SIRIUS Configuration

Selection data for Fuseless Load Feeders

Brochure · January 2009

Low-Voltage Controls and Distribution

Answers for industry.

SIEMENS

Introduction

SIRIUS – the Modular System Family for the Switching, Protecting and Starting of Motors

In order to simplify the configuration of load feeders, the SIRIUS modular system offers standard components that are optimally coordinated and are easy to combine. Just 7 sizes cover the entire performance range up to 250 kW.

The individual switching devices can be easily assembled to form complete load feeders, either using link modules or by mounting directly.

SIRIUS motor starter protectors


3RV10 11 (S00)


3RV10 21 (S0)


3RV10 31 (S2)


3RV10 41 (S3)

SENTRON circuit breakers


VL250/3VL3


VL400 (3VL4)


VL630 (3VL5)

SIRIUS contactors


3RT10 1 (S00)


3RT10 2 (S0)[1)]


3RT10 3 (S2)


3RT1. 4 (S3)


3RT1. 5 (S6)


3RT1. 6 (S10)


3RT1. 7 (S12)

SIRIUS overload relays


3RB20 16 (S00)


3RB20 26 (S0)


3RB20 36 (S2)


3RB20 46 (S3)


3RB20 56 (S6)


3RB20 66 (S10/S12)

SIRIUS soft starters


3RW30 1 (S00)


3RW40 2 (S0)


3RW40 3 (S2)


3RW40 4 (S3)


3RW40 5 (S6)


3RW40 7 (S10/S12)

[1)] We recommend the use of solid-state contactors/solid-state reversing contactors for high switching frequencies.

Highlights

■ Load feeders:	Easy to implement up to 250 kW / 400 V from standard devices
■ Modular design:	Everything fits together and can be combined
■ Versions and sizes:	Economical and flexible thanks to 7 compact sizes
■ Accessories:	Optimum variance with uniform accessories
■ Type of construction:	Space-saving thanks to small device width and butt-mounting type of construction up to 60 °C
■ Design:	Fast start-up, short setting-up times and simple wiring
■ Communication:	Connection to AS-Interface and PROFIBUS DP supported
■ Maintenance:	Extremely durable, low maintenance and reliable
■ Approvals:	Global approvals and certifications, such as UL, CSA, CCC, shipbuilding ...
■ Mounting:	Permanently secure mounting, screw or snap fitting
■ Spring-type connection:	Quick and secure connection, vibration-proof and maintenance-free
■ Environment:	Environment-friendly production and materials, recycling capability, low power loss
■ Design:	Clear-cut, ergonomic design (winner of the iF Product Design Award)

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General information

General criteria for the selection of devices

The motor starter protectors, contactors, solid-state switching devices, soft starters and overload relays in the following tables are all specified in their basic versions, i.e. (in particular) without accessories. It goes without saying that accessories, such as auxiliary switches, auxiliary trip units 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 and the 3RB20/3RB21 solid-state overload relays can generally be directly mounted onto the contactor. Exceptions are specified in the footnotes of the respective tables. The 3RB22/3RB23 solid-state overload relay and the SIMOCODE pro 3UF7 motor protection and control device are essentially used for stand-alone installation. In their basic version, these devices are specified with a rated control supply voltage of 230 V AC as well. No sizes are specified for the "Molded-Case Circuit Breakers" (MCCB) as for SIRIUS.

Mounting the combinations

When mounting the devices, specific arcing spaces must be maintained so that short-circuits can be cleared safely and reliably. The appropriate installation guidelines are listed separately for 400/440/480/500/550 V AC and 690 V AC on page 70 ff.

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

400/440/480/500/550/690 V AC

The subsequent tables are structured according to mains voltages of 400/440/480/500/550/690 V AC for grounded networks (at 50 and 60 Hz) generally found in IEC regions. With a few exceptions, tests are carried out with a test voltage which lies 10 % above these values (further details can be found in the test reports). Thus, the specified combinations can also be used for other networks as long as their maximum voltage does not exceed the test voltage. This means, for instance, the combinations for 400 V can also be used for 415 V networks that have a line supply tolerance of +5 %.

Ambient conditions

A maximum ambient temperature of 60 °C applies for all electromechanical controlgear, and 40 °C for soft starters and solid-state contactors. Higher temperatures are possible with derating. For details refer to Catalog LV1 T or contact Technical Assistance.

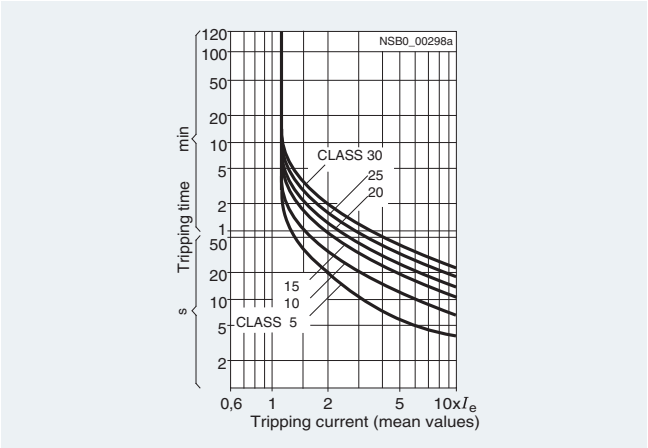
A maximum installation height of 2000 m applies for all electromechanical controlgear, and 1000 m for soft starters and solid-state contactors. Greater installation heights are possible with derating. For details refer to Catalog LV1 T.

Trip classes
CLASS 5, CLASS 10, CLASS 20, CLASS 30 and CLASS 40

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

The tripping times are as follows:

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



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

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

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

Type of coordination 1 or 2

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

- Type of coordination "1"[1]:
  After a short-circuit, it is permissible for the starter to be inoperative, in particular, damage to the contactor, solid-state switching devices and overload relay is permissible.

- Type of coordination "2"[1]:
  The starter is still operative. There must be no signs of damage to the devices, with the exception of slightly welded contactor contacts if these can be easily separated again without any noticeable deformation.

[1] Combinations are color coded according to the respective type of coordination as shown above.

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

Tests

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

With or without overload relay

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

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

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

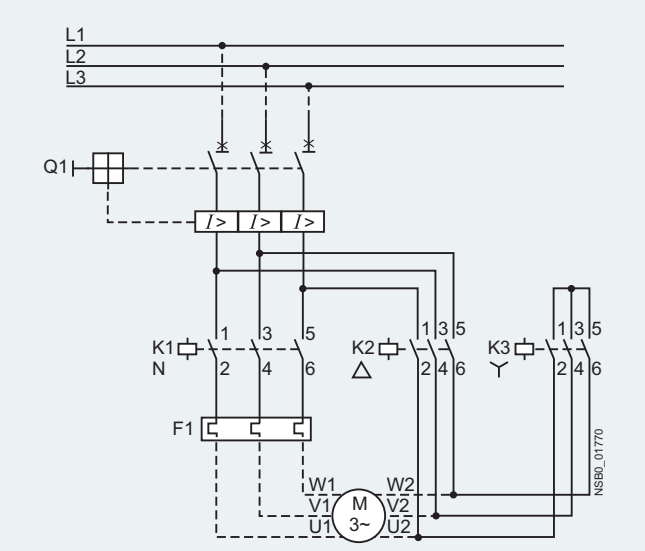
In this situation, combinations with motor starter protector and contactor offer the most cost-effective solution. However, combinations with overload relays offer distinct advantages for certain applications:

- Using 3RB20/3RB21 and 3RB22/3RB23 solid-state overload relays, as well as SIMOCODE pro 3UF7, enables users to achieve not only trip classes CLASS 5 and CLASS 10, but also solutions for heavy starting, such as CLASS 20, CLASS 30 and CLASS 40.
- Using solid-state overload relays offers a wide setting range of 1:4 or 1:10. This offers advantages during configuration (e. g. if the exact motor current is not known) and enables us to reduce the number of variants required.
- Overload and short-circuit protection are carried out separately and can also be signaled separately. Alternatively, the 3RV19 21-1M signaling block can be used for the 3RV motor starter protector instead of the overload relay. This also supports the separate signaling of overloads and short-circuits.
- Setting of the overload relay to "Automatic Reset" can also save a walk to the control cabinet in the case of overload tripping, as a manual reset in the control cabinet is not required. Alternatively, this function can also be implemented with the "3RV11 motor starter protector with overload relay function". These devices can be used in the motor starter protector + contactor tables instead of the 3RV10 motor starter protector.

Wye(Y)-delta function (*Δ) starting

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

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



Circuit diagram main circuit for YΔ circuit

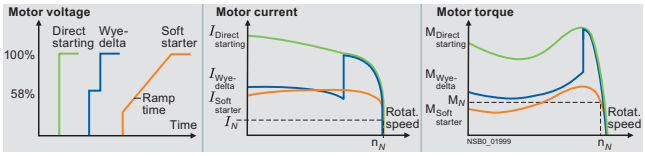
A Y Δ timing relay is required for switching from the Y to the Δ circuit. These timing relays are specifically designed for these types of applications and ensure safe, reliable switchover. The respective timing relays are listed in the Catalog LV 1 "Low-Voltage Controls and Distribution". The specified combinations are designed for a starting time of 10 seconds in Y operation. In order to prevent damage to the Y contactor in the event of a motor blockage, operation should switch to Δ mode within a maximum of 10 seconds.

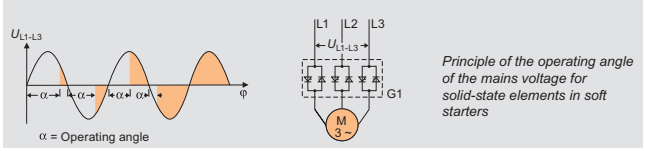
In the tables, circuit breakers are used for starter combinations (without overload releases). However, 3RV10 motor starter protectors with the same rated current can also be used for motor protection instead. In this case, the rated motor current of the motor starter protector must be set to the maximum value. This prevents a simultaneous tripping of the motor starter protector and overload relay.

Soft starting with soft starters

What is the basic principle of a soft starter?

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





Principle of the operating angle of the mains voltage for solid-state elements in soft starters

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

Further information on SIRIUS soft starters is available on the Internet at: http://www.siemens.com/softstarter

For optimum configurations, we recommend using the selection and simulation program "Win-Soft Starter".

Order or download at:
http://www.siemens.com/lowvoltage/demosoftware
(Order No.: E20001-D1020-P302-V2-7400)

Load feeders with soft starters

Soft starters can also be used to prevent current peaks in the line supply instead of the Wye-Delta starting combinations. Three versions of these soft starters are available:

- 3RW30
- 3RW40
- 3RW44

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

3RB22/23 overload relays and SIMOCODE pro

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

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

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

3RB22/23

- Basic unit (=evaluation module)
  - Monostable, screw — 3RB22 83-4AA1
  - Bistable, screw — 3RB23 83-4AA1
  - Monostable, spring-loaded — 3RB22 83-4AC1
  - Bistable, spring-loaded — 3RB23 83-4AC1
- Connection cable
  - 0.1 m (S00-S3) — 3RB29 87-2B
  - 0.5 m (S00-S12) — 3RB29 87-2D
- For other accessories for 3RB22/23 overload relays see Catalog LV 1 Chapter 5.

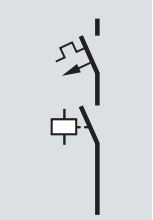
SIMOCODE pro

- SIMOCODE pro C, basic unit 1
  PROFIBUS DP interface, 12 Mbit/s, RS485 4I/3O freely assignable, input for thermistor connection, monostable relay outputs
  - 24 V DC — 3UF7 000-1AB00-0
  - 110 ... 240 V AC/DC — 3UF7 000-1AU00-0
- SIMOCODE pro V, basic unit 2
  PROFIBUS DP interface, 12 Mbit/s, RS485 4I/3O freely assignable, input for thermistor connection, monostable relay outputs, can be expanded by expansion modules
  - 24 V DC — 3UF7 010-1AB00-0
  - 110 ... 240 V AC/DC — 3UF7 010-1AU00-0
- Connection cable
  - 0.1 m, flat — 3UF7 931-0AA00-0
  - 0.3 m, flat — 3UF7 935-0AA00-0
  - 0.5 m, flat — 3UF7 932-0AA00-0
  - 0.5 m, round — 3UF7 932-0BA00-0
  - 1.0 m, round — 3UF7 937-0BA00-0
  - 2.5 m, round — 3UF7 933-0BA00-0
- For other accessories and software for SIMOCODE pro see Catalog LV 1 Chapter 7.

Selection tables 400 V AC

Motor starter protector/circuit breaker + contactor

CLASS 10, type of coordination 1, short-circuit breaking capacity I_q = 50 kA/80 kA



400 V AC

Standard induction motor 4-pole at 400 V AC[1]		Setting range Overload release	Motor starter protector/circuit breaker	Contactor[2]	Size	Short-circuit breaking capacity I_q
Standard output P	Motor current (guide value) I	Motor starter protector/circuit breaker				
kW	A	A	Order No.	Order No.		kA
0.06	0.2	0.14 ... 0.20	3RV10 11-0BA10	3RT10 15-1AP01	S00/S00	50
0.06	0.2	0.18 ... 0.25	3RV10 11-0CA10	3RT10 15-1AP01	S00/S00	50
0.09	0.3	0.22 ... 0.32	3RV10 11-0DA10	3RT10 15-1AP01	S00/S00	50
0.09	0.3	0.28 ... 0.40	3RV10 11-0EA10	3RT10 15-1AP01	S00/S00	50
0.12	0.4	0.35 ... 0.50	3RV10 11-0FA10	3RT10 15-1AP01	S00/S00	50
0.18	0.6	0.45 ... 0.63	3RV10 11-0GA10	3RT10 15-1AP01	S00/S00	50
0.25	0.85	0.55 ... 0.80	3RV10 11-0HA10	3RT10 15-1AP01	S00/S00	50
0.25	0.85	0.70 ... 1.00	3RV10 11-0JA10	3RT10 15-1AP01	S00/S00	50
0.37	1.1	0.90 ... 1.25	3RV10 11-0KA10	3RT10 15-1AP01	S00/S00	50
0.55	1.5	1.10 ... 1.60	3RV10 11-1AA10	3RT10 15-1AP01	S00/S00	50
0.75	1.9	1.40 ... 2.00	3RV10 11-1BA10	3RT10 15-1AP01	S00/S00	50
0.75	1.9	1.80 ... 2.50	3RV10 11-1CA10	3RT10 15-1AP01	S00/S00	50
1.1	2.7	2.20 ... 3.20	3RV10 11-1DA10	3RT10 15-1AP01	S00/S00	50
1.5	3.6	2.80 ... 4.00	3RV10 11-1EA10	3RT10 15-1AP01	S00/S00	50
1.5	3.6	3.50 ... 5.00	3RV10 11-1FA10	3RT10 15-1AP01	S00/S00	50
2.2	5.0	4.50 ... 6.30	3RV10 11-1GA10	3RT10 15-1AP01	S00/S00	50
3	6.5	5.50 ... 8.00	3RV10 11-1HA10	3RT10 15-1AP01	S00/S00	50
4	8.5	7.00 ... 10.0	3RV10 11-1JA10	3RT10 16-1AP01	S00/S00	50
5.5	11.5	9.00 ... 12.0	3RV10 11-1KA10	3RT10 17-1AP01	S00/S00	50
7.5	15.5	11.0 ... 16.0	3RV10 21-4AA10	3RT10 25-1AP00	S0/S0	50
7.5	15.5	14.0 ... 20.0	3RV10 21-4BA10	3RT10 25-1AP00	S0/S0	50
11	22	17.0 ... 22.0	3RV10 21-4CA10	3RT10 26-1AP00	S0/S0	50
11	22	20.0 ... 25.0	3RV10 21-4DA10	3RT10 26-1AP00	S0/S0	50
15	29	22.0 ... 32.0	3RV10 31-4EA10	3RT10 34-1AP00	S2/S2	50
18.5	35	28.0 ... 40.0	3RV10 31-4FA10	3RT10 35-1AP00	S2/S2	50
22	41	36.0 ... 45.0	3RV10 31-4GA10	3RT10 36-1AP00	S2/S2	50
22	41	40.0 ... 50.0	3RV10 31-4HA10	3RT10 36-1AP00	S2/S2	50
30	55	45.0 ... 63.0	3RV10 41-4JA10	3RT10 44-1AP00	S3/S3	50
30	55	45.0 ... 63.0	3RV10 42-4JA10	3RT10 44-1AP00	S3/S3	80
37	66	57.0 ... 75.0	3RV10 41-4KA10	3RT10 45-1AP00	S3/S3	50
37	66	57.0 ... 75.0	3RV10 42-4KA10	3RT10 45-1AP00	S3/S3	80
45	80	70.0 ... 90.0	3RV10 41-4LA10	3RT10 46-1AP00	S3/S3	50
45	80	70.0 ... 90.0	3RV10 42-4LA10	3RT10 46-1AP00	S3/S3	80
45	80	80.0 ... 100	3RV10 41-4MA10	3RT10 46-1AP00	S3/S3	50
45	80	80.0 ... 100	3RV10 42-4MA10	3RT10 46-1AP00	S3/S3	80
55	97	40.0 ... 100	3VL27 10-2SP33[3]	3RT10 54-1AP36	–/S6	50
75	132	64.0 ... 160	3VL27 16-2SP33	3RT10 55-6AP36	–/S6	50
90	160	80.0 ... 200	3VL37 20-2SP36[3]	3RT10 56-6AP36	–/S6	50
110	195	80.0 ... 200	3VL37 20-2SP36[4]	3RT10 64-6AP36	–/S10	50
110	195	80.0 ... 200	3VL37 20-2SP36[4]	3RT12 64-6AP56	–/S10V	50
132	230	100 ... 250	3VL37 25-2SP36[5]	3RT10 65-6AP36	–/S10	50
132	230	100 ... 250	3VL37 25-2SP36[5]	3RT12 65-6AP36	–/S10V	50
160	280	125 ... 315	3VL47 31-2SP36	3RT10 66-6AP36	–/S10	50
160	280	125 ... 315	3VL47 31-2SP36	3RT12 66-6AP36	–/S10V	50
200	350	200 ... 500	3VL57 50-2SP36	3RT10 75-6AP36	–/S12	50
200	350	200 ... 500	3VL57 50-2SP36	3RT12 75-6AP36	–/S12V	50
250	430	200 ... 500	3VL57 50-2SP36	3RT10 76-6AP36	–/S12	50
250	430	200 ... 500	3VL57 50-2SP36	3RT12 76-6AP36	–/S12V	50

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

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

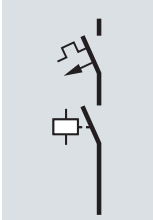
3) Alternatively 3VL27 16-2SP33 also possible.

4) Alternatively 3VL37 25-2SP36 also possible.

5) Alternatively 3VL47 31-2SP36 also possible.

Motor starter protector/circuit breaker + contactor

CLASS 10, type of coordination 2, short-circuit breaking capacity I_q = 50 kA



400 V AC

Standard induction motor 4-pole at 400 V AC[1]		Setting range Overload release	Motor starter protector/circuit breaker	Contactor[2]	Size	Short-circuit breaking capacity I_q
Standard output P	Motor current (guide value) I	Motor starter protector/circuit breaker				
kW	A	A	Order No.	Order No.		kA
0.06	0.2	0.14 ... 0.20	3RV10 11-0BA10	3RT10 15-1AP01	S00/S00	50
0.06	0.2	0.18 ... 0.25	3RV10 11-0CA10	3RT10 15-1AP01	S00/S00	50
0.09	0.3	0.22 ... 0.32	3RV10 11-0DA10	3RT10 15-1AP01	S00/S00	50
0.09	0.3	0.28 ... 0.40	3RV10 11-0EA10	3RT10 15-1AP01	S00/S00	50
0.12	0.4	0.35 ... 0.50	3RV10 11-0FA10	3RT10 15-1AP01	S00/S00	50
0.18	0.6	0.45 ... 0.63	3RV10 11-0GA10	3RT10 15-1AP01	S00/S00	50
0.25	0.85	0.55 ... 0.80	3RV10 11-0HA10	3RT10 15-1AP01	S00/S00	50
0.25	0.85	0.70 ... 1.00	3RV10 11-0JA10	3RT10 15-1AP01	S00/S00	50
0.37	1.1	0.90 ... 1.25	3RV10 11-0KA10	3RT10 15-1AP01	S00/S00	50
0.55	1.5	1.10 ... 1.60	3RV10 11-1AA10	3RT10 15-1AP01	S00/S00	50
0.75	1.9	1.40 ... 2.00	3RV10 11-1BA10	3RT10 15-1AP01	S00/S00	50
0.75	1.9	1.80 ... 2.50	3RV10 21-1CA10	3RT10 24-1AP00	S0/S0	50
1.1	2.7	2.20 ... 3.20	3RV10 21-1DA10	3RT10 24-1AP00	S0/S0	50
1.5	3.6	2.80 ... 4.00	3RV10 21-1EA10	3RT10 24-1AP00	S0/S0	50
1.5	3.6	3.50 ... 5.00	3RV10 21-1FA10	3RT10 24-1AP00	S0/S0	50
2.2	5.0	4.50 ... 6.30	3RV10 21-1GA10	3RT10 24-1AP00	S0/S0	50
3	6.5	5.50 ... 8.00	3RV10 21-1HA10	3RT10 24-1AP00	S0/S0	50
4	8.5	7.00 ... 10.0	3RV10 21-1JA10	3RT10 26-1AP00	S0/S0	50
5.5	11.5	9.00 ... 12.5	3RV10 21-1KA10	3RT10 26-1AP00	S0/S0	50
7.5	15.5	11.0 ... 16.0	3RV10 21-4AA10	3RT10 26-1AP00	S0/S0	50
7.5	15.5	14.0 ... 20.0	3RV10 21-4BA10	3RT10 26-1AP00	S0/S0	50
11	22	18.0 ... 25.0	3RV10 31-4DA10	3RT10 34-1AP00	S2/S2	50
15	29	22.0 ... 32.0	3RV10 31-4EA10	3RT10 34-1AP00	S2/S2	50
18.5	35	28.0 ... 40.0	3RV10 31-4FA10	3RT10 35-1AP00	S2/S2	50
22	41	36.0 ... 45.0	3RV10 31-4GA10	3RT10 36-1AP00	S2/S2	50
22	41	40.0 ... 50.0	3RV10 31-4HA10	3RT10 36-1AP00	S2/S2	50
30	55	45.0 ... 63.0	3RV10 41-4JA10	3RT10 44-1AP00	S3/S3	50
37	66	57.0 ... 75.0	3RV10 41-4KA10	3RT10 45-1AP00	S3/S3	50
45	80	70.0 ... 90.0	3RV10 41-4LA10	3RT10 46-1AP00	S3/S3	50
45	80	80.0 ... 100	3RV10 41-4MA10	3RT10 46-1AP00	S3/S3	50
55	97	40.0 ... 100	3VL27 10-2SP33[3]	3RT10 54-1AP36	–/S6	50
75	132	64.0 ... 160	3VL27 16-2SP33	3RT10 55-6AP36	–/S6	50
90	160	80.0 ... 200	3VL37 20-2SP36[3]	3RT10 56-6AP36	–/S6	50
110	195	80.0 ... 200	3VL37 20-2SP36[4]	3RT10 64-6AP36	–/S10	50
110	195	80.0 ... 200	3VL37 20-2SP36[4]	3RT12 64-6AP56	–/S10V	50
132	230	100 ... 250	3VL37 25-2SP36[5]	3RT10 65-6AP36	–/S10	50
132	230	100 ... 250	3VL37 25-2SP36[5]	3RT12 65-6AP36	–/S10V	50
160	280	125 ... 315	3VL47 31-2SP36	3RT10 66-6AP36	–/S10	50
160	280	125 ... 315	3VL47 31-2SP36	3RT12 66-6AP36	–/S10V	50
200	350	200 ... 500	3VL57 50-2SP36	3RT10 75-6AP36	–/S12	50
200	350	200 ... 500	3VL57 50-2SP36	3RT12 75-6AP36	–/S12V	50
250	430	200 ... 500	3VL57 50-2SP36	3RT10 76-6AP36	–/S12	50
250	430	200 ... 500	3VL57 50-2SP36	3RT12 76-6AP36	–/S12V	50

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

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

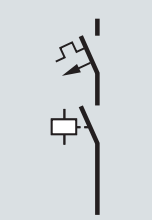
3) Alternatively 3VL27 16-2SP33 also possible.

4) Alternatively 3VL37 25-2SP36 also possible.

5) Alternatively 3VL47 31-2SP36 also possible.

Motor starter protector + contactor

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



400 V AC

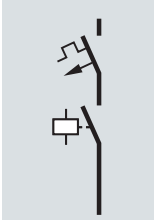
Standard induction motor 4-pole at 400 V AC[1]		Setting range Overload release Motor starter protector	Motor starter protector	Contactor[2]	Size	Short-circuit breaking capacity I_q
Standard output P	Motor current (guide value) I					
kW	A	A	Order No.	Order No.		kA
0.04	0.16	0.11 ... 0.16	3RV10 11-0AA10	3RT10 15-1AP01	S00/S00	130
0.06	0.2	0.14 ... 0.20	3RV10 11-0BA10	3RT10 15-1AP01	S00/S00	130
0.06	0.2	0.18 ... 0.25	3RV10 11-0CA10	3RT10 15-1AP01	S00/S00	130
0.09	0.3	0.22 ... 0.32	3RV10 11-0DA10	3RT10 15-1AP01	S00/S00	130
0.09	0.3	0.28 ... 0.40	3RV10 11-0EA10	3RT10 15-1AP01	S00/S00	130
0.12	0.4	0.35 ... 0.50	3RV10 11-0FA10	3RT10 15-1AP01	S00/S00	130
0.18	0.6	0.45 ... 0.63	3RV10 11-0GA10	3RT10 15-1AP01	S00/S00	130
0.18	0.6	0.55 ... 0.80	3RV10 11-0HA10	3RT10 15-1AP01	S00/S00	130
0.25	0.85	0.70 ... 1.00	3RV10 11-0JA10	3RT10 15-1AP01	S00/S00	130
0.37	1.1	0.90 ... 1.25	3RV10 11-0KA10	3RT10 15-1AP01	S00/S00	130
0.55	1.5	1.10 ... 1.60	3RV10 11-1AA10	3RT10 15-1AP01	S00/S00	130
0.75	1.9	1.40 ... 2.00	3RV10 11-1BA10	3RT10 15-1AP01	S00/S00	130
0.04	0.16	0.11 ... 0.16	3RV10 21-0AA10	3RT10 24-1AP00	S0/S0	130
0.06	0.2	0.14 ... 0.20	3RV10 21-0BA10	3RT10 24-1AP00	S0/S0	130
0.06	0.2	0.18 ... 0.25	3RV10 21-0CA10	3RT10 24-1AP00	S0/S0	130
0.09	0.3	0.22 ... 0.32	3RV10 21-0DA10	3RT10 24-1AP00	S0/S0	130
0.09	0.3	0.28 ... 0.40	3RV10 21-0EA10	3RT10 24-1AP00	S0/S0	130
0.12	0.4	0.35 ... 0.50	3RV10 21-0FA10	3RT10 24-1AP00	S0/S0	130
0.18	0.6	0.45 ... 0.63	3RV10 21-0GA10	3RT10 24-1AP00	S0/S0	130
0.18	0.6	0.55 ... 0.80	3RV10 21-0HA10	3RT10 24-1AP00	S0/S0	130
0.25	0.85	0.70 ... 1.00	3RV10 21-0JA10	3RT10 24-1AP00	S0/S0	130
0.37	1.1	0.90 ... 1.25	3RV10 21-0KA10	3RT10 24-1AP00	S0/S0	130
0.55	1.5	1.10 ... 1.60	3RV10 21-1AA10	3RT10 24-1AP00	S0/S0	130
0.75	1.9	1.40 ... 2.00	3RV10 21-1BA10	3RT10 24-1AP00	S0/S0	130
0.75	1.9	1.80 ... 2.50	3RV10 21-1CA10	3RT10 24-1AP00	S0/S0	130
1.1	2.7	2.20 ... 3.20	3RV10 21-1DA10	3RT10 24-1AP00	S0/S0	130
1.5	3.6	2.80 ... 4.00	3RV10 21-1EA10	3RT10 24-1AP00	S0/S0	130
1.5	3.6	3.50 ... 5.00	3RV10 21-1FA10	3RT10 24-1AP00	S0/S0	130
2.2	5	4.50 ... 6.30	3RV10 21-1GA10	3RT10 24-1AP00	S0/S0	130
3	6.5	5.50 ... 8.00	3RV10 21-1HA10	3RT10 24-1AP00	S0/S0	130
4	8.5	7.00 ... 10.0	3RV10 21-1JA10	3RT10 26-1AP00	S0/S0	130
5.5	11.5	9.00 ... 12.5	3RV10 21-1KA10	3RT10 26-1AP00	S0/S0	130
7.5	15.5	11.0 ... 16.0	3RV10 21-4AA10	3RT10 26-1AP00	S0/S0	100
7.5	15.5	14.0 ... 20.0	3RV10 21-4BA10	3RT10 26-1AP00	S0/S0	100
11	22	18.0 ... 25.0	3RV10 31-4DA10	3RT10 34-1AP00	S2/S2	100
15	29	22.0 ... 32.0	3RV10 31-4EA10	3RT10 34-1AP00	S2/S2	100
18.5	35	28.0 ... 40.0	3RV10 31-4FA10	3RT10 35-1AP00	S2/S2	100
22	41	36.0 ... 45.0	3RV10 31-4GA10	3RT10 36-1AP00	S2/S2	100
22	41	40.0 ... 50.0	3RV10 31-4HA10	3RT10 36-1AP00	S2/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

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

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

Circuit breaker + contactor

CLASS 10, type of coordination 2, short-circuit breaking capacity I_q = 100 kA



400 V AC

Standard induction motor 4-pole at 400 V AC[1]		Setting range Overload release Circuit breaker	Circuit breaker	Contactor[2]	Size	Short-circuit breaking capacity I_q
Standard output P	Motor current (guide value) I					
kW	A	A	Order No.	Order No.		kA
55	97	40.0 ... 160	**3VL27 16-3SP33**[3]	**3RT10 54-1AP36**	–/S6	100
75	132	64.0 ... 160	**3VL27 16-3SP33**	**3RT10 55-6AP36**	–/S6	100
90	160	80.0 ... 250	**3VL37 25-3SP36**[4]	**3RT10 56-6AP36**	–/S6	100
110	195	80.0 ... 200	**3VL37 20-3SP36**[5]	**3RT10 64-6AP36**	–/S10	100
110	195	80.0 ... 200	**3VL37 20-3SP36**[5]	**3RT12 64-6AP36**	–/S10V	100
132	230	100 ... 250	**3VL37 25-3SP36**	**3RT10 65-6AP36**	–/S10	100
132	230	100 ... 250	**3VL37 25-3SP36**[6]	**3RT12 65-6AP36**	–/S10V	100
160	280	125 ... 315	**3VL47 31-3SP36**	**3RT10 75-6AP36**	–/S12	100
160	280	125 ... 315	**3VL47 31-3SP36**	**3RT12 66-6AP36**	–/S10V	100
200	350	200 ... 500	**3VL57 50-3SP36**	**3RT10 75-6AP36**	–/S12	100
200	350	200 ... 500	**3VL57 50-3SP36**	**3RT12 75-6AP36**	–/S12V	100
250	430	200 ... 500	**3VL57 50-3SP36**	**3RT10 76-6AP36**	–/S12	100
250	430	200 ... 500	**3VL57 50-3SP36**	**3RT12 76-6AP36**	–/S12V	100

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

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

3) Alternatively 3VL27 10-3SP33 also possible.

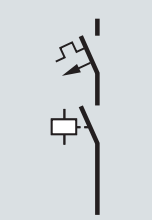
4) Alternatively 3VL27 20-3SP33 also possible.

5) Alternatively 3VL27 25-3SP36 also possible.

6) Alternatively 3VL47 31-3SP36 also possible.

