup>2)</sup>	Size	Overload relay <sup>3)</sup>	Setting range Overload release Overload relay	Short-circuit breaking capacity $I_q$	
kW	A	A	Order No.	Order No.		Order No.	A	kA	
0.12	0.32	without	3RV13 21-1AC10	3RT10 24-1AP00	S0	3UF7 100-1AA0 or 3RB29 06-2BG1	0.30 ... 3.00	50	
0.18	0.48	without	3RV13 21-1AC10	3RT10 24-1AP00	S0		0.30 ... 3.00	50	
0.18	0.48	without	3RV13 21-1BC10	3RT10 24-1AP00	S0		0.30 ... 3.00	50	
0.25	0.68	without	3RV10 21-1BA10	3RT10 24-1AP00	S0		0.30 ... 3.00	50	
0.25	0.68	without	3RV13 21-1BC10	3RT10 24-1AP00	S0		0.30 ... 3.00	50	
0.37	0.88	1.80 ... 2.50	3RV10 21-1CA10	3RT10 26-1AP00	S0		0.30 ... 3.00	50	
0.37	0.88	without	3RV13 21-1CC10	3RT10 26-1AP00	S0		0.30 ... 3.00	50	
0.55	1.2	2.20 ... 3.20	3RV10 21-1DA10	3RT10 34-1AP00	S0/S2		0.30 ... 3.00	50	
0.75	1.5	2.80 ... 4.00	3RV10 21-1EA10	3RT10 34-1AP00	S0/S2		0.30 ... 3.00	50	
0.75	1.5	4.00 ... 5.00	3RV10 21-1FA10	3RT10 34-1AP00	S0/S2		0.30 ... 3.00	50	
1.1	2.2	4.00 ... 5.00	3RV10 21-1FA10	3RT10 34-1AP00	S0/S2		0.30 ... 3.00	50	
1.1	2.2	5.00 ... 6.30	3RV10 21-1GA10	3RT10 34-1AP00	S0/S2		0.30 ... 3.00	50	
1.5	2.9	5.00 ... 6.30	3RV10 21-1GA10	3RT10 34-1AP00	S0/S2	3UF7 101-1AA0 or 3RB29 06-2DG1	2.40 ... 25.0	50	
1.5	2.9	6.00 ... 8.00	3RV10 21-1HA10	3RT10 34-1AP00	S0/S2		2.40 ... 25.0	50	
2.2	4	7.00 ... 10.0	3RV10 21-1JA10	3RT10 34-1AP00	S0/S2		2.40 ... 25.0	50	
2.2	4	9.00 ... 13.0	3RV10 21-1KA10	3RT10 34-1AP00	S0/S2		2.40 ... 25.0	50	
3	5.2	9.00 ... 13.0	3RV10 21-1KA10	3RT10 34-1AP00	S0/S2		2.40 ... 25.0	50	
3	5.2	11.0 ... 16.0	3RV10 31-4AA10	3RT10 34-1AP00	S2		2.40 ... 25.0	50	
4	6.8	11.0 ... 16.0	3RV10 31-4AA10	3RT10 34-1AP00	S2		2.40 ... 25.0	50	
4	6.8	14.0 ... 20.0	3RV10 31-4BA10	3RT10 34-1AP00	S2		2.00 ... 25.0	50	
5.5	9.2	14.0 ... 20.0	3RV10 31-4BA10	3RT10 34-1AP00	S2		2.00 ... 25.0	50	
5.5	9.2	18.0 ... 25.0	3RV10 31-4DA10	3RT10 34-1AP00	S2		2.00 ... 25.0	50	
7.5	12.4	22.0 ... 32.0	3RV10 31-4EA10	3RT10 34-1AP00	S2		2.00 ... 25.0	50	
11	17.6	28.0 ... 40.0	3RV10 31-4FA10	3RT10 35-1AP00	S2		2.00 ... 25.0	50	
15	23	28.0 ... 40.0	3RV10 42-4FB10	3RT10 44-1AP00	S3	3UF7 102-1AA0 or 3RB29 06-2JG1	10.0 ... 100	50	
15	22	36.0 ... 50.0	3RV10 42-4HB10	3RT10 44-1AP00	S3		10.0 ... 100	50	
18.5	28	36.0 ... 50.0	3RV10 42-4HB10	3RT10 44-1AP00	S3		10.0 ... 100	50	
18.5	28	45.0 ... 63.0	3RV10 42-4JB10	3RT10 45-1AP00	S3		10.0 ... 100	50	
22	33	36.0 ... 50.0	3RV10 42-4HB10	3RT10 44-1AP00	S3		10.0 ... 100	50	
22	33	57.0 ... 75.0	3RV10 42-4KB10	3RT10 45-1AP00	S3		10.0 ... 100	50	
30	44	57.0 ... 75.0	3RV10 42-4KB10	3RT10 45-1AP00	S3		10.0 ... 100	50	
30	44	70.0 ... 90.0	3RV10 42-4LB10	3RT10 54-1AP36	S3/S6		10.0 ... 100	50	
30	44	70.0 ... 90.0	3RV10 42-4LB10	3RT10 54-1AP36	S3/S6	3UF7 103-1AA0 or 3RB29 56-2TG2	20.0 ... 200	50	
37	53	70.0 ... 90.0	3RV10 42-4LB10	3RT10 54-1AP36	S3/S6		3UF7 102-1AA0 or 3RB29 06-2JG1	10.0 ... 100	50
37	53	70.0 ... 90.0	3RV10 42-4LB10	3RT10 54-1AP36	S3/S6				
45	64	without	3VL27 10-3DK33	3RT10 54-1AP36	3VLS/6	3UF7 103-1AA0 or 3RB29 56-2TG2	20.0 ... 200	50	
55	78	without	3VL27 10-3DK33	3RT10 55-1AP36	3VLS/6		20.0 ... 200	50	
75	106	without	3VL27 16-3DK33	3RT10 56-6AP36	3VLS/6		20.0 ... 200	50	

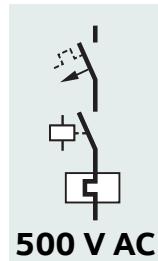
<sup>1)</sup> Nominal value at 500 V AC, 50 Hz for 4-pole standard motors. The specific starting and rated data of the motor to be protected are decisive when selecting devices.

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

<sup>3)</sup> The necessary current detection modules are stated. In addition, the corresponding 3RB22/3RB23 and 3UF7 basic units are required.

# Circuit breaker + contactor + SIMOCODE 3UF7/ 3RB22/3RB23 solid-state overload relay

CLASS 30, coordination type 2,  
Short-circuit breaking capacity  $I_q = 50$  kA



Standard three-phase motor 4-pole at 500 V AC <sup>1)</sup> Rated power P	Setting range Overload release Motor current (nominal value) I	Circuit breaker kW	Contactor <sup>2)</sup> Order No.	Size	Overload relay <sup>3)</sup> Order No.	Setting range Overload release Overload relay	Short-circuit breaking capacity $I_q$
	A	A				A	kA
75	106	without	3VL27 16-3DK33	3RT10 64-6AP36	3VL/S10	3UF7 104-1BA0 or 3RB29 66-2WH2	63.0 ... 630
90	128	without	3VL27 16-3DK33	3RT10 64-6AP36	3VL/S10		50
90	128	without	3VL37 25-3DK36	3RT12 65-6AP36	3VL/S10V		63.0 ... 630
110	156	without	3VL27 16-3DK33 <sup>4)</sup>	3RT10 65-6AP36	3VL/S10		50
110	156	without	3VL27 16-3DK33 <sup>4)</sup>	3RT12 64-6AP36	3VL/S10V		63.0 ... 630
132	184	without	3VL47 31-3DK36	3RT10 76-6AP36	3VL/S12		50
132	184	without	3VL37 25-3DK36	3RT12 65-6AP36	3VL/S10V		63.0 ... 630
160	224	without	3VL37 25-3DK36	3RT10 75-6AP36	3VL/S12		50
160	224	without	3VL37 25-3DK36	3RT12 66-6AP36	3VL/S10V		63.0 ... 630
200	280	without	3VL47 31-3DK36	3RT10 76-6AP36	3VL/S12		50
200	280	without	3VL47 31-3DK36	3RT12 75-6AP36	3VL/S12V		63.0 ... 630
250	344	without	3VL57 50-3DK36	3RT12 76-6AP36	3VL/S12V		50
315	432	without	3VL57 50-2DK36	3TF69 44-0CM7	3VL/S14		63.0 ... 630
355	488	without	3VL57 50-2DK36	3TF69 44-0CM7	3VL/S14		50

<sup>1)</sup> Nominal value at 500 V AC, 50 Hz for 4-pole standard motors. The specific starting and rated data of the motor to be protected are decisive when selecting devices.