Motor starter protector/circuit breaker + contactor

CLASS 20, type of coordination 2, short-circuit breaking capacity I_q = 50 kA/100 kA



400 V AC

Standard induction motor 4-pole at 400 V AC[1]		Setting range Overload release	Motor starter protector/circuit breaker	Contactor[2]	Size	Short-circuit breaking capacity I_q
Standard output P	Motor current (guide value) I	Motor starter protector/circuit breaker				
kW	A	A	Order No.	Order No.		kA
I_q = 50 kA						
5.5	11.5	11.0 ... 16.0	3RV10 31-4AB10	3RT10 34-1AP00	S2/S2	50
7.5	15.5	14.0 ... 20.0	3RV10 31-4BB10	3RT10 34-1AP00	S2/S2	50
11	22	18.0 ... 25.0	3RV10 31-4DB10	3RT10 35-1AP00	S2/S2	50
11	22	22.0 ... 32.0	3RV10 31-4EB10	3RT10 35-1AP00	S2/S2	50
15	29	28.0 ... 40.0	3RV10 42-4FB10	3RT10 44-1AP00	S3/S3	50
18.5	35	28.0 ... 40.0	3RV10 42-4FB10	3RT10 44-1AP00	S3/S3	50
18.5	35	36.0 ... 50.0	3RV10 42-4HB10	3RT10 44-1AP00	S3/S3	50
22	41	36.0 ... 50.0	3RV10 42-4HB10	3RT10 44-1AP00	S3/S3	50
30	55	45.0 ... 63.0	3RV10 42-4JB10	3RT10 46-1AP00	S3/S3	50
30	55	57.0 ... 75.0	3RV10 42-4KB10	3RT10 46-1AP00	S3/S3	50
37	66	57.0 ... 75.0	3RV10 42-4KB10	3RT10 46-1AP00	S3/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 10-2SS33[3]	3RT10 55-6AP36	–/S6	50
75	132	64.0 ... 160	3VL27 16-2SS33	3RT10 56-6AP36	–/S6	50
90	160	80.0 ... 200	3VL37 20-2SS36[3]	3RT10 64-6AP36	–/S10	50
90	160	80.0 ... 200	3VL37 20-2SS36[3]	3RT10 65-6AP36	–/S10	50
110	195	80.0 ... 200	3VL37 20-2SS36[4]	3RT10 66-6AP36	–/S10	50
110	195	80.0 ... 200	3VL37 20-2SS36[4]	3RT12 64-6AP36	–/S10V	50
132	230	100 ... 250	3VL37 25-2SS36[5]	3RT12 65-6AP36	–/S10V	50
160	280	125 ... 315	3VL47 31-2SS36	3RT12 66-6AP36	–/S10V	50
160	280	125 ... 315	3VL47 31-2SS36	3RT10 75-6AP36	–/S12	50
200	350	200 ... 500	3VL57 50-2SS36	3RT10 76-6AP36	–/S12	50
200	350	200 ... 500	3VL57 50-2SS36	3RT12 75-6AP36	–/S12V	50
250	430	200 ... 500	3VL57 50-2SS36	3RT12 76-6AP36	–/S12V	50
I_q = 100 kA						
45	80	40.0 ... 100	3VL27 10-3SS33	3RT10 54-1AP36	–/S6	100
55	97	40.0 ... 100	3VL27 10-3SS33[6]	3RT10 55-6AP36	–/S6	100
75	132	64.0 ... 160	3VL27 16-3SS33	3RT10 56-6AP36	–/S6	100
90	160	80.0 ... 200	3VL37 20-3SS36[7]	3RT10 64-6AP36	–/S10	100
90	160	80.0 ... 200	3VL37 20-3SS36[7]	3RT10 65-6AP36	–/S10	100
110	195	80.0 ... 200	3VL37 20-3SS36[8]	3RT10 66-6AP36	–/S10	100
110	195	80.0 ... 200	3VL37 20-3SS36[8]	3RT12 64-6AP36	–/S10V	100
132	230	100 ... 250	3VL37 25-3SS36[9]	3RT12 65-6AP36	–/S10V	100
160	280	125 ... 315	3VL47 31-3SS36	3RT12 66-6AP36	–/S10V	100
160	280	125 ... 315	3VL47 31-3SS36	3RT10 75-6AP36	–/S12	100
200	350	200 ... 500	3VL57 50-3SS36	3RT10 76-6AP36	–/S12	100
200	350	200 ... 500	3VL57 50-3SS36	3RT12 75-6AP36	–/S12V	100
250	430	200 ... 500	3VL57 50-3SS36	3RT12 76-6AP36	–/S12V	100

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

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

3) Alternatively 3VL27 16-2SS33 also possible.

4) Alternatively 3VL37 25-2SS36 also possible.

5) Alternatively 3VL47 31-2SS36 also possible.

6) Alternatively 3VL27 16-3SS33 also possible.

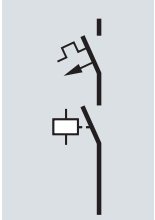
7) Alternatively 3VL27 16-3SS33 also possible.

8) Alternatively 3VL37 25-3SS36 also possible.

9) Alternatively 3VL47 31-3SS36 also possible.

Circuit breaker + contactor

CLASS 30, type of coordination 2, short-circuit breaking capacity I_q = 100 kA



400 V AC

Standard induction motor 4-pole at 400 V AC[1]		Setting range Overload release Circuit breaker	Circuit breaker	Contactor[2]	Size	Short-circuit breaking capacity I_q
Standard output P	Motor current (guide value) I					
kW	A	A	Order No.	Order No.		kA
37	66	40.0 ... 100	**3VL27 10-3SS33**	**3RT10 54-1AP36**	–/S6	100
45	80	40.0 ... 100	**3VL27 10-3SS33**	**3RT10 55-6AP36**	–/S6	100
55	97	64.0 ... 160	**3VL27 16-3SS33**[3]	**3RT10 56-6AP36**	–/S6	100
75	132	64.0 ... 160	**3VL27 16-3SS33**	**3RT10 64-6AP36**	–/S10	100
90	160	80.0 ... 200	**3VL37 20-3SS33**[4]	**3RT10 65-6AP36**	–/S10	100
90	160	80.0 ... 200	**3VL37 20-3SS33**[4]	**3RT12 64-6AP36**	–/S10V	100
110	195	100 ... 250	**3VL37 25-3SS36**	**3RT12 65-6AP36**	–/S10V	100
132	230	100 ... 250	**3VL37 25-3SS36**[5]	**3RT10 75-6AP36**	–/S12	100
160	280	125 ... 315	**3VL47 31-3SS36**	**3RT10 76-6AP36**	–/S12	100
160	280	125 ... 315	**3VL47 31-3SS36**	**3RT12 75-6AP36**	–/S12V	100
200	350	200 ... 500	**3VL57 50-3SS36**	**3RT12 76-6AP36**	–/S12V	100

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

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

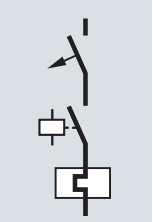
3) Alternatively 3VL27 10-3SS33 also possible.

4) Alternatively 3VL27 16-3SS33 also possible.

5) Alternatively 3VL47 31-3SS36 also possible.

Motor starter protector + contactor + 3RU11 thermal overload relay

CLASS 10, type of coordination 1, short-circuit breaking capacity I_q = 50 kA/80 kA



400 V AC

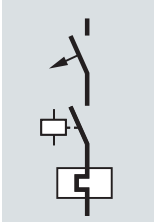
Standard induction motor 4-pole at 400 V AC[1]		Setting range	Motor starter protector	Contactor[2]	Size	Overload relay	Setting range	Short-circuit breaking capacity I_q
Standard output P	Motor current (guide value) I	Overload release Motor starter protector					Overload release Overload relay	
kW	A	A	Order No.	Order No.		Order No.	A	kA
0.06	0.2	None	**3RV13 21-0BC10**	**3RT10 15-1AP01**	S0/S00	**3RU11 16-0BB0**	0.14 ... 0.20	50
0.06	0.2	None	**3RV13 21-0CC10**	**3RT10 15-1AP01**	S0/S00	**3RU11 16-0CB0**	0.18 ... 0.25	50
0.09	0.3	None	**3RV13 21-0DC10**	**3RT10 15-1AP01**	S0/S00	**3RU11 16-0DB0**	0.22 ... 0.32	50
0.09	0.3	None	**3RV13 21-0EC10**	**3RT10 15-1AP01**	S0/S00	**3RU11 16-0EB0**	0.28 ... 0.40	50
0.12	0.4	None	**3RV13 21-0FC10**	**3RT10 15-1AP01**	S0/S00	**3RU11 16-0FB0**	0.35 ... 0.50	50
0.18	0.6	None	**3RV13 21-0GC10**	**3RT10 15-1AP01**	S0/S00	**3RU11 16-0GB0**	0.45 ... 0.63	50
0.25	0.85	None	**3RV13 21-0HC10**	**3RT10 15-1AP01**	S0/S00	**3RU11 16-0HB0**	0.55 ... 0.80	50
0.25	0.85	None	**3RV13 21-0JC10**	**3RT10 15-1AP01**	S0/S00	**3RU11 16-0JB0**	0.70 ... 1.00	50
0.37	1.1	None	**3RV13 21-0KC10**	**3RT10 15-1AP01**	S0/S00	**3RU11 16-0KB0**	0.90 ... 1.25	50
0.55	1.5	None	**3RV13 21-1AC10**	**3RT10 15-1AP01**	S0/S00	**3RU11 16-1AB0**	1.10 ... 1.60	50
0.75	1.9	None	**3RV13 21-1BC10**	**3RT10 15-1AP01**	S0/S00	**3RU11 16-1BB0**	1.40 ... 2.00	50
1.1	2.7	None	**3RV13 21-1DC10**	**3RT10 15-1AP01**	S0/S00	**3RU11 16-1DB0**	2.20 ... 3.20	50
1.5	3.6	None	**3RV13 21-1EC10**	**3RT10 15-1AP01**	S0/S00	**3RU11 16-1EB0**	2.80 ... 4.00	50
1.5	3.6	None	**3RV13 21-1FC10**	**3RT10 15-1AP01**	S0/S00	**3RU11 16-1FB0**	3.50 ... 5.00	50
2.2	5.0	None	**3RV13 21-1GC10**	**3RT10 15-1AP01**	S0/S00	**3RU11 16-1GB0**	4.50 ... 6.30	50
3	6.5	None	**3RV13 21-1HC10**	**3RT10 15-1AP01**	S0/S00	**3RU11 16-1HB0**	5.50 ... 8.00	50
4	8.5	None	**3RV13 21-1JC10**	**3RT10 16-1AP01**	S0/S00	**3RU11 16-1JB0**	7.00 ... 10.0	50
5.5	11.5	None	**3RV13 21-1KC10**	**3RT10 17-1AP01**	S0/S00	**3RU11 16-1KB0**	9.00 ... 12.0	50
7.5	15.5	None	**3RV13 21-4AC10**	**3RT10 24-1AP00**	S0/S0	**3RU11 26-4AB0**	11.0 ... 16.0	50
7.5	15.5	None	**3RV13 21-4BC10**	**3RT10 25-1AP00**	S0/S0	**3RU11 26-4BB0**	14.0 ... 20.0	50
11	22	None	**3RV13 21-4CC10**	**3RT10 26-1AP00**	S0/S0	**3RU11 26-4CB0**	17.0 ... 22.0	50
11	22	None	**3RV13 21-4DC10**	**3RT10 26-1AP00**	S0/S0	**3RU11 26-4DB0**	20.0 ... 25.0	50
15	29	None	**3RV13 31-4EC10**	**3RT10 34-1AP00**	S2/S2	**3RU11 36-4EB0**	22.0 ... 32.0	50
18.5	35	None	**3RV13 31-4FC10**	**3RT10 35-1AP00**	S2/S2	**3RU11 36-4FB0**	28.0 ... 40.0	50
22	41	None	**3RV13 31-4GC10**	**3RT10 36-1AP00**	S2/S2	**3RU11 36-4GB0**	36.0 ... 45.0	50
22	41	None	**3RV13 31-4HC10**	**3RT10 36-1AP00**	S2/S2	**3RU11 36-4HB0**	40.0 ... 50.0	50
30	55	None	**3RV13 41-4JC10**	**3RT10 44-1AP00**	S3/S3	**3RU11 46-4JB0**	45.0 ... 63.0	50
30	55	None	**3RV13 42-4JC10**	**3RT10 44-1AP00**	S3/S3	**3RU11 46-4JB0**	45.0 ... 63.0	80
37	66	None	**3RV13 41-4KC10**	**3RT10 45-1AP00**	S3/S3	**3RU11 46-4KB0**	57.0 ... 75.0	50
37	66	None	**3RV13 42-4KC10**	**3RT10 45-1AP00**	S3/S3	**3RU11 46-4KB0**	57.0 ... 75.0	80
45	80	None	**3RV13 41-4LC10**	**3RT10 46-1AP00**	S3/S3	**3RU11 46-4LB0**	70.0 ... 90.0	50
45	80	None	**3RV13 42-4LC10**	**3RT10 46-1AP00**	S3/S3	**3RU11 46-4LB0**	70.0 ... 90.0	80
45	80	None	**3RV13 41-4MC10**	**3RT10 46-1AP00**	S3/S3	**3RU11 46-4MB0**	80.0 ... 100	50
45	80	None	**3RV13 42-4MC10**	**3RT10 46-1AP00**	S3/S3	**3RU11 46-4MB0**	80.0 ... 100	80

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

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

Motor starter protector + contactor + 3RU11 thermal overload relay

CLASS 10, type of coordination 2, short-circuit breaking capacity I_q = 50 kA



400 V AC

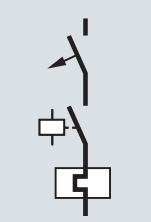
Standard induction motor 4-pole at 400 V AC[1]		Setting range	Motor starter protector	Contactor[2]	Size	Overload relay	Setting range	Short-circuit breaking capacity I_q
Standard output P	Motor current (guide value) I	Overload release Motor starter protector					Overload release Overload relay	
kW	A	A	Order No.	Order No.		Order No.	A	kA
0.06	0.2	None	3RV13 21-0BC10	3RT10 15-1AP01	S0/S00	3RU11 16-0BB0	0.14 ... 0.20	50
0.06	0.2	None	3RV13 21-0CC10	3RT10 15-1AP01	S0/S00	3RU11 16-0CB0	0.18 ... 0.25	50
0.09	0.3	None	3RV13 21-0DC10	3RT10 15-1AP01	S0/S00	3RU11 16-0DB0	0.22 ... 0.32	50
0.09	0.3	None	3RV13 21-0EC10	3RT10 15-1AP01	S0/S00	3RU11 16-0EB0	0.28 ... 0.40	50
0.12	0.4	None	3RV13 21-0FC10	3RT10 15-1AP01	S0/S00	3RU11 16-0FB0	0.35 ... 0.50	50
0.18	0.6	None	3RV13 21-0GC10	3RT10 15-1AP01	S0/S00	3RU11 16-0GB0	0.45 ... 0.63	50
0.25	0.85	None	3RV13 21-0HC10	3RT10 15-1AP01	S0/S00	3RU11 16-0HB0	0.55 ... 0.80	50
0.25	0.85	None	3RV13 21-0JC10	3RT10 15-1AP01	S0/S00	3RU11 16-0JB0	0.70 ... 1.00	50
0.37	1.1	None	3RV13 21-0KC10	3RT10 15-1AP01	S0/S00	3RU11 16-0KB0	0.90 ... 1.25	50
0.55	1.5	None	3RV13 21-1AC10	3RT10 15-1AP01	S0/S00	3RU11 16-1AB0	1.10 ... 1.60	50
0.75	1.9	None	3RV13 21-1BC10	3RT10 15-1AP01	S0/S00	3RU11 16-1BB0	1.40 ... 2.00	50
0.75	1.9	None	3RV13 21-1CC10	3RT10 24-1AP00	S0/S0	3RU11 26-1CB0	1.80 ... 2.50	50
1.1	2.7	None	3RV13 21-1DC10	3RT10 24-1AP00	S0/S0	3RU11 26-1DB0	2.20 ... 3.20	50
1.5	3.6	None	3RV13 21-1EC10	3RT10 24-1AP00	S0/S0	3RU11 26-1EB0	2.80 ... 4.00	50
1.5	3.6	None	3RV13 21-1FC10	3RT10 24-1AP00	S0/S0	3RU11 26-1FB0	3.50 ... 5.00	50
2.2	5.0	None	3RV13 21-1GC10	3RT10 24-1AP00	S0/S0	3RU11 26-1GB0	4.50 ... 6.30	50
3	6.5	None	3RV13 21-1HC10	3RT10 24-1AP00	S0/S0	3RU11 26-1HB0	5.50 ... 8.00	50
4	8.5	None	3RV13 21-1JC10	3RT10 26-1AP00	S0/S0	3RU11 26-1JB0	7.00 ... 10.0	50
5.5	11.5	None	3RV13 21-1KC10	3RT10 26-1AP00	S0/S0	3RU11 26-1KB0	9.00 ... 12.5	50
7.5	15.5	None	3RV13 21-4AC10	3RT10 26-1AP00	S0/S0	3RU11 26-4AB0	11.0 ... 16.0	50
7.5	15.5	None	3RV13 21-4BC10	3RT10 26-1AP00	S0/S0	3RU11 26-4BB0	14.0 ... 20.0	50
11	22	None	3RV13 31-4DC10	3RT10 34-1AP00	S2/S2	3RU11 36-4DB0	18.0 ... 25.0	50
15	29	None	3RV13 31-4EC10	3RT10 34-1AP00	S2/S2	3RU11 36-4EB0	22.0 ... 32.0	50
18.5	35	None	3RV13 31-4FC10	3RT10 35-1AP00	S2/S2	3RU11 36-4FB0	28.0 ... 40.0	50
22	41	None	3RV13 31-4GC10	3RT10 36-1AP00	S2/S2	3RU11 36-4GB0	36.0 ... 45.0	50
22	41	None	3RV13 31-4HC10	3RT10 36-1AP00	S2/S2	3RU11 36-4HB0	40.0 ... 50.0	50
30	55	None	3RV13 41-4JC10	3RT10 44-1AP00	S3/S3	3RU11 46-4JB0	45.0 ... 63.0	50
37	66	None	3RV13 41-4KC10	3RT10 45-1AP00	S3/S3	3RU11 46-4KB0	57.0 ... 75.0	50
45	80	None	3RV13 41-4LC10	3RT10 46-1AP00	S3/S3	3RU11 46-4LB0	70.0 ... 90.0	50
45	80	None	3RV13 41-4MC10	3RT10 46-1AP00	S3/S3	3RU11 46-4MB0	80.0 ... 100	50

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

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

Motor starter protector + contactor + 3RU11 thermal overload relay

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



400 V AC

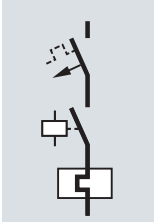
Standard induction motor 4-pole at 400 V AC[1]		Setting range Overload release Motor starter protector	Motor starter protector	Contactor[2]	Size	Overload relay	Setting range Overload release Overload relay	Short-circuit breaking capacity I_q
Standard output P	Motor current (guide value) I							
kW	A	A	Order No.	Order No.		Order No.	A	kA
0.04	0.16	None	**3RV13 21-0AC10**	**3RT10 15-1AP01**	S0/S00	**3RU11 16-0AB0**	0.11 ... 0.16	130
0.06	0.2	None	**3RV13 21-0BC10**	**3RT10 15-1AP01**	S0/S00	**3RU11 16-0BB0**	0.14 ... 0.20	130
0.06	0.2	None	**3RV13 21-0CC10**	**3RT10 15-1AP01**	S0/S00	**3RU11 16-0CB0**	0.18 ... 0.25	130
0.09	0.3	None	**3RV13 21-0DC10**	**3RT10 15-1AP01**	S0/S00	**3RU11 16-0DB0**	0.22 ... 0.32	130
0.09	0.3	None	**3RV13 21-0EC10**	**3RT10 15-1AP01**	S0/S00	**3RU11 16-0EB0**	0.28 ... 0.40	130
0.12	0.4	None	**3RV13 21-0FC10**	**3RT10 15-1AP01**	S0/S00	**3RU11 16-0FB0**	0.35 ... 0.50	130
0.18	0.6	None	**3RV13 21-0GC10**	**3RT10 15-1AP01**	S0/S00	**3RU11 16-0GB0**	0.45 ... 0.63	130
0.18	0.6	None	**3RV13 21-0HC10**	**3RT10 15-1AP01**	S0/S00	**3RU11 16-0HB0**	0.55 ... 0.80	130
0.25	0.85	None	**3RV13 21-0JC10**	**3RT10 15-1AP01**	S0/S00	**3RU11 16-0JB0**	0.70 ... 1.00	130
0.37	1.1	None	**3RV13 21-0KC10**	**3RT10 15-1AP01**	S0/S00	**3RU11 16-0KB0**	0.90 ... 1.25	130
0.55	1.5	None	**3RV13 21-1AC10**	**3RT10 15-1AP01**	S0/S00	**3RU11 16-1AB0**	1.10 ... 1.60	130
0.75	1.9	None	**3RV13 21-1BC10**	**3RT10 15-1AP01**	S0/S00	**3RU11 16-1BB0**	1.40 ... 2.00	130
0.75	1.9	None	**3RV13 21-1CC10**	**3RT10 24-1AP00**	S0/S0	**3RU11 26-1CB0**	1.80 ... 2.50	130
1.1	2.7	None	**3RV13 21-1DA10**	**3RT10 24-1AP00**	S0/S0	**3RU11 26-1DB0**	2.20 ... 3.20	130
1.5	3.6	None	**3RV13 21-1EA10**	**3RT10 24-1AP00**	S0/S0	**3RU11 26-1EB0**	2.80 ... 4.00	130
1.5	3.6	None	**3RV13 21-1FA10**	**3RT10 24-1AP00**	S0/S0	**3RU11 26-1FB0**	3.50 ... 5.00	130
2.2	5	None	**3RV13 21-1GC10**	**3RT10 24-1AP00**	S0/S0	**3RU11 26-1GB0**	4.50 ... 6.30	130
3	6.5	None	**3RV13 21-1HC10**	**3RT10 24-1AP00**	S0/S0	**3RU11 26-1HB0**	5.50 ... 8.00	130
4	8.5	None	**3RV13 21-1JC10**	**3RT10 26-1AP00**	S0/S0	**3RU11 26-1JB0**	7.00 ... 10.0	130
5.5	11.5	None	**3RV13 21-1KC10**	**3RT10 26-1AP00**	S0/S0	**3RU11 26-1KB0**	9.00 ... 12.5	130
7.5	15.5	None	**3RV13 21-4AC10**	**3RT10 26-1AP00**	S0/S0	**3RU11 26-4AB0**	11.0 ... 16.0	100
7.5	15.5	None	**3RV13 21-4BC10**	**3RT10 26-1AP00**	S0/S0	**3RU11 26-4BB0**	14.0 ... 20.0	100
11	22	None	**3RV13 31-4DC10**	**3RT10 34-1AP00**	S2/S2	**3RU11 36-4DB0**	18.0 ... 25.0	100
15	29	None	**3RV13 31-4EC10**	**3RT10 34-1AP00**	S2/S2	**3RU11 36-4EB0**	22.0 ... 32.0	100
18.5	35	None	**3RV13 31-4FC10**	**3RT10 35-1AP00**	S2/S2	**3RU11 36-4FB0**	28.0 ... 40.0	100
22	41	None	**3RV13 31-4GC10**	**3RT10 36-1AP00**	S2/S2	**3RU11 36-4GB0**	36.0 ... 45.0	100
22	41	None	**3RV13 31-4HC10**	**3RT10 36-1AP00**	S2/S2	**3RU11 36-4HB0**	40.0 ... 50.0	100

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

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

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

CLASS 5 and CLASS 10, types of coordination 2 and 1, short-circuit breaking capacity I_q = 50 kA



400 V AC

Standard induction motor 4-pole at 400 V AC[1]		Setting range Overload release	Motor starter protector/circuit breaker	Contactor[3]	Size	Overload relay	Setting range Overload release	Short-circuit breaking capacity I_q
Standard output P	Motor current (guide value) I	Motor starter protector /circuit breaker[2]					Overload relay	
kW	A	A	Order No.	Order No.		Order No.	A	kA
Type of coordination 2								
0.06	0.2	0.22 ... 0.32	3RV10 11-0DA10	3RT10 15-1AP01	S00/S00	3RB20 16-1RB0/ 3RB21 13-4RB0	0.10 ... 0.40	50
0.09	0.3	0.28 ... 0.40	3RV10 11-0EA10	3RT10 15-1AP01	S00/S00		0.10 ... 0.40	50
0.12	0.4	0.70 ... 1.00	3RV10 11-0JA10	3RT10 15-1AP01	S00/S00	3RB20 16-1NB0/ 3RB21 13-4NB0	0.32 ... 1.25	50
0.18	0.6	0.70 ... 1.00	3RV10 11-0JA10	3RT10 15-1AP01	S00/S00		0.32 ... 1.25	50
0.25	0.85	1.10 ... 1.60	3RV10 11-1AA10	3RT10 15-1AP01	S00/S00		0.32 ... 1.25	50
0.37	1.1	1.10 ... 1.60	3RV10 11-1AA10	3RT10 15-1AP01	S00/S00	3RB20 16-1PB0/ 3RB21 13-4PB0	1.00 ... 4.00	50
0.55	1.5	1.40 ... 2.00	3RV10 11-1BA10	3RT10 24-1AP00	S00/S00		1.00 ... 4.00	50
0.55	1.5	None	3RV13 21-1BC10	3RT10 24-1AP00	S0/S0	3RB21 23-4PB0	1.00 ... 4.00	50
0.75	1.9	None	3RV13 21-1CC10	3RT10 24-1AP00	S0/S0		1.00 ... 4.00	50
1.1	2.7	None	3RV13 21-1DC10	3RT10 24-1AP00	S0/S0		1.00 ... 4.00	50
1.5	3.5	None	3RV13 21-1EC10	3RT10 24-1AP00	S0/S0	3RB20 26-1SB0/ 3RB21 23-4SB0	3.00 ... 12.0	50
2.2	5	None	3RV13 21-1GC10	3RT10 24-1AP00	S0/S0		3.00 ... 12.0	50
3	6.5	None	3RV13 21-1HC10	3RT10 24-1AP00	S0/S0		3.00 ... 12.0	50
4	8.5	None	3RV13 21-1JC10	3RT10 26-1AP00	S0/S0	3RB20 26-1QB0/ 3RB21 23-4QB0	6.00 ... 25.0	50
5.5	11.5	None	3RV13 21-1KC10	3RT10 26-1AP00	S0/S0		6.00 ... 25.0	50
7.5	15.5	14.0 ... 20.0	3RV10 21-4BA10	3RT10 26-1AP00	S0/S0		6.00 ... 25.0	50
11	22	None	3RV13 31-4EC10	3RT10 34-1AP00	S2/S2	3RB20 36-1UB0/ 3RB21 33-4UB0	12.5 ... 50.0	50
15	29	28.0 ... 40.0	3RV10 31-4FA10	3RT10 36-1AP00	S2/S2		12.5 ... 50.0	50
15	29	None	3RV13 41-4FC10	3RT10 44-1AP00	S3/S3	3RB20 46-1EB0/ 3RB21 43-4EB0	25.0 ... 100	50
18.5	35	None	3RV13 41-4FC10	3RT10 44-1AP00	S3/S3		25.0 ... 100	50
22	41	None	3RV13 41-4HC10	3RT10 44-1AP00	S3/S3		25.0 ... 100	50
30	55	None	3RV13 41-4JC10	3RT10 44-1AP00	S3/S3		25.0 ... 100	50
37	66	None	3RV13 41-4KC10	3RT10 45-1AP00	S3/S3		25.0 ... 100	50
45	80	70.0 ... 90.0	3RV10 41-4LA10	3RT10 46-1AP00	S3/S3		25.0 ... 100	50
55	97	None	3VL27 10-2DK33	3RT10 54-1AP36	–/S6	3RB20 56-1FW2/ 3RB21 53-4FW2	50.0 ... 200	50
55	97	None	3VL27 16-2DK33	3RT10 54-1AP36	–/S6		50.0 ... 200	50
75	132	None	3VL27 16-2DK33	3RT10 55-6AP36	–/S6	3RB20 56-1FC2/ 3RB21 53-4FC2	50.0 ... 200	50
90	160	None	3VL27 16-2DK33	3RT10 56-6AP36	–/S6		50.0 ... 200	50
90	160	None	3VL37 25-2DK36	3RT10 56-6AP36	–/S6		50.0 ... 200	50
110	195	None	3VL37 25-2DK36	3RT10 64-6AP36	–/S10	3RB20 66-1GC2/ 3RB21 63-4GC2	55.0 ... 250	50
110	195	None	3VL37 25-2DK36	3RT12 64-6AP36	–/S10V		55.0 ... 250	50
132	230	None	3VL47 25-2DK36	3RT10 65-6AP36	–/S10		55.0 ... 250	50
132	230	None	3VL47 25-2DK36	3RT12 65-6AP36	–/S10V		55.0 ... 250	50
132	230	None	3VL47 31-2DK36	3RT10 65-6AP36	–/S10		55.0 ... 250	50
132	230	None	3VL47 31-2DK36	3RT12 65-6AP36	–/S10V		55.0 ... 250	50
160	280	None	3VL47 31-2DK36	3RT10 66-6AP36	–/S10	3RB20 66-1MC2/ 3RB21 63-4MC2	160 ... 630	50
160	280	None	3VL47 31-2DK36	3RT12 66-6AP36	–/S10V		160 ... 630	50
200	350	None	3VL57 50-2DK36	3RT10 75-6AP36	–/S12		160 ... 630	50
200	350	None	3VL57 50-2DK36	3RT12 75-6AP36	–/S12V		160 ... 630	50
250	430	None	3VL57 50-2DK36	3RT10 76-6AP36	–/S12		160 ... 630	50
250	430	None	3VL57 50-2DK36	3RT12 76-6AP36	–/S12V		160 ... 630	50
Type of coordination 1								
315	540	None	3VL77 12-1DE36	3TF68 44-0CM7	–/14	3RB20 6.-.M.2/ 3RB21 63-4MC2	160 ... 630	50
355	610	None	3VL77 12-1DE36	3TF68 44-0CM7	–/14		160 ... 630	50
400	690	None	3VL87 16-1DE36	3TF69 44-0CM7	–/14	3UF1 868-3GA00 + 3RB20 16-1NB0	205 ... 820	50

Footnotes for pages 19 and 20:

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

2) The motor starter protector/circuit breaker is to be set to maximum current value.

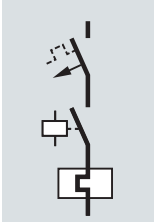
3) Rated control supply voltage 230 V AC, 50 Hz. Other control voltages are also possible.

4) Alternatively 3VL47 31-3DK36 also possible.

5) Use terminal bracket for stand-alone installation of overload relays.

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

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



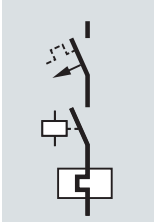
400 V AC

Standard induction motor 4-pole at 400 V AC[1)]		Setting range Overload release	Motor starter protector/circuit breaker	Contactor[3)]	Size	Overload relay	Setting range Overload release	Short-circuit breaking capacity I_q
Standard output P	Motor current (guide value) I	Motor starter protector/circuit breaker[2)]					Overload relay	
kW	A	A	Order No.	Order No.		Order No.	A	kA
Type of coordination 2								
0.06	0.2	0.22 ... 0.32	3RV10 11-0DA10	3RT10 15-1AP01	S00/S00	3RB20 16-1RB0/ 3RB21 13-4RB0	0.10 ... 0.40	130
0.09	0.3	0.28 ... 0.40	3RV10 11-0EA10	3RT10 15-1AP01	S00/S00		0.10 ... 0.40	130
0.12	0.4	0.70 ... 1.00	3RV10 11-0JA10	3RT10 15-1AP01	S00/S00	3RB20 16-1NB0/ 3RB21 13-4NB0	0.32 ... 1.25	130
0.18	0.6	0.70 ... 1.00	3RV10 11-0JA10	3RT10 15-1AP01	S00/S00		0.32 ... 1.25	130
0.25	0.85	1.10 ... 1.60	3RV10 11-1AA10	3RT10 15-1AP01	S00/S00		0.32 ... 1.25	130
0.37	1.1	1.10 ... 1.60	3RV10 11-1AA10	3RT10 15-1AP01	S00/S00	3RB20 16-1PB0/ 3RB21 13-4PB0	1.00 ... 4.00	130
0.37	1.1	None	3RV13 21-1AC10	3RT10 24-1AP00	S0/S0	3RB21 23-4PB0	1.00 ... 4.00	130
0.55	1.5	1.40 ... 2.00	3RV10 11-1BA10	3RT10 15-1AP01	S00/S00	3RB20 16-1PB0/ 3RB21 13-4PB0	1.00 ... 4.00	130
0.55	1.5	None	3RV13 21-1BC10	3RT10 24-1AP00	S0/S0	3RB21 23-4PB0	1.00 ... 4.00	130
0.75	1.9	None	3RV13 21-1CC10	3RT10 24-1AP00	S0/S0		1.00 ... 4.00	130
1.1	2.7	None	3RV13 21-1DC10	3RT10 24-1AP00	S0/S0		1.00 ... 4.00	130
1.5	3.5	None	3RV13 21-1EC10	3RT10 24-1AP00	S0/S0	3RB20 26-1SB0/ 3RB21 23-4SB0	3.00 ... 12.0	130
2.2	5	None	3RV13 21-1GC10	3RT10 24-1AP00	S0/S0		3.00 ... 12.0	130
3	6.5	None	3RV13 21-1HC10	3RT10 24-1AP00	S0/S0		3.00 ... 12.0	130
4	8.5	None	3RV13 21-1JC10	3RT10 26-1AP00	S0/S0	3RB20 26-1QB0/ 3RB21 23-4QB0	6.00 ... 25.0	130
5.5	11.5	None	3RV13 21-1KC10	3RT10 26-1AP00	S0/S0		6.00 ... 25.0	130
7.5	15.5	14.0 ... 20.0	3RV10 21-4BA10	3RT10 26-1AP00	S0/S0		6.00 ... 25.0	100
11	22	None	3RV13 31-4EC10	3RT10 34-1AP00	S2/S2	3RB20 36-1UB0/ 3RB21 33-4UB0	12.5 ... 50.0	100
15	29	28.0 ... 40.0	3RV10 31-4FA10	3RT10 36-1AP00	S2/S2		12.5 ... 50.0	100
15	29	None	3RV13 42-4FC10	3RT10 54-1AP36	S3/S6	3RB20 46-1EW1/ 3RB21 43-4EW1	25.0 ... 100	100
18.5	35	None	3RV13 42-4FC10	3RT10 54-1AP36	S3/S6		25.0 ... 100	100
22	41	None	3RV13 42-4HC10	3RT10 54-1AP36	S3/S6		25.0 ... 100	100
30	55	None	3RV13 42-4JC10	3RT10 54-1AP36	S3/S6		25.0 ... 100	100
30	55	None	3RV13 42-4JC10	3RT10 54-1AP36	S3/S6	3RB20 56-1FW2/ 3RB21 53-4FW2	50.0 ... 200	100
37	66	None	3RV13 42-4KC10	3RT10 54-1AP36	S3/S6	3RB20 46-1EW1/ 3RB21 43-4EW1	25.0 ... 100	100
37	66	None	3RV13 42-4KC10	3RT10 54-1AP36	S3/S6	3RB20 56-1FW2/ 3RB21 53-4FW2	50.0 ... 200	100
45	80	70.0 ... 90.0	3RV10 42-4LA10	3RT10 54-1AP36	S3/S6	3RB20 46-1EW1/ 3RB21 43-4EW1	25.0 ... 100	100
45	80	70.0 ... 90.0	3RV10 42-4LA10	3RT10 54-1AP36	S3/S6	3RB20 56-1FW2/ 3RB21 53-4FW2	50.0 ... 200	100
55	97	None	3VL27 10-3DK33	3RT10 54-1AP36	–/S6		50.0 ... 200	100
55	97	None	3VL27 16-3DK33	3RT10 54-1AP36	–/S6		50.0 ... 200	100
75	132	None	3VL27 16-3DK33	3RT10 55-6AP36	–/S6	3RB20 56-1FC2/ 3RB21 53-4FC2	50.0 ... 200	100
90	160	None	3VL27 16-3DK33	3RT10 56-6AP36	–/S6		50.0 ... 200	100
90	160	None	3VL37 25-3DK36	3RT10 56-6AP36	–/S6		50.0 ... 200	100
110	195	None	3VL37 25-3DK36	3RT10 64-6AP36	–/S10	3RB20 66-1GC2/ 3RB21 63-4GC2	55.0 ... 250	100
110	195	None	3VL37 25-3DK36	3RT12 64-6AP36	–/S10V		55.0 ... 250	100
132	230	None	3VL47 25-3DK36[4)]	3RT10 75-6AP36	–/S12		55.0 ... 250	100
132	230	None	3VL47 25-3DK36[4)]	3RT12 65-6AP36	–/S10V		55.0 ... 250	100
160	280	None	3VL47 31-3DK36	3RT10 75-6AP36	–/S12	3RB20 66-1MC2/ 3RB21 63-4MC2	160 ... 630	100
160	280	None	3VL47 31-3DK36	3RT12 66-6AP36	–/S10V		160 ... 630	100
200	350	None	3VL57 50-3DK36	3RT10 75-6AP36	–/S12		160 ... 630	100
200	350	None	3VL57 50-3DK36	3RT12 75-6AP36	–/S12V		160 ... 630	100
250	430	None	3VL57 50-3DK36	3RT10 76-6AP36	–/S12		160 ... 630	100
250	430	None	3VL57 50-3DK36	3RT12 76-6AP36	–/S12V		160 ... 630	100
Type of coordination 1								
315	540	None	3VL77 12-3DE36	3TF68 44-0CM7	–/14	3RB20 66-1M.2 3RB21 6.-.M.2	160 ... 630	100
355	610	None	3VL77 12-3DE36	3TF68 44-0CM7	–/14		160 ... 630	100
400	690	None	3VL87 16-3DE36	3TF69 44-0CM7	–/14	3UF1 868-3GA00 + 3RB20 16-1NB0[5)]	205 ... 820	100

For footnotes to this table, see page 19.

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

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



400 V AC

Standard induction motor 4-pole at 400 V AC[1]		Setting range Overload release Motor starter protector/circuit breaker[2]	Motor starter protector/circuit breaker	Contactor[3]	Size	Overload relay	Setting range Overload release Overload relay	Short-circuit breaking capacity I_q
Standard output P	Motor current (guide value) I							
kW	A	A	Order No.	Order No.		Order No.	A	kA
Type of coordination 2								
0.06	0.2	0.28 ... 0.40	3RV10 11-0EA10	3RT10 15-1AP01	S00/S00	3RB20 16-2RB0/ 3RB21 13-4RB0	0.10 ... 0.40	50
0.09	0.3	0.70 ... 1.00	3RV10 11-0JA10	3RT10 15-1AP01	S00/S00		0.10 ... 0.40	50
0.12	0.4	0.70 ... 1.00	3RV10 11-0JA10	3RT10 15-1AP01	S00/S00	3RB20 16-2NB0/ 3RB21 13-4NB0	0.32 ... 1.25	50
0.18	0.6	1.10 ... 1.60	3RV10 11-1AA10	3RT10 15-1AP01	S00/S00		0.32 ... 1.25	50
0.25	0.85	1.10 ... 1.60	3RV10 11-1AA10	3RT10 15-1AP01	S00/S00		0.32 ... 1.25	50
0.37	1.1	1.40 ... 2.00	3RV10 11-1BA10	3RT10 15-1AP01	S00/S00	3RB20 16-2PB0/ 3RB21 13-4PB0	1.00 ... 4.00	50
0.37	1.1	None	3RV13 21-1BC10	3RT10 24-1AP00	S0/S0	3RB21 23-4PB0	1.00 ... 4.00	50
0.55	1.5	None	3RV13 21-1DC10	3RT10 24-1AP00	S0/S0		1.00 ... 4.00	50
0.75	1.9	2.80 ... 4.00	3RV10 21-1EA10	3RT10 24-1AP00	S0/S0		1.00 ... 4.00	50
1.1	2.7	3.50 ... 5.00	3RV10 21-1FA10	3RT10 24-1AP00	S0/S0		1.00 ... 4.00	50
1.5	3.5	None	3RV13 21-1GC10	3RT10 24-1AP00	S0/S0	3RB20 26-2SB0/ 3RB21 23-4SB0	3.00 ... 12.0	50
2.2	5	None	3RV13 21-1JC10	3RT10 26-1AP00	S0/S0		3.00 ... 12.0	50
3	6.5	11.0 ... 16.0	3RV10 31-4AA10	3RT10 34-1AP00	S2/S2	3RB20 36-2QB0/ 3RB21 33-4QB0	6.00 ... 25.0	50
4	8.5	11.0 ... 16.0	3RV10 31-4AA10	3RT10 34-1AP00	S2/S2		6.00 ... 25.0	50
5.5	11.5	18.0 ... 25.0	3RV10 31-4DA10	3RT10 34-1AP00	S2/S2		6.00 ... 25.0	50
7.5	15.5	22.0 ... 32.0	3RV10 31-4EA10	3RT10 35-1AP00	S2/S2		6.00 ... 25.0	50
11	22	28.0 ... 40.0	3RV10 31-4FA10	3RT10 36-1AP00	S2/S2	3RB20 36-2UB0/ 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/S3	3RB20 46-2UB0/ 3RB21 43-4UB0	12.5 ... 50.0	50
18.5	35	None	3RV13 41-4JC10	3RT10 45-1AP00	S3/S3	3RB20 46-2EB0/ 3RB21 43-4EB0	25.0 ... 100	50
22	41	57.0 ... 75.0	3RV10 41-4KA10	3RT10 46-1AP00	S3/S3		25.0 ... 100	50
30	55	70.0 ... 90.0	3RV10 42-4LB10	3RT10 46-1AP00	S3/S3		25.0 ... 100	50
37	66	None	3VL27 10-2DK33	3RT10 54-1AP36	–/S6	3RB20 56-2FW2/ 3RB21 53-4FW2	50.0 ... 200	50
45	80	None	3VL27 10-2DK33	3RT10 54-1AP36	–/S6		50.0 ... 200	50
55	97	None	3VL27 10-2DK33	3RT10 55-6AP36	–/S6	3RB20 56-2FW2/ 3RB21 53-4FW2	50.0 ... 200	50
55	97	None	3VL27 16-2DK33	3RT10 55-6AP36	–/S6		50.0 ... 200	50
75	132	None	3VL37 25-2DK36	3RT10 56-6AP36	–/S6		50.0 ... 200	50
90	160	None	3VL27 16-2DK33	3RT10 64-6AP36	–/S10	3RB20 66-2GC2/ 3RB21 63-4GC2	55.0 ... 250	50
90	160	None	3VL37 25-2DK36	3RT10 65-6AP36	–/S10		55.0 ... 250	50
110	195	None	3VL37 25-2DK36	3RT10 66-6AP36	–/S10		55.0 ... 250	50
110	195	None	3VL37 25-2DK36	3RT12 64-6AP36	–/S10V		55.0 ... 250	50
132	230	None	3VL37 25-2DK36	3RT12 65-6AP36	–/S10V		55.0 ... 250	50
132	230	None	3VL47 31-2DK36	3RT12 65-6AP36	–/S10V		55.0 ... 250	50
160	280	None	3VL47 31-2DK36	3RT10 75-6AP36	–/S12	3RB20 66-2MC2/ 3RB21 63-4MC2	160 ... 630	50
160	280	None	3VL47 31-2DK36	3RT12 66-6AP36	–/S10V		160 ... 630	50
200	350	None	3VL57 50-2DK36	3RT10 76-6AP36	–/S12		160 ... 630	50
200	350	None	3VL57 50-2DK36	3RT12 75-6AP36	–/S12V		160 ... 630	50
250	430	None	3VL57 50-2DK36	3RT12 76-6AP36	–/S12V		160 ... 630	50
Type of coordination 1								
315	540	None	3VL77 12-1DE36	3TF69 44-0CM7	–/14	3RB20 6.-.M.2/ 3RB21 6.-.M.2	160 ... 630	50

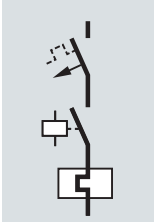
1) Guide value for 4-pole standard motors for 400 V AC, 50 Hz. Selection depends on the concrete startup and rated data of the protected motor.

2) The motor starter protector/circuit breaker is to be set to maximum current value.

3) 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, types of coordination 2 and 1, short-circuit breaking capacity $I_q \geq 100$ kA



400 V AC

Standard induction motor 4-pole at 400 V AC[1]		Setting range Overload release Motor starter protector/circuit breaker[2]	Motor starter protector/circuit breaker	Contactor[3]	Size	Overload relay	Setting range Overload release Overload relay	Short-circuit breaking capacity I_q
Standard output P kW	Motor current (guide value) I A	A	Order No.	Order No.		Order No.	A	kA
Type of coordination 2								
0.06	0.2	0.28 ... 0.40	3RV10 11-0EA10	3RT10 15-1AP01	S00/S00	3RB20 16-2RB0/ 3RB21 13-4RB0	0.10 ... 0.40	130
0.09	0.3	0.70 ... 1.00	3RV10 11-0JA10	3RT10 15-1AP01	S00/S00		0.10 ... 0.40	130
0.12	0.4	0.70 ... 1.00	3RV10 11-0JA10	3RT10 15-1AP01	S00/S00	3RB20 16-2NB0/ 3RB21 13-4NB0	0.32 ... 1.25	130
0.18	0.6	1.10 ... 1.60	3RV10 11-1AA10	3RT10 15-1AP01	S00/S00		0.32 ... 1.25	130
0.25	0.85	1.10 ... 1.60	3RV10 11-1AA10	3RT10 15-1AP01	S00/S00		0.32 ... 1.25	130
0.37	1.1	1.40 ... 2.00	3RV10 11-1BA10	3RT10 15-1AP01	S00/S00	3RB20 16-2PB0/ 3RB21 13-4PB0	1.00 ... 4.00	130
0.37	1.1	None	3RV13 21-1BC10	3RT10 24-1AP00	S0/S0	3RB21 23-4PB0	1.00 ... 4.00	130
0.55	1.5	None	3RV13 21-1DC10	3RT10 24-1AP00	S0/S0		1.00 ... 4.00	130
0.75	1.9	2.80 ... 4.00	3RV10 21-1EA10	3RT10 24-1AP00	S0/S0		1.00 ... 4.00	130
1.1	2.7	3.50 ... 5.00	3RV10 21-1FA10	3RT10 24-1AP00	S0/S0		1.00 ... 4.00	130
1.5	3.5	None	3RV13 21-1GC10	3RT10 24-1AP00	S0/S0	3RB20 26-2SB0/ 3RB21 23-4SB0	3.00 ... 12.0	130
2.2	5	None	3RV13 21-1JC10	3RT10 26-1AP00	S0/S0		3.00 ... 12.0	130
3	6.5	11.0 ... 16.0	3RV10 31-4AA10	3RT10 34-1AP00	S2/S2	3RB20 36-2QB0/ 3RB21 33-4QB0	6.00 ... 25.0	100
4	8.5	11.0 ... 16.0	3RV10 31-4AA10	3RT10 34-1AP00	S2/S2		6.00 ... 25.0	100
5.5	11.5	18.0 ... 25.0	3RV10 31-4DA10	3RT10 34-1AP00	S2/S2		6.00 ... 25.0	100
7.5	15.5	22.0 ... 32.0	3RV10 31-4EA10	3RT10 35-1AP00	S2/S2		6.00 ... 25.0	100
11	22	28.0 ... 40.0	3RV10 31-4FA10	3RT10 36-1AP00	S2/S2	3RB20 36-2UB0/ 3RB21 33-4UB0	12.5 ... 50.0	100
15	29	36.0 ... 50.0	3RV10 42-4HA10	3RT10 54-1AP36	S3/S6	3RB20 36-2UW1/ 3RB21 33-4UB0	12.5 ... 50.0	100
15	29	36.0 ... 50.0	3RV10 42-4HA10	3RT10 54-1AP36	S3/S6	3RB20 46-2EW1/ 3RB21 43-4EW1	25.0 ... 100	100
18.5	35	None	3RV13 42-4JC10	3RT10 54-1AP36	S3/S6	3RB20 46-2EB0/ 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	None	3VL27 10-3DK33	3RT10 54-1AP36	–/S6	3RB20 56-2FW2/ 3RB21 53-4FW2	50.0 ... 200	100
37	66	None	3VL27 16-3DK33	3RT10 54-1AP36	–/S6		50.0 ... 200	100
45	80	None	3VL27 10-3DK33	3RT10 54-1AP36	–/S6		50.0 ... 200	100
45	80	None	3VL27 16-3DK33	3RT10 54-1AP36	–/S6		50.0 ... 200	100
55	97	None	3VL27 10-3DK33	3RT10 55-6AP36	–/S6	3RB20 56-2FC2/ 3RB21 53-4FC2	50.0 ... 200	100
75	132	None	3VL27 16-3DK33	3RT10 56-6AP36	–/S6		50.0 ... 200	100
75	132	None	3VL37 25-3DK36	3RT10 56-6AP36	–/S6		50.0 ... 200	100
90	160	None	3VL27 16-3DK33	3RT10 64-6AP36	–/S10	3RB20 66-2GC2/ 3RB21 63-4GC2	55.0 ... 250	100
90	160	None	3VL37 25-3DK36	3RT10 64-6AP36	–/S10		55.0 ... 250	100
110	195	None	3VL37 25-3DK36	3RT10 64-6AP36	–/S10		55.0 ... 250	100
110	195	None	3VL37 25-3DK36	3RT12 64-6AP36	–/S10V		55.0 ... 250	100
132	230	None	3VL37 25-3DK36[4]	3RT10 75-6AP36	–/S12		55.0 ... 250	100
132	230	None	3VL37 25-3DK36[4]	3RT12 65-6AP36	–/S10V		55.0 ... 250	100
160	280	None	3VL47 31-3DK36	3RT10 75-6AP36	–/S12	3RB20 66-1MC2/ 3RB21 63-4MC2	160 ... 630	100
160	280	None	3VL47 31-3DK36	3RT12 66-6AP36	–/S10V		160 ... 630	100
200	350	None	3VL57 50-3DK36	3RT10 76-6AP36	–/S12		160 ... 630	100
200	350	None	3VL57 50-3DK36	3RT12 75-6AP36	–/S12V		160 ... 630	100
250	430	None	3VL57 50-3DK36	3RT12 76-6AP36	–/S12V		160 ... 630	100
Type of coordination 1								
315	540	None	3VL77 12-3DE36	3TF69 44-0CM7	–/14	3RB20 6.-.M.2/ 3RB21 6.-.M.2	160 ... 630	100

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

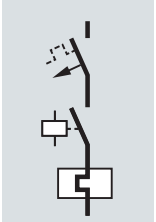
2) The motor starter protector/circuit breaker is to be set to maximum current value.

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

4) Alternatively 3VL47 31-3DK36 also possible.

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

CLASS 30, types of coordination 2 and 1, short-circuit breaking capacity I_q = 50 kA



400 V AC

Standard induction motor 4-pole at 400 V AC[1]		Setting range Overload release Motor starter protector/circuit breaker[2]	Motor starter protector/circuit breaker	Contactor[3]	Size	Overload relay	Setting range Overload release Overload relay	Short-circuit breaking capacity I_q
Standard output P	Motor current (guide value) I							
kW	A	A	Order No.	Order No.		Order No.	A	kA
Type of coordination 2								
0.06	0.2	0.45 ... 0.63	**3RV10 11-0GA10**	**3RT10 15-1AP01**	S00/S00	**3RB21 13-4RB0**	0.10 ... 0.40	50
0.09	0.3	0.55 ... 0.80	**3RV10 11-0HA10**	**3RT10 15-1AP01**	S00/S00		0.10 ... 0.40	50
0.12	0.4	0.70 ... 1.00	**3RV10 11-0JA10**	**3RT10 15-1AP01**	S00/S00	**3RB21 13-4NB0**	0.32 ... 1.25	50
0.18	0.6	1.10 ... 1.60	**3RV10 11-1AA10**	**3RT10 15-1AP01**	S00/S00		0.32 ... 1.25	50
0.25	0.85	1.40 ... 2.00	**3RV10 11-1BA10**	**3RT10 15-1AP01**	S00/S00		0.32 ... 1.25	50
0.37	1.1	2.20 ... 3.20	**3RV10 21-1DA10**	**3RT10 26-1AP00**	S0/S0	**3RB21 23-4PB0**	1.00 ... 4.00	50
0.55	1.5	2.80 ... 4.00	**3RV10 21-1EA10**	**3RT10 26-1AP00**	S0/S0		1.00 ... 4.00	50
0.75	1.9	3.50 ... 5.00	**3RV10 21-1FA10**	**3RT10 26-1AP00**	S0/S0		1.00 ... 4.00	50
1.1	2.7	3.50 ... 5.00	**3RV10 21-1GA10**	**3RT10 26-1AP00**	S0/S0		1.00 ... 4.00	50
1.5	3.5	5.50 ... 8.00	**3RV10 21-1HA10**	**3RT10 26-1AP00**	S0/S0	**3RB21 23-4SB0**	3.00 ... 12.0	50
2.2	5	9.00 ... 12.5	**3RV10 21-1KA10**	**3RT10 26-1AP00**	S0/S0		3.00 ... 12.0	50
3	6.5	11.0 ... 16.0	**3RV10 31-4AA10**	**3RT10 34-1AP00**	S2/S2	**3RB21 33-4QB0**	6.00 ... 25.0	50
4	8.5	14.0 ... 20.0	**3RV10 31-4BA10**	**3RT10 34-1AP00**	S2/S2		6.00 ... 25.0	50
5.5	11.5	22.0 ... 32.0	**3RV10 31-4EA10**	**3RT10 34-1AP00**	S2/S2		6.00 ... 25.0	50
7.5	15.5	28.0 ... 40.0	**3RV10 31-4FA10**	**3RT10 35-1AP00**	S2/S2	**3RB21 33-4UB0**	12.5 ... 50.0	50
11	22	28.0 ... 40.0	**3RV10 31-4FB10**	**3RT10 36-1AP00**	S2/S2		12.5 ... 50.0	50
15	29	36.0 ... 50.0	**3RV10 42-4HB10**	**3RT10 44-1AP00**	S3/S3		12.5 ... 50.0	50
18.5	35	45.0 ... 63.0	**3RV10 42-4JB10**	**3RT10 45-1AP00**	S3/S3	**3RB21 43-4EB0**	25.0 ... 100	50
22	41	57.0 ... 75.0	**3RV10 42-4KB10**	**3RT10 46-1AP00**	S3/S3		25.0 ... 100	50
37	66	None	**3VL27 10-2DK33**	**3RT10 54-1AP36**	–/S6	**3RB21 53-4FW2**	50.0 ... 200	50
45	80	None	**3VL27 10-2DK33**	**3RT10 55-6AP36**	–/S6	**3RB21 53-4FC2**	50.0 ... 200	50
55	97	None	**3VL27 10-2DK33**	**3RT10 56-6AP36**	–/S6		50.0 ... 200	50
75	132	None	**3VL37 25-2DK36**	**3RT10 64-6AP36**	–/S10	**3RB21 63-4GC2**	55.0 ... 250	50
90	160	None	**3VL27 16-2DK33**[4]	**3RT10 66-6AP36**	–/S10		55.0 ... 250	50
90	160	None	**3VL27 16-2DK33**[4]	**3RT12 64-6AP36**	–/S10V		55.0 ... 250	50
110	195	None	**3VL37 25-2DK36**	**3RT12 65-6AP36**	–/S10V		55.0 ... 250	50
132	230	None	**3VL37 25-2DK36**[5]	**3RT10 75-6AP36**	–/S12		55.0 ... 250	50
132	230	None	**3VL37 25-2DK36**[5]	**3RT12 66-6AP36**	–/S10V		55.0 ... 250	50
160	280	None	**3VL47 31-2DK36**	**3RT10 76-6AP36**	–/S12	**3RB21 63-4MC2**	160 ... 630	50
160	280	None	**3VL47 31-2DK36**	**3RT12 75-6AP36**	–/S12V		160 ... 630	50
200	350	None	**3VL57 50-2DK36**	**3RT12 76-6AP36**	–/S12V		160 ... 630	50
Type of coordination 1								
250	430	None	**3VL57 50-1DK36**	**3TF69 44-0CM7**	–/14	**3RB21 6.-.M.2**	160 ... 630	50

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

2) The motor starter protector/circuit breaker is to be set to maximum current value.

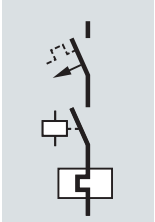
3) Rated control supply voltage 230 V AC, 50 Hz. Other control voltages are also possible.

4) Alternatively 3VL37 25-2DK36 also possible.

5) Alternatively 3VL47 31-2DK36 also possible.

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

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



400 V AC

Standard induction motor 4-pole at 400 V AC[1]		Setting range Overload release Motor starter protector/circuit breaker[2]	Motor starter protector/circuit breaker	Contactor[3]	Size	Overload relay	Setting range Overload release Overload relay	Short-circuit breaking capacity I_q
Standard output P	Motor current (guide value) I							
kW	A	A	Order No.	Order No.		Order No.	A	kA
Type of coordination 2								
0.06	0.2	0.45 ... 0.63	3RV10 11-0GA10	3RT10 15-1AP01	S00/S00	3RB21 13-4RB0	0.10 ... 0.40	130
0.09	0.3	0.55 ... 0.80	3RV10 11-0HA10	3RT10 15-1AP01	S00/S00		0.10 ... 0.40	130
0.12	0.4	0.70 ... 1.00	3RV10 11-0JA10	3RT10 15-1AP01	S00/S00	3RB21 13-4NB0	0.32 ... 1.25	130
0.18	0.6	1.10 ... 1.60	3RV10 11-1AA10	3RT10 15-1AP01	S00/S00		0.32 ... 1.25	130
0.25	0.85	1.40 ... 2.00	3RV10 11-1BA10	3RT10 15-1AP01	S00/S00		0.32 ... 1.25	130
0.37	1.1	2.20 ... 3.20	3RV10 21-1DA10	3RT10 26-1AP00	S0/S0	3RB21 23-4PB0	1.00 ... 4.00	130
0.55	1.5	2.80 ... 4.00	3RV10 21-1EA10	3RT10 26-1AP00	S0/S0		1.00 ... 4.00	130
0.75	1.9	3.50 ... 5.00	3RV10 21-1FA10	3RT10 26-1AP00	S0/S0		1.00 ... 4.00	130
1.1	2.7	4.50 ... 6.30	3RV10 21-1GA10	3RT10 26-1AP00	S0/S0		1.00 ... 4.00	130
1.5	3.5	5.50 ... 8.00	3RV10 21-1HA10	3RT10 26-1AP00	S0/S0	3RB21 23-4SB0	3.00 ... 12.0	130
2.2	5	9.00 ... 12.5	3RV10 21-1KA10	3RT10 26-1AP00	S0/S0		3.00 ... 12.0	130
3	6.5	11.0 ... 16.0	3RV10 31-4AA10	3RT10 34-1AP00	S2/S2	3RB21 33-4QB0	6.00 ... 25.0	100
4	8.5	14.0 ... 20.0	3RV10 31-4BA10	3RT10 34-1AP00	S2/S2		6.00 ... 25.0	100
5.5	11.5	22.0 ... 32.0	3RV10 31-4EA10	3RT10 34-1AP00	S2/S2		6.00 ... 25.0	100
7.5	15.5	28.0 ... 40.0	3RV10 31-4FA10	3RT10 35-1AP00	S2/S2	3RB21 33-4UB0	12.5 ... 50.0	100
11	22	28.0 ... 40.0	3RV10 31-4FB10	3RT10 36-1AP00	S2/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	None	3VL27 10-3DK33	3RT10 54-1AP36	–/S6		50.0 ... 200	100
37	66	None	3VL27 16-3DK33	3RT10 54-1AP36	–/S6		50.0 ... 200	100
45	80	None	3VL27 10-3DK33	3RT10 55-6AP36	–/S6	3RB21 53-4FC2	50.0 ... 200	100
45	80	None	3VL27 16-3DK33	3RT10 55-6AP36	–/S6		50.0 ... 200	100
55	97	None	3VL27 10-3DK33	3RT10 56-6AP36	–/S6		50.0 ... 200	100
55	97	None	3VL27 16-3DK33	3RT10 56-6AP36	–/S6		50.0 ... 200	100
75	132	None	3VL27 16-3DK33	3RT10 64-6AP36	–/S10		50.0 ... 200	100
75	132	None	3VL37 25-3DK36	3RT10 64-6AP36	–/S10	3RB21 63-4GC2	55.0 ... 250	100
90	160	None	3VL27 16-3DK33[4]	3RT10 66-6AP36	–/S10		55.0 ... 250	100
90	160	None	3VL27 16-3DK33[4]	3RT12 64-6AP36	–/S10V		55.0 ... 250	100
110	195	None	3VL37 25-3DK36	3RT12 65-6AP36	–/S10V		55.0 ... 250	100
132	230	None	3VL37 25-3DK36[5]	3RT10 75-6AP36	–/S12		55.0 ... 250	100
132	230	None	3VL37 25-3DK36[5]	3RT12 66-6AP36	–/S10V		55.0 ... 250	100
160	280	None	3VL47 31-3DK36	3RT10 76-6AP36	–/S12	3RB21 63-4MC2	160 ... 630	100
160	280	None	3VL47 31-3DK36	3RT12 75-6AP36	–/S12V		160 ... 630	100
200	350	None	3VL57 50-3DK36	3RT12 76-6AP36	–/S12V		160 ... 630	100
Type of coordination 1								
250	430	None	3VL57 50-3DK36	3TF69 44-0CM7	–/14	3RB21 6.-.M.2	160 ... 630	100

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

2) The motor starter protector/circuit breaker is to be set to maximum current value.

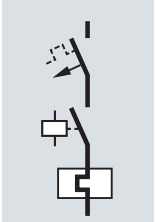
3) Rated control supply voltage 230 V AC, 50 Hz. Other control voltages are also possible.

4) Alternatively 3VL37 25-3DK36 also possible.

5) Alternatively 3VL47 31-3DK36 also possible.