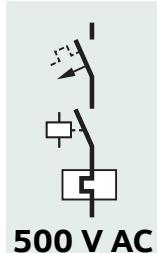
<sup>2)</sup> Rated control supply voltage 230 V AC, 50 Hz.  
Other control voltages are also possible.

<sup>3)</sup> The necessary current detection modules are stated. In addition, the corresponding 3RB22/3RB23 and 3UF7 basic units are required.

<sup>4)</sup> Alternatively, 3VL37 25-3DK36 is possible.

# Motor starter protector/circuit breaker + contactor + SIMOCODE 3UF7

CLASS 40, coordination types 2 and 1,  
Short-circuit breaking capacity  $I_q = 50$  kA



Standard three-phase motor 4-pole at 500 V AC <sup>1)</sup>		Setting range Overload release Motor starter protector/circuit breaker	Motor starter protector/circuit breaker	Contactor <sup>2)</sup>	Size	Overload relay <sup>3)</sup>	Setting range Overload release Overload relay	Short-circuit breaking capacity $I_q$
Rated power $P$ kW	Motor current (nominal value) $I$ A	A	Order No.	Order No.		Order No.	A	kA
<b>Coordination type 2</b>								
0.12	0.32	without	3RV13 21-1AC10	3RT10 24-1AP00	S0	3UF7 100-1AA0	0.30 ... 3.00	50
0.18	0.48	without	3RV13 21-1BC10	3RT10 24-1AP00	S0		0.30 ... 3.00	50
0.25	0.68	without	3RV10 21-1CA10	3RT10 24-1AP00	S0		0.30 ... 3.00	50
0.37	0.88	1.80 ... 2.50	3RV10 21-1CA10	3RT10 26-1AP00	S0		0.30 ... 3.00	50
0.55	1.2	2.20 ... 3.20	3RV10 21-1DA10	3RT10 34-1AP00	S0/S2		0.30 ... 3.00	50
0.75	1.5	3.50 ... 5.00	3RV10 21-1FA10	3RT10 34-1AP00	S0/S2		0.30 ... 3.00	50
1.1	2.2	4.50 ... 6.30	3RV10 21-1GA10	3RT10 34-1AP00	S0/S2		0.30 ... 3.00	50
1.5	2.9	5.50 ... 8.00	3RV10 21-1HA10	3RT10 34-1AP00	S0/S2	3UF7 101-1AA0	2.40 ... 25.0	50
2.2	4	9.00 ... 12.5	3RV10 21-1KA10	3RT10 34-1AP00	S0/S2		2.40 ... 25.0	50
3	5.2	11.0 ... 16.0	3RV10 31-4AA10	3RT10 34-1AP00	S2		2.40 ... 25.0	50
4	6.8	14.0 ... 20.0	3RV10 31-4BA10	3RT10 34-1AP00	S2		2.40 ... 25.0	50
5.5	9.2	18.0 ... 25.0	3RV10 31-4DA10	3RT10 34-1AP00	S2		2.40 ... 25.0	50
7.5	12.4	22.0 ... 32.0	3RV10 31-4EA10	3RT10 34-1AP00	S2		2.40 ... 25.0	50
11	17.6	22.0 ... 32.0	3RV10 31-4EB10	3RT10 44-1AP00	S2/S3	3UF7 102-1AA0	10.0 ... 100	50
15	22	36.0 ... 50.0	3RV10 42-4HB10	3RT10 44-1AP00	S3		10.0 ... 100	50
18.5	28	45.0 ... 63.0	3RV10 42-4JB10	3RT10 45-1AP00	S3		10.0 ... 100	50
22	33	57.0 ... 75.0	3RV10 42-4KB10	3RT10 45-1AP00	S3		10.0 ... 100	50
30	44	70.0 ... 90.0	3RV10 42-4LB10	3RT10 54-1AP36	S3/S6		10.0 ... 100	50
30	44	70.0 ... 90.0	3RV10 42-4LB10	3RT10 54-1AP36	S3/S6	3UF7 103-1AA0	20.0 ... 200	50
37	53	70.0 ... 90.0	3RV10 42-4LB10	3RT10 54-1AP36	S3/S6	3UF7 102-1AA0	10.0 ... 100	50
37	53	70.0 ... 90.0	3RV10 42-4LB10	3RT10 54-1AP36	S3/S6	3UF7 103-1AA0	20.0 ... 200	50
45	64	without	3VL27 10-3DK33	3RT10 55-1AP36	3VL/S6		20.0 ... 200	50
55	78	without	3VL27 16-3DK33	3RT10 56-6AP36	3VL/S6		20.0 ... 200	50
75	106	without	3VL27 16-3DK33	3RT10 64-6AP36	3VL/S10	3UF7 104-1AA0	63.0 ... 630	50
90	128	without	3VL37 25-3DK33	3RT12 65-6AP36	3VL/S10V		63.0 ... 630	50
110	156	without	3VL37 25-3DK33	3RT12 65-6AP36	3VL/S10V		63.0 ... 630	50
132	184	without	3VL47 31-3DK36	3RT10 76-6AP36	3VL/S12		63.0 ... 630	50
160	224	without	3VL47 31-3DK36	3RT10 76-6AP36	3VL/S12		63.0 ... 630	50
200	280	without	3VL57 50-3DK36	3RT12 76-6AP36	3VL/S12V		63.0 ... 630	50
<b>Coordination type 1</b>								
250	344	without	3VL67 80-2DE36	3TF69 44-0CM7	3VL/S14	3UF7 104-1AA0	63.0 ... 630	50

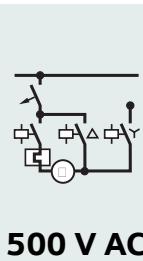
<sup>1)</sup> Nominal value at 500 V AC, 50 Hz for 4-pole standard motors. The specific starting and rated data of the motor to be protected are decisive when selecting devices.

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

<sup>3)</sup> The necessary current detection modules are stated. In addition, the corresponding 3RB22/3RB23 and 3UF7 basic units are required.

# Motor starter protector + star-delta combination + thermal overload relay

CLASS 5 and CLASS 10, coordination types 2 and 1,  
Short-circuit breaking capacity  $I_q = 50 \text{ kA}$