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

CLASS 5 and CLASS 10, types of coordination 2 and 1, short-circuit breaking capacity I_q = 50 kA



400 V AC

Standard induction motor 4-pole at 400 V AC[1]		Setting range Overload release Motor starter protector/circuit breaker[2]	Motor starter protector/circuit breaker	Contactor[3]	Size	SIMOCODE pro or overload relay (current measuring module)[4]	Setting range Overload release Overload relay	Short-circuit breaking capacity I_q
Standard output P	Motor current (guide value) I							
kW	A	A	Order No.	Order No.		Order No.	A	kA
Type of coordination 2								
0.09	0.3	None	3RV13 21-0HC10	3RT10 24-1AP00	S0/S0	3UF7 100-1AA00-0/ 3RB29 06-2BG1	0.30 ... 3.00	50
0.12	0.4	None	3RV13 21-0HC10	3RT10 24-1AP00	S0/S0		0.30 ... 3.00	50
0.18	0.6	None	3RV13 21-0JC10	3RT10 24-1AP00	S0/S0		0.30 ... 3.00	50
0.25	0.85	None	3RV13 21-0KC10	3RT10 24-1AP00	S0/S0		0.30 ... 3.00	50
0.37	1.1	None	3RV13 21-1AC10	3RT10 24-1AP00	S0/S0		0.30 ... 3.00	50
0.55	1.5	None	3RV13 21-1AC10	3RT10 24-1AP00	S0/S0		0.30 ... 3.00	50
0.75	1.9	None	3RV13 21-1BC10	3RT10 24-1AP00	S0/S0		0.30 ... 3.00	50
1.1	2.7	None	3RV13 21-1DC10	3RT10 24-1AP00	S0/S0		0.30 ... 3.00	50
1.5	3.5	None	3RV13 21-1EC10	3RT10 24-1AP00	S0/S0	3UF7 101-1AA00-0/ 3RB29 06-2DG1	2.40 ... 25.0	50
2.2	5	None	3RV13 21-1GC10	3RT10 24-1AP00	S0/S0		2.40 ... 25.0	50
3	6.5	None	3RV13 21-1HC10	3RT10 24-1AP00	S0/S0		2.40 ... 25.0	50
4	8.5	None	3RV13 21-1JC10	3RT10 26-1AP00	S0/S0		2.40 ... 25.0	50
5.5	11.5	None	3RV13 21-1KC10	3RT10 26-1AP00	S0/S0		2.40 ... 25.0	50
7.5	15.5	14.0 ... 20.0	3RV10 21-4BA10	3RT10 26-1AP00	S0/S0		2.40 ... 25.0	50
7.5	15.5	None	3RV13 31-4BC10	3RT10 34-1AP00	S2/S2		2.40 ... 25.0	50
11	22	None	3RV13 31-4EC10	3RT10 34-1AP00	S2/S2	3UF7 102-1AA00-0/ 3RB29 06-2JG1	10.0 ... 100	50
15	29	40.0 ... 50.0	3RV10 31-4HA10	3RT10 36-1AP00	S2/S2		10.0 ... 100	50
15	29	None	3RV13 41-4FC10	3RT10 44-1AP00	S3/S3		10.0 ... 100	50
18.5	35	None	3RV13 41-4FC10	3RT10 44-1AP00	S3/S3		10.0 ... 100	50
22	41	None	3RV13 41-4HC10	3RT10 44-1AP00	S3/S3		10.0 ... 100	50
30	55	None	3RV13 41-4JC10	3RT10 44-1AP00	S3/S3		10.0 ... 100	50
37	66	None	3RV13 41-4KC10	3RT10 45-1AP00	S3/S3		10.0 ... 100	50
45	80	70.0 ... 90.0	3RV10 41-4LA10	3RT10 46-1AP00	S3/S3		10.0 ... 100	50
55	97	None	3VL27 10-2DK33	3RT10 54-1AP36	–/S6	3UF7 103-1AA00-0/ 3RB29 56-2TG2	20.0 ... 200	50
55	97	None	3VL27 16-2DK33	3RT10 54-1AP36	–/S6		20.0 ... 200	50
75	132	None	3VL27 16-2DK33	3RT10 55-1AP36	–/S6		20.0 ... 200	50
90	160	None	3VL37 25-2DK36	3RT10 56-6AP36	–/S6		20.0 ... 200	50
110	195	None	3VL37 25-2DK36	3RT10 64-6AP36	–/S10	3UF7 104-1BA00-0/ 3RB29 66-2WH2	63.0 ... 630	50
110	195	None	3VL37 25-2DK36	3RT12 64-6AP36	–/S10V		63.0 ... 630	50
132	230	None	3VL47 25-2DK36	3RT10 65-6AP36	–/S10		63.0 ... 630	50
132	230	None	3VL47 25-2DK36	3RT12 65-6AP36	–/S10V		63.0 ... 630	50
132	230	None	3VL47 31-2DK36	3RT10 65-6AP36	–/S10		63.0 ... 630	50
132	230	None	3VL47 31-2DK36	3RT12 65-6AP36	–/S10V		63.0 ... 630	50
160	280	None	3VL47 31-2DK36	3RT10 66-6AP36	–/S10		63.0 ... 630	50
160	280	None	3VL47 31-2DK36	3RT12 66-6AP36	–/S10V		63.0 ... 630	50
200	350	None	3VL57 50-2DK36	3RT10 75-6AP36	–/S12		63.0 ... 630	50
200	350	None	3VL57 50-2DK36	3RT12 75-6AP36	–/S12V		63.0 ... 630	50
250	430	None	3VL57 50-2DK36	3RT10 76-6AP36	–/S12		63.0 ... 630	50
250	430	None	3VL57 50-2DK36	3RT12 76-6AP36	–/S12V		63.0 ... 630	50
315	540	None	3VL77 12-1DE36	3TF68 44-0CM7	–/14		63.0 ... 630	50
Type of coordination 1								
355	610	None	3VL77 12-1DE36	3TF68 44-0CM7	–/14	3UF7 104-1BA00-0/ 3RB29 66-2WH2	63.0 ... 630	50

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

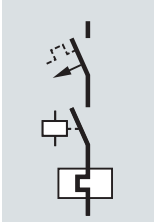
2) The motor starter protector/circuit breaker is to be set to maximum current value.

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

4) The current measuring modules required for 3UF7 or 3RB22/3RB23 are specified in each case. For details of the basic units 3UF7 or 3RB22/3RB23 which are also required see page 9.

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

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



400 V AC

Standard induction motor 4-pole at 400 V AC[1]		Setting range Overload release Motor starter protector/circuit breaker[2]	Motor starter protector/circuit breaker	Contactor[3]	Size	SIMOCODE pro or overload relay (current measuring module)[4]	Setting range Overload release Overload relay	Short-circuit breaking capacity I_q
Standard output P	Motor current (guide value) I							
kW	A	A	Order No.	Order No.		Order No.	A	kA
Type of coordination 2								
0.09	0.3	None	3RV13 21-0HC10	3RT10 24-1AP00	S0/S0	3UF7 100-1AA00-0/ 3RB29 06-2BG1	0.30 ... 3.00	130
0.12	0.4	None	3RV13 21-0HC10	3RT10 24-1AP00	S0/S0		0.30 ... 3.00	130
0.18	0.6	None	3RV13 21-0JC10	3RT10 24-1AP00	S0/S0		0.30 ... 3.00	130
0.25	0.85	None	3RV13 21-0KC10	3RT10 24-1AP00	S0/S0		0.30 ... 3.00	130
0.37	1.1	None	3RV13 21-1AC10	3RT10 24-1AP00	S0/S0		0.30 ... 3.00	130
0.55	1.5	None	3RV13 21-1AC10	3RT10 24-1AP00	S0/S0		0.30 ... 3.00	130
0.75	1.9	None	3RV13 21-1BC10	3RT10 24-1AP00	S0/S0		0.30 ... 3.00	130
1.1	2.7	None	3RV13 21-1DC10	3RT10 24-1AP00	S0/S0		0.30 ... 3.00	130
1.5	3.5	None	3RV13 21-1EC10	3RT10 24-1AP00	S0/S0	3UF7 101-1AA00-0/ 3RB29 06-2DG1	2.40 ... 25.0	130
2.2	5	None	3RV13 21-1GC10	3RT10 24-1AP00	S0/S0		2.40 ... 25.0	130
3	6.5	None	3RV13 21-1HC10	3RT10 24-1AP00	S0/S0		2.40 ... 25.0	130
4	8.5	None	3RV13 21-1JC10	3RT10 26-1AP00	S0/S0		2.40 ... 25.0	130
5.5	11.5	None	3RV13 21-1KC10	3RT10 26-1AP00	S0/S0		2.40 ... 25.0	130
7.5	15.5	14.0 ... 20.0	3RV10 21-4BA10	3RT10 26-1AP00	S0/S0		2.40 ... 25.0	100
11	22	None	3RV13 31-4EC10	3RT10 34-1AP00	S2/S2	3UF7 102-1AA00-0/ 3RB29 06-2JG1	10.0 ... 100	100
15	29	28.0 ... 40.0	3RV10 31-4FA10	3RT10 36-1AP00	S2/S2		10.0 ... 100	100
15	29	None	3RV13 42-4FC10	3RT10 54-1AP36	S3/S6		10.0 ... 100	100
18.5	35	None	3RV13 42-4FC10	3RT10 54-1AP36	S3/S6		10.0 ... 100	100
22	41	None	3RV13 42-4HC10	3RT10 54-1AP36	S3/S6		10.0 ... 100	100
30	55	None	3RV13 42-4JC10	3RT10 54-1AP36	S3/S6		10.0 ... 100	100
37	66	None	3RV13 42-4KC10	3RT10 54-1AP36	S3/S6		10.0 ... 100	100
45	80	None	3RV13 42-4LC10	3RT10 54-1AP36	S3/S6	3UF7 103-1AA00-0/ 3RB29 56-2TG2	20.0 ... 200	100
55	97	None	3VL27 10-3DK33	3RT10 54-1AP36	–/S6		20.0 ... 200	100
55	97	None	3VL27 16-3DK33	3RT10 54-1AP36	–/S6		20.0 ... 200	100
75	132	None	3VL27 16-3DK33	3RT10 55-6AP36	–/S6		20.0 ... 200	100
90	160	None	3VL27 16-3DK36	3RT10 56-6AP36	–/S6		20.0 ... 200	100
90	160	None	3VL27 25-3DK36	3RT10 56-6AP36	–/S6		20.0 ... 200	100
110	195	None	3VL37 25-3DK36	3RT10 64-6AP36	–/S10	3UF7 104-1BA00-0/ 3RB29 66-2WH2	63.0 ... 630	100
110	195	None	3VL37 25-3DK36	3RT12 64-6AP36	–/S10V		63.0 ... 630	100
132	230	None	3VL47 25-3DK36[5]	3RT10 75-6AP36	–/S12		63.0 ... 630	100
132	230	None	3VL47 25-3DK36[5]	3RT12 65-6AP36	–/S10V		63.0 ... 630	100
160	280	None	3VL47 31-3DK36	3RT10 75-6AP36	–/S12		63.0 ... 630	100
160	280	None	3VL47 31-3DK36	3RT12 66-6AP36	–/S10V		63.0 ... 630	100
200	350	None	3VL57 50-3DK36	3RT10 75-6AP36	–/S12		63.0 ... 630	100
200	350	None	3VL57 50-3DK36	3RT12 75-6AP36	–/S12V		63.0 ... 630	100
250	430	None	3VL57 50-3DK36	3RT10 76-6AP36	–/S12		63.0 ... 630	100
250	430	None	3VL57 50-3DK36	3RT12 76-6AP36	–/S12V		63.0 ... 630	100
Type of coordination 1								
15	29	None	3RV13 42-4FC10	3RT10 44-1AP00	S3/S3	3UF7 102-1AA00-0/ 3RB29 06-2JG1	10.0 ... 100	80
18.5	35	None	3RV13 42-4FC10	3RT10 44-1AP00	S3/S3		10.0 ... 100	80
22	41	None	3RV13 42-4HC10	3RT10 44-1AP00	S3/S3		10.0 ... 100	80
30	55	None	3RV13 42-4JC10	3RT10 44-1AP00	S3/S3		10.0 ... 100	80
37	66	None	3RV13 42-4KC10	3RT10 45-1AP00	S3/S3		10.0 ... 100	80
45	80	70.0 ... 90.0	3RV10 42-4LA10	3RT10 46-1AP00	S3/S3		10.0 ... 100	80

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

2) The motor starter protector/circuit breaker is to be set to maximum current value.

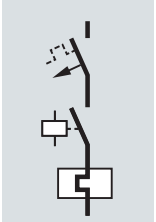
3) Rated control supply voltage 230 V AC, 50 Hz.
Other control voltages are also possible.

4) The current measuring modules required for 3UF7 or 3RB22/3RB23 are specified in each case. For details of the basic units 3UF7 or 3RB22/3RB23 which are also required see page 9.

5) Alternatively 3VL47 31-3DK36 also possible.

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

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



400 V AC

Standard induction motor 4-pole at 400 V AC[1]		Setting range Overload release Motor starter protector/circuit breaker[2]	Motor starter protector/circuit breaker	Contactor[3]	Size	SIMOCODE pro or overload relay (current measuring module)[4]	Setting range Overload release Overload relay	Short-circuit breaking capacity I_q
Standard output P kW	Motor current (guide value) I A	A	Order No.	Order No.		Order No.	A	kA
Type of coordination 2								
0.09	0.3	None	3RV13 21-0HC10	3RT10 24-1AP00	S0/S0	3UF7 100-1AA00-0/ 3RB29 06-2BG1	0.30 ... 3.00	50
0.12	0.4	None	3RV13 21-0JC10	3RT10 24-1AP00	S0/S0		0.30 ... 3.00	50
0.18	0.6	None	3RV13 21-0KC10	3RT10 24-1AP00	S0/S0		0.30 ... 3.00	50
0.25	0.85	None	3RV13 21-1AC10	3RT10 24-1AP00	S0/S0		0.30 ... 3.00	50
0.37	1.1	None	3RV13 21-1BC10	3RT10 24-1AP00	S0/S0		0.30 ... 3.00	50
0.55	1.5	None	3RV13 21-1DC10	3RT10 24-1AP00	S0/S0		0.30 ... 3.00	50
0.75	1.9	None	3RV13 21-1EC10	3RT10 24-1AP00	S0/S0		0.30 ... 3.00	50
1.1	2.7	None	3RV13 21-1EC10	3RT10 24-1AP00	S0/S0	3UF7 101-1AA00-0/ 3RB29 06-2DG1	2.40 ... 25.0	50
1.5	3.5	None	3RV13 21-1GC10	3RT10 24-1AP00	S0/S0		2.40 ... 25.0	50
2.2	5	None	3RV13 21-1HC10	3RT10 24-1AP00	S0/S0		2.40 ... 25.0	50
3	6.5	None	3RV13 21-1JC10	3RT10 26-1AP00	S0/S0		2.40 ... 25.0	50
4	8.5	11.0 ... 16.0	3RV10 31-4AA10	3RT10 34-1AP00	S2/S2		2.40 ... 25.0	50
5.5	11.5	18.0 ... 25.0	3RV10 31-4DA10	3RT10 34-1AP00	S2/S2		2.40 ... 25.0	50
7.5	15.5	22.0 ... 32.0	3RV10 31-4EA10	3RT10 35-1AP00	S2/S2		2.40 ... 25.0	50
11	22	28.0 ... 40.0	3RV10 31-4FA10	3RT10 36-1AP00	S2/S2	3UF7 102-1AA00-0/ 3RB29 06-2JG1	10.0 ... 100	50
15	29	36.0 ... 50.0	3RV10 41-4HA10	3RT10 44-1AP00	S3/S3		10.0 ... 100	50
18.5	35	None	3RV13 41-4JC10	3RT10 45-1AP00	S3/S3		10.0 ... 100	50
22	41	57.0 ... 75.0	3RV10 41-4KA10	3RT10 46-1AP00	S3/S3		10.0 ... 100	50
30	55	70.0 ... 90.0	3RV10 42-4LB10	3RT10 46-1AP00	S3/S3		10.0 ... 100	50
37	66	None	3VL27 10-2DK33	3RT10 54-1AP36	–/S6	3UF7 103-1AA00-0/ 3RB29 56-2TG2	20.0 ... 200	50
45	80	None	3VL27 10-2DK33	3RT10 55-1AP36	–/S6		20.0 ... 200	50
55	97	None	3VL27 10-2DK33	3RT10 54-1AP36	–/S6		20.0 ... 200	50
55	97	None	3VL27 16-2DK33	3RT10 55-1AP36	–/S6		20.0 ... 200	50
75	132	None	3VL27 16-2DK33	3RT10 56-6AP36	–/S6		20.0 ... 200	50
90	160	None	3VL27 16-2DK33	3RT10 64-6AP36	–/S10	3UF7 104-1BA00-0/ 3RB29 66-2WH2	63.0 ... 630	50
110	195	None	3VL37 25-2DK36	3RT10 66-6AP36	–/S10		63.0 ... 630	50
110	195	None	3VL37 25-2DK36	3RT12 64-6AP36	–/S10V		63.0 ... 630	50
132	230	None	3VL37 25-2DK36	3RT12 65-6AP36	–/S10V		63.0 ... 630	50
160	280	None	3VL47 31-2DK36	3RT10 75-6AP36	–/S12		63.0 ... 630	50
160	280	None	3VL47 31-2DK36	3RT12 66-6AP36	–/S10V		63.0 ... 630	50
200	350	None	3VL57 50-2DK36	3RT10 76-6AP36	–/S12		63.0 ... 630	50
200	350	None	3VL57 50-2DK36	3RT12 75-6AP36	–/S12V		63.0 ... 630	50
250	430	None	3VL57 50-2DK36	3RT12 76-6AP36	–/S12V		63.0 ... 630	50
Type of coordination 1								
315	540	None	3VL77 12-1DE36	3TF69 44-0CM7	–/14	3UF7 104-../ 3RB29 66-..	63.0 ... 630	50

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

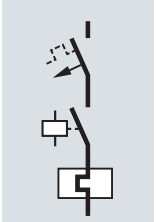
2) The motor starter protector/circuit breaker is to be set to maximum current value.

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

4) The current measuring modules required for 3UF7 or 3RB22/3RB23 are specified in each case. For details of the basic units 3UF7 or 3RB22/3RB23 which are also required see page 9.

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

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



400 V AC

Standard induction motor 4-pole at 400 V AC[1]		Setting range Overload release Motor starter protector/circuit breaker[2]	Motor starter protector/circuit breaker	Contactor[3]	Size	SIMOCODE pro or overload relay (current measuring module)[4]	Setting range Overload release Overload relay	Short-circuit breaking capacity I_q
Standard output P kW	Motor current (guide value) I A	A	Order No.	Order No.		Order No.	A	kA
Type of coordination 2								
0.09	0.3	None	3RV13 21-0HC10	3RT10 24-1AP00	S0/S0	3UF7 100-1AA00-0/ 3RB29 06-2BG1	0.30 ... 3.00	130
0.12	0.4	None	3RV13 21-0JC10	3RT10 24-1AP00	S0/S0		0.30 ... 3.00	130
0.18	0.6	None	3RV13 21-0KC10	3RT10 24-1AP00	S0/S0		0.30 ... 3.00	130
0.25	0.85	None	3RV13 21-1AC10	3RT10 24-1AP00	S0/S0		0.30 ... 3.00	130
0.37	1.1	None	3RV13 21-1BC10	3RT10 24-1AP00	S0/S0		0.30 ... 3.00	130
0.55	1.5	None	3RV13 21-1DC10	3RT10 24-1AP00	S0/S0		0.30 ... 3.00	130
0.75	1.9	None	3RV13 21-1EC10	3RT10 24-1AP00	S0/S0		0.30 ... 3.00	130
1.1	2.7	None	3RV13 21-1EC10	3RT10 24-1AP00	S0/S0	3UF7 101-1AA00-0/ 3RB29 06-2DG1	2.40 ... 25.0	130
1.5	3.5	None	3RV13 21-1GC10	3RT10 24-1AP00	S0/S0		2.40 ... 25.0	130
2.2	5	None	3RV13 21-1HC10	3RT10 24-1AP00	S0/S0		2.40 ... 25.0	130
3	6.5	None	3RV13 21-1JC10	3RT10 26-1AP00	S0/S0		2.40 ... 25.0	130
4	8.5	11.0 ... 16.0	3RV10 31-4AA10	3RT10 34-1AP00	S2/S2		2.40 ... 25.0	100
5.5	11.5	18.0 ... 25.0	3RV10 31-4DA10	3RT10 34-1AP00	S2/S2		2.40 ... 25.0	100
7.5	15.5	22.0 ... 32.0	3RV10 31-4EA10	3RT10 35-1AP00	S2/S2		2.40 ... 25.0	100
11	22	28.0 ... 40.0	3RV10 31-4FA10	3RT10 36-1AP00	S2/S2	3UF7 102-1AA00-0/ 3RB29 06-2JG1	10.0 ... 100	100
15	29	36.0 ... 50.0	3RV10 42-4HA10	3RT10 54-1AP36	S3/S6		10.0 ... 100	100
18.5	35	None	3RV13 42-4JC10	3RT10 54-1AP36	S3/S6		10.0 ... 100	100
22	41	57.0 ... 75.0	3RV10 42-4KA10	3RT10 54-1AP36	S3/S6		10.0 ... 100	100
30	55	70.0 ... 90.0	3RV10 42-4LB10	3RT10 54-1AP36	S3/S6		10.0 ... 100	100
37	66	None	3VL27 10-3DK33	3RT10 54-1AP36	–/S6	3UF7 103-1AA00-0/ 3RB29 06-2TG2	20.0 ... 200	100
37	66	None	3VL27 16-3DK33	3RT10 54-1AP36	–/S6		20.0 ... 200	100
45	80	None	3VL27 10-3DK33[5]	3RT10 54-1AP36	–/S6		20.0 ... 200	100
55	97	None	3VL27 10-3DK33[5]	3RT10 55-1AP36	–/S6		20.0 ... 200	100
75	132	None	3VL27 16-3DK33[6]	3RT10 56-6AP36	–/S6		20.0 ... 200	100
90	160	None	3VL27 16-3DK33[6]	3RT10 64-6AP36	–/S10	3UF7 104-1BA00-0/ 3RB29 66-2WH2	63.0 ... 630	100
110	195	None	3VL37 25-3DK36	3RT10 66-6AP36	–/S10		63.0 ... 630	100
110	195	None	3VL37 25-3DK36	3RT12 64-6AP36	–/S10V		63.0 ... 630	100
132	230	None	3VL37 25-3DK36[7]	3RT10 75-6AP36	–/S12		63.0 ... 630	100
132	230	None	3VL37 25-3DK36[7]	3RT12 65-6AP36	–/S10V		63.0 ... 630	100
160	280	None	3VL47 31-3DK36	3RT10 75-6AP36	–/S12		63.0 ... 630	100
160	280	None	3VL47 31-3DK36	3RT12 66-6AP36	–/S10V		63.0 ... 630	100
200	350	None	3VL57 50-3DK36	3RT10 76-6AP36	–/S12		63.0 ... 630	100
200	350	None	3VL57 50-3DK36	3RT12 75-6AP36	–/S12V		63.0 ... 630	100
250	430	None	3VL57 50-3DK36	3RT12 76-6AP36	–/S12V		63.0 ... 630	100
Type of coordination 1								
315	540	None	3VL77 12-3DE36	3TF69 44-0CM7	–/14	3UF7 104-../ 3RB29 66-..	63.0 ... 630	100

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

2) The motor starter protector/circuit breaker is to be set to maximum current value.

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

4) The current measuring modules required for 3UF7 or 3RB22/3RB23 are specified in each case. For details of the basic units 3UF7 or 3RB22/3RB23 which are also required see page 9.

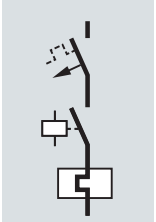
5) Alternatively 3VL37 16-3DK33 also possible.

6) Alternatively 3VL37 25-3DK36 also possible.

7) Alternatively 3VL47 31-3DK36 also possible.

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

CLASS 30, types of coordination 2 and 1, short-circuit breaking capacity I_q = 50 kA



400 V AC

Standard induction motor 4-pole at 400 V AC[1]		Setting range Overload release Motor starter protector/circuit breaker[2]	Motor starter protector/circuit breaker	Contactor[3]	Size	SIMOCODE pro or overload relay (current measuring module)[4]	Setting range Overload release Overload relay	Short-circuit breaking capacity I_q
Standard output P kW	Motor current (guide value) I A	A	Order No.	Order No.		Order No.	A	kA
Type of coordination 2								
0.09	0.3	None	3RV13 21-1AC10	3RT10 24-1AP00	S0/S0	3UF7 100-1AA00-0/ 3RB29 06-2BG1	0.30 ... 3.00	50
0.12	0.4	None	3RV13 21-1AC10	3RT10 24-1AP00	S0/S0		0.30 ... 3.00	50
0.18	0.6	None	3RV13 21-1BC10	3RT10 24-1AP00	S0/S0		0.30 ... 3.00	50
0.25	0.85	None	3RV13 21-1CC10	3RT10 26-1AP00	S0/S0		0.30 ... 3.00	50
0.37	1.1	None	3RV10 21-1DA10	3RT10 26-1AP00	S0/S0		0.30 ... 3.00	50
0.55	1.5	None	3RV13 21-1EC10	3RT10 26-1AP00	S0/S0		0.30 ... 3.00	50
0.75	1.9	3.50 ... 5.00	3RV10 21-1FA10	3RT10 26-1AP00	S0/S0		0.30 ... 3.00	50
1.1	2.7	None	3RV13 21-1GC10	3RT10 26-1AP00	S0/S0	3UF7 101-1AA00-0/ 3RB29 06-2DG1	2.40 ... 25.0	50
1.5	3.5	None	3RV13 21-1HC10	3RT10 26-1AP00	S0/S0		2.40 ... 25.0	50
2.2	5	9.00 ... 12.5	3RV10 21-1KA10	3RT10 26-1AP00	S0/S0		2.40 ... 25.0	50
3	6.5	11.0 ... 16.0	3RV10 31-4AA10	3RT10 34-1AP00	S2/S2		2.40 ... 25.0	50
4	8.5	14.0 ... 20.0	3RV10 31-4BA10	3RT10 34-1AP00	S2/S2		2.40 ... 25.0	50
5.5	11.5	22.0 ... 32.0	3RV10 31-4EA10	3RT10 34-1AP00	S2/S2		2.40 ... 25.0	50
7.5	15.5	28.0 ... 40.0	3RV10 31-4FA10	3RT10 35-1AP00	S2/S2		2.40 ... 25.0	50
11	22	28.0 ... 40.0	3RV10 31-4FB10	3RT10 36-1AP00	S2/S2	3UF7 102-1AA00-0/ 3RB29 06-2JG1	10.0 ... 100	50
15	29	36.0 ... 50.0	3RV10 42-4HB10	3RT10 54-1AP36	S3/S6		10.0 ... 100	50
18.5	35	45.0 ... 63.0	3RV10 42-4JB10	3RT10 54-1AP36	S3/S6		10.0 ... 100	50
22	41	57.0 ... 75.0	3RV10 42-4KB10	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	None	3VL27 10-2DK33	3RT10 54-1AP36	–/S6	3UF7 103-1AA00-0/ 3RB29 56-2TG2	20.0 ... 200	50
45	80	None	3VL27 10-2DK33	3RT10 55-1AP36	–/S6		20.0 ... 200	50
55	97	None	3VL27 16-2DK33	3RT10 56-6AP36	–/S6		20.0 ... 200	50
75	132	None	3VL27 16-2DK33	3RT10 64-6AP36	–/S10	3UF7 104-1BA00-0/ 3RB29 66-2WH2	63.0 ... 630	50
90	160	None	3VL27 16-2DK33[5]	3RT10 66-6AP36	–/S10		63.0 ... 630	50
90	160	None	3VL27 16-2DK33[5]	3RT12 64-6AP36	–/S10V		63.0 ... 630	50
110	195	None	3VL37 25-2DK36	3RT12 65-6AP36	–/S10V		63.0 ... 630	50
132	230	None	3VL37 25-2DK36[6]	3RT10 75-6AP36	–/S12		63.0 ... 630	50
132	230	None	3VL37 25-2DK36[6]	3RT12 66-6AP36	–/S10V		63.0 ... 630	50
160	280	None	3VL47 31-2DK36	3RT10 76-6AP36	–/S12		63.0 ... 630	50
160	280	None	3VL47 31-2DK36	3RT12 75-6AP36	–/S12V		63.0 ... 630	50
200	350	None	3VL57 50-2DK36	3RT12 76-6AP36	–/S12V		63.0 ... 630	50
Type of coordination 1								
250	430	None	3VL57 50-1DK36	3TF69 44-0CM7	–/14	3UF7 104-../ 3RB29 66-..	63.0 ... 630	50

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

2) The motor starter protector/circuit breaker is to be set to maximum current value.

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

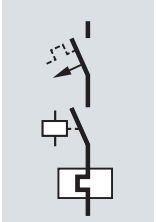
4) The current measuring modules required for 3UF7 or 3RB22/3RB23 are specified in each case. For details of the basic units 3UF7 or 3RB22/3RB23 which are also required see page 9.

5) Alternatively 3VL37 25-2DK36 also possible.

6) Alternatively 3VL47 31-2DK36 also possible.

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

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



400 V AC

Standard induction motor 4-pole at 400 V AC[1]		Setting range	Motor starter protector/circuit breaker	Contactor[3]	Size	SIMOCODE pro or overload relay (current measuring module)[4]	Setting range	Short-circuit breaking capacity I_q
Standard output P	Motor current (guide value) I	Overload release Motor starter protector/circuit breaker[2]					Overload release Overload relay	
kW	A	A	Order No.	Order No.		Order No.	A	kA
Type of coordination 2								
0.09	0.3	None	3RV13 21-1AC10	3RT10 24-1AP00	S0/S0	3UF7 100-1AA00-0/ 3RB29 06-2BG1	0.30 ... 3.00	130
0.12	0.4	None	3RV13 21-1AC10	3RT10 24-1AP00	S0/S0		0.30 ... 3.00	130
0.18	0.6	None	3RV13 21-1BC10	3RT10 24-1AP00	S0/S0		0.30 ... 3.00	130
0.25	0.85	None	3RV13 21-1CC10	3RT10 26-1AP00	S0/S0		0.30 ... 3.00	130
0.37	1.1	2.20 ... 3.20	3RV10 21-1DA10	3RT10 26-1AP00	S0/S0		0.30 ... 3.00	130
0.55	1.5	2.80 ... 4.00	3RV10 21-1EA10	3RT10 26-1AP00	S0/S0		0.30 ... 3.00	130
0.75	1.9	3.50 ... 5.00	3RV10 21-1FA10	3RT10 26-1AP00	S0/S0		0.30 ... 3.00	130
1.1	2.7	4.50 ... 6.30	3RV10 21-1GA10	3RT10 26-1AP00	S0/S0		0.30 ... 3.00	130
1.5	3.5	5.50 ... 8.00	3RV10 21-1HA10	3RT10 26-1AP00	S0/S0	3UF7 101-1AA00-0/ 3RB29 06-2DG1	2.40 ... 25.0	130
2.2	5	9.00 ... 12.5	3RV10 21-1KA10	3RT10 26-1AP00	S0/S0		2.40 ... 25.0	130
3	6.5	11.0 ... 16.0	3RV10 31-4AA10	3RT10 34-1AP00	S2/S2		2.40 ... 25.0	100
4	8.5	14.0 ... 20.0	3RV10 31-4BA10	3RT10 34-1AP00	S2/S2		2.40 ... 25.0	100
5.5	11.5	22.0 ... 32.0	3RV10 31-4EA10	3RT10 34-1AP00	S2/S2		2.40 ... 25.0	100
7.5	15.5	28.0 ... 40.0	3RV10 31-4FA10	3RT10 35-1AP00	S2/S2		2.40 ... 25.0	100
11	22	28.0 ... 40.0	3RV10 31-4FB10	3RT10 36-1AP00	S2/S2	3UF7 102-1AA00-0/ 3RB29 06-2JG1	10.0 ... 100	100
15	29	36.0 ... 50.0	3RV10 42-4HB10	3RT10 54-1AP36	S3/S6		10.0 ... 100	100
18.5	35	45.0 ... 63.0	3RV10 42-4JB10	3RT10 54-1AP36	S3/S6		10.0 ... 100	100
22	41	57.0 ... 75.0	3RV10 42-4KB10	3RT10 54-1AP36	S3/S6		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	3UF7 103-1AA00-0/ 3RB29 56-2TG2	20.0 ... 200	100
37	66	None	3VL27 10-3DK33	3RT10 54-1AP36	–/S6		20.0 ... 200	100
37	66	None	3VL27 16-3DK33	3RT10 54-1AP36	–/S6		20.0 ... 200	100
45	80	None	3VL27 10-3DK33	3RT10 55-1AP36	–/S6		20.0 ... 200	100
45	80	None	3VL27 16-3DK33	3RT10 55-1AP36	–/S6		20.0 ... 200	100
55	97	None	3VL27 10-3DK33	3RT10 56-6AP36	–/S6		20.0 ... 200	100
55	97	None	3VL27 16-3DK33	3RT10 56-6AP36	–/S6		20.0 ... 200	100
75	132	None	3VL27 16-3DK33	3RT10 64-6AP36	–/S10	3UF7 104-1BA00-0/ 3RB29 66-2WH2	63.0 ... 630	100
90	160	None	3VL27 16-3DK33[5]	3RT10 65-6AP36	–/S10		63.0 ... 630	100
90	160	None	3VL27 16-3DK33[5]	3RT12 64-6AP36	–/S10V		63.0 ... 630	100
110	195	None	3VL37 25-3DK36	3RT12 65-6AP36	–/S10V		63.0 ... 630	100
132	230	None	3VL37 25-3DK36[6]	3RT10 75-6AP36	–/S12		63.0 ... 630	100
132	230	None	3VL37 25-3DK36[6]	3RT12 66-6AP36	–/S10V		63.0 ... 630	100
160	280	None	3VL47 31-3DK36	3RT10 76-6AP36	–/S12		63.0 ... 630	100
160	280	None	3VL47 31-3DK36	3RT12 75-6AP36	–/S12V		63.0 ... 630	100
200	350	None	3VL57 50-3DK36	3RT12 76-6AP36	–/S12V		63.0 ... 630	100
Type of coordination 1								
250	430	None	3VL57 50-3DK36	3TF69 44-0CM7	–/14	3UF7 104-../ 3RB29 66-..	63.0 ... 630	100

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

2) The motor starter protector/circuit breaker is to be set to maximum current value.