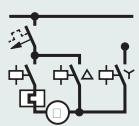
Standard three-phase motor 4-pole at 500 V AC <sup>1)</sup>		Setting range Overload release	Motor starter protector	Contactors <sup>2)</sup>		Size	Overload relay	Setting range Overload release	Short-circuit breaking capacity $I_q$
Rated power $P$	Motor current (nominal value) $I$	Motor starter protector		Line contactor + delta contactor	Star contactor			Overload relay	
kW	A	A	Order No.	Order No.	Order No.		Order No.	A	kA
<b>Coordination type 2</b>									
7.5	12.4	without	3RV13 31-4AC10	3RT10 34-1AP00	3RT10 24-1AP00	S2/S0	3RU11 36-1JB0	7.00 ... 10.0	50
11	17.6	without	3RV13 31-4BC10	3RT10 34-1AP00	3RT10 24-1AP00	S2/S0	3RU11 36-1KB0	9.00 ... 12.5	50
15	22	without	3RV13 31-4DC10	3RT10 34-1AP00	3RT10 24-1AP00	S2/S0	3RU11 36-4AB0	11.0 ... 16.0	50
18.5	29	without	3RV13 31-4EC10	3RT10 34-1AP00	3RT10 24-1AP00	S2/S0	3RU11 36-4BB0	14.0 ... 20.0	50
22	34	without	3RV13 31-4FC10	3RT10 35-1AP00	3RT10 24-1AP00	S2/S0	3RU11 36-4DB0	18.0 ... 25.0	50
30	46	without	3RV13 31-4HC10	3RT10 36-1AP00	3RT10 26-1AP00	S2/S0	3RU11 36-4EB0	22.0 ... 32.0	50
37	53	without	3RV13 41-4JC10	3RT10 44-1AP00	3RT10 34-1AP00	S3/S2	3RU11 46-4FB0	28.0 ... 40.0	50
45	65	without	3RV13 41-4KC10	3RT10 44-1AP00	3RT10 34-1AP00	S3/S2	3RU11 46-4HB0	36.0 ... 50.0	50
55	79	without	3RV13 41-4LC10	3RT10 45-1AP00	3RT10 34-1AP00	S3/S2		36.0 ... 50.0	50
<b>Coordination type 1</b>									
7.5	12.4	without	3RV13 21-4AC10	3RT10 17-1AP01	3RT10 15-1AP01	S0/S00	3RU11 16-1JB0	7.00 ... 10.0	50
11	17.6	without	3RV13 21-4BC10	3RT10 24-1AP00	3RT10 24-1AP00	S0	3RU11 26-1KB0	9.00 ... 12.5	50
15	22	without	3RV13 21-4DC10	3RT10 24-1AP00	3RT10 24-1AP00	S0	3RU11 26-4AB0	11.0 ... 16.0	50
18.5	29	without	3RV13 31-4EC10	3RT10 26-1AP00	3RT10 24-1AP00	S2/S0	3RU11 26-4BB0	14.0 ... 20.0	50
22	34	without	3RV13 31-4FC10	3RT10 34-1AP00	3RT10 24-1AP00	S2/S0	3RU11 36-4DB0	18.0 ... 25.0	50
30	46	without	3RV13 31-4HC10	3RT10 34-1AP00	3RT10 26-1AP00	S2/S0	3RU11 36-4EB0	22.0 ... 32.0	50
37	53	without	3RV13 41-4JC10	3RT10 34-1AP00	3RT10 34-1AP00	S3/S2	3RU11 36-4FB0	28.0 ... 40.0	50
45	65	without	3RV13 41-4KC10	3RT10 35-1AP00	3RT10 34-1AP00	S3/S2	3RU11 36-4GB0	36.0 ... 45.0	50
55	79	without	3RV13 41-4LC10	3RT10 36-1AP00	3RT10 34-1AP00	S3/S2	3RU11 36-4HB0	40.0 ... 50.0	50

<sup>1)</sup> Nominal value at 500 V AC, 50 Hz for 4-pole standard motors. The specific starting and rated data of the motor to be protected are decisive when selecting devices.

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

# Motor starter protector/circuit breaker + star-delta combination + 3RB20/3RB21 solid-state overload relay

CLASS 5 and CLASS 10, coordination type 2,  
Short-circuit breaking capacity  $I_q = 50 \text{ kA}$



**500 V AC**

Standard three-phase motor 4-pole at 500 V AC <sup>1)</sup>		Setting range Overload release	Motor starter protector/circuit breaker	Contactors <sup>2)</sup>		Size	Overload relay	Setting range Overload release
Rated power $P$	Motor current (nominal value) $I$	Motor starter protector/circuit breaker		Line contactor + delta contactor	Star contactor		Overload relay	Overload relay
kW	A	A	Order No.	Order No.	Order No.		Order No.	A
7.5	12.4	without	3RV13 31-4AC10	3RT10 34-1AP00	3RT10 24-1AP00	S2/S0	3RB20 36-1QB0 or 3RB21 23-4QB0	6.00 ... 25.0
11	17.6	without	3RV13 31-4BC10	3RT10 34-1AP00	3RT10 24-1AP00	S2/S0		
15	22	without	3RV13 31-4EC10	3RT10 34-1AP00	3RT10 24-1AP00	S2/S0	3RB20 36-1UB0 or 3RB21 33-4UW1	12.5 ... 50.0
18.5	28	28.0 ... 40.0 <sup>3)</sup>	3RV10 31-4FA10	3RT10 35-1AP00	3RT10 24-1AP00	S2/S0		
22	33	40.0 ... 50.0 <sup>3)</sup>	3RV10 31-4HA10	3RT10 36-1AP00	3RT10 24-1AP00	S2/S0		
30	44	without	3RV13 41-4HC10	3RT10 44-1AP00	3RT10 34-1AP00	S3/S2	3RB20 46-1EB0 or 3RB21 43-4EB0	25.0 ... 100
37	53	without	3RV13 41-4JC10	3RT10 44-1AP00	3RT10 34-1AP00	S3/S2		
45	64	57.0 ... 75.0 <sup>3)</sup>	3RV10 41-4KA10	3RT10 44-1AP00	3RT10 34-1AP00	S3/S2		
55	78	70.0 ... 90.0 <sup>3)</sup>	3RV10 41-4LA10	3RT10 45-1AP00	3RT10 34-1AP00	S3/S2		
75	106	without	3VL27 16-3DK33	3RT10 54-1AP36	3RT10 44-1AP00	S6/S3	3RB20 56-1FW2 or 3RB21 53-4FW2	50.0 ... 200
90	128	without	3VL27 16-3DK33	3RT10 55-1AP36	3RT10 44-1AP00	S6/S3	3RB20 56-1FC2 or 3RB21 53-4FC2	
110	156	without	3VL27 16-3DK33	3RT10 56-6AP36	3RT10 44-1AP00	S6/S3		
110	156	without	3VL37 25-3DK36	3RT10 56-6AP36	3RT10 44-1AP00	S6/S3		
132	184	without	3VL37 25-3DK36	3RT10 64-6AP36	3RT10 54-1AP36	S10/S6	3RB20 66-1GC2 or 3RB21 63-4GC2	55.0 ... 250
160	224	without	3VL37 25-3DK36	3RT10 65-6AP36	3RT10 54-1AP36	S10/S6		
160	224	without	3VL47 31-3DK36	3RT10 65-6AP36	3RT10 54-1AP36	S10/S6		
200	280	without	3VL47 31-3DK36	3RT10 66-6AP36	3RT10 54-1AP36	S10/S6	3RB20 66-1MC2 or 3RB21 63-4MC2	160 ... 630
250	344	without	3VL57 50-3DK36	3RT10 75-6AP36	3RT10 64-6AP36	S12/S10		
315	432	without	3VL57 50-3DK36	3RT10 75-6AP36	3RT10 64-6AP36	S12/S10		
355	488	without	3VL57 50-3DK36	3RT10 75-6AP36	3RT10 64-6AP36	S12/S10		

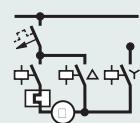
<sup>1)</sup> Nominal value at 500 V AC, 50 Hz for 4-pole standard motors. The specific starting and rated data of the motor to be protected are decisive when selecting devices.

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

<sup>3)</sup> The motor starter protector/circuit breaker must be set to the maximum current value.

# Motor starter protector/circuit breaker + star-delta combination + SIMOCODE 3UF7/3RB22/3RB23 solid-state overload relay

CLASS 5 and CLASS 10, coordination type 2,  
Short-circuit breaking capacity  $I_q = 50 \text{ kA}$