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

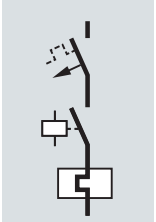
4) The current measuring modules required for 3UF7 or 3RB22/3RB23 are specified in each case. For details of the basic units 3UF7 or 3RB22/3RB23 which are also required see page 9.

5) Alternatively 3VL37 25-3DK36 also possible.

6) Alternatively 3VL47 31-3DK36 also possible.

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

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



400 V AC

Standard induction motor 4-pole at 400 V AC[1]		Setting range Overload release Motor starter protector/circuit breaker[2]	Motor starter protector/circuit breaker	Contactor[3]	Size	SIMOCODE pro (current measuring module)[4]	Setting range Overload release Overload relay	Short-circuit breaking capacity I_q
Standard output P	Motor current (guide value) I							
kW	A	A	Order No.	Order No.		Order No.	A	kA
Type of coordination 2								
0.09	0.3	None	3RV13 21-1AC10	3RT10 24-1AP00	S0/S0	3UF7 100-1AA00-0	0.30 ... 3.00	50
0.12	0.4	None	3RV13 21-1BC10	3RT10 24-1AP00	S0/S0		0.30 ... 3.00	50
0.18	0.6	1.40 ... 2.00	3RV10 21-1BA10	3RT10 24-1AP00	S0/S0		0.30 ... 3.00	50
0.25	0.85	1.80 ... 2.50	3RV10 21-1CA10	3RT10 26-1AP00	S0/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 101-1AA00-0	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/S2		2.40 ... 25.0	50
3	6.5	14.0 ... 20.0	3RV10 31-4BA10	3RT10 34-1AP00	S2/S2		2.40 ... 25.0	50
4	8.5	18.0 ... 25.0	3RV10 31-4DA10	3RT10 34-1AP00	S2/S2		2.40 ... 25.0	50
5.5	11.5	22.0 ... 32.0	3RV10 31-4EA10	3RT10 34-1AP00	S2/S2		2.40 ... 25.0	50
7.5	15.5	22.0 ... 32.0	3RV10 31-4EB10	3RT10 44-1AP00	S2/S3	3UF7 102-1AA00-0	10.0 ... 100	50
11	22	36.0 ... 50.0	3RV10 42-4HB10	3RT10 44-1AP00	S3/S3		10.0 ... 100	50
15	29	45.0 ... 63.0	3RV10 42-4JB10	3RT10 45-1AP00	S3/S3		10.0 ... 100	50
18.5	35	57.0 ... 75.0	3RV10 42-4KB10	3RT10 45-1AP00	S3/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	None	3VL27 10-2DK33	3RT10 55-1AP36	–/S6	3UF7 103-1AA00-0	20.0 ... 200	50
45	80	None	3VL27 16-2DK33	3RT10 56-6AP36	–/S6		20.0 ... 200	50
55	97	None	3VL27 16-2DK33	3RT10 64-6AP36	–/S10	3UF7 104-1BA00-0	63.0 ... 630	50
75	132	None	3VL37 25-2DK36	3RT12 65-6AP36	–/S10V		63.0 ... 630	50
90	160	None	3VL37 25-2DK36	3RT12 66-6AP36	–/S10V		63.0 ... 630	50
110	195	None	3VL47 31-2DK36	3RT10 76-6AP36	–/S12		63.0 ... 630	50
132	230	None	3VL47 31-2DK36	3RT10 76-6AP36	–/S12		63.0 ... 630	50
160	280	None	3VL57 50-2DK36	3RT12 76-6AP36	–/S12V		63.0 ... 630	50
Type of coordination 1								
200	350	None	3VL67 80-1DE36	3RTF69 44-0CM7	–/14	3UF7 104-1BA00-0	63.0 ... 630	50
250	430	None	3VL67 80-1DE36	3RTF69 44-0CM7	–/14		63.0 ... 630	50

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

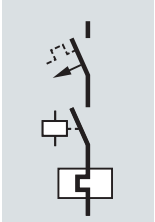
2) The motor starter protector/circuit breaker is to be set to maximum current value.

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

4) The current measuring modules required for 3UF7 are specified.
For details of the 3UF7 basic units which are also required see page 9.

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

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



400 V AC

Standard induction motor 4-pole at 400 V AC[1]		Setting range	Motor starter protector/circuit breaker	Contactor[3]	Size	SIMOCODE pro (current measuring module)[4]	Setting range	Short-circuit breaking capacity
Standard output *P*	Motor current (guide value) *I*	Overload release Motor starter protector/circuit breaker[2]					Overload relay	I_q
kW	A	A	Order No.	Order No.		Order No.	A	kA
0.09	0.3	None	3RV13 21-1AC10	3RT10 24-1AP00	S0/S0	3UF7 100-1AA00-0	0.30 ... 3.00	130
0.12	0.4	None	3RV13 21-1BC10	3RT10 24-1AP00	S0/S0		0.30 ... 3.00	130
0.18	0.6	1.40 ... 2.00	3RV10 21-1BA10	3RT10 24-1AP00	S0/S0		0.30 ... 3.00	130
0.25	0.85	1.80 ... 2.50	3RV10 21-1CA10	3RT10 26-1AP00	S0/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	3UF7 101-1AA00-0	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/S2		2.40 ... 25.0	100
3	6.5	14.0 ... 20.0	3RV10 31-4BA10	3RT10 34-1AP00	S2/S2		2.40 ... 25.0	100
4	8.5	18.0 ... 25.0	3RV10 31-4DA10	3RT10 34-1AP00	S2/S2		2.40 ... 25.0	100
5.5	11.5	22.0 ... 32.0	3RV10 31-4EA10	3RT10 34-1AP00	S2/S2		2.40 ... 25.0	100
7.5	15.5	22.0 ... 32.0	3RV10 31-4EB10	3RT10 54-1AP36	S2/S6	3UF7 102-1AA00-0	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 54-1AP36	S3/S6		10.0 ... 100	100
18.5	35	57.0 ... 75.0	3RV10 42-4KB10	3RT10 54-1AP36	S3/S6	3UF7 103-1AA00-0	20.0 ... 200	100
22	41	70.0 ... 90.0	3RV10 42-4LB10	3RT10 54-1AP36	S3/S6	3UF7 103-1AA00-0	20.0 ... 200	100
30	55	70.0 ... 90.0	3RV10 42-4LB10	3RT10 54-1AP36	S3/S6	3UF7 102-1AA00-0	10.0 ... 100	100
30	55	70.0 ... 90.0	3RV10 42-4LB10	3RT10 54-1AP36	S3/S6	3UF7 103-1AA00-0	20.0 ... 200	100
37	66	None	3VL27 16-3DK33	3RT10 55-1AP36	–/S6		20.0 ... 200	100
45	80	None	3VL27 16-3DK33	3RT10 56-6AP36	–/S6		20.0 ... 200	100
55	97	None	3VL37 25-3DK36	3RT10 64-6AP36	–/S10	3UF7 104-1BA00-0	63.0 ... 630	100
55	97	None	3VL37 25-3DK36	3RT12 64-6AP36	–/S10V		63.0 ... 630	100
75	132	None	3VL47 31-3DK36	3RT10 75-6AP36	–/S12		63.0 ... 630	100
90	160	None	3VL47 31-3DK36	3RT10 75-6AP36	–/S12		63.0 ... 630	100
110	195	None	3VL47 31-3DK36	3RT10 75-6AP36	–/S12		63.0 ... 630	100
132	230	None	3VL57 50-3DK36	3RT10 76-6AP36	–/S12		63.0 ... 630	100
160	280	None	3VL57 50-3DK36	3RT12 76-6AP36	–/S12V		63.0 ... 630	100

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

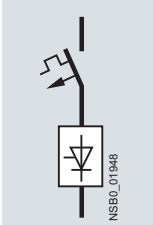
2) The motor starter protector/circuit breaker is to be set to maximum current value.

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

4) The current measuring modules required for 3UF7 are specified.
For details of the 3UF7 basic units which are also required see page 9.

Motor starter protector + solid-state contactor[1)]

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



400 V AC

Standard induction motor 4-pole at 400 V AC[2)]		Setting range Overload release Motor starter protector	Motor starter protector	Size	Solid-state contactor[3)]		Short-circuit breaking capacity I_q
Standard output P	Motor current (guide value) I				Mounting with lateral clearance of 20 mm	Butt-mounting	
kW	A	A	Order No.		Order No.	Order No.	kA
0.06	0.2	0.14 ... 0.20	**3RV10 21-0BA10**	S0	**3RF24 05-1BB24**	**3RF24 05-1BB24**	50
0.06	0.2	0.18 ... 0.25	**3RV10 21-0CA10**	S0			50
0.09	0.3	0.22 ... 0.32	**3RV10 21-0DA10**	S0			50
0.09	0.3	0.28 ... 0.40	**3RV10 21-0EA10**	S0			50
0.12	0.4	0.35 ... 0.50	**3RV10 21-0FA10**	S0			50
0.18	0.6	0.45 ... 0.63	**3RV10 21-0GA10**	S0			50
0.25	0.85	0.55 ... 0.80	**3RV10 21-0HA10**	S0			50
0.25	0.85	0.70 ... 1.00	**3RV10 21-0JA10**	S0			50
0.37	1.1	0.90 ... 1.25	**3RV10 21-0KA10**	S0			50
0.55	1.5	1.10 ... 1.60	**3RV10 21-1AA10**	S0			50
0.75	1.9	1.40 ... 2.00	**3RV10 21-1BA10**	S0			50
0.75	1.9	1.80 ... 2.50	**3RV10 21-1CA10**	S0			50
1.1	2.7	2.20 ... 3.20	**3RV10 21-1DA10**	S0			50
1.5	3.6	2.80 ... 4.00	**3RV10 21-1EA10**	S0			50
1.5	3.6	3.50 ... 5.00	**3RV10 21-1FA10**	S0			50
2.2	5	4.50 ... 6.30	**3RV10 21-1GA10**	S0		**3RF24 10-1BB24**	50/5
3	6.5	5.50 ... 8.00	**3RV10 21-1HA10**	S0	**3RF24 10-1BB24**	**3RF24 10-1BB24**	5
4	8.5	7.00 ... 10.0	**3RV10 21-1JA10**	S0			20
5.5	11.5	9.00 ... 12.0	**3RV10 21-1KA10**	S0	**3RF24 12-1BB24**	**3RF24 12-1BB24**	5
7.5	15.5	11.0 ... 16.0	**3RV10 21-4AA10**	S0	**3RF24 16-1BB24**	**3RF24 16-1BB24**	3
7.5	15.5	14.0 ... 20.0	**3RV10 21-4BA10**	S0			5

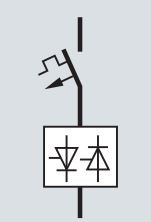
1) If the solid-state contactor is mounted directly on the motor starter protector, the switching frequencies are sometimes reduced for thermal reasons. Detailed characteristic curves can be found in LV1T chapter 4 or at http://www.siemens.de/halbleiterschaltgeraete.

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

3) Rated currents taken into account at 40 °C ambient temperature. Rated control supply voltage 110 ... 230 V AC, 50/60 Hz. Other control voltages are also possible. Screw terminals or spring-loaded terminals can be selected. 3RA19 21-1AA00 link module can only be used with screw terminals.

Motor starter protector + solid-state reversing contactor

CLASS 10, type of coordination 1, short-circuit breaking capacity $I_q \geq$ 10 kA/50 kA



400 V AC

Standard induction motor 4-pole at 400 V AC[1]		Setting range Overload release	Motor starter protector	Size	Solid-state reversing contactor[2]		Short-circuit breaking capacity I_q
Standard output P	Motor current (guide value) I	Motor starter protector			Mounting with lateral clearance of 20 mm	Butt-mounting	
kW	A	A	Order No.		Order No.	Order No.	kA
0.06	0.2	0.14 ... 0.20	**3RV10 21-0BA10**	S0	**3RF24 03-1BD24**	**3RF24 03-1BD24**	50
0.06	0.2	0.18 ... 0.25	**3RV10 21-0CA10**	S0			50
0.09	0.3	0.22 ... 0.32	**3RV10 21-0DA10**	S0			50
0.09	0.3	0.28 ... 0.40	**3RV10 21-0EA10**	S0			50
0.12	0.4	0.35 ... 0.50	**3RV10 21-0FA10**	S0			50
0.18	0.6	0.45 ... 0.63	**3RV10 21-0GA10**	S0			50
0.25	0.85	0.55 ... 0.80	**3RV10 21-0HA10**	S0			50
0.25	0.85	0.70 ... 1.00	**3RV10 21-0JA10**	S0			50
0.37	1.1	0.90 ... 1.25	**3RV10 21-0KA10**	S0			50
0.55	1.5	1.10 ... 1.60	**3RV10 21-1AA10**	S0			50
0.75	1.9	1.40 ... 2.00	**3RV10 21-1BA10**	S0			50
0.75	1.9	1.80 ... 2.50	**3RV10 21-1CA10**	S0			50
1.1	2.7	2.20 ... 3.20	**3RV10 21-1DA10**	S0			50
1.5	3.6	2.80 ... 4.00	**3RV10 21-1EA10**	S0		**3RF24 05-1BD24**	50
1.5	3.6	3.50 ... 5.00	**3RV10 21-1FA10**	S0			50
2.2	5	4.50 ... 6.30	**3RV10 21-1GA10**	S0	**3RF24 05-1BD24**	**3RF24 10-1BD24**	50/10
3	6.5	5.50 ... 8.00	**3RV10 21-1HA10**	S0	**3RF24 10-1BD24**	**3RF24 10-1BD24**	10

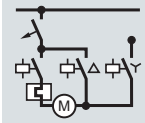
1) Guide value for 4-pole standard motors for 400 V AC, 50 Hz. Selection depends on the concrete startup and rated data of the protected motor.

2) Rated currents taken into account at 40 °C ambient temperature. Rated control supply voltage 110 ... 230 V AC, 50/60 Hz.
Other control voltages are also possible. 3RA19 21-1AA00 link module can be used.

Detailed information can be found in LV1T Chapter 4 or at http://www.siemens.de/halbleiterschaltgeraete.

Motor starter protector + wye-delta starting + 3RU11 thermal overload relay

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



400 V AC

Standard induction motor 4-pole at 400 V AC[1]		Setting range Overload release Motor starter protector[2]	Motor starter protector	Contactors[3]		Size	Overload relay	Setting range Overload release Overload relay	Short-circuit breaking capacity I_q
Standard output P	Motor current (guide value) I			Line contactor + delta contactor	Star contactor				
kW	A	A	Order No.	Order No.	Order No.		Order No.	A	kA
Type of coordination 2									
5.5	11.5	None	3RV13 21-4AC10	3RT10 26-1AP00	3RT10 24-1AP00	S0/S0/S0	3RU11 26-1HB0	5.50 ... 8.00	50
7.5	15.5	None	3RV13 21-4BC10	3RT10 26-1AP00	3RT10 24-1AP00	S0/S0/S0	3RU11 26-1JB0	7.00 ... 10.0	50
11	22	None	3RV13 31-4DC10	3RT10 34-1AP00	3RT10 24-1AP00	S2/S2/S0	3RU11 36-4AB0	11.0 ... 16.0	50
15	29	None	3RV13 31-4FC10	3RT10 34-1AP00	3RT10 24-1AP00	S2/S2/S0	3RU11 36-4BB0	14.0 ... 20.0	50
18.5	35	None	3RV13 31-4FC10	3RT10 35-1AP00	3RT10 24-1AP00	S2/S2/S0	3RU11 36-4DB0	18.0 ... 25.0	50
22	41	None	3RV13 31-4GC10	3RT10 36-1AP00	3RT10 26-1AP00	S2/S2/S0	3RU11 36-4EB0	22.0 ... 32.0	50
30	55	None	3RV13 41-4JC10	3RT10 44-1AP00	3RT10 26-1AP00	S3/S3/S0	3RU11 46-4FB0	28.0 ... 40.0	50
37	66	None	3RV13 41-4KC10	3RT10 44-1AP00	3RT10 34-1AP00	S3/S3/S2	3RU11 46-4HB0	36.0 ... 50.0	50
45	80	None	3RV13 41-4LC10	3RT10 45-1AP00	3RT10 34-1AP00	S3/S3/S2	3RU11 46-4JB0	45.0 ... 63.0	50
Type of coordination 1									
5.5	11.5	9.00 ... 12.0	3RV10 11-1KA10	3RT10 15-1AP01	3RT10 15-1AP00	S00/S00/S00	3RU11 16-1HB0	5.50 ... 8.00	50
7.5	15.5	None	3RV13 21-4BC10	3RT10 16-1AP01	3RT10 15-1AP00	S0/S00/S00	3RU11 16-1JB0	7.00 ... 10.0	50
11	22	None	3RV13 21-4DC10	3RT10 24-1AP00	3RT10 24-1AP00	S0/S0/S0	3RU11 26-4AB0	11.0 ... 16.0	50
15	29	None	3RV13 31-4FC10	3RT10 26-1AP00	3RT10 24-1AP00	S2/S0/S0	3RU11 26-4BB0	14.0 ... 20.0	50
18.5	35	None	3RV13 31-4FC10	3RT10 26-1AP00	3RT10 24-1AP00	S2/S0/S0	3RU11 26-4DB0	20.0 ... 25.0	50
22	41	None	3RV13 31-4GC10	3RT10 34-1AP00	3RT10 26-1AP00	S2/S0/S0	3RU11 36-4EB0	22.0 ... 32.0	50
30	55	None	3RV13 41-4JC10	3RT10 34-1AP00	3RT10 26-1AP00	S3/S2/S0	3RU11 36-4FB0	28.0 ... 40.0	50
37	66	None	3RV13 41-4KC10	3RT10 35-1AP00	3RT10 34-1AP00	S3/S2/S2	3RU11 36-4GB0	36.0 ... 45.0	50
45	80	None	3RV13 41-4LC10	3RT10 36-1AP00	3RT10 34-1AP00	S3/S2/S2	3RU11 36-4HB0	40.0 ... 50.0	50

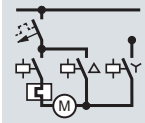
1) Guide value for 4-pole standard motors for 400 V AC, 50 Hz. Selection depends on the concrete startup and rated data of the protected motor.

2) The motor starter protector is to be set to maximum current value.

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

Motor starter protector/circuit breaker + wye-delta starting + 3RB20/3RB21 solid-state overload relay

CLASS 5 and CLASS 10, type of coordination 2, short-circuit breaking capacity I_q = 50 kA



400 V AC

Standard induction motor 4-pole at 400 V AC[1]		Setting range Overload release Motor starter protector /circuit breaker[2]	Motor starter protector/circuit breaker	Contactors[3]		Size	Overload relay	Setting range Overload release Overload relay	Short-circuit breaking capacity I_q
Standard output P	Motor current (guide value) I			Line contactor + delta contactor	Star contactor				
kW	A	A	Order No.	Order No.	Order No.		Order No.	A	kA
5.5	11.5	None	3RV13 21-1KC10	3RT10 26-1AP00	3RT10 24-1AP00	S0/S0/S0	3RB20 26-1QB0/ 3RB21 23-4QB0	6.00 ... 25.0	50
7.5	15.5	14.0 ... 20.0	3RV10 21-4BA10	3RT10 26-1AP00	3RT10 24-1AP00	S0/S0/S0		6.00 ... 25.0	50
11	22	None	3RV13 31-4EC10	3RT10 34-1AP00	3RT10 24-1AP00	S2/S2/S0	3RB20 36-1UB0/ 3RB21 33-4UB0	12.5 ... 50.0	50
15	29	28.0 ... 40.0	3RV10 31-4FA10	3RT10 35-1AP00	3RT10 24-1AP00	S2/S2/S0		12.5 ... 50.0	50
18.5	35	None	3RV13 41-4FC10	3RT10 44-1AP00	3RT10 34-1AP00	S3/S3/S2	3RB20 46-1UB0/ 3RB21 43-4UB0	12.5 ... 50.0	50
22	41	None	3RV13 41-4HC10	3RT10 44-1AP00	3RT10 34-1AP00	S3/S3/S2		12.5 ... 50.0	50
30	55	None	3RV13 41-4JC10	3RT10 44-1AP00	3RT10 34-1AP00	S3/S3/S2	3RB20 46-1EB0/ 3RB21 43-4EB0	25.0 ... 100	50
37	66	None	3RV13 41-4KC10	3RT10 45-1AP00	3RT10 34-1AP00	S3/S3/S2		25.0 ... 100	50
45	80	70.0 ... 90.0	3RV10 41-4LA10	3RT10 46-1AP00	3RT10 34-1AP00	S3/S3/S2		25.0 ... 100	50
55	97	None	3VL27 10-2DK33	3RT10 54-1AP36	3RT10 44-1AP00	-/S6/S3	3RB20 56-1FW2/ 3RB21 53-4FW2	50.0 ... 200	50
75	132	None	3VL27 16-2DK33	3RT10 55-6AP36	3RT10 44-1AP00	-/S6/S3	3RB20 56-1FC2/ 3RB21 53-4FC2	50.0 ... 200	50
90	160	None	3VL27 16-2DK33	3RT10 55-6AP36	3RT10 44-1AP00	-/S6/S3		50.0 ... 200	50
110	195	None	3VL37 25-2DK36	3RT10 64-6AP36	3RT10 54-1AP36	-/S10/S6	3RB20 66-1GC2/ 3RB21 63-4GC2	55.0 ... 250	50
132	230	None	3VL47 25-2DK36	3RT10 65-6AP36	3RT10 54-1AP36	-/S10/S6		55.0 ... 250	50
160	280	None	3VL47 31-2DK36	3RT10 66-6AP36	3RT10 54-1AP36	-/S10/S6	3RB20 66-1MC2/ 3RB21 63-4MC2	160 ... 630	50
200	350	None	3VL57 50-2DK36	3RT10 75-6AP36	3RT10 64-6AP36	-/S12/S10		160 ... 630	50
250	430	None	3VL57 50-2DK36	3RT10 75-6AP36	3RT10 64-6AP36	-/S12/S10		160 ... 630	50

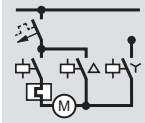
1) Guide value for 4-pole standard motors for 400 V AC, 50 Hz. Selection depends on the concrete startup and rated data of the protected motor.

2) The motor starter protector/circuit breaker is to be set to maximum current value.

3) Rated control supply voltage 230 V AC, 50 Hz.

Motor starter protector/circuit breaker + wye-delta starting + SIMOCODE pro 3UF7 / 3RB22/3RB23 solid-state overload relay

CLASS 5 and CLASS 10, type of coordination 2, short-circuit breaking capacity I_q = 50 kA



400 V AC

Standard induction motor 4-pole at 400 V AC[1]		Setting range Overload release Motor starter protector/circuit breaker[2]	Motor starter protector/circuit breaker	Contactors[3]		Size	SIMOCODE pro or overload relay (current measuring module)[4]	Setting range Overload release Overload relay	Short-circuit breaking capacity I_q
Standard output P	Motor current (guide value) I			Line contactor + delta contactor	Star contactor				
kW	A	A	Order No.	Order No.	Order No.		Order No.	A	kA
5.5	11.5	None	3RV13 21-1KC10	3RT10 26-1AP00	3RT10 24-1AP00	S0/S0/S0	3UF7 101-1AA00-0/ 3RB29 06-2DG1	2.40 ... 25.0	50
7.5	15.5	14.0 ... 20.0	3RV10 21-4BA10	3RT10 26-1AP00	3RT10 24-1AP00	S0/S0/S0		2.40 ... 25.0	50
11	22	None	3RV13 31-4EC10	3RT10 34-1AP00	3RT10 24-1AP00	S2/S2/S0	3UF7 102-1AA00-0/ 3RB29 06-2JG1	10.0 ... 100	50
15	29	28.0 ... 40.0	3RV10 31-4FA10	3RT10 35-1AP00	3RT10 24-1AP00	S2/S2/S0		10.0 ... 100	50
18.5	35	None	3RV13 41-4FC10	3RT10 44-1AP00	3RT10 34-1AP00	S3/S3/S2		10.0 ... 100	50
22	41	None	3RV13 41-4HC10	3RT10 44-1AP00	3RT10 34-1AP00	S3/S3/S2		10.0 ... 100	50
30	55	None	3RV13 41-4JC10	3RT10 44-1AP00	3RT10 34-1AP00	S3/S3/S2		10.0 ... 100	50
37	66	None	3RV13 41-4KC10	3RT10 45-1AP00	3RT10 34-1AP00	S3/S3/S2		10.0 ... 100	50
45	80	70.0 ... 90.0	3RV10 41-4LA10	3RT10 46-1AP00	3RT10 34-1AP00	S3/S3/S2		10.0 ... 100	50
55	97	None	3VL27 10-2DK33	3RT10 54-1AP36	3RT10 44-1AP00	-/S6/S3	3UF7 103-1AA00-0/ 3RB29 56-2TG2	20.0 ... 200	50
75	132	None	3VL27 16-2DK33	3RT10 55-6AP36	3RT10 44-1AP00	-/S6/S3		20.0 ... 200	50
90	160	None	3VL27 16-2DK33	3RT10 55-6AP36	3RT10 44-1AP00	-/S6/S3		20.0 ... 200	50
110	195	None	3VL37 25-2DK36	3RT10 64-6AP36	3RT10 54-1AP36	-/S10/S6	3UF7 104-1BA00-0/ 3RB29 66-2WH2	63.0 ... 630	50
132	230	None	3VL47 25-2DK36	3RT10 65-6AP36	3RT10 54-1AP36	-/S10/S6		63.0 ... 630	50
160	280	None	3VL47 31-2DK36	3RT10 66-6AP36	3RT10 54-1AP36	-/S10/S6		63.0 ... 630	50
200	350	None	3VL57 50-2DK36	3RT10 75-6AP36	3RT10 64-6AP36	-/S12/S10		63.0 ... 630	50
250	430	None	3VL57 50-2DK36	3RT10 75-6AP36	3RT10 64-6AP36	-/S12/S10		63.0 ... 630	50

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

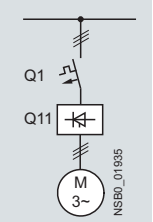
2) The motor starter protector/circuit breaker is to be set to maximum current value.

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

4) The current measuring modules required for 3UF7 or 3RB22/3RB23 are specified in each case. For details of the basic units 3UF7 or 3RB22/3RB23 which are also required see page 9.

Motor starter protector/circuit breaker + 3RW30/3RW40 soft starter

CLASS 10, type of coordination 1, short-circuit breaking capacity I_q = 10...55 kA



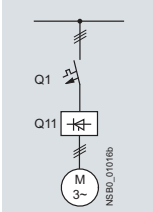
400 V AC

Rated operational current Soft starter[1] I	Setting range Overload release Motor starter protector/ circuit breaker	Motor starter protector/ circuit breaker	Size	Soft starter type	Short-circuit breaking capacity I_q
A	A	Order No.		Order No.	kA
Soft starter type 3RW30					
3	2.80 ... 4.00	3RV10 11-1EA10	S00	3RW30 03	50
3.6	3.50 ... 5.00	3RV10 21-1FA10	S0	3RW30 13	10
6.5	5.50 ... 8.00	3RV10 21-1HA10	S0	3RW30 14	10
9	7.00 ... 10.0	3RV10 21-1JA10	S0	3RW30 16	10
12.5	9.00 ... 12.5	3RV10 21-1KA10	S0	3RW30 17	10
17.6	14.0 ... 20.0	3RV10 21-4BA10	S0	3RW30 18	10
25	20.0 ... 25.0	3RV10 21-4DA10	S0	3RW30 26	55
32	22.0 ... 32.0	3RV10 31-4EA10	S2	3RW30 27	55
38	28.0 ... 40.0	3RV10 31-4FA10	S2	3RW30 28	55
45	36.0 ... 45.0	3RV10 31-4GA10	S2	3RW30 36	20
63	45.0 ... 63.0	3RV10 41-4JA10	S3	3RW30 37	20
72	57.0 ... 75.0	3RV10 41-4KA10	S3	3RW30 38	20
80	70.0 ... 90.0	3RV10 41-4LA10	S3	3RW30 46	11
106	80.0 ... 100	3RV10 41-4MA10	S3	3RW30 47	11
Soft starter type 3RW40					
12.5	9.00 ... 12.5	3RV10 21-1KA10	S0	3RW40 24	55
25	20.0 ... 25.0	3RV10 21-4DA10	S0	3RW40 26	55
32	22.0 ... 32.0	3RV10 31-4EA10	S2	3RW40 27	55
38	28.0 ... 40.0	3RV10 31-4FA10	S2	3RW40 28	55
45	36.0 ... 45.0	3RV10 31-4GA10	S2	3RW40 36	20
63	45.0 ... 63.0	3RV10 41-4JA10	S3	3RW40 37	20
72	57.0 ... 75.0	3RV10 41-4KA10	S3	3RW40 38	20
80	70.0 ... 90.0	3RV10 41-4LA10	S3	3RW40 46	11
106	80.0 ... 100	3RV10 41-4MA10	S3	3RW40 47	11
12.5	None	3RV13 21-1KC10	S0	3RW40 24	55
25	None	3RV13 21-4DC10	S0	3RW40 26	55
32	None	3RV13 31-4EC10	S2	3RW40 27	55
38	None	3RV13 31-4FC10	S2	3RW40 28	55
45	None	3RV13 31-4GC10	S2	3RW40 36	20
63	None	3RV13 41-4JC10	S3	3RW40 37	20
72	None	3RV13 41-4KC10	S3	3RW40 38	20
80	None	3RV13 41-4LC10	S3	3RW40 46	11
106	None	3RV13 41-4MC10	S3	3RW40 47	11
134	None	3VL37 20-2DC36	-	3RW40 55	35
162	None		-	3RW40 56	35
230	None	3VL47 31-2DC36	-	3RW40 73	65
280	None		-	3RW40 74	65
356	None	3VL47 40-2DC36	-	3RW40 75	65
432	None	3VL57 50-2DC36	-	3RW40 76	65

[1] At 40 °C ambient temperature (for high ambient temperatures see Catalog LV 1 T)

Motor starter protector/circuit breaker + 3RW44 soft starter

CLASS 10, type of coordination 1, short-circuit breaking capacity I_q = 16... 65 kA



400 V AC

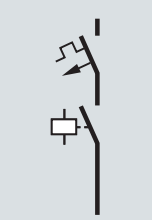
Rated operational current Soft starter[1)] I	Setting range Overload release Motor starter protector/ circuit breaker	Motor starter protector/ circuit breaker	Size	Soft starter type	Short-circuit breaking capacity I_q
A	A	Order No.		Order No.	kA
29	36.0 ... 50.0	**3RV10 42-4HA10**	S3	**3RW44 22**	32
36	45.0 ... 63.0	**3RV10 42-4JA10**	S3	**3RW44 23**	32
47	57.0 ... 75.0	**3RV10 42-4KA10**	S3	**3RW44 24**	32
57	70.0 ... 90.0	**3RV10 42-4LA10**	S3	**3RW44 25**	32
77	80.0 ... 100	**3RV10 42-4MA10**	S3	**3RW44 26**	32
93	80.0 ... 100		S3	**3RW44 27**	32
113	None	**3VL17 16-2DD36**	-	**3RW44 34**	16
134	None		-	**3RW44 35**	16
162	None	**3VL37 25-2DC36**	-	**3RW44 36**	65
203	None	**3VL47 31-3DC36**	-	**3RW44 43**	65
250	None		-	**3RW44 44**	65
313	None	**3VL47 40-3DC36**	-	**3RW44 45**	65
356	None		-	**3RW44 46**	65
432	None	**3VL57 50-3DC36**	-	**3RW44 47**	65
551	None	**3VL67 80-3AB36**	-	**3RW44 53**	65
615	None		-	**3RW44 54**	65
693	None		-	**3RW44 55**	65
780	None	**3VL77 10-3AB36**	-	**3RW44 56**	65
880	None		-	**3RW44 57**	65
970	None	**3VL77 12-3AB36**	-	**3RW44 58**	65
1076	None		-	**3RW44 65**	65
1214	None		-	**3RW44 66**	65

1) At 40 °C ambient temperature (for high ambient temperatures see Catalog LV 1 T)

Selection tables 440 V AC

Motor starter protector + contactor

CLASS 10, type of coordination 2, short-circuit breaking capacity I_q = 75 kA/100 kA



440 V AC

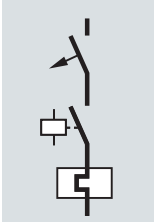
Standard induction motor 4-pole at 440 V AC[1]		Setting range Overload release Motor starter protector	Motor starter protector	Contactor[2]	Size	Short-circuit breaking capacity I_q
Standard output P	Motor current (guide value) I					
kW	A	A	Order No.	Order No.		kA
0.37	1.0	0.90 ... 1.25	3RV10 11-0KA10	3RT10 15-1AP01	S00/S00	100
0.55	1.4	1.10 ... 1.60	3RV10 11-1AA10	3RT10 15-1AP01	S00/S00	100
0.75	1.7	1.40 ... 2.00	3RV10 11-1BA10	3RT10 15-1AP01	S00/S00	100
1.1	2.5	2.20 ... 3.20	3RV10 21-1DA10	3RT10 26-1AP00	S0/S0	100
1.5	3.3	2.80 ... 4.00	3RV10 21-1EA10	3RT10 26-1AP00	S0/S0	100
2.2	4.6	3.50 ... 5.00	3RV10 21-1FA10	3RT10 26-1AP00	S0/S0	100
3	5.9	5.5 0... 8.00	3RV10 21-1HA10	3RT10 26-1AP00	S0/S0	100
4	7.7	7.00 ... 10.0	3RV10 21-1JA10	3RT10 26-1AP00	S0/S0	100
5.5	10.5	9.0 ... 12.5	3RV10 21-1KA10	3RT10 26-1AP00	S0/S0	100
7.5	14.0	11.0 ... 16.0	3RV10 21-4AA10	3RT10 26-1AP00	S0/S0	100
9	16.9	14.0 ... 20.0	3RV10 31-4BA10	3RT10 34-1AP00	S2/S2	100
11	20	18.0 ... 25.0	3RV10 31-4DA10	3RT10 34-1AP00	S2/S2	100
15	26	22.0 ... 32.0	3RV10 31-4EA10	3RT10 35-1AP00	S2/S2	100
18.5	32	28.0 ... 40.0	3RV10 31-4FA10	3RT10 35-1AP00	S2/S2	100
22	37	36.0 ... 45.0	3RV10 31-4GA10	3RT10 36-1AP00	S2/S2	100
30	50	45.0 ... 63.0	3RV10 41-4JA10	3RT10 44-1AP00	S3/S3	100
37	60	57.0 ... 75.0	3RV10 41-4KA10	3RT10 54-1AP36	S3/S6	100
45	73	70.0 ... 90.0	3RV10 41-4LA10	3RT10 54-1AP36	S3/S6	100
55	88	80.0 ... 100	3RV10 41-4MA10	3RT10 54-1AP36	S3/S6	100
75	120	64.0 ... 160	3RV10 63-7CL10	3RT10 55-6AP36	-/S6	100
90	145	64.0 ... 160	3RV10 63-7CL10	3RT10 56-6AP36	-/S6	100
110	177	80.0 ... 200	3RV10 63-7DL10	3RT10 64-6AP36	-/S10	100
132	209	160 ... 400	3RV10 73-7GL10	3RT10 65-6AP36	-/S10	100
160	255	160 ... 400	3RV10 73-7GL10	3RT10 66-6AP36	-/S10	100
185	318	252 ... 630	3RV10 83-7JL10	3RT12 75-6AP36	-/S12V	75
200	391	252 ... 630	3RV10 83-7JL10	3RT12 75-6AP36	-/S12V	75
250	491	252 ... 630	3RV10 83-7JL10	3RT12 76-6AP36	-/S12V	75

1) Guide value for 4-pole standard motors for 440 V AC, 50 Hz. Selection depends on the concrete startup and rated data of the protected motor.