**500 V AC**

Standard three-phase motor 4-pole at 500 V AC <sup>1)</sup>		Setting range Overload release	Motor starter protector/circuit breaker	Contactors <sup>2)</sup>		Size	Overload relay <sup>3)</sup>	Setting range Overload release Overload relay
Rated power P	kW	Motor current (nominal value) I	A	Order No.	Order No.	Order No.	Order No.	A
7.5	12.4	without	3RV13 31-4AC10	3RT10 34-1AP00	3RT10 24-1AP00	S2/S0	3UF7 101-1AA0 or 3RB29 06-2DG1	2.40 ... 25.0
11	17.6	without	3RV13 31-4BC10	3RT10 34-1AP00	3RT10 24-1AP00	S2/S0		
15	23	without	3RV13 31-4EC10	3RT10 34-1AP00	3RT10 24-1AP00	S2/S0	3UF7 102-1AA0 or 3RB29 06-2JG1	10.0 ... 100
18.5	28	without	3RV13 31-4FC10	3RT10 35-1AP00	3RT10 24-1AP00	S2/S0		
22	33	40.0 ... 50.0 <sup>4)</sup>	3RV10 31-4HA10	3RT10 36-1AP00	3RT10 24-1AP00	S2/S0		
30	44	without	3RV13 41-4HC10	3RT10 44-1AP00	3RT10 34-1AP00	S3/S2		
37	53	without	3RV13 41-4JC10	3RT10 44-1AP00	3RT10 34-1AP00	S3/S2		
45	64	without	3RV13 41-4KC10	3RT10 44-1AP00	3RT10 34-1AP00	S3/S2		
55	78	70.0 ... 90.0 <sup>4)</sup>	3RV10 41-4LA10	3RT10 45-1AP00	3RT10 34-1AP00	S3/S2		
75	106	without	3VL27 16-3DK33	3RT10 54-1AP36	3RT10 44-1AP00	S6/S3	3UF7 103-1AA0 or 3RB29 56-2TG2	20.0 ... 200
90	128	without	3VL27 16-3DK33	3RT10 55-1AP36	3RT10 44-1AP00	S6/S3		
110	156	without	3VL27 16-3DK33	3RT10 56-6AP36	3RT10 44-1AP00	S6/S3		
110	156	without	3VL27 25-3DK33	3RT10 56-6AP36	3RT10 44-1AP00	S6/S3		
132	184	without	3VL37 25-3DK36	3RT10 64-6AP36	3RT10 54-1AP36	S10/S6	3UF7 104-1BA0 or 3RB29 66-2WH2	63.0 ... 630
160	224	without	3VL37 25-3DK36	3RT10 65-6AP36	3RT10 54-1AP36	S10/S6		
160	224	without	3VL37 31-3DK36	3RT10 65-6AP36	3RT10 54-1AP36	S10/S6		
200	280	without	3VL47 31-3DK36	3RT10 66-6AP36	3RT10 54-1AP36	S10/S6		
250	344	without	3VL57 50-3DK36	3RT10 75-6AP36	3RT10 64-6AP36	S12/S10		
315	432	without	3VL57 50-3DK36	3RT10 75-6AP36	3RT10 64-6AP36	S12/S10		
355	488	without	3VL57 50-3DK36	3RT10 75-6AP36	3RT10 64-6AP36	S12/S10		

<sup>1)</sup> Nominal value at 500 V AC, 50 Hz for 4-pole standard motors. The specific starting and rated data of the motor to be protected are decisive when selecting devices.

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

<sup>3)</sup> The necessary current detection modules are stated. In addition, the corresponding 3RB22/3RB23 and 3UF7 basic units are required.

<sup>4)</sup> The motor starter protector/circuit breaker must be set to the maximum current value.

# Motor starter protector + contactor

CLASS 10, coordination type 2,  
Short-circuit breaking capacity  $I_q = 50 \text{ kA}$



**690 V AC**

Standard three-phase motor 4-pole at 690 V AC <sup>1)</sup>		Setting range Overload release Motor starter protector	Standard motor starter protector with limiter function	Motor starter protector	Contactor <sup>2)</sup>	Size	Short-circuit breaking capaci- ty $I_q$
Rated power $P$ kW	Motor current (nominal value) $I$ A	A	Typ	Order No.	Order No.		kA
0.09	0.17	0.14 ... 0.20	not required	3RV10 21-0BA10	3RT10 24-1AP00	S0	50
0.12	0.23	0.18 ... 0.25	not required	3RV10 21-0CA10	3RT10 24-1AP00	S0	50
0.12	0.23	0.22 ... 0.32	not required	3RV10 21-0DA10	3RT10 24-1AP00	S0	50
0.18	0.35	0.28 ... 0.40	not required	3RV10 21-0EA10	3RT10 24-1AP00	S0	50
0.18	0.35	0.35 ... 0.50	not required	3RV10 21-0FA10	3RT10 24-1AP00	S0	50
0.25	0.49	0.45 ... 0.63	not required	3RV10 21-0GA10	3RT10 24-1AP00	S0	50
0.37	0.64	0.55 ... 0.80	not required	3RV10 21-0HA10	3RT10 24-1AP00	S0	50
0.55	0.87	0.70 ... 1.00	not required	3RV10 21-0JA10	3RT10 24-1AP00	S0	50
0.75	1.1	0.90 ... 1.25	not required	3RV10 21-0KA10	3RT10 24-1AP00	S0	50
0.75	1.1	1.10 ... 1.60	not required	3RV10 21-1AA10	3RT10 24-1AP00	S0	50
1.1	1.6	1.40 ... 2.00	3RV13 21-4DC10 Size S0 $I_n = 25 \text{ A}$	3RV10 21-1BA10	3RT10 24-1AP00	S0	50
1.5	2.1	1.80 ... 2.50		3RV10 21-1CA10	3RT10 24-1AP00	S0	50
2.2	2.8	2.20 ... 3.20		3RV10 21-1DA10	3RT10 24-1AP00	S0	50
3.0	3.8	3.50 ... 5.00		3RV10 21-1FA10	3RT10 24-1AP00	S0	50
4.0	4.9	4.50 ... 6.30		3RV10 21-1GA10	3RT10 24-1AP00	S0	50
5.5	6.7	5.50 ... 8.00	3RV13 31-4HC10 Size S2 $I_n = 50 \text{ A}$	3RV10 21-1HA10	3RT10 24-1AP00	S0	50
7.5	8.9	7.00 ... 10.0		3RV10 21-1JA10	3RT10 24-1AP00	S0	50
11	12.8	11.0 ... 16.0		3RV10 21-4AA10	3RT10 25-1AP00	S0	50
11	12.8	11.0 ... 16.0	3RV13 31-4HC10 Size S2 $I_n = 50 \text{ A}$	3RV10 31-4AA10	3RT10 34-1AP00	S2	50
15	17	14.0 ... 20.0		3RV10 31-4BA10	3RT10 34-1AP00	S2	50
18.5	21	18.0 ... 25.0		3RV10 31-4DA10	3RT10 35-1AP00	S2	50
22	24	22.0 ... 32.0		3RV10 31-4EA10	3RT10 35-1AP00	S2	50
30	32	28.0 ... 40.0	3RV13 31-4HC10 Size S2 $I_n = 50 \text{ A}$	3RV10 31-4FA10	3RT10 44-1AP00 <sup>3)</sup>	S2/S3	50
37	39	36.0 ... 45.0		3RV10 31-4GA10	3RT10 44-1AP00 <sup>3)</sup>	S2/S3	50
45	47	40.0 ... 50.0		3RV10 31-4HA10	3RT10 45-1AP00 <sup>3)</sup>	S2/S3	50
55	57	40.0 ... 100	not required	3VU20 32-0AL60	3RT10 55-6AP36	S6	50
75	77	40.0 ... 100	not required	3VU20 32-0AL60	3RT10 55-6AP36	S6	50
90	93	64.0 ... 160	not required	3VU20 32-0CL60	3RT10 55-6AP36	S6	50
110	113	64.0 ... 160	not required	3VU20 32-0CL60	3RT10 55-6AP36	S6	50
132	134	64.0 ... 160	not required	3VU20 32-0CL60	3RT10 55-6AP36	S6	50
160	162	80.0 ... 200	not required	3VU20 42-0FL60	3RT10 56-6AP36	S6	50
200	203	128 ... 320	not required	3VU20 42-0FL60	3RT12 64-6AP36	S10V	50
250	250	128 ... 320	not required	3VU20 42-0FL60	3RT12 65-6AP36	S10V	50
315	316	160 ... 400	not required	3VU20 52-0FL60	3RT12 75-6AP36	S12V	50
355	354	252 ... 630	not required	3VU20 52-0HL60	3RT12 75-6AP36	S12V	50
400	400	252 ... 630	not required	3VU20 52-0HL60	3RT12 75-6AP36	S12V	50
500	493	252 ... 630	not required	3VU20 52-0HL60	3RT12 76-6AP36	S12V	50

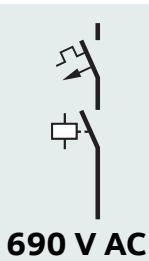
<sup>1)</sup> Nominal value at 690 V AC, 50 Hz for 4-pole standard motors. The specific starting and rated data of the motor to be protected are decisive when selecting devices.

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

<sup>3)</sup> There must be a minimum clearance of 10 cm between the motor starter protector and the contactor.