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

Motor starter protector + contactor + 3RU11 thermal overload relay

CLASS 10, type of coordination 2, short-circuit breaking capacity I_q = 100 kA



440 V AC

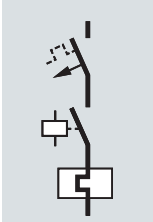
Standard induction motor 4-pole at 440 V AC[1]		Setting range Overload release Motor starter protector	Motor starter protector	Contactor[2]	Size	Overload relay	Setting range Overload relay	Short-circuit breaking capacity I_q
Standard output P	Motor current (guide value) I							
kW	A	A	Order No.	Order No.		Order No.	A	kA
0.37	1.0	None	**3RV13 21-0KC10**	**3RT10 15-1AP01**	S0/S00	**3RU11 16-0KB0**	0.90 ... 1.25	100
0.55	1.4	None	**3RV13 21-1AC10**	**3RT10 15-1AP01**	S0/S00	**3RU11 16-1AB0**	1.10 ... 1.60	100
0.75	1.7	None	**3RV13 21-1BC10**	**3RT10 15-1AP01**	S0/S00	**3RU11 16-1BB0**	1.40 ... 2.00	100
1.1	2.5	None	**3RV13 21-1DC10**	**3RT10 24-1AP00**	S0/S0	**3RU11 26-1DB0**	2.20 ... 3.20	100
1.5	3.3	None	**3RV13 21-1EC10**	**3RT10 24-1AP00**	S0/S0	**3RU11 26-1EB0**	2.80 ... 4.00	100
2.2	4.6	None	**3RV13 21-1FC10**	**3RT10 24-1AP00**	S0/S0	**3RU11 26-1FB0**	3.50 ... 5.00	100
3	5.9	None	**3RV13 21-1HC10**	**3RT10 26-1AP00**	S0/S0	**3RU11 26-1GB0**	5.50 ... 8.00	100
4	7.7	None	**3RV13 21-1JC10**	**3RT10 26-1AP00**	S0/S0	**3RU11 26-1JB0**	7.00 ... 10.0	100
5.5	10.5	None	**3RV13 21-1KC10**	**3RT10 26-1AP00**	S0/S0	**3RU11 26-1KB0**	9.00 ... 12.5	100
7.5	14.0	None	**3RV13 21-4AC10**	**3RT10 26-1AP00**	S0/S0	**3RU11 26-4AB0**	11.0 ... 16.0	100
9	16.9	None	**3RV13 31-4BC10**	**3RT10 34-1AP00**	S2/S2	**3RU11 36-4BB0**	14.0 ... 20.0	100
11	20	None	**3RV13 31-4DC10**	**3RT10 34-1AP00**	S2/S2	**3RU11 36-4DB0**	18.0 ... 25.0	100
15	26	None	**3RV13 31-4EC10**	**3RT10 34-1AP00**	S2/S2	**3RU11 36-4EB0**	22.0 ... 32.0	100
18.5	39	None	**3RV13 31-4FC10**	**3RT10 35-1AP00**	S2/S2	**3RU11 36-4FB0**	28.0 ... 40.0	100
22	37	None	**3RV13 31-4GC10**	**3RT10 36-1AP00**	S2/S2	**3RU11 36-4GB0**	36.0 ... 45.0	100
30	50	None	**3RV13 41-4JC10**	**3RT10 44-1AP00**	S3/S6	**3RU11 46-4JB0**	45.0 ... 63.0	100
37	60	None	**3RV13 41-4KC10**	**3RT10 54-6AP36**	S3/S6	**3RU11 46-4KB0**	57.0 ... 75.0	100
45	73	None	**3RV13 41-4LC10**	**3RT10 54-6AP36**	S3/S6	**3RU11 46-4LB0**	70.0 ... 90.0	100
55	88	None	**3RV13 41-4MC10**	**3RT10 54-6AP36**	S3/S6	**3RU11 46-4LB0**	80.0 ... 100	100

1) Guide value for 4-pole standard motors for 440 V AC, 50 Hz. Selection depends on the concrete startup and rated data of the protected motor.

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

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

CLASS 10, type of coordination 2, short-circuit breaking capacity I_q = 75 kA/100 kA



440 V AC

Standard induction motor 4-pole at 440 V AC[1]		Setting range Overload release	Motor starter protector	Contactor[3]	Size	Overload relay	Setting range Overload relay	Short-circuit breaking capacity I_q
Standard output P	Motor current (guide value) I	Motor starter protector[2]						
kW	A	A	Order No.	Order No.		Order No.	A	kA
0.37	1.0	None	3RV13 21-0KC10	3RT10 15-1AP01	S0/S00	3RB20 16-1NB0 3RB21 13-4NB0	0.32 ... 1.25	100
0.55	1.4	None	3RV13 21-1AC10	3RT10 15-1AP01	S0/S00	3RB20 16-1PB0 3RB21 13-4PB0	1.00 ... 4.00	100
0.75	1.7	None	3RV13 21-1BC10	3RT10 15-1AP01	S0/S00		1.00 ... 4.00	100
1.1	2.5	None	3RV13 21-1DC10	3RT10 26-1AP00	S0/S0	3RB21 23-4PB0	1.00 ... 4.00	100
1.5	3.3	None	3RV13 21-1EC10	3RT10 26-1AP00	S0/S0	3RB21 23-4SB0	3.00 ... 12.0	100
2.2	4.6	None	3RV13 21-1FC10	3RT10 26-1AP00	S0/S0	3RB20 26-1SB0 3RB21 23-4SB0	3.00 ... 12.0	100
3	5.9	None	3RV13 21-1HC10	3RT10 26-1AP00	S0/S0		3.00 ... 12.0	100
4	7.7	None	3RV13 21-1JC10	3RT10 26-1AP00	S0/S0		3.00 ... 12.0	100
5.5	10.5	None	3RV13 21-1KC10	3RT10 26-1AP00	S0/S0	3RB20 26-1QB0 3RB21 23-4QB0	3.00 ... 12.0	100
7.5	14.0	None	3RV13 21-4AC10	3RT10 26-1AP00	S0/S0		6.00 ... 25.0	100
9	16.9	None	3RV13 31-4BC10	3RT10 34-1AP00	S2/S2	3RB20 36-1UB0 3RB21 33-4UB0	12.5 ... 50.0	100
11	20	None	3RV13 31-4EC10	3RT10 35-1AP00	S2/S2		12.5 ... 50.0	100
15	26	28.0 ... 40.0	3RV10 31-4FA10	3RT10 35-1AP00	S2/S2		12.5 ... 50.0	100
18.5	32	None	3RV13 31-4GA10	3RT10 35-1AP00	S2/S2		12.5 ... 50.0	100
22	37	None	3RV13 41-4HC10	3RT10 44-1AP00	S3/S3	3RB20 46-1EB0 3RB21 43-4EB0	25.0 ... 100	100
30	50	None	3RV13 41-4JC10	3RT10 44-1AP00	S3/S3		25.0 ... 100	100
37	60	None	3RV13 41-4KC10	3RT10 54-1AP36	S3/S6		25.0 ... 100	100
45	78	None	3RV13 41-4LC10	3RT10 54-1AP36	S3/S6		25.0 ... 100	100
55	88	None	3RV13 41-4MC10	3RT10 54-1AP36	S3/S6		25.0 ... 100	100
75	120	None	3RV13 63-7CN10	3RT10 55-6AP36	-/S6	3RB20 56-1FW2 3RB21 53-4FW2	50.0 ... 200	100
90	145	None	3RV13 63-7EN10	3RT10 56-6AP36	-/S6		50.0 ... 200	100
110	177	None	3RV13 63-7EN10	3RT10 64-6AP36	-/S10	3RB20 66-1GC2 3RB21 63-4GC2	55.0 ... 250	100
132	209	None	3RV13 73-7GN10	3RT10 65-6AP36	-/S10		55.0 ... 250	100
160	255	None	3RV13 73-7GN10	3RT10 66-6AP36	-/S10	3RB20 66-1MC2 3RB21 63-4MC2	160 ... 630	100
185	294	None	3RV13 73-7JN10	3RT10 75-6AP36	-/S12		160 ... 630	100
200	318	None	3RV13 73-7JN10	3RT10 75-6AP36	-/S12		160 ... 630	100
250	391	None	3RV13 73-7JN10	3RT12 75-6AP36	-/S12V		160 ... 630	100
315	491	None	3RV13 83-7KN10	3RT12 76-6AP36	-/S12V		160 ... 630	75

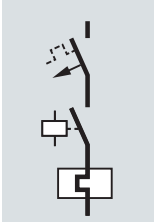
1) Guide value for 4-pole standard motors for 440 V AC, 50 Hz. Selection depends on the concrete startup and rated data of the protected motor.

2) The motor starter protector is to be set to maximum current value.

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

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

CLASS 10, type of coordination 2, short-circuit breaking capacity I_q = 75 kA/100 kA



440 V AC

Standard induction motor 4-pole at 440 V AC[1]		Setting range	Motor starter protector	Contactor[3]	Size	SIMOCODE pro or overload relay (current measuring module)[4]	Setting range	Short-circuit breaking capacity I_q
Standard output P	Motor current (guide value) I	Motor starter protector[2]		AC and DC drive			Overload relay	
kW	A	A	Order No.	Order No.		Order No.	A	kA
0.37	1.0	None	3RV13 21-0KC10	3RT10 15-1AP01	S0/S00	3UF71 00-1AA00-0/ 3RB29 06-2BG1	0.3 ... 3	100
0.55	1.4	None	3RV13 21-1AC10	3RT10 15-1AP01	S0/S00		0.3 ... 3	100
0.75	1.7	None	3RV13 21-1BC10	3RT10 15-1AP01	S0/S00		0.3 ... 3	100
1.1	2.5	None	3RV13 21-1DC10	3RT10 26-1AP00	S0/S0		0.3 ... 3	100
1.5	3.3	None	3RV13 21-1EC10	3RT10 26-1AP00	S0/S0	3UF71 01-1AA00-0/ 3RB29 06-2DG1	2.4 ... 25	100
2.2	4.6	None	3RV13 21-1FC10	3RT10 26-1AP00	S0/S0		2.4 ... 25	100
3	5.9	None	3RV13 21-1HC10	3RT10 24-1AP00	S0/S0		2.4 ... 25	100
4	7.7	None	3RV13 21-1JC10	3RT10 26-1AP00	S0/S0		2.4 ... 25	100
5.5	10.5	None	3RV13 21-1KC10	3RT10 26-1AP00	S0/S0		2.4 ... 25	100
7.5	14.0	None	3RV13 21-4AC10	3RT10 26-1AP00	S0/S0		2.4 ... 25	100
9	16.9	None	3RV13 31-4BC10	3RT10 34-1AP00	S2/S2		2.4 ... 25	100
11	20	None	3RV13 31-4EC10	3RT10 34-1AP00	S2/S2		10 ... 100	100
15	26	None	3RV13 31-4EC10	3RT10 35-1AP00	S2/S2	3UF71 02-1AA00-0/ 3RB29 06-2JG1	10 ... 100	100
18.5	32	28.0 ... 40.0	3RV10 31-4FA10	3RT10 35-1AP00	S2/S2		10 ... 100	100
22	37	None	3RV13 41-4FC10	3RT10 36-1AP00	S2/S2		10 ... 100	100
30	50	None	3RV13 41-4JC10	3RT10 44-1AP00	S3/S3		10 ... 100	100
37	60	None	3RV13 41-4KC10	3RT10 54-1AP36	S3/S6		10 ... 100	100
45	73	None	3RV13 41-4LC10	3RT10 54-1AP36	S3/S6	3UF71 03-1AA00-0/ 3RB29 56-2TG2	20 ... 200	100
55	88	None	3RV13 41-4MC10	3RT10 54-1AP36	S3/S6	3UF71 03-1AA00-0/ 3RB29 56-2TG2	20 ... 200	100
75	120	None	3RV13 63-7CN10	3RT10 55-6AP36	-/S6	3UF71 03-1AA00-0/ 3RB29 56-2TG2	20 ... 200	100
90	145	None	3RV13 63-7EN10	3RT10 56-6AP36	-/S6		20 ... 200	100
110	177	None	3RV13 63-7EN10	3RT10 64-6AP36	-/S10		20 ... 200	100
132	209	None	3RV13 73-7GN10	3RT10 65-6AP36	-/S10	3UF71 04-1BA00-0/ 3RB29 66-2WH2	63 ... 630	100
160	255	None	3RV13 73-7GN10	3RT10 66-6AP36	-/S10		63 ... 630	100
185	294	None	3RV13 73-7JN10	3RT10 75-6AP36	-/S12		63 ... 630	100
200	318	None	3RV13 73-7JN10	3RT10 75-6AP36	-/S12		63 ... 630	100
250	391	None	3RV13 73-7JN10	3RT12 75-6AP36	-/S12V		63 ... 630	100
315	491	None	3RV13 83-7KN10	3RT12 76-6AP36	-/S12V		63 ... 630	75

1) Guide value for 4-pole standard motors for 440 V AC, 50 Hz. Selection depends on the concrete startup and rated data of the protected motor.

2) The motor starter protector is to be set to maximum current value.

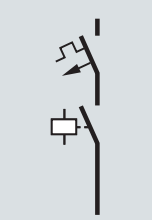
3) Rated control supply voltage 230 V AC, 50 Hz.
Other control voltages are also possible.

4) The current measuring modules required for 3UF7 or 3RB22/3RB23 are specified in each case. For details of the basic units 3UF7 or 3RB22/3RB23 which are also required see page 9.

Selection tables 480 V AC

Motor starter protector + contactor

CLASS 10, type of coordination 2, short-circuit breaking capacity I_q = 75 kA/100 kA



480 V AC

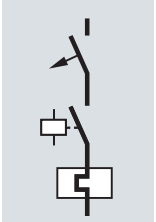
Standard induction motor 4-pole at 480 V AC[1]		Setting range Overload release Motor starter protector	Motor starter protector	Contactor[2]	Size	Short-circuit breaking capacity I_q
Standard output P	Motor current (guide value) I					
kW	A	A	Order No.	Order No.		kA
0.37	0.9	0.90 ... 1.25	**3RV10 11-0KA10**	**3RT10 15-1AP01**	S00/S00	100
0.55	1.3	1.10 ... 1.60	**3RV10 11-1AA10**	**3RT10 15-1AP01**	S00/S00	100
0.75	1.6	1.40 ... 2.00	**3RV10 21-1BA10**	**3RT10 24-1AP00**	S0/S0	100
1.1	2.3	1.80 ... 2.50	**3RV10 21-1CA10**	**3RT10 26-1AP00**	S0/S0	100
1.5	3.0	2.80 ... 4.00	**3RV10 21-1EA10**	**3RT10 34-1AP00**	S0/S2	100
2.2	4.2	3.50 ... 5.00	**3RV10 21-1FA10**	**3RT10 34-1AP00**	S0/S2	100
3	5.4	4.50 ... 6.30	**3RV10 21-1GA10**	**3RT10 34-1AP00**	S0/S2	100
4	7.0	5.50 ... 8.00	**3RV10 21-1HA10**	**3RT10 34-1AP00**	S0/S2	100
5.5	9.6	9.00 ... 12.5	**3RV10 21-1KA10**	**3RT10 34-1AP00**	S0/S2	100
7.5	12.92	11.0 ... 16.0	**3RV10 21-4AA10**	**3RT10 34-1AP00**	S0/S2	100
9	15.5	14.0 ... 20.0	**3RV10 31-4BA10**	**3RT10 34-1AP00**	S2/S2	100
11	18.3	18.0 ... 25.0	**3RV10 31-4DA10**	**3RT10 34-1AP00**	S2/S2	100
15	24	22.0 ... 32.0	**3RV10 31-4EA10**	**3RT10 35-1AP00**	S2/S2	100
18.5	29	28.0 ... 40.0	**3RV10 31-4FA10**	**3RT10 35-1AP00**	S2/S2	100
22	34	28.0 ... 40.0	**3RV10 31-4FA10**	**3RT10 35-1AP00**	S2/S2	100
30	46	40.0 ... 50.0	**3RV10 31-4HA10**	**3RT10 36-1AP00**	S2/S2	100
37	55	45.0 ... 63.0	**3RV10 41-4JA10**	**3RT10 54-1AP36**	S3/S6	100
45	67	57.0 ... 75.0	**3RV10 41-4KA10**	**3RT10 54-1AP36**	S3/S6	100
55	81	80.0 ... 100	**3RV10 41-4MA10**	**3RT10 54-1AP36**	S3/S6	100
75	110	64.0 ... 160	**3RV10 63-7CL10**	**3RT10 54-1AP36**	-/S6	100
90	133	64.0 ... 160	**3RV10 63-7CL10**	**3RT10 55-6AP36**	-/S6	100
110	163	80.0 ... 200	**3RV10 63-7DL10**	**3RT10 56-6AP36**	-/S6	100
132	192	160 ... 400	**3RV10 73-7GL10**	**3RT10 65-6AP36**	-/S10	100
160	233	160 ... 400	**3RV10 73-7GL10**	**3RT10 65-6AP36**	-/S10	100
185	292	252 ... 630	**3RV10 83-7GL10**	**3RT12 75-6AP36**	-/S12V	75
200	358	252 ... 630	**3RV10 83-7GL10**	**3RT12 75-6AP36**	-/S12V	75
250	358	252 ... 630	**3RV10 83-7JL10**	**3RT12 76-6AP36**	-/S12V	75

1) Guide value for 4-pole standard motors for 480 V AC, 50 Hz. Selection depends on the concrete startup and rated data of the protected motor.

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

Motor starter protector + contactor + 3RU11 thermal overload relay

CLASS 10, type of coordination 2, short-circuit breaking capacity I_q = 100 kA



480 V AC

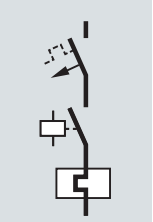
Standard induction motor 4-pole at 480 V AC[1]		Setting range Overload release Motor starter protector	Motor starter protector	Contactor[2]	Size	Overload relay	Setting range Overload release Overload relay	Short-circuit breaking capacity I_q
Standard output P	Motor current (guide value) I							
kW	A	A	Order No.	Order No.		Order No.	A	kA
0.37	0.9	None	3RV13 21-0KC10	3RT10 15-1AP01	S0/S00	3RU11 16-0KB0	0.90 ... 1.25	100
0.55	1.3	None	3RV13 21-1AC10	3RT10 15-1AP01	S0/S00	3RU11 16-1AB0	1.10 ... 1.6.0	100
0.75	1.6	None	3RV13 21-1BC10	3RT10 15-1AP01	S0/S00	3RU11 16-1BB0	1.40 ... 2.00	100
1.1	2.3	None	3RV13 21-1DC10	3RT10 26-1AP00	S0/S0	3RU11 26-1DB0	2.20 ... 3.20	100
1.5	3.0	None	3RV13 21-1EC10	3RT10 34-1AP00	S0/S2	3RU11 26-1EB0	2.80 ... 4.00	100
2.2	4.2	None	3RV13 21-1FC10	3RT10 34-1AP00	S0/S2	3RU11 26-1FB0	3.50 ... 5.00	100
3	5.4	None	3RV13 21-1GC10	3RT10 34-1AP00	S0/S2	3RU11 26-1GB0	4.50 ... 6.30	100
4	7.0	None	3RV13 21-1HC10	3RT10 34-1AP00	S0/S2	3RU11 36-1HB0	5.50 ... 8.00	100
5.5	9.9	None	3RV13 21-1KC10	3RT10 34-1AP00	S0/S2	3RU11 36-1KB0	9.00 ... 12.5	100
7.5	12.9	None	3RV13 21-4AC10	3RT10 34-1AP00	S0/S2	3RU11 36-4AB0	11.0 ... 16.0	100
9	15.5	None	3RV13 31-4BC10	3RT10 34-1AP00	S2/S2	3RU11 36-4BB0	14.0 ... 20.0	100
11	18.3	None	3RV13 31-4DC10	3RT10 34-1AP00	S2/S2	3RU11 36-4DB0	18.0 ... 25.0	100
15	24	None	3RV13 31-4EC10	3RT10 34-1AP00	S2/S2	3RU11 36-4EB0	22.0 ... 32.0	100
18.5	29	None	3RV13 31-4FC10	3RT10 34-1AP00	S2/S2	3RU11 36-4FB0	28.0 ... 40.0	100
22	34	None	3RV13 31-4FC10	3RT10 35-1AP00	S2/S2	3RU11 36-4FB0	28.0 ... 40.0	100
30	46	None	3RV13 31-4HC10	3RT10 36-1AP00	S2/S2	3RU11 36-4HB0	40.0 ... 50.0	100
37	55	None	3RV13 41-4JC10	3RT10 54-1AP36	S3/S6	3RU11 46-4JB0	45.0 ... 63.0	100
45	67	None	3RV13 41-4KC10	3RT10 54-1AP36	S3/S6	3RU11 46-4KB0	57.0 ... 75.0	100
55	81	None	3RV13 41-4MC10	3RT10 54-1AP36	S3/S6	3RU11 46-4MB0	80.0 ... 100	100

1) Guide value for 4-pole standard motors for 480 V AC, 50 Hz. Selection depends on the concrete startup and rated data of the protected motor.

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

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

CLASS 10, type of coordination 2, short-circuit breaking capacity I_q = 75 kA/100 kA



480 V AC

Standard induction motor 4-pole at 480 V AC[1]		Setting range	Motor starter protector	Contactor[3]	Size	Overload relay	Setting range	Short-circuit breaking capacity
Standard output *P*	Motor current (guide value) *I*	Overload release Motor starter protector[2]					Overload release Overload relay	I_q
kW	A	A	Order No.	Order No.		Order No.	A	kA
0.37	0.9	None	3RV13 21-0KC10	3RT10 15-1AP01	S0/S00	3RB20 16-1NB0/ 3RB21 13-4NB0	0.32 ... 1.25	100
0.55	1.3	None	3RV13 21-1AC10	3RT10 15-1AP01	S0/S00	3RB20 16-1PB0/ 3RB21 13-4PB0	1.00 ... 4.00	100
0.75	1.6	None	3RV13 21-1BC10	3RT10 24-1AP00	S0/S0	3RB21 23-4PB0	1.00 ... 4.00	100
1.1	2.3	None	3RV13 21-1CC10	3RT10 26-1AP00	S0/S0		1.00 ... 4.00	100
1.5	3.0	None	3RV13 21-1EC10	3RT10 34-1AP00	S0/S2		1.00 ... 4.00	100
2.2	4.2	None	3RV13 21-1FC10	3RT10 34-1AP00	S0/S2	3RB20 26-1SB0/ 3RB21 23-4SB0	3.00 ... 12.0	100
3	5.4	None	3RV13 21-1GC10	3RT10 34-1AP00	S0/S2		3.00 ... 12.0	100
4	7.1	None	3RV13 21-1HC10	3RT10 34-1AP00	S0/S2		3.00 ... 12.0	100
5.5	9.6	None	3RV13 21-1KC10	3RT10 34-1AP00	S0/S2	3RB20 26-1QB0/ 3RB21 23-4QB0	6.00 ... 25.0	100
7.5	12.9	None	3RV13 21-4AC10	3RT10 34-1AP00	S0/S2		6.00 ... 25.0	100
9	15.5	None	3RV13 31-4BC10	3RT10 34-1AP00	S2/S2	3RB20 36-1UB0/ 3RB21 33-4UB0	12.5 ... 50.0	100
11	18.3	None	3RV13 31-4EC10	3RT10 34-1AP00	S2/S2		12.5 ... 50.0	100
15	24	None	3RV13 31-4EC10	3RT10 35-1AP00	S2/S2		12.5 ... 50.0	100
18.5	29	28.0 ... 40.0	3RV10 31-4FA10	3RT10 35-1AP00	S2/S2		12.5 ... 50.0	100
22	34	None	3RV13 41-4HC10	3RT10 44-1AP00	S3/S3	3RB20 46-1EB0/ 3RB21 43-4EB0	25.0 ... 100	100
30	46	None	3RV13 41-4HC10	3RT10 44-1AP00	S3/S3		25.0 ... 100	100
37	55	None	3RV13 41-4JC10	3RT10 54-1AP36	-/S6		25.0 ... 100	100
45	67	None	3RV13 41-4KC10	3RT10 54-1AP36	-/S6		25.0 ... 100	100
55	81	None	3RV13 41-4MC10	3RT10 54-1AP36	-/S6		25.0 ... 100	100
75	110	None	3RV13 63-7CN10	3RT10 54-1AP36	-/S6	3RB20 56-1FW2/ 3RB21 53-4FW2	50.0 ... 200	100
90	133	None	3RV13 63-7CN10	3RT10 55-6AP36	-/S6		50.0 ... 200	100
110	163	None	3RV13 63-7EN10	3RT10 56-6AP36	-/S6	3RB20 66-1GC2/ 3RB21 63-4GC2	55.0 ... 250	100
132	192	None	3RV13 73-7GN10	3RT10 65-6AP36	-/S10		55.0 ... 250	100
160	233	None	3RV13 73-7GN10	3RT10 65-6AP36	-/S10		55.0 ... 250	100
185	292	None	3RV13 73-7JN10	3RT10 75-6AP36	-/S12	3RB20 66-1MC2/ 3RB21 63-4MC2	160 ... 630	100
200	315	None	3RV13 73-7JN10	3RT10 75-6AP36	-/S12		160 ... 630	100
250	358	None	3RV13 83-7JN10	3RT12 75-6AP36	-/S12V		160 ... 630	75
315	450	None	3RV13 83-7KN10	3RT12 76-6AP36	-/S12V		160 ... 630	75

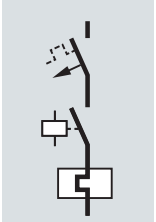
1) Guide value for 4-pole standard motors for 480 V AC, 50 Hz. Selection depends on the concrete startup and rated data of the protected motor.

2) The motor starter protector is to be set to maximum current value.

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

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

CLASS 10, type of coordination 2, short-circuit breaking capacity I_q = 75 kA/100 kA



480 V AC

Standard induction motor 4-pole at 480 V AC[1]		Setting range Overload release Motor starter protector	Motor starter protector	Contactor[2]	Size	SIMOCODE pro or overload relay (current measuring module)[3]	Setting range Overload release Overload relay	Short-circuit breaking capacity I_q
Standard output P	Motor current (guide value) I							
kW	A	A	Order No.	Order No.		Order No.	A	kA
0.37	0.9	None	3RV13 21-0KC10	3RT10 15-1AP01	S0/S00	3UF7 100-1AA00-0/ 3RB29 06-2BG1	0.30 ... 3.00	100
0.55	1.3	None	3RV13 21-1AC10	3RT10 15-1AP01/ 3RT10 15-1BB41	S0/S00		0.30 ... 3.00	100
0.75	1.6	None	3RV13 21-1BC10	3RT10 24-1AP00	S0/S0		0.30 ... 3.00	100
1.1	2.3	None	3RV13 21-1CC10	3RT10 26-1AP00/ 3RT10 26-1BB40	S0/S0		0.30 ... 3.00	100
1.5	3.0	None	3RV13 21-1EC10	3RT10 34-1AP00	S0/S2	3UF7 101-1AA00-0/ 3RB29 06-2DG1	2.40 ... 25.0	100
2.2	4.2	None	3RV13 21-1FC10	3RT10 34-1AP00	S0/S2		2.40 ... 25.0	100
3	5.4	None	3RV13 21-1GC10	3RT10 34-1AP00	S0/S2		2.40 ... 25.0	100
4	7.1	None	3RV13 21-1HC10	3RT10 34-1AP00	S0/S2		2.40 ... 25.0	100
5.5	9.6	None	3RV13 21-1KC10	3RT10 34-1AP00	S0/S2		2.40 ... 25.0	100
7.5	12.9	None	3RV13 21-4AC10	3RT10 34-1AP00	S0/S2		2.40 ... 25.0	100
9	15.5	None	3RV13 31-4BC10	3RT10 34-1AP00	S2/S2		2.40 ... 25.0	100
11	18.3	None	3RV13 31-4DC10	3RT10 34-1AP00	S2/S2	3UF7 102-1AA00-0/ 3RB29 06-2JG1	2.40 ... 25.0	100
15	24	None	3RV13 31-4EC10	3RT10 35-1AP00	S2/S2	3UF7 112-1AA00-0/ 3RB29 06-2JG1	2.40 ... 25.0	100
18.5	29	None	3RV13 31-4FC10	3RT10 35-1AP00	S2/S2	3UF7 102-1AA00-0/ 3RB29 06-2JG1	10.0 ... 100	100
22	34	None	3RV13 31-4HC10	3RT10 35-1AP00/ 3RT10 35-1BB40	S2/S2		10.0 ... 100	100
30	46	None	3RV13 41-4HC10	3RT10 36-1AP00/ 3RT10 36-1BB40	S3/S2		10.0 ... 100	100
37	55	None	3RV13 41-4JC10	3RT10 54-1AP36	S3/S6	3UF7 103-1AA00-0/ 3RB29 56-2TG1	20.0 ... 200	100
45	67	None	3RV13 41-4KC10	3RT10 54-1AP36	S3/S6		20.0 ... 200	100
55	81	None	3RV13 41-4MC10	3RT10 54-1AP36	S3/S6	3UF7 103-1AA00-0/ 3RB29 56-2TG2	20.0 ... 200	100
75	110	None	3RV13 63-7CN10	3RT10 54-1AP36	-/S6		20.0 ... 200	100
90	133	None	3RV13 63-7CN10	3RT10 55-6AP36	-/S6		20.0 ... 200	100
110	163	None	3RV13 63-7EN10	3RT10 56-6AP36	-/S6		20.0 ... 200	100
132	192	None	3RV13 73-7GN10	3RT10 65-6AP36	-/S10		20.0 ... 200	100
160	233	None	3RV13 73-7GN10	3RT10 65-6AP36	-/S10	3UF7 104-1BA00-0/ 3RB29 66-2WH2	63.0 ... 630	100
185	292	None	3RV13 73-7JN10	3RT10 75-6AP36	-/S12		63.0 ... 630	100
200	315	None	3RV13 73-7JN10	3RT10 75-6AP36	-/S12		63.0 ... 630	100
250	358	None	3RV13 83-7JN10	3RT12 75-6AP36	-S12V		63.0 ... 630	75
315	450	None	3RV13 83-7KN10	3RT12 76-6AP36	-S12V		63.0 ... 630	75

1) Guide value for 4-pole standard motors for 480 V AC, 50 Hz. Selection depends on the concrete startup and rated data of the protected motor.