# Circuit breaker + contactor

CLASS 20 and CLASS 30, coordination type 2,  
Short-circuit breaking capacity  $I_q = 50$  kA



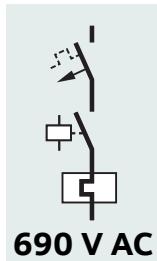
Standard three-phase motor 4-pole at 690 V AC <sup>1)</sup>		Setting range Overload release Circuit breaker	Circuit breaker	Contactor <sup>2)</sup>	Size	Short-circuit breaking capacity $I_q$
Rated power P kW	Motor current (nominal value) I A	A	Order No.	Order No.		kA
<b>CLASS 20</b>						
55	57	40.0 ... 100	3VU20 32-0AL60	3RT10 55-6AP36	S6	50
75	77	64.0 ... 160	3VU20 32-0CL60	3RT10 55-6AP36	S6	50
90	93	64.0 ... 160	3VU20 32-0CL60	3RT10 55-6AP36	S6	50
110	113	80.0 ... 200	3VU20 32-0DL60	3RT10 56-6AP36	S6	50
132	133	128 ... 320	3VU20 42-0FL60	3RT12 64-6AP36	S10V	50
160	162	128 ... 320	3VU20 42-0FL60	3RT12 64-6AP36	S10V	50
200	204	128 ... 320	3VU20 42-0FL60	3RT12 64-6AP36	S10V	50
250	249	128 ... 320	3VU20 42-0FL60	3RT12 65-6AP36	S10V	50
315	316	160 ... 400	3VU20 52-0FL60	3RT12 75-6AP36	S12V	50
355	354	252 ... 630	3VU20 52-0HL60	3RT12 75-6AP36	S12V	50
400	400	252 ... 630	3VU20 52-0HL60	3RT12 75-6AP36	S12V	50
500	493	252 ... 630	3VU20 52-0HL60	3RT12 76-6AP36	S12V	50
<b>CLASS 30</b>						
55	57	40.0 ... 100	3VU20 32-0AL60	3RT10 55-6AP36	S6	50
75	77	64.0 ... 160	3VU20 32-0CL60	3RT10 55-6AP36	S6	50
90	93	80.0 ... 200	3VU20 32-0DL60	3RT10 56-6AP36	S6	50
110	113	128 ... 320	3VU20 42-0FL60	3RT12 64-6AP36	S10V	50
132	133	128 ... 320	3VU20 42-0FL60	3RT12 64-6AP36	S10V	50
160	162	128 ... 320	3VU20 42-0FL60	3RT12 64-6AP36	S10V	50
200	204	128 ... 320	3VU20 42-0FL60	3RT12 65-6AP36	S10V	50
250	249	160 ... 400	3VU20 52-0FL60	3RT12 75-6AP36	S12V	50
315	316	252 ... 630	3VU20 52-0HL60	3RT12 76-6AP36	S12V	50
355	354	252 ... 630	3VU20 52-0HL60	3RT12 76-6AP36	S12V	50

<sup>1)</sup> Nominal value at 690 V AC, 50 Hz for 4-pole standard motors. The specific starting and rated data of the motor to be protected are decisive when selecting devices.

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

# Circuit breaker + contactor + 3RB20/3RB21 solid-state overload relay

CLASS 5 and CLASS 10, CLASS 20 and CLASS 30, coordination type 2,  
Short-circuit breaking capacity  $I_q = 50 \text{ kA}$



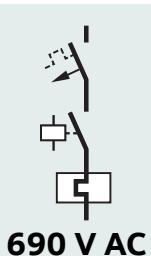
Standard three-phase motor 4-pole at 690 V AC <sup>1)</sup>		Setting range Overload release Circuit breaker	Circuit breaker	Contactor <sup>2)</sup>	Size	Overload relay	Setting range Overload release Overload relay	Short-circuit breaking capacity $I_q$
Rated power $P$ kW	Motor current (nominal value) $I$ A	A	Order No.	Order No.		Order No.	A	kA
<b>CLASS 5 and CLASS 10</b>								
75	77	without	3VU23 12-0AC60	3RT10 54-1AP36	3VU2/S6	3RB20 56-1FW2 or 3RB21 53-4FW2	50.0 ... 200	50
90	93	without	3VU23 12-0BC60	3RT10 54-1AP36	3VU2/S6		50.0 ... 200	50
110	113	without	3VU23 22-0CC60	3RT10 54-1AP36	3VU2/S6		50.0 ... 200	50
132	133	without	3VU23 22-0CC60	3RT10 55-1AP36	3VU2/S6		50.0 ... 200	50
160	162	without	3VU23 22-0DC60	3RT10 56-1AP36	3VU2/S6		50.0 ... 200	50
200	203	without	3VU23 32-0EC60	3RT10 64-6AP36	3VU2/S10	3RB20 66-1GC2 or 3RB21 63-4GC2	55.0 ... 250	50
250	250	without	3VU23 42-0FC60	3RT12 65-6AP36	3VU2/S10V	3RB20 66-1MC2 or 3RB21 63-4MC2	160 ... 630	50
315	316	without	3VU23 42-0GC60	3RT12 75-6AP36	3VU2/S12V		160 ... 630	50
355	354	without	3VU23 52-0HC60	3RT12 75-6AP36	3VU2/S12V		160 ... 630	50
400	400	without	3VU23 52-0HC60	3RT12 75-6AP36	3VU2/S12V		160 ... 630	50
500	493	without	3VU23 52-0HC60	3RT12 76-6AP36	3VU2/S12V		160 ... 630	50
<b>CLASS 20</b>								
55	57	without	3VU23 12-0AC60	3RT10 54-1AP36	3VU2/S6	3RB20 56-2FW2 or 3RB21 53-4FW2	50.0 ... 200	50
75	77	without	3VU23 12-0AC60	3RT10 54-1AP36	3VU2/S6		50.0 ... 200	50
90	93	without	3VU23 22-0CC60	3RT10 55-1AP36	3VU2/S6		50.0 ... 200	50
110	113	without	3VU23 22-0DC60	3RT10 56-1AP36	3VU2/S6		50.0 ... 200	50
132	133	without	3VU23 32-0EC60	3RT10 64-6AP36	3VU2/S10	3RB20 66-2GC2 or 3RB21 63-4GC2	55.0 ... 250	50
160	162	without	3VU23 32-0EC60	3RT10 65-6AP36	3VU2/S10		55.0 ... 250	50
200	203	without	3VU23 32-0EC60	3RT10 66-6AP36	3VU2/S10		55.0 ... 250	50
250	250	without	3VU23 42-0FC60	3RT12 65-6AP36	3VU2/S10V	3RB20 66-2MC2 or 3RB21 63-4MC2	160 ... 630	50
315	316	without	3VU23 42-0GC60	3RT12 75-6AP36	3VU2/S12V		160 ... 630	50
355	354	without	3VU23 52-0HC60	3RT12 75-6AP36	3VU2/S12V		160 ... 630	50
400	400	without	3VU23 52-0HC60	3RT12 75-6AP36	3VU2/S12V		160 ... 630	50
500	493	without	3VU23 52-0HC60	3RT12 76-6AP36	3VU2/S12V		160 ... 630	50
<b>CLASS 30</b>								
55	56	without	3VU23 12-0AC60	3RT10 54-1AP36	3VU2/S6	3RB21 53-4FW2	50.0 ... 200	50
75	77	without	3VU23 22-0CC60	3RT10 55-1AP36	3VU2/S6		50.0 ... 200	50
90	93	without	3VU23 22-0DC60	3RT10 56-1AP36	3VU2/S6		50.0 ... 200	50
110	113	without	3VU23 32-0EC60	3RT10 64-6AP36	3VU2/S10		50.0 ... 200	50
110	113	without	3VU23 32-0EC60	3RT10 64-6AP36	3VU2/S10	3RB21 63-4GC2	55.0 ... 250	50
132	133	without	3VU23 32-0EC60	3RT10 64-6AP36	3VU2/S10		55.0 ... 250	50
160	162	without	3VU23 32-0EC60	3RT10 64-6AP36	3VU2/S10		55.0 ... 250	50
200	203	without	3VU23 42-0FC60	3RT12 64-6AP36	3VU2/S10V		55.0 ... 250	50
250	250	without	3VU23 42-0GC60	3RT12 75-6AP36	3VU2/S12V	3RB21 63-4MC2	160 ... 630	50
315	316	without	3VU23 52-0HC60	3RT12 75-6AP36	3VU2/S12V		160 ... 630	50
355	354	without	3VU23 52-0HC60	3RT12 76-6AP36	3VU2/S12V		160 ... 630	50

<sup>1)</sup> Nominal value at 690 V AC, 50 Hz for 4-pole standard motors. The specific starting and rated data of the motor to be protected are decisive when selecting devices.