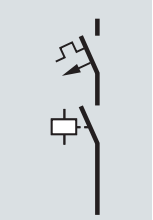
2) Rated control supply voltage 230 V AC, 50 Hz.
Other control voltages are also possible.

3) The current measuring modules required for 3UF7 or 3RB22/3RB23 are specified in each case. For details of the basic units 3UF7 or 3RB22/3RB23 which are also required see page 9.

Selection tables 500 V AC

Motor starter protector/circuit breaker + contactor

CLASS 10, type of coordination 1, short-circuit breaking capacity I_q = 50 kA



500 V AC

Standard induction motor 4-pole at 500 V AC[1]		Setting range Overload release	Motor starter protector/circuit breaker	Contactor[2]	Size	Short-circuit breaking capacity I_q
Standard output P	Motor current (guide value) I	Motor starter protector/circuit breaker				
kW	A	A	Order No.	Order No.		kA
0.06	0.2	0.14 ... 0.20	**3RV10 11-0BA10**	**3RT10 15-1AP01**	S00/S00	50
0.09	0.2	0.18 ... 0.25	**3RV10 11-0CA10**	**3RT10 15-1AP01**	S00/S00	50
0.12	0.3	0.22 ... 0.32	**3RV10 11-0DA10**	**3RT10 15-1AP01**	S00/S00	50
0.12	0.3	0.28 ... 0.40	**3RV10 11-0EA10**	**3RT10 15-1AP01**	S00/S00	50
0.18	0.5	0.35 ... 0.50	**3RV10 11-0FA10**	**3RT10 15-1AP01**	S00/S00	50
0.18	0.5	0.45 ... 0.63	**3RV10 11-0GA10**	**3RT10 15-1AP01**	S00/S00	50
0.25	0.7	0.55 ... 0.80	**3RV10 11-0HA10**	**3RT10 15-1AP01**	S00/S00	50
0.37	0.9	0.70 ... 1.00	**3RV10 11-0JA10**	**3RT10 15-1AP01**	S00/S00	50
0.55	1.2	0.90 ... 1.25	**3RV10 11-0KA10**	**3RT10 15-1AP01**	S00/S00	50
0.75	1.5	1.10 ... 1.60	**3RV10 11-1AA10**	**3RT10 15-1AP01**	S00/S00	50
0.75	1.5	1.40 ... 2.00	**3RV10 11-1BA10**	**3RT10 15-1AP01**	S00/S00	50
1.1	2.2	1.80 ... 2.50	**3RV10 11-1CA10**	**3RT10 15-1AP01**	S00/S00	50
1.5	2.9	2.20 ... 3.20	**3RV10 11-1DA10**	**3RT10 15-1AP01**	S00/S00	50
2.2	4.0	3.50 ... 5.00	**3RV10 11-1FA10**	**3RT10 15-1AP01**	S00/S00	50
3	5.2	4.50 ... 6.30	**3RV10 11-1GA10**	**3RT10 15-1AP01**	S00/S00	50
4	6.8	5.50 ... 8.00	**3RV10 11-1HA10**	**3RT10 16-1AP01**	S00/S00	50
5.5	9.2	7.00 ... 10.0	**3RV10 11-1JA10**	**3RT10 17-1AP01**	S00/S00	50
7.5	12.4	9.00 ... 12.5	**3RV10 21-1KA10**	**3RT10 25-1AP00**	S0/S0	50
7.5	12.4	11.0 ... 16.0	**3RV10 21-4AA10**	**3RT10 25-1AP00**	S0/S0	50
11	17.6	14.0 ... 20.0	**3RV10 21-4BA10**	**3RT10 26-1AP00**	S0/S0	50
15	23	18.0 ... 25.0	**3RV10 31-4DA10**	**3RT10 34-1AP00**	S2/S2	50
18.5	28	22.0 ... 32.0	**3RV10 31-4EA10**	**3RT10 34-1AP00**	S2/S2	50
22	33	28.0 ... 40.0	**3RV10 31-4FA10**	**3RT10 35-1AP00**	S2/S2	50
30	44	36.0 ... 45.0	**3RV10 31-4GA10**	**3RT10 36-1AP00**	S2/S2	50
30	44	40.0 ... 50.0	**3RV10 31-4HA10**	**3RT10 36-1AP00**	S2/S2	50
37	53	45.0 ... 63.0	**3RV10 41-4JA10**	**3RT10 44-1AP00**	S3/S3	50
45	64	57.0 ... 75.0	**3RV10 41-4KA10**	**3RT10 44-1AP00**	S3/S3	50
55	78	70.0 ... 90.0	**3RV10 41-4LA10**	**3RT10 45-1AP00**	S3/S3	50
75	106	64.0 ... 160	**3VL27 16-2SP33**	**3RT10 54-6AP36**	-/S6	50
90	128	64.0 ... 160	**3VL27 16-2SP33**	**3RT10 55-6AP36**	-/S6	50
110	156	64.0 ... 160	**3VL27 16-2SP33**[3]	**3RT10 56-6AP36**	-/S6	50
132	184	80.0 ... 200	**3VL37 20-2SP36**[4]	**3RT10 64-6AP36**	-/S10	50
132	184	80.0 ... 200	**3VL37 20-2SP36**[4]	**3RT12 64-6AP36**	-/S10V	50
160	224	100 ... 250	**3VL37 25-2SP36**[5]	**3RT10 65-6AP36**	-/S10	50
160	224	100 ... 250	**3VL37 25-2SP36**[5]	**3RT12 65-6AP36**	-/S10V	50
200	280	125 ... 315	**3VL47 31-2SP36**	**3RT10 66-6AP36**	-/S10	50
200	280	125 ... 315	**3VL47 31-2SP36**	**3RT12 66-6AP36**	-/S10V	50
250	344	200 ... 500	**3VL57 50-2SP36**	**3RT10 75-6AP36**	-/S12	50
250	344	200 ... 500	**3VL57 50-2SP36**	**3RT12 75-6AP36**	-/S12V	50
315	432	200 ... 500	**3VL57 50-2SP36**	**3RT10 76-6AP36**	-/S12	50
315	432	200 ... 500	**3VL57 50-2SP36**	**3RT12 76-6AP36**	-/S12V	50
355	488	200 ... 500	**3VL57 50-2SP36**	**3RT10 76-6AP36**	-/S12	50
355	488	200 ... 500	**3VL57 50-2SP36**	**3RT12 76-6AP36**	-/S12V	50

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

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

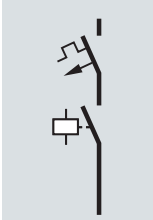
3) Alternatively 3VL37 20-2SP36 also possible.

4) Alternatively 3VL37 25-2SP36 also possible.

5) Alternatively 3VL47 31-2SP36 also possible.

Motor starter protector/circuit breaker + contactor

CLASS 10, type of coordination 2, short-circuit breaking capacity I_q = 50 kA



500 V AC

Standard induction motor 4-pole at 500 V AC[1]		Setting range Overload release	Motor starter protector/circuit breaker	Contactor[2]	Size	Short-circuit breaking capacity I_q
Standard output P	Motor current (guide value) I	Motor starter protector/circuit breaker				
kW	A	A	Order No.	Order No.		kA
0.06	0.2	0.14 ... 0.20	3RV10 11-0BA10	3RT10 15-1AP01	S00/S00	50
0.09	0.2	0.18 ... 0.25	3RV10 11-0CA10	3RT10 15-1AP01	S00/S00	50
0.12	0.3	0.22 ... 0.32	3RV10 11-0DA10	3RT10 15-1AP01	S00/S00	50
0.12	0.3	0.28 ... 0.40	3RV10 11-0EA10	3RT10 15-1AP01	S00/S00	50
0.18	0.5	0.35 ... 0.50	3RV10 11-0FA10	3RT10 15-1AP01	S00/S00	50
0.18	0.5	0.45 ... 0.63	3RV10 11-0GA10	3RT10 15-1AP01	S00/S00	50
0.25	0.7	0.55 ... 0.80	3RV10 11-0HA10	3RT10 15-1AP01	S00/S00	50
0.37	0.9	0.70 ... 1.00	3RV10 11-0JA10	3RT10 15-1AP01	S00/S00	50
0.55	1.2	0.90 ... 1.25	3RV10 11-0KA10	3RT10 15-1AP01	S00/S00	50
0.75	1.5	1.10 ... 1.60	3RV10 11-1AA10	3RT10 15-1AP01	S00/S00	50
0.75	1.5	1.40 ... 2.00	3RV10 21-1BA10	3RT10 24-1AP00	S0/S0	50
1.1	2.2	1.80 ... 2.50	3RV10 21-1CA10	3RT10 26-1AP00	S0/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/S2	50
11	17.6	14.0 ... 20.0	3RV10 31-4BA10	3RT10 34-1AP00	S2/S2	50
15	23	18.0 ... 25.0	3RV10 31-4DA10	3RT10 34-1AP00	S2/S2	50
18.5	28	22.0 ... 32.0	3RV10 31-4EA10	3RT10 34-1AP00	S2/S2	50
22	33	28.0 ... 40.0	3RV10 31-4FA10	3RT10 35-1AP00	S2/S2	50
30	44	36.0 ... 45.0	3RV10 31-4GA10	3RT10 36-1AP00	S2/S2	50
30	44	40.0 ... 50.0	3RV10 31-4HA10	3RT10 36-1AP00	S2/S2	50
37	53	45.0 ... 63.0	3RV10 41-4JA10	3RT10 44-1AP00	S3/S3	50
45	64	57.0 ... 75.0	3RV10 41-4KA10	3RT10 44-1AP00	S3/S3	50
55	78	70.0 ... 90.0	3RV10 41-4LA10	3RT10 45-1AP00	S3/S3	50
75	106	64.0 ... 160	3VL27 16-2SP33	3RT10 54-1AP36	-/S6	50
90	128	64.0 ... 160	3VL27 16-2SP33[3]	3RT10 55-6AP36	-/S6	50
110	156	64.0 ... 160	3VL27 16-2SP33[4]	3RT10 56-6AP36	-/S6	50
132	184	80.0 ... 200	3VL37 20-2SP36[4]	3RT10 64-6AP36	-/S10	50
132	184	80.0 ... 200	3VL37 20-2SP36[5]	3RT12 64-6AP36	-/S10V	50
160	224	100 ... 250	3VL37 25-2SP36[5]	3RT10 65-6AP36	-/S10	50
160	224	100 ... 250	3VL37 25-2SP36	3RT12 65-6AP36	-/S10V	50
200	280	125 ... 315	3VL47 31-2SP36	3RT10 66-6AP36	-/S10	50
200	280	125 ... 315	3VL47 31-2SP36	3RT12 66-6AP36	-/S10V	50
250	344	200 ... 500	3VL57 50-2SP36	3RT10 75-6AP36	-/S12	50
250	344	200 ... 500	3VL57 50-2SP36	3RT12 76-6AP36	-/S12V	50
315	432	200 ... 500	3VL57 50-2SP36	3RT10 76-6AP36	-/S12	50
315	432	200 ... 500	3VL57 50-2SP36	3RT12 76-6AP36	-/S12V	50
355	488	200 ... 500	3VL57 50-2SP36	3RT10 76-6AP36	-/S12	50
355	488	200 ... 500	3VL57 50-2SP36	3RT12 76-6AP36	-/S12V	50

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

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

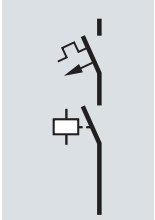
3) Alternatively 3VL37 20-2SP36 also possible.

4) Alternatively 3VL37 25-2SP36 also possible.

5) Alternatively 3VL47 31-2SP36 also possible.

Motor starter protector/circuit breaker + contactor

CLASS 20, type of coordination 2, short-circuit breaking capacity I_q = 50 kA



500 V AC

Standard induction motor 4-pole at 500 V AC[1]		Setting range Overload release	Motor starter protector/circuit breaker	Contactor[2]	Size	Short-circuit breaking capacity I_q
Standard output P	Motor current (guide value) I	Motor starter protector/circuit breaker				
kW	A	A	Order No.	Order No.		kA
7.5	12.4	11.0 ... 16.0	3RV10 31-4AB10	3RT10 34-1AP00	S2/S2	50
11	17.6	14.0 ... 20.0	3RV10 31-4BB10	3RT10 34-1AP00	S2/S2	50
11	17.6	18.0 ... 25.0	3RV10 31-4DB10	3RT10 34-1AP00	S2/S2	50
15	23	22.0 ... 32.0	3RV10 31-4EB10	3RT10 35-1AP00	S2/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/S3	50
22	33	28.0 ... 40.0	3RV10 42-4FB10	3RT10 44-1AP00	S3/S3	50
30	44	36.0 ... 50.0	3RV10 42-4HB10	3RT10 44-1AP00	S3/S3	50
30	44	45.0 ... 63.0	3RV10 42-4JB10	3RT10 44-1AP00	S3/S3	50
37	53	45.0 ... 63.0	3RV10 42-4JB10	3RT10 45-1AP00	S3/S3	50
37	53	57.0 ... 75.0	3RV10 42-4KB10	3RT10 45-1AP00	S3/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 16-2SS33	3RT10 55-6AP36	-/S6	50
90	128	64.0 ... 160	3VL27 16-2SS33	3RT10 56-6AP36	-/S6	50
110	156	64.0 ... 160	3VL27 16-2SS33[3]	3RT10 64-6AP36	-/S10	50
132	184	80.0 ... 200	3VL37 20-2SS36[4]	3RT10 65-6AP36	-/S10	50
132	184	80.0 .. 200	3VL37 20-2SS36[4]	3RT10 66-6AP36	-/S10	50
132	184	80.0 ... 200	3VL37 20-2SS36[4]	3RT12 64-6AP36	-/S10V	50
160	224	100 ... 250	3VL37 25-2SS36[5]	3RT12 65-6AP36	-/S10V	50
200	280	125 ... 315	3VL47 31-2SS36	3RT12 66-6AP36	-/S10V	50
200	280	125 ... 315	3VL47 31-2SS36	3RT10 75-6AP36	-/S12	50
250	344	200 ... 500	3VL57 50-2SS36	3RT10 76-6AP36	-/S12	50
250	344	200 ... 500	3VL57 50-2SS36	3RT12 75-6AP36	-/S12V	50
315	432	200 ... 500	3VL57 50-2SS36	3RT12 76-6AP36	-/S12V	50
255	488	200 ... 500	3VL57 50-2SS36	3RT12 76-6AP36	-/S12V	50

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

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

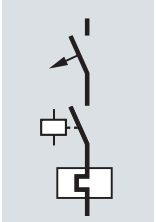
3) Alternatively 3VL37 20-2SS36 also possible.

4) Alternatively 3VL37 25-2SS36 also possible.

5) Alternatively 3VL47 31-2SS36 also possible.

Motor starter protector/circuit breaker + contactor + 3RU11 thermal overload relay

CLASS 10, type of coordination 1, short-circuit breaking capacity I_q = 50 kA



500 V AC

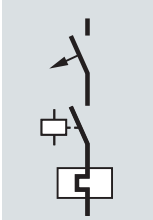
Standard induction motor 4-pole at 500 V AC[1]		Setting range Overload release Motor starter protector/circuit breaker	Motor starter protector/circuit breaker	Contactor[2]	Size	Overload relay	Setting range Overload release Overload relay	Short-circuit breaking capacity I_q
Standard output P	Motor current (guide value) I							
kW	A	A	Order No.	Order No.		Order No.	A	kA
0.06	0.2	None	3RV13 21-0BC10	3RT10 15-1AP01	S0/S00	3RU11 16-0BB0	0.14 ... 0.20	50
0.09	0.2	None	3RV13 21-0CC10	3RT10 15-1AP01	S0/S00	3RU11 16-0CB0	0.18 ... 0.25	50
0.12	0.3	None	3RV13 21-0DC10	3RT10 15-1AP01	S0/S00	3RU11 16-0DB0	0.22 ... 0.32	50
0.12	0.3	None	3RV13 21-0EC10	3RT10 15-1AP01	S0/S00	3RU11 16-0EB0	0.28 ... 0.40	50
0.18	0.5	None	3RV13 21-0FC10	3RT10 15-1AP01	S0/S00	3RU11 16-0FB0	0.35 ... 0.50	50
0.18	0.5	None	3RV13 21-0GC10	3RT10 15-1AP01	S0/S00	3RU11 16-0GB0	0.45 ... 0.63	50
0.25	0.7	None	3RV13 21-0HC10	3RT10 15-1AP01	S0/S00	3RU11 16-0HB0	0.55 ... 0.80	50
0.37	0.9	None	3RV13 21-0JC10	3RT10 15-1AP01	S0/S00	3RU11 16-0JB0	0.70 ... 1.00	50
0.55	1.2	None	3RV13 21-0KC10	3RT10 15-1AP01	S0/S00	3RU11 16-0KB0	0.90 ... 1.25	50
0.75	1.5	None	3RV13 21-1AC10	3RT10 15-1AP01	S0/S00	3RU11 16-1AB0	1.10 ... 1.60	50
0.75	1.5	None	3RV13 21-1BC10	3RT10 15-1AP01	S0/S00	3RU11 16-1BB0	1.40 ... 2.00	50
1.1	2.2	None	3RV13 21-1CC10	3RT10 15-1AP01	S0/S00	3RU11 16-1CB0	1.80 ... 2.50	50
1.5	2.9	None	3RV13 21-1DC10	3RT10 15-1AP01	S0/S00	3RU11 16-1DB0	2.20 ... 3.20	50
2.2	4.0	None	3RV13 21-1FC10	3RT10 15-1AP01	S0/S00	3RU11 16-1FB0	3.50 ... 5.00	50
3	5.2	None	3RV13 21-1GC10	3RT10 15-1AP01	S0/S00	3RU11 16-1GB0	4.50 ... 6.30	50
4	6.8	None	3RV13 21-1HC10	3RT10 16-1AP01	S0/S00	3RU11 16-1HB0	5.50 ... 8.00	50
5.5	9.2	None	3RV13 21-1JC10	3RT10 17-1AP01	S0/S00	3RU11 16-1JB0	7.00 ... 10.0	50
7.5	12.4	None	3RV13 21-1KC10	3RT10 25-1AP00	S0/S0	3RU11 26-1KB0	9.00 ... 12.5	50
7.5	12.4	None	3RV13 21-4AC10	3RT10 25-1AP00	S0/S0	3RU11 26-4AB0	11.0 ... 16.0	50
11	17.6	None	3RV13 21-4BC10	3RT10 26-1AP00	S0/S0	3RU11 26-4BB0	14.0 ... 20.0	50
15	23	None	3RV13 31-4DC10	3RT10 34-1AP00	S2/S2	3RU11 36-4DB0	18.0 ... 25.0	50
18.5	28	None	3RV13 31-4EC10	3RT10 34-1AP00	S2/S2	3RU11 36-4EB0	22.0 ... 32.0	50
22	33	None	3RV13 31-4FC10	3RT10 35-1AP00	S2/S2	3RU11 36-4FB0	28.0 ... 40.0	50
30	44	None	3RV13 31-4GC10	3RT10 36-1AP00	S2/S2	3RU11 36-4GB0	36.0 ... 45.0	50
30	44	None	3RV13 31-4HC10	3RT10 36-1AP00	S2/S2	3RU11 36-4HB0	40.0 ... 50.0	50
37	53	None	3RV13 41-4JC10	3RT10 44-1AP00	S3/S3	3RU11 46-4JB0	45.0 ... 63.0	50
45	64	None	3RV13 41-4KC10	3RT10 44-1AP00	S3/S3	3RU11 46-4KB0	57.0 ... 75.0	50
55	78	None	3RV13 41-4LC10	3RT10 45-1AP00	S3/S3	3RU11 46-4LB0	70.0 ... 90.0	50

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

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

Motor starter protector + contactor + 3RU11 thermal overload relay

CLASS 10, type of coordination 2, short-circuit breaking capacity I_q = 50 kA



500 V AC

Standard induction motor 4-pole at 500 V AC[1]		Setting range	Motor starter protector	Contactor[2]	Size	Overload relay	Setting range	Short-circuit breaking capacity I_q
Standard output P	Motor current (guide value) I	Overload release Motor starter protector					Overload release Overload relay	
kW	A	A	Order No.	Order No.		Order No.	A	kA
0.06	0.2	None	3RV13 21-0BC10	3RT10 15-1AP01	S0/S00	3RU11 16-0BB0	0.14 ... 0.20	50
0.09	0.2	None	3RV13 21-0CC10	3RT10 15-1AP01	S0/S00	3RU11 16-0CB0	0.18 ... 0.25	50
0.12	0.3	None	3RV13 21-0DC10	3RT10 15-1AP01	S0/S00	3RU11 16-0DB0	0.22 ... 0.32	50
0.12	0.3	None	3RV13 21-0EC10	3RT10 15-1AP01	S0/S00	3RU11 16-0EB0	0.28 ... 0.40	50
0.18	0.5	None	3RV13 21-0FC10	3RT10 15-1AP01	S0/S00	3RU11 16-0FB0	0.35 ... 0.50	50
0.18	0.5	None	3RV13 21-0GC10	3RT10 15-1AP01	S0/S00	3RU11 16-0GB0	0.45 ... 0.63	50
0.25	0.7	None	3RV13 21-0HC10	3RT10 15-1AP01	S0/S00	3RU11 16-0HB0	0.55 ... 0.80	50
0.37	0.9	None	3RV13 21-0JC10	3RT10 15-1AP01	S0/S00	3RU11 16-0JB0	0.70 ... 1.00	50
0.55	1.2	None	3RV13 21-0KC10	3RT10 15-1AP01	S0/S00	3RU11 16-0KB0	0.90 ... 1.25	50
0.75	1.5	None	3RV13 21-1AC10	3RT10 15-1AP01	S0/S00	3RU11 16-1AB0	1.10 ... 1.60	50
0.75	1.5	None	3RV13 21-1BC10	3RT10 24-1AP00	S0/S0	3RU11 16-1BB0	1.40 ... 2.00	50
1.1	2.2	None	3RV13 21-1CC10	3RT10 26-1AP00	S0/S0	3RU11 26-1CB0	1.80 ... 2.50	50
1.5	2.9	None	3RV13 21-1DC10	3RT10 34-1AP00	S0/S2	3RU11 26-1DB0[3]	2.20 ... 3.20	50
2.2	4.0	None	3RV13 21-1FC10	3RT10 34-1AP00	S0/S2	3RU11 26-1FB0[3]	3.50 ... 5.00	50
3	5.2	None	3RV13 21-1GC10	3RT10 34-1AP00	S0/S2	3RU11 26-1GB0[3]	4.50 ... 6.30	50
4	6.8	None	3RV13 21-1HC10	3RT10 34-1AP00	S0/S2	3RU11 36-1HB0	5.50 ... 8.00	50
5.5	9.2	None	3RV13 21-1JC10	3RT10 34-1AP00	S0/S2	3RU11 36-1JB0	7.00 ... 10.0	50
7.5	12.4	None	3RV13 21-1KC10	3RT10 34-1AP00	S0/S2	3RU11 36-1KB0	9.00 ... 12.5	50
11	17.6	None	3RV13 31-4BC10	3RT10 34-1AP00	S2/S2	3RU11 36-4BB0	14.0 ... 20.0	50
15	23	None	3RV13 31-4DC10	3RT10 34-1AP00	S2/S2	3RU11 36-4DB0	18.0 ... 25.0	50
18.5	28	None	3RV13 31-4EC10	3RT10 34-1AP00	S2/S2	3RU11 36-4EB0	22.0 ... 32.0	50
22	33	None	3RV13 31-4FC10	3RT10 35-1AP00	S2/S2	3RU11 36-4FB0	28.0 ... 40.0	50
30	44	None	3RV13 31-4GC10	3RT10 36-1AP00	S2/S2	3RU11 36-4GB0	36.0 ... 45.0	50
30	44	None	3RV13 31-4HC10	3RT10 36-1AP00	S2/S2	3RU11 36-4HB0	40.0 ... 50.0	50
37	53	None	3RV13 41-4JC10	3RT10 44-1AP00	S3/S3	3RU11 46-4JB0	45.0 ... 63.0	50
45	64	None	3RV13 41-4KC10	3RT10 44-1AP00	S3/S3	3RU11 46-4KB0	57.0 ... 75.0	50
55	78	None	3RV13 41-4LC10	3RT10 45-1AP00	S3/S3	3RU11 46-4LB0	70.0 ... 90.0	50

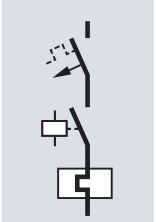
1) Guide value for 4-pole standard motors for 500 V AC, 50 Hz. Selection depends on the concrete startup and rated data of the protected motor.

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

3) Stand-alone installation.

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

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



500 V AC

Standard induction motor 4-pole at 500 V AC[1]		Setting range Overload release Motor starter protector/circuit breaker[2]	Motor starter protector/circuit breaker	Contactor[3]	Size	Overload relay	Setting range Overload release Overload relay	Short-circuit breaking capacity I_q
Standard output P	Motor current (guide value) I							
kW	A	A	Order No.	Order No.		Order No.	A	kA
Type of coordination 2								
0.06	0.2	0.22 ... 0.32	3RV10 11-0DA10	3RT10 15-1AP01	S00/S00	3RB20 16-1RB0/ 3RB21 13-4RB0	0.10 ... 0.40	50
0.09	0.2	0.28 ... 0.40	3RV10 11-0EA10	3RT10 15-1AP01	S00/S00		0.10 ... 0.40	50
0.12	0.3	0.45 ... 0.63	3RV10 11-0GA10	3RT10 15-1AP01	S00/S00		0.10 ... 0.40	50
0.18	0.5	0.60 ... 0.80	3RV10 11-0HA10	3RT10 15-1AP01	S00/S00	3RB20 16-1NB0/ 3RB21 13-4NB0	0.32 ... 1.25	50
0.25	0.7	0.70 ... 1.00	3RV10 11-0JA10	3RT10 15-1AP01	S00/S00		0.32 ... 1.25	50
0.37	0.9	1.10 ... 1.60	3RV10 11-1AA10	3RT10 15-1AP01	S00/S00		0.32 ... 1.25	50
0.55	1.2	1.10 ... 1.60	3RV10 11-1AA10	3RT10 15-1AP01	S00/S00	3RB20 16-1PB0/ 3RB21 23-4PB0	1.00 ... 4.00	50
0.55	1.2	None	3RV13 21-0KC10	3RT10 24-1AP01	S0/S0	3RB21 23-4PB0/ 3RB21 13-4PB0	1.00 ... 4.00	50
0.75	1.5	None	3RV13 21-1BC10	3RT10 24-1AP00	S0/S0		1.00 ... 4.00	50
1.1	2.2	None	3RV13 21-1CC10	3RT10 26-1AP00	S0/S0		1.00 ... 4.00	50
1.5	2.9	None	3RV13 21-1DC10	3RT10 34-1AP00	S0/S2		1.00 ... 4.00	50
2.2	4	None	3RV13 21-1FC10	3RT10 34-1AP00	S0/S2	3RB20 26-1SB0/ 3RB21 23-4SB0	3.00 ... 12.0	50
3	5.2	None	3RV13 21-1GC10	3RT10 34-1AP00	S0/S2		3.00 ... 12.0	50
4	6.8	None	3RV13 21-1HC10	3RT10 34-1AP00	S0/S2	3RB20 36-1QB0/ 3RB21 23-4QB0	6.00 ... 25.0	50
5.5	9.2	None	3RV13 21-1JC10	3RT10 34-1AP00	S0/S2		6.00 ... 25.0	50
7.5	12.4	None	3RV13 31-4AC10	3RT10 34-1AP00	S2/S2		6.00 ... 25.0	50
11	17.6	None	3RV13 31-4BC10	3RT10 34-1AP00	S2/S2	3RB20 36-1UB0/ 3RB21 33-4UW1	12.5 ... 50.0	50
15	23	None	3RV13 31-4EC10	3RT10 34-1AP00	S2/S2		12.5 ... 50.0	50
18.5	28	28.0 ... 40.0	3RV10 31-4FA10	3RT10 35-1AP00	S2/S2		12.5 ... 50.0	50
22	33	40.0 ... 50.0	3RV10 31-4HA10	3RT10 36-1AP00	S2/S2		12.5 ... 50.0	50
22	33	None	3RV13 41-4FC10	3RT10 44-1AP00	S3/S3	3RB20 46-1UB0/ 3RB21 43-4UB0	12.5 ... 50.0	50
30	44	None	3RV13 41-4HC10	3RT10 44-1AP00	S3/S3	3RB20 46-1EB0/ 3RB21 43-4EB0	25.0 ... 100	50
37	53	None	3RV13 41-4JC10	3RT10 44-1AP00	S3/S3		25.0 ... 100	50
45	64	57.0 ... 75.0	3RV10 41-4KA10	3RT10 44-1AP00	S3/S3		25.0 ... 100	50
55	78	70.0 ... 90.0	3RV10 41-4LA10	3RT10 45-1AP00	S3/S3		25.0 ... 100	50
55	78	None	3VL27 10-3DK33	3RT10 54-1AP36	–/S6	3RB20 56-1FW2/ 3RB21 53-4FW2	50.0 ... 200	50
75	106	None	3VL27 16-3DK33	3RT10 54-1AP36	–/S6		50.0 ... 200	50
90	128	None	3VL27 16-3DK33	3RT10 55-6AP36	–/S6	3RB20 56-1FC2/ 3RB21 53-4FC2	50.0 ... 200	50
110	156	None	3VL27 16-3DK33	3RT10 56-6AP36	–/S6		50.0 ... 200	50
110	156	None	3VL37 25-3DK36	3RT10 56-6AP36	–/S6	3RB20 66-1GC2/ 3RB21 63-4GC2	55.0 ... 250	50
132	184	None	3VL37 25-3DK36	3RT10 64-6AP36	–/S10		55.0 ... 250	50
132	184	None	3VL37 25-3DK36	3RT12 64-6AP36	–/S10V		55.0 ... 250	50
160	224	None	3VL37 25-3DK36	3RT10 65-6AP36	–/S10		55.0 ... 250	50
160	224	None	3VL47 31-3DK36	3RT10 65-6AP36	–/S10		55.0 ... 250	50
160	224	None	3VL37 25-3DK36	3RT12 65-6AP36	–/S10V		55.0 ... 250	50
200	280	None	3VL47 31-3DK36	3RT10 66-6AP36	–/S10	3RB20 66-1MC2/ 3RB21 63-4MC2	160 ... 630	50
200	280	None	3VL47 31-3DK36	3RT12 66-6AP36	–/S10V		160 ... 630	50
250	344	None	3VL57 50-3DK36	3RT10 75-6AP36	–/S12		160 ... 630	50
250	344	None	3VL57 50-3DK36	3RT12 75-6AP36	–/S12V		160 ... 630	50
315	432	None	3VL57 50-3DK36	3RT10 76-6AP36	–/S12		160 ... 630	50
315	432	None	3VL57 50-3DK36	3RT12 76-6AP36	–/S12V		160 ... 630	50
355	488	None	3VL57 50-3DK36	3RT10 76-6AP36	–/S12		160 ... 630	50
355	488	None	3VL57 50-3DK36	3RT12 76-6AP36	–/S12V		160 ... 630	50
Type of coordination 1								
400	552	None	3VL77 12-2DE36	3TF68 44-0CM7	–/14	3RB20 66-2MC2/ 3RB21 63-4MC2	160 ... 630	50
500	680	None	3VL87 16-2DE36	3TF69 44-0CM7	–/14	3UF1 868-3GA00 + 3RB20 16-1NB0/ 3UF1 868-3GA00 + 3RB21 13-4RB0[4]	205 ... 820	50
560	760	None	3VL87 16-2DE36	3TF69 44-0CM7	–/14		160 ... 630	50

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

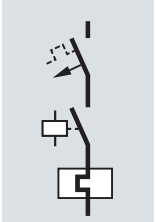
2) The motor starter protector/circuit breaker is to be set to maximum current value.