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

# Circuit breaker + contactor + SIMOCODE 3UF7/ 3RB22/3RB23 solid-state overload relay

CLASS 5 and CLASS 10, CLASS 20 and CLASS 30, coordination type 2,  
Short-circuit breaking capacity  $I_q = 50$  kA



Standard three-phase motor 4-pole at 690 V AC <sup>1)</sup> Rated power $P$ kW	Setting range Overload release Motor current (nominal value) $I$ A	Circuit breaker Order No.	Contactor <sup>2)</sup> Order No.	Size	Overload relay <sup>3)</sup> Order No.	Setting range Overload release Overload relay A	Short-circuit breaking capacity $I_q$ kA	
<b>CLASS 5 and CLASS 10</b>								
75	77	without	3VU23 12-0AC60	3RT10 54-1AP36	3VU2/S6	3UF7 103-1AA0 or 3RB29 56-2TG2	20.0 ... 200	50
90	93	without	3VU23 12-0BC60	3RT10 54-1AP36	3VU2/S6		20.0 ... 200	50
110	113	without	3VU23 22-0CC60	3RT10 54-1AP36	3VU2/S6		20.0 ... 200	50
132	133	without	3VU23 22-0CC60	3RT10 55-1AP36	3VU2/S6		20.0 ... 200	50
160	162	without	3VU23 22-0DC60	3RT10 56-1AP36	3VU2/S6		20.0 ... 200	50
200	203	without	3VU23 32-0EC60	3RT10 64-6AP36	3VU2/S10	3UF7 104-1BA0 or 3RB29 66-2WH2	63.0 ... 630	50
250	250	without	3VU23 42-0FC60	3RT12 65-6AP36	3VU2/S10V		63.0 ... 630	50
315	316	without	3VU23 42-0GC60	3RT12 75-6AP36	3VU2/S12V		63.0 ... 630	50
355	354	without	3VU23 52-0HC60	3RT12 75-6AP36	3VU2/S12V		63.0 ... 630	50
400	400	without	3VU23 52-0HC60	3RT12 75-6AP36	3VU2/S12V		63.0 ... 630	50
500	493	without	3VU23 52-0HC60	3RT12 76-6AP36	3VU2/S12V		63.0 ... 630	50
<b>CLASS 20</b>								
55	56	without	3VU23 12-0AC60	3RT10 54-1AP36	3VU2/S6	3UF7 103-1AA0 or 3RB29 56-2TG2	20.0 ... 200	50
75	77	without	3VU23 12-0A C60	3RT10 54-1AP36	3VU2/S6		20.0 ... 200	50
90	93	without	3VU23 22-0CC60	3RT10 55-1AP36	3VU2/S6		20.0 ... 200	50
110	113	without	3VU23 22-0DC60	3RT10 56-1AP36	3VU2/S6		20.0 ... 200	50
132	133	without	3VU23 32-0EC60	3RT10 64-6AP36	3VU2/S10	3UF7 104-1BA0 or 3RB29 66-2WH2	63.0 ... 630	50
132	133	without	3VU23 32-0EC60	3RT10 64-6AP36	3VU2/S10		63.0 ... 630	50
160	162	without	3VU23 32-0EC60	3RT10 65-6AP36	3VU2/S10		20.0 ... 200	50
160	162	without	3VU23 32-0EC60	3RT10 65-6AP36	3VU2/S10		63.0 ... 630	50
200	203	without	3VU23 32-0EC60	3RT10 66-6AP36	3VU2/S10		63.0 ... 630	50
250	250	without	3VU23 42-0FC60	3RT12 65-6AP36	3VU2/S10V	3UF7 104-1BA0 or 3RB29 66-2WH2	63.0 ... 630	50
315	316	without	3VU23 42-0GC60	3RT12 75-6AP36	3VU2/S12V		63.0 ... 630	50
355	354	without	3VU23 52-0HC60	3RT12 75-6AP36	3VU2/S12V		63.0 ... 630	50
400	400	without	3VU23 52-0HC60	3RT12 75-6AP36	3VU2/S12V		63.0 ... 630	50
500	493	without	3VU23 52-0HC60	3RT12 76-6AP36	3VU2/S12V		63.0 ... 630	50
<b>CLASS 30</b>								
55	57	without	3VU23 12-0AC60	3RT10 54-1AP36	3VU2/S6	3UF7 103-1AA0 or 3RB29 56-2TG2	20.0 ... 200	50
75	77	without	3VU23 22-0CC60	3RT10 55-1AP36	3VU2/S6		20.0 ... 200	50
90	93	without	3VU23 22-0DC60	3RT10 56-1AP36	3VU2/S6		20.0 ... 200	50
110	113	without	3VU23 32-0EC60	3RT10 64-6AP36	3VU2/S10		20.0 ... 200	50
110	113	without	3VU23 32-0EC60	3RT10 64-6AP36	3VU2/S10	3UF7 104-1BA0 or 3RB29 66-2WH2	63.0 ... 630	50
132	133	without	3VU23 32-0EC60	3RT10 64-6AP36	3VU2/S10		20.0 ... 200	50
132	133	without	3VU23 32-0EC60	3RT10 64-6AP36	3VU2/S10		63.0 ... 630	50
132	133	without	3VU23 32-0EC60	3RT10 64-6AP36	3VU2/S10		20.0 ... 200	50
160	162	without	3VU23 32-0EC60	3RT10 66-6AP36	3VU2/S10		63.0 ... 630	50
200	203	without	3VU23 42-0FC60	3RT12 65-6AP36	3VU2/S10V	3UF7 104-1BA0 or 3RB29 66-2WH2	63.0 ... 630	50
250	250	without	3VU23 42-0GC60	3RT12 75-6AP36	3VU2/S12V		63.0 ... 630	50
315	316	without	3VU23 52-0HC60	3RT12 75-6AP36	3VU2/S12V		63.0 ... 630	50
355	354	without	3VU23 52-0HC60	3RT12 76-6AP36	3VU2/S12V		63.0 ... 630	50
355	354	without	3VU23 52-0HC60	3RT12 76-6AP36	3VU2/S12V		63.0 ... 630	50

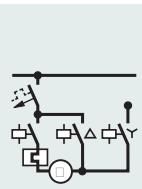
<sup>1)</sup> Nominal value at 690 V AC, 50 Hz for 4-pole standard motors. The specific starting and rated data of the motor to be protected are decisive when selecting devices.

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

<sup>3)</sup> The necessary current detection modules are stated. In addition, the corresponding 3RB22/3RB23 and 3UF7 basic units are required.

# Circuit breaker + star-delta combination + 3RB20/3RB21 solid-state overload relay

CLASS 5 and CLASS 10, coordination type 2,  
Short-circuit breaking capacity  $I_q = 50 \text{ kA}$

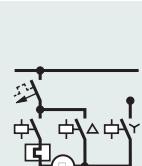


**690 V AC**

Standard three-phase motor 4-pole at 690 V AC <sup>1)</sup>		Setting range Overload release Circuit breaker	Circuit breaker	Contactors <sup>2)</sup>		Size	Overload relay	Setting range Overload release Overload relay
Rated power P	Motor current (nominal value) I	kW	A	Order No.	Order No.	Order No.	Order No.	A
90	93	without	3VU23 12-0BC60	3RT10 54-1AP36	3RT10 44-1AP00	S6/S2	3RB20 56-1FW2 or 3RB21 53-4FW2	50.0 ... 200
110	113	without	3VU23 22-0CC60	3RT10 54-1AP36	3RT10 44-1AP00	S6/S2		50.0 ... 200
132	133	without	3VU23 22-0CC60	3RT10 55-1AP36	3RT10 44-1AP00	S6/S3		50.0 ... 200
160	162	without	3VU23 22-0DC60	3RT10 56-1AP36	3RT10 44-1AP00	S6/S3		50.0 ... 200
200	203	without	3VU23 32-0EC60	3RT10 64-6AP36	3RT10 54-1AP36	S10/S6	3RB20 66-1GC2 or 3RB21 63-4GC2	55.0 ... 250
250	250	without	3VU23 42-0FC60	3RT12 65-6AP36	3RT12 64-6AP36	S10V/S10V		55.0 ... 250
315	316	without	3VU23 42-0GC60	3RT12 75-6AP36	3RT12 64-6AP36	S12V/S10V	3RB20 66-1MC2 or 3RB21 63-4MC2	160 ... 630
355	354	without	3VU23 52-0HC60	3RT12 75-6AP36	3RT12 64-6AP36	S12V/S10V		160 ... 630
400	400	without	3VU23 52-0HC60	3RT12 75-6AP36	3RT12 64-6AP36	S12V/S10V		160 ... 630
500	493	without	3VU23 52-0HC60	3RT12 76-6AP36	3RT12 64-6AP36	S12V/S10V		160 ... 630

# Circuit breaker + star-delta combination + SIMOCODE 3UF7/ 3RB22/3RB23 solid-state overload relay

CLASS 5 and CLASS 10, coordination type 2,  
Short-circuit breaking capacity  $I_q = 50 \text{ kA}$



**690 V AC**

Standard three-phase motor 4-pole at 690 V AC <sup>1)</sup>		Setting range Overload release Circuit breaker	Circuit breaker	Contactors <sup>2)</sup>		Size	Overload relay <sup>3)</sup>	Setting range Overload release Overload relay
Rated power P	Motor current (nominal value) I	kW	A	Order No.	Order No.	Order No.	Order No.	A
90	93	without	3VU23 12-0BC60	3RT10 54-1AP36	3RT10 44-1AP00	S6/S3	3UF7 103-1AA0 or 3RB29 56-2TG2	20.0 ... 200
110	113	without	3VU23 22-0CC60	3RT10 54-1AP36	3RT10 44-1AP00	S6/S3		20.0 ... 200
132	133	without	3VU23 22-0CC60	3RT10 55-1AP36	3RT10 44-1AP00	S6/S3		20.0 ... 200
160	162	without	3VU23 22-0DC60	3RT10 56-1AP36	3RT10 44-1AP00	S6/S3		20.0 ... 200
200	203	without	3VU23 32-0EC60	3RT10 64-6AP36	3RT10 54-1AP36	S10/S6	3UF7 104-1BA0 or 3RB29 66-2WH2	63.0 ... 630
250	250	without	3VU23 42-0FC60	3RT12 65-6AP36	3RT12 64-6AP36	S10V/S10V		63.0 ... 630
315	316	without	3VU23 42-0GC60	3RT12 75-6AP36	3RT12 64-6AP36	S12V/S10V		63.0 ... 630
355	354	without	3VU23 52-0HC60	3RT12 75-6AP36	3RT12 64-6AP36	S12V/S10V		63.0 ... 630
400	400	without	3VU23 52-0HC60	3RT12 75-6AP36	3RT12 64-6AP36	S12V/S10V		63.0 ... 630
500	493	without	3VU23 52-0HC60	3RT12 76-6AP36	3RT12 64-6AP36	S12V/S10V		63.0 ... 630

<sup>1)</sup> Nominal value at 690 V AC, 50 Hz for 4-pole standard motors. The specific starting and rated data of the motor to be protected are decisive when selecting devices.

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

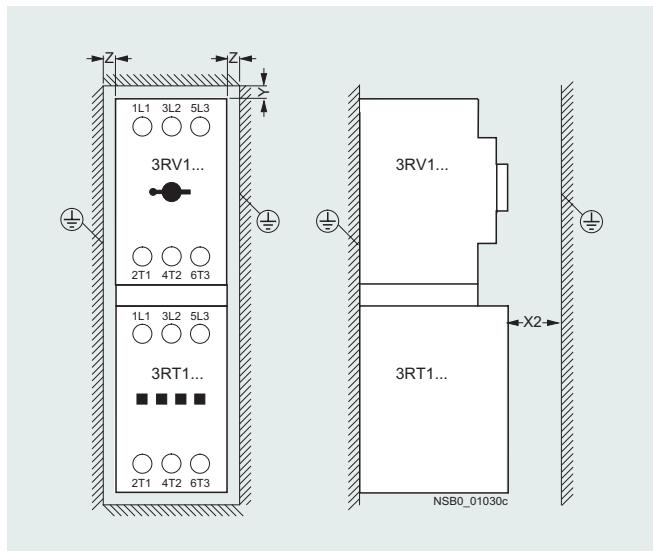
<sup>3)</sup> The necessary current detection modules are stated. In addition, the corresponding 3RB22/3RB23 and 3UF7 basic units are required.

# Mounting regulations for 400/500 V AC

Clearance to grounded parts and components for 3RV motor starter protector + 3RT10 contactor (size S00/S0/S2/S3)

Motor starter protector	Contac- tor	Rated operational voltage V	Clearance to grounded or live parts and components		
			Y mm	X2 <sup>1)</sup> mm	Z mm
3RV1.1	3RT101	400/500	20	10	9
3RV1.2	3RT101	400/500	30	10	9
	3RT102	400/500	30	10	9
	3RT103	400/500	30	10	9
3RV1.3	3RT102	400/500	50	10	10
	3RT103	400/500	50	10	10
	3RT104	400/500	50	10	10
3RV1.4	3RT104	400	90	10	12
	3RT104	500	220	10	20

<sup>1)</sup> Minimum clearance to the contactor at the front. For motor starter protectors, a minimum clearance at the front is not required.

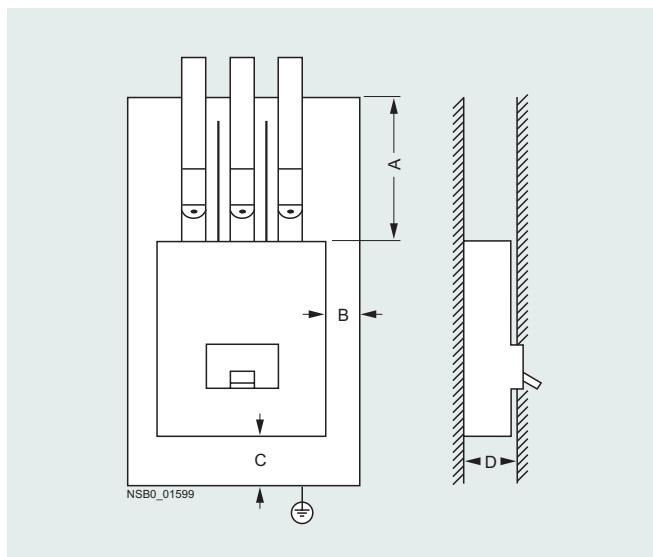


Clearance to grounded parts and components for 3VL circuit breaker

Circuit breaker	Rated operational voltage $U_e$		Clearance to ground- ed or live parts and components		
	V mm	A mm	B mm	C mm	D mm
3VL2/3 <sup>1)</sup>	max. 400	100	25	30	87
3VL2/3 <sup>2)</sup>	400 ... 525	100	25	30	87
3VL4/5 <sup>1)</sup>	max. 525	100	35	30	106.5

<sup>1)</sup> 3VL93 00-8CE00 (3VL2/3) or 3VL96 00-8CE00 (3VL4/5) phase barriers must be used.

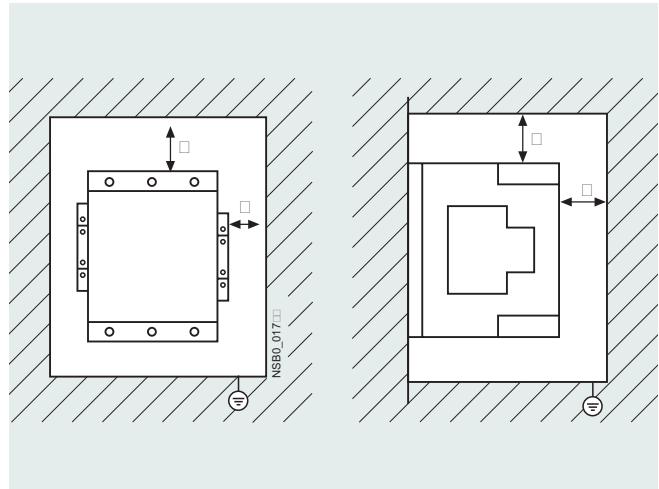
<sup>2)</sup> 3VL93 00-8C.0 (3VL2/3) terminal cover must be used.



### Clearance to grounded parts and components for 3RT10/3RT12 contactors (size S6/S10/S12)

Contactor	Rated operational voltage	Clearance to grounded or live parts and components		
		G mm	H mm	I mm
3RT105	400/500/690 V	40	10	20
3RT106	400/500/690 V	20	10	20
3RT107	400/500/690 V	20	10	20
3RT126	400/500/690 V	20	10	20
3RT127	400/500/690 V	20	10	20

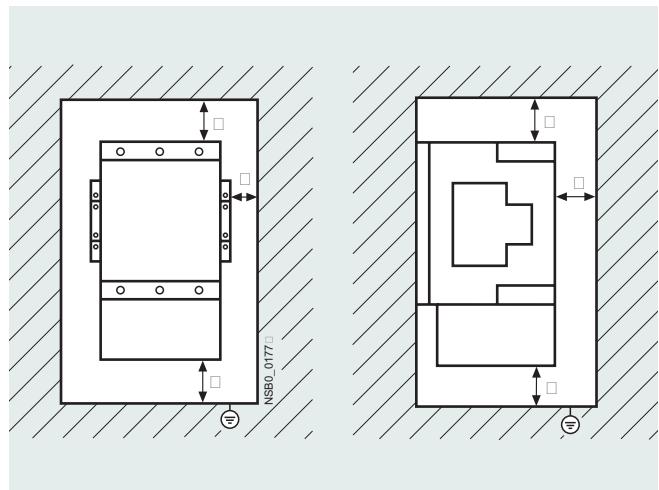
G = Clearance to coil connections. When using cables with cable lugs or busbar connection, the 3RT19 56-4EA1 (S6) or 3RT19 66-4EA1 (S10/S12) terminal cover must be used.



### Clearance to grounded parts and components for 3RT10/3RT12 contactors (size S6/S10/S12) with mounted overload relay

Contactor	Rated operational voltage V	Clearance to grounded or live parts and components			
		G mm	H mm	I mm	K mm
3RT105	400/500/690	40	10	20	20
3RT106	400/500/690	20	10	20	20
3RT107	400/500/690	20	10	20	20
3RT126	400/500/690	20	10	20	20
3RT127	400/500/690	20	10	20	20

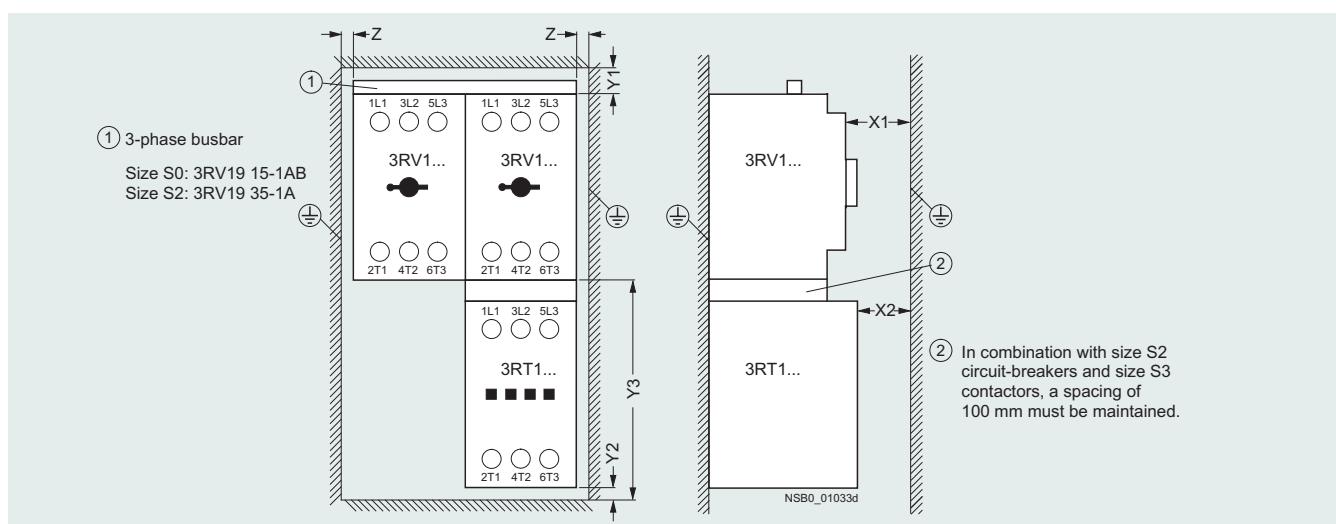
G = Clearance to coil connections. When using cables with cable lugs or busbar connection, the 3RT19 56-4EA1 (S6) or 3RT19 66-4EA1 (S10/S12) terminal cover must be used.



# Mounting regulations for 690 V AC

**Clearance to grounded parts and components for 3RV motor starter protector + 3RT10 contactor (size S0/S2/S3)**

Motor starter protectors	Contactor	Rated operational voltage V	Clearance to grounded or live parts and components					
			Y1 mm	Y2 mm	Y3 mm	X1 mm	X2 mm	z mm
3RV1.2 with	3RT102	690	80	10	95	20	14	20
3RV1.3 with	3RT103	690	50	10	120	10	32	10
	3RT104	690	50	10	120	10	40	10



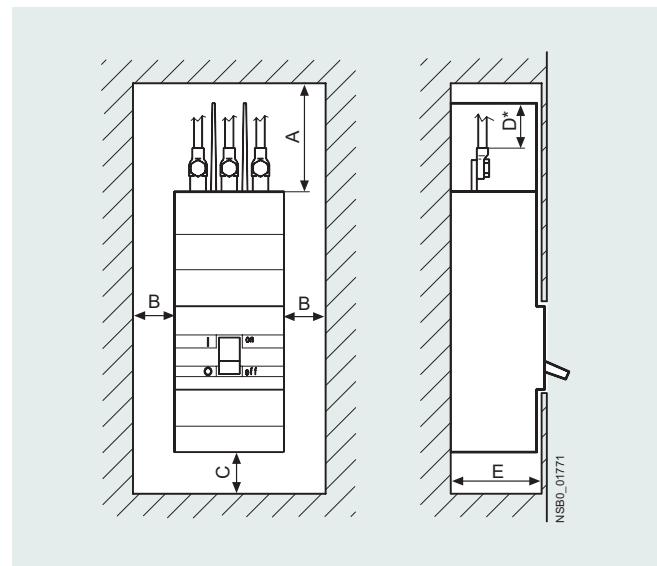
### Mounting system for 3RV motor starter protector + 3RT10 contactor (size S0/S2/S3)

Size	Mounting system	Standard mounting for size S0 ... 5.5 kW, S2 and S3	Mounting for size S0 from 7.5 ... 12 kW
S0	Mounted on an insulated base plate. When screws are used to retain the device, these screws may not be grounded. The mounting rail adapter can be alternatively used without any restrictions.	<p>3-phase busbar Size S0: 3RV19 15-1AB Size S2: 3RV19 35-1A</p> <p>Infeed side</p> <p>NSB0_01031d</p>	<p>Infeed side</p> <p>Load side</p> <p>Connecting module, refer to Catalog LV 1 "Low-Voltage Controls and Distribution", Chapter 5.</p> <p>NSB0_01031d</p>
S2/S3:	Mounting on an insulated base plate. A mounting rail adapter can be alternatively used.		

### Clearance to grounded parts and components for 3VU2 circuit breaker

Circuit breaker	Rated operational voltage V	Clearance to grounded or live parts and components				
		A mm	B mm	C mm	D <sup>1)</sup> mm	E mm
3VU2.1	690	100	25	30	35	107
3VU2.2	690	100	25	30	35	107
3VU2.3	690	100	25	30	35	107
3VU2.4	690	125	30	30	5	107
3VU2.5	690	125	30	30	5	107

<sup>1)</sup> Clearance between the phase barrier and the end of the insulation (cable lug).



- Refer to the mounting regulations for 400/500 V AC for the clearances to grounded parts and components for 3RT10/3RT12 contactors (size S6/S10/S12).
- Refer to the mounting regulations for 400/500 V AC for the clearances to grounded parts and components for 3RT10/3RT12 contactors (size S6/S10/S12) with mounted overload relay.

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