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

4) Use terminal bracket for stand-alone installation of overload relays.

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

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



500 V AC

Standard induction motor 4-pole at 500 V AC[1] Standard output P	Motor current (guide value) I	Setting range Overload release Motor starter protector /circuit breaker[2]	Motor starter protector/circuit breaker	Contactor[3]	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
Type of coordination 2								
0.06	0.2	0.28 ... 0.40	3RV10 11-0EA10	3RT10 15-1AP01	S00/S00	3RB20 16-2RB0/ 3RB21 13-4RB0	0.10 ... 0.40	50
0.09	0.2	0.45 ... 0.63	3RV10 11-0GA10	3RT10 15-1AP01	S00/S00		0.10 ... 0.40	50
0.12	0.3	0.55 ... 0.80	3RV10 11-0HA10	3RT10 15-1AP01	S00/S00	3RB20 16-2NB0/ 3RB21 13-4NB0	0.32 ... 1.25	50
0.18	0.5	0.70 ... 1.00	3RV10 11-0JA10	3RT10 15-1AP01	S00/S00		0.32 ... 1.25	50
0.25	0.7	0.90 ... 1.25	3RV10 11-0KA10	3RT10 15-1AP01	S00/S00		0.32 ... 1.25	50
0.37	0.9	1.10 ... 1.60	3RV10 11-1AA10	3RT10 15-1AP01	S00/S00		0.32 ... 1.25	50
0.55	1.2	None	3RV13 21-1BC10	3RT10 24-1AP00	S0/S0	3RB21 23-4PB0/ 3RB21 13-4PB0	1.00 ... 4.00	50
0.75	1.5	None	3RV13 21-1DC10	3RT10 26-1AP00	S0/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	None	3RV13 21-1HC10	3RT10 34-1AP00	S0/S2	3RB20 26-2SB0/ 3RB21 23-4SB0	3.00 ... 12.0	50
3	5.2	None	3RV13 21-1JC10	3RT10 34-1AP00	S0/S2		3.00 ... 12.0	50
4	6.8	None	3RV13 21-4AC10	3RT10 34-1AP00	S0/S2	3RB20 36-2QB0/ 3RB21 23-4QB0	6.00... 25.0	50
5.5	9.2	11.0 ... 16.0	3RV10 31-4AA10	3RT10 34-1AP00	S2/S2		6.00... 25.0	50
7.5	12.4	18.0 ... 25.0	3RV10 31-4DA10	3RT10 34-1AP00	S2/S2		6.00... 25.0	50
11	17.6	22.0 ... 32.0	3RV10 31-4EA10	3RT10 35-1AP00	S2/S2		6.00... 25.0	50
15	23	28.0 ... 40.0	3RV10 31-4FA10	3RT10 36-1AP00	S2/S2	3RB20 36-2UB0/ 3RB21 33-4UW1	12.5 ... 50.0	50
18.5	28	36.0 ... 50.0	3RV10 41-4HA10	3RT10 44-1AP00	S3/S3		12.5 ... 50.0	50
22	33	45.0 ... 63.0	3RV10 41-4JA10	3RT10 44-1AP00	S3/S3	3RB20 36-2UW1/ 3RB21 33-4UW1	12.5 ... 50.0	50
22	33	45.0 ... 63.0	3RV10 41-4JA10	3RT10 44-1AP00	S3/S3	3RB20 46-2UB0/ 3RB21 43-4UB0	12.5 ... 50.0	50
30	44	57.0 ... 75.0	3RV10 41-4KA10	3RT10 44-1AP00	S3/S3	3RB20 46-2EB0/ 3RB21 43-4EB0	25.0 ... 100	50
37	53	70.0 ... 90.0	3RV10 41-4LA10	3RT10 45-1AP00	S3/S3		25.0 ... 100	50
45	64	70.0 ... 90.0	3RV10 42-4LB10	3RT10 54-1AP36	S3/S6		25.0 ... 100	50
45	64	70.0 ... 90.0	3RV10 42-4LB10	3RT10 54-1AP36	S3/S6	3RB20 56-2FW2/ 3RB21 53-4FW2	50.0 ... 200	50
55	78	None	3VL27 10-3DK33	3RT10 54-1AP36	–/S6		50.0 ... 200	50
75	106	None	3VL27 16-3DK33	3RT10 55-1AP36	–/S6		50.0 ... 200	50
90	128	None	3VL27 16-3DK33	3RT10 56-6AP36	–/S6	3RB20 56-2FC2/ 3RB21 53-4FC2	50.0 ... 200	50
110	156	None	3VL27 16-3DK33	3RT10 64-6AP36	–/S10	3RB20 66-2GC2/ 3RB21 63-4GC2	55.0 ... 250	50
132	184	None	3VL37 25-3DK36	3RT10 65-6AP36	–/S10		55.0 ... 250	50
132	184	None	3VL37 25-3DK36	3RT12 64-6AP36	–/S10V		55.0 ... 250	50
160	224	None	3VL37 25-3DK36[4]	3RT12 65-6AP36	–/S10V		55.0 ... 250	50
200	280	None	3VL47 31-3DK36	3RT10 75-6AP36	–/S12	3RB20 66-2MC2/ 3RB21 63-4MC2	160 ... 630	50
200	280	None	3VL47 31-3DK36	3RT12 66-6AP36	–/S10V		160 ... 630	50
250	344	None	3VL57 50-3DK36	3RT10 76-6AP36	–/S12		160 ... 630	50
250	344	None	3VL57 50-3DK36	3RT12 75-6AP36	–/S12V		160 ... 630	50
315	432	None	3VL57 50-3DK36	3RT12 76-6AP36	–/S12V		160 ... 630	50
355	488	None	3VL57 50-3DK36	3RT12 76-6AP36	–/S12V		160 ... 630	50
Type of coordination 1								
400	552	None	3VL77 12-2DE36	3TF69 44-0CM7	–/14	3RB20 66-2MC2/ 3RB21 63-4MC2	160 ... 630	50

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

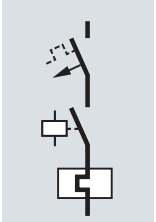
2) The motor starter protector/circuit breaker is to be set to maximum current value.

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

4) Alternatively 3VL47 31-3DK36 also possible.

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

CLASS 30, types of coordination 2 and 1, short-circuit breaking capacity I_q = 50 kA



500 V AC

Standard induction motor 4-pole at 500 V AC[1]		Setting range Overload release Motor starter protector/ circuit breaker[2]	Motor starter protector/circuit breaker	Contactor[3]	Size	Overload relay	Setting range Overload release Overload relay	Short-circuit breaking capacity I_q
Standard output P	Motor current (guide value) I							
kW	A	A	Order No.	Order No.		Order No.	A	kA
Type of coordination 2								
0.06	0.2	0.45 ... 0.63	3RV10 11-0GA10	3RT10 15-1AP01	S00/S00	3RB21 13-4RB0	0.10 ... 0.40	50
0.09	0.2	0.55 ... 0.80	3RV10 11-0HA10	3RT10 15-1AP01	S00/S00		0.10 ... 0.40	50
0.12	0.3	0.70 ... 1.00	3RV10 11-0JA10	3RT10 15-1AP01	S00/S00	3RB21 13-4NB0	0.32 ... 1.25	50
0.18	0.5	0.90 ... 1.25	3RV10 11-0KA10	3RT10 15-1AP01	S00/S00		0.32 ... 1.25	50
0.25	0.7	1.10 ... 1.60	3RV10 11-1AA10	3RT10 15-1AP01	S00/S00		0.32 ... 1.25	50
0.37	0.9	1.40 ... 2.00	3RV10 11-1BA10	3RT10 15-1AP01	S00/S00		0.32 ... 1.25	50
0.55	1.2	2.20 ... 3.20	3RV10 21-1DA10	3RT10 34-1AP00	S0/S2	3RB21 23-4PB0/ 3RB21 13-4PB0	1.00 ... 4.00	50
0.75	1.5	2.80 ... 4.00	3RV10 21-1EA10	3RT10 34-1AP00	S0/S2		1.00 ... 4.00	50
1.1	2.2	3.50 ... 5.00	3RV10 21-1FA10	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	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		3.00 ... 12.0	50
4	6.8	11.0 ... 16.0	3RV10 31-4AA10	3RT10 34-1AP00	S2/S2	3RB21 33-4QB0/ 3RB21 23-4QB0	6.00... 25.0	50
5.5	9.2	14.0 ... 20.0	3RV10 31-4BA10	3RT10 34-1AP00	S2/S2		6.00... 25.0	50
7.5	12.4	22.0 ... 32.0	3RV10 31-4EA10	3RT10 34-1AP00	S2/S2		6.00... 25.0	50
11	17.6	28.0 ... 40.0	3RV10 31-4FA10	3RT10 35-1AP00	S2/S2	3RB21 36-2UB0/ 3RB21 33-4UW1	12.5 ... 50.0	50
15	23	28.0 ... 40.0	3RV10 42-4FB10	3RT10 44-1AP00	S3/S3	3RB21 33-4UW1	12.5 ... 50.0	50
15	23	28.0 ... 40.0	3RV10 42-4FB10	3RT10 44-1AP00	S3/S3	3RB21 43-4UB0	12.5 ... 50.0	50
18.5	28	36.0 ... 50.0	3RV10 42-4HB10	3RT10 44-1AP00	S3/S3	3RB21 33-4UW1	12.5 ... 50.0	50
18.5	28	36.0 ... 50.0	3RV10 42-4HB10	3RT10 44-1AP00	S3/S3	3RB21 43-4UB0	12.5 ... 50.0	50
22	33	36.0 ... 50.0	3RV10 42-4HB10	3RT10 44-1AP00	S3/S3	3RB21 33-4UW1	12.5 ... 50.0	50
22	33	36.0 ... 50.0	3RV10 42-4HB10	3RT10 44-1AP00	S3/S3	3RB21 43-4UB0	12.5 ... 50.0	50
30	44	57.0 ... 75.0	3RV10 42-4KB10	3RT10 45-1AP00	S3/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	None	3VL27 10-3DK33	3RT10 54-1AP36	–/S6		50.0 ... 200	50
55	78	None	3VL27 10-3DK33	3RT10 55-1AP36	–/S6		50.0 ... 200	50
75	106	None	3VL27 16-3DK33	3RT10 56-6AP36	–/S6	3RB21 53-4FC2	50.0 ... 200	50
90	128	None	3VL27 16-3DK33	3RT10 64-6AP36	–/S10	3RB21 63-4GC2	55.0 ... 250	50
110	156	None	3VL27 16-3DK33[4]	3RT10 65-6AP36	–/S10		55.0 ... 250	50
110	156	None	3VL27 16-3DK33	3RT12 64-6AP36	–/S10V		55.0 ... 250	50
132	184	None	3VL37 25-3DK36	3RT12 65-6AP36	–/S10V		55.0 ... 250	50
160	224	None	3VL37 25-3DK36	3RT10 75-6AP36	–/S12		55.0 ... 250	50
160	224	None	3VL37 25-3DK36	3RT12 66-6AP36	–/S10V		55.0 ... 250	50
200	280	None	3VL47 31-3DK36	3RT10 76-6AP36	–/S12	3RB21 63-4MC2	160 ... 630	50
200	280	None	3VL47 31-3DK36	3RT12 75-6AP36	–/S12V		160 ... 630	50
250	344	None	3VL57 50-3DK36	3RT12 76-6AP36	–/S12V		160 ... 630	50
Type of coordination 1								
315	432	None	3VL57 50-2DK36	3TF69 44-0CM7	–/14	3RB21 63-2MC2/ 3RB21 63-4MC2	160 ... 630	50
355	488	None	3VL57 50-2DK36	3TF69 44-0CM7	–/14		160 ... 630	50

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

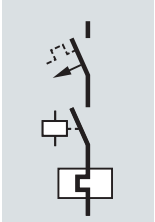
2) The motor starter protector/circuit breaker is to be set to maximum current value.

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

4) Alternatively 3VL27 25-3DK33 also possible.

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

CLASS 5 and CLASS 10, types of coordination 2 and 1, short-circuit breaking capacity I_q = 50 kA



500 V AC

Standard induction motor 4-pole at 500 V AC[1]		Setting range Overload release Motor starter protector/circuit breaker[2]	Motor starter protector/circuit breaker	Contactor[3]	Size	SIMOCODE pro or overload relay (current measuring module)[4]	Setting range Overload release Overload relay	Short-circuit breaking capacity I_q
Standard output P	Motor current (guide value) I							
kW	A	A	Order No.	Order No.		Order No.	A	kA
Type of coordination 2								
0.12	0.3	None	3RV13 21-0HC10	3RT10 24-1AP00	S0/S0	3UF7 100-1AA00/ 3RB29 06-2BG1	0.30 ... 3.00	50
0.18	0.5	None	3RV13 21-0HC10	3RT10 24-1AP00	S0/S0		0.30 ... 3.00	50
0.25	0.7	None	3RV13 21-0JC10	3RT10 24-1AP00	S0/S0		0.30 ... 3.00	50
0.37	0.9	None	3RV13 21-0KC10	3RT10 24-1AP00	S0/S0		0.30 ... 3.00	50
0.55	1.2	None	3RV13 21-0KC10	3RT10 24-1AP00	S0/S0		0.30 ... 3.00	50
0.75	1.5	None	3RV13 21-1BC10	3RT10 24-1AP00	S0/S0		0.30 ... 3.00	50
1.1	2.2	None	3RV13 21-1CC10	3RT10 26-1AP00	S0/S0		0.30 ... 3.00	50
1.5	2.9	None	3RV13 21-1DC10	3RT10 34-1AP00	S0/S2		0.30 ... 3.00	50
2.2	4	None	3RV13 21-1EC10	3RT10 34-1AP00	S0/S2	3UF7 101-1AA00/ 3RB29 06-2DG1	2.40 ... 25.0	50
3	5.2	None	3RV13 21-1GC10	3RT10 34-1AP00	S0/S2		2.40 ... 25.0	50
4	6.8	None	3RV13 21-1HC10	3RT10 34-1AP00	S0/S2		2.40 ... 25.0	50
5.5	9.2	None	3RV13 21-1JC10	3RT10 34-1AP00	S0/S2		2.40 ... 25.0	50
7.5	12.4	None	3RV13 21-1KC10	3RT10 34-1AP00	S0/S2		2.40 ... 25.0	50
7.5	12.4	None	3RV13 31-4AC10	3RT10 34-1AP00	S2/S2		2.40 ... 25.0	50
11	17.6	None	3RV13 31-4BC10	3RT10 34-1AP00	S2/S2		2.40 ... 25.0	50
15	23	None	3RV13 31-4EC10	3RT10 34-1AP00	S2/S2	3UF7 102-1AA00/ 3RB29 06-2JG1	10.0 ... 100	50
18.5	28	None	3RV13 31-4FC10	3RT10 35-1AP00	S2/S2		10.0 ... 100	50
22	33	40.0 ... 50.0	3RV10 31-4HA10	3RT10 36-1AP00	S2/S2		10.0 ... 100	50
22	33	None	3RV13 41-4FC10	3RT10 44-1AP00	S3/S3		10.0 ... 100	50
30	44	None	3RV13 41-4HC10	3RT10 44-1AP00	S3/S3		10.0 ... 100	50
37	53	None	3RV13 41-4JC10	3RT10 44-1AP00	S3/S3		10.0 ... 100	50
45	64	None	3RV13 41-4KC10	3RT10 44-1AP00	S3/S3		10.0 ... 100	50
55	78	None	3RV13 41-4LC10	3RT10 45-1AP00	S3/S3		10.0 ... 100	50
55	78	None	3VL27 10-3DK33	3RT10 54-1AP36	–/S6	3UF7 103-1AA00/ 3RB29 56-2TG2	20.0 ... 200	50
75	106	None	3VL27 16-3DK33	3RT10 54-1AP36	–/S6		20.0 ... 200	50
90	128	None	3VL27 16-3DK33	3RT10 55-6AP36	–/S6		20.0 ... 200	50
110	156	None	3VL27 16-3DK33	3RT10 56-6AP36	–/S6		20.0 ... 200	50
110	156	None	3VL27 25-3DK33	3RT10 56-6AP36	–/S6		20.0 ... 200	50
132	184	None	3VL37 25-3DK36	3RT10 64-6AP36	–/S10	3UF7 104-1AA00/ 3RB29 66-2WH2	63.0 ... 630	50
132	184	None	3VL37 25-3DK36	3RT12 64-6AP36	–/S10V		63.0 ... 630	50
160	224	None	3VL37 25-3DK36	3RT10 65-6AP36	–/S10		63.0 ... 630	50
160	224	None	3VL37 25-3DK36	3RT12 65-6AP36	–/S10V		63.0 ... 630	50
200	280	None	3VL47 31-3DK36	3RT10 66-6AP36	–/S10		63.0 ... 630	50
200	280	None	3VL47 31-3DK36	3RT12 66-6AP36	–/S10V		63.0 ... 630	50
250	344	None	3VL57 50-3DK36	3RT10 75-6AP36	–/S12		63.0 ... 630	50
250	344	None	3VL57 50-3DK36	3RT12 75-6AP36	–/S12V		63.0 ... 630	50
315	432	None	3VL57 50-3DK36	3RT10 76-6AP36	–/S12		63.0 ... 630	50
315	432	None	3VL57 50-3DK36	3RT12 76-6AP36	–/S12V		63.0 ... 630	50
355	488	None	3VL57 50-3DK36	3RT10 76-6AP36	–/S12		63.0 ... 630	50
355	488	None	3VL57 50-3DK36	3RT12 76-6AP36	–/S12V		63.0 ... 630	50
Type of coordination 1								
400	552	None	3VL77 12-2DE36	3TF68 44-0CM7	–/14	3UF7 104-1AA00/ 3RB29 66-2WH2	63.0 ... 630	50
500	680	None	3VL87 16-2DE36	3TF69 44-0CM7	–/14	3UF1 868-3GA00 + 3UF7 100-1AA0/ 3UF1 868-3GA00 + 3RB29 06-2BG1	205 ... 820	50
560	760	None	3VL87 16-2DE36	3TF69 44-0CM7	–/14		205 ... 820	50

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

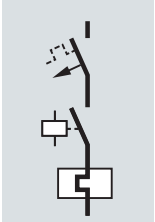
2) The motor starter protector/circuit breaker is to be set to maximum current value.

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

4) The current measuring modules required for 3UF7 or 3RB22/3RB23 are specified in each case. For details of the basic units 3UF7 or 3RB22/3RB23 which are also required see page 9.

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

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



500 V AC

Standard induction motor 4-pole at 500 V AC[1]		Setting range Overload release Motor starter protector/circuit breaker[2]	Motor starter protector/circuit breaker	Contactor[3]	Size	SIMOCODE pro or overload relay (current measuring module)[4]	Setting range Overload release Overload relay	Short-circuit breaking capacity I_q
Standard output P	Motor current (guide value) I							
kW	A	A	Order No.	Order No.		Order No.	A	kA
Type of coordination 2								
0.12	0.3	None	3RV13 21-0HC10	3RT10 24-1AP00	S0/S0	3UF7 100-1AA0/ 3RB29 06-2BG1	0.30 ... 3.00	50
0.18	0.5	None	3RV13 21-0JC10	3RT10 24-1AP00	S0/S0		0.30 ... 3.00	50
0.25	0.7	None	3RV13 21-0KC10	3RT10 24-1AP00	S0/S0		0.30 ... 3.00	50
0.37	0.9	None	3RV13 21-1AC10	3RT10 24-1AP00	S0/S0		0.30 ... 3.00	50
0.55	1.2	None	3RV13 21-1BC10	3RT10 24-1AP00	S0/S0		0.30 ... 3.00	50
0.75	1.5	None	3RV13 21-1DC10	3RT10 26-1AP00	S0/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	None	3RV13 21-1EC10	3RT10 34-1AP00	S0/S2	3UF7 101-1AA0/ 3RB29 06-2DG1	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	None	3RV13 21-1GC10	3RT10 34-1AP00	S0/S2		2.40 ... 25.0	50
3	5.2	None	3RV13 21-1HC10	3RT10 34-1AP00	S0/S2		2.40 ... 25.0	50
4	6.8	None	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/S2		2.40 ... 25.0	50
7.5	12.4	18.0 ... 25.0	3RV10 31-4DA10	3RT10 34-1AP00	S2/S2		2.40 ... 25.0	50
11	17.6	22.0 ... 32.0	3RV10 31-4EA10	3RT10 35-1AP00	S2/S2		2.40 ... 25.0	50
15	23	28.0 ... 40.0	3RV10 31-4FA10	3RT10 36-1AP00	S2/S2	3UF7 102-1AA0/ 3RB29 06-2JG1	10.0 ... 100	50
18.5	28	36.0 ... 50.0	3RV10 41-4HA10	3RT10 44-1AP00	S3/S3		10.0 ... 100	50
22	33	45.0 ... 63.0	3RV10 41-4JA10	3RT10 44-1AP00	S3/S3		10.0 ... 100	50
30	44	57.0 ... 75.0	3RV10 41-4KA10	3RT10 44-1AP00	S3/S3		10.0 ... 100	50
37	53	70.0 ... 90.0	3RV10 41-4LA10	3RT10 45-1AP00	S3/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	3UF7 103-1AA0/ 3RB29 56-2TG2	20.0 ... 200	50
55	78	None	3VL27 10-3DK33	3RT10 54-1AP36	–/S6		20.0 ... 200	50
75	106	None	3VL27 16-3DK33	3RT10 55-1AP36	–/S6		20.0 ... 200	50
90	128	None	3VL27 16-3DK33	3RT10 56-6AP36	–/S6		20.0 ... 200	50
110	156	None	3VL27 16-3DK33	3RT10 64-6AP36	–/S10	3UF7 104-1AA0/ 3RB29 66-2WH2	63.0 ... 630	50
132	184	None	3VL37 25-3DK36	3RT10 65-6AP36	–/S10		63.0 ... 630	50
132	184	None	3VL37 25-3DK36	3RT12 64-6AP36	–/S10V		63.0 ... 630	50
160	224	None	3VL37 25-3DK36	3RT12 65-6AP36	–/S10V		63.0 ... 630	50
160	224	None	3VL47 31-3DK36	3RT12 65-6AP36	–/S10V		63.0 ... 630	50
200	280	None	3VL47 31-3DK36	3RT10 75-6AP36	–/S12		63.0 ... 630	50
200	280	None	3VL47 31-3DK36	3RT12 66-6AP36	–/S10V		63.0 ... 630	50
250	344	None	3VL57 50-3DK36	3RT10 76-6AP36	–/S12		63.0 ... 630	50
250	344	None	3VL57 50-3DK36	3RT12 75-6AP36	–/S12V		63.0 ... 630	50
315	432	None	3VL57 50-3DK36	3RT12 76-6AP36	–/S12V		63.0 ... 630	50
355	488	None	3VL57 50-3DK36	3RT12 76-6AP36	–/S12V		63.0 ... 630	50
Type of coordination 1								
400	552	None	3VL77 12-2DE36	3TF69 44-0CM7	–/S14	3UF7 104-1AA0/ 3RB29 66-2WH2	63.0 ... 630	50

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

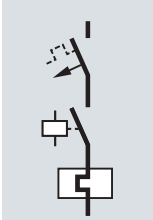
2) The motor starter protector/circuit breaker is to be set to maximum current value.

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

4) The current measuring modules required for 3UF7 or 3RB22/3RB23 are specified in each case. For details of the basic units 3UF7 or 3RB22/3RB23 which are also required see page 9.

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

CLASS 30, type of coordination 2, short-circuit breaking capacity I_q = 50 kA



500 V AC

Standard induction motor 4-pole at 500 V AC[1]		Setting range Overload release Motor starter protector/circuit breaker[2]	Motor starter protector/circuit breaker	Contactor[3]	Size	SIMOCODE pro or overload relay (current measuring module)[4]	Setting range Overload release Overload relay	Short-circuit breaking capacity I_q
Standard output P	Motor current (guide value) I							
kW	A	A	Order No.	Order No.		Order No.	A	kA
0.12	0.3	None	3RV13 21-1AC10	3RT10 24-1AP00	S0/S0	3UF7 100-1AA0/ 3RB29 06-2BG1	0.30 ... 3.00	50
0.18	0.5	None	3RV13 21-1AC10	3RT10 24-1AP00	S0/S0		0.30 ... 3.00	50
0.18	0.5	None	3RV13 21-1BC10	3RT10 24-1AP00	S0/S0		0.30 ... 3.00	50
0.25	0.7	1.40 ... 2.00	3RV10 21-1BA10	3RT10 24-1AP00	S0/S0		0.30 ... 3.00	50
0.25	0.7	None	3RV13 21-1BC10	3RT10 24-1AP00	S0/S0		0.30 ... 3.00	50
0.37	0.9	1.80 ... 2.50	3RV10 21-1CA10	3RT10 26-1AP00	S0/S0		0.30 ... 3.00	50
0.37	0.9	None	3RV13 21-1CC10	3RT10 26-1AP00	S0/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/ 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/S2		2.40 ... 25.0	50
4	6.8	11.0 ... 16.0	3RV10 31-4AA10	3RT10 34-1AP00	S2/S2		2.40 ... 25.0	50
4	6.8	14.0 ... 20.0	3RV10 31-4BA10	3RT10 34-1AP00	S2/S2		2.00 ... 25.0	50
5.5	9.2	14.0 ... 20.0	3RV10 31-4BA10	3RT10 34-1AP00	S2/S2		2.00 ... 25.0	50
5.5	9.2	18.0 ... 25.0	3RV10 31-4DA10	3RT10 34-1AP00	S2/S2		2.00 ... 25.0	50
7.5	12.4	22.0 ... 32.0	3RV10 31-4EA10	3RT10 34-1AP00	S2/S2		2.00 ... 25.0	50
11	17.6	28.0 ... 40.0	3RV10 31-4FA10	3RT10 35-1AP00	S2/S2		2.00 ... 25.0	50
15	23	28.0 ... 40.0	3RV10 42-4FB10	3RT10 44-1AP00	S3/S3	3UF7 102-1AA0/ 3RB29 06-2JG1	10.0 ... 100	50
15	22	36.0 ... 50.0	3RV10 42-4HB10	3RT10 44-1AP00	S3/S3		10.0 ... 100	50
18.5	28	36.0 ... 50.0	3RV10 42-4HB10	3RT10 44-1AP00	S3/S3		10.0 ... 100	50
18.5	28	45.0 ... 63.0	3RV10 42-4JB10	3RT10 45-1AP00	S3/S3		10.0 ... 100	50
22	33	36.0 ... 50.0	3RV10 42-4HB10	3RT10 44-1AP00	S3/S3		10.0 ... 100	50
22	33	57.0 ... 75.0	3RV10 42-4KB10	3RT10 45-1AP00	S3/S3		10.0 ... 100	50
30	44	57.0 ... 75.0	3RV10 42-4KB10	3RT10 45-1AP00	S3/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/ 3RB29 56-2TG2	20.0 ... 200	50
37	53	70.0 ... 90.0	3RV10 42-4LB10	3RT10 54-1AP36	S3/S6	3UF7 102-1AA0/ 3RB29 06-2JG1	10.0 ... 100	50
37	53	70.0 ... 90.0	3RV10 42-4LB10	3RT10 54-1AP36	S3/S6	3UF7 103-1AA0/ 3RB29 56-2TG2	20.0 ... 200	50
45	64	None	3VL27 10-3DK33	3RT10 54-1AP36	–/S6		20.0 ... 200	50
55	78	None	3VL27 10-3DK33	3RT10 55-1AP36	–/S6		20.0 ... 200	50
75	106	None	3VL27 16-3DK33	3RT10 56-6AP36	–/S6		20.0 ... 200	50

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

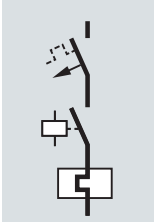
2) The motor starter protector/circuit breaker is to be set to maximum current value.

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

4) The current measuring modules required for 3UF7 or 3RB22/3RB23 are specified in each case. For details of the basic units 3UF7 or 3RB22/3RB23 which are also required see page 9.

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

CLASS 30, types of coordination 2 and 1, short-circuit breaking capacity I_q = 50 kA



500 V AC

Standard induction motor 4-pole at 500 V AC[1]		Setting range Overload release Motor starter protector/ circuit breaker	Motor starter protector/circuit breaker	Contactor[2]	Size	SIMOCODE pro or overload relay (current measuring module)[3]	Setting range Overload release Overload relay	Short-circuit breaking capacity I_q
Standard output *P*	Motor current (guide value) *I*							
kW	A	A	Order No.	Order No.		Order No.	A	kA
Type of coordination 2								
75	106	None	3VL27 16-3DK33	3RT10 64-6AP36	–/S10	3UF7 104-1BA0/ 3RB29 66-2WH2	63.0 ... 630	50
90	128	None	3VL27 16-3DK33	3RT10 64-6AP36	–/S10		63.0 ... 630	50
90	128	None	3VL37 25-3DK36	3RT12 65-6AP36	–/S10V		63.0 ... 630	50
110	156	None	3VL27 16-3DK33[4]	3RT10 65-6AP36	–/S10		63.0 ... 630	50
110	156	None	3VL27 16-3DK33[4]	3RT12 64-6AP36	–/S10V		63.0 ... 630	50
132	184	None	3VL47 31-3DK36	3RT10 76-6AP36	–/S12		63.0 ... 630	50
132	184	None	3VL37 25-3DK36	3RT12 65-6AP36	–/S10V		63.0 ... 630	50
160	224	None	3VL37 25-3DK36	3RT10 75-6AP36	–/S12		63.0 ... 630	50
160	224	None	3VL37 25-3DK36	3RT12 66-6AP36	–/S10V		63.0 ... 630	50
200	280	None	3VL47 31-3DK36	3RT10 76-6AP36	–/S12		63.0 ... 630	50
200	280	None	3VL47 31-3DK36	3RT12 75-6AP36	–/S12V		63.0 ... 630	50
250	344	None	3VL57 50-3DK36	3RT12 76-6AP36	–/S12V		63.0 ... 630	50
Type of coordination 1								
315	432	None	3VL57 50-2DK36	3TF69 44-0CM7	–/14	3UF7 104-1BA0/ 3RB29 66-2WH2	63.0 ... 630	50
355	488	None	3VL57 50-2DK36	3TF69 44-0CM7	–/14		63.0 ... 630	50

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

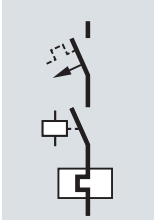
2) Rated control supply voltage 230 V AC, 50 Hz.
Other control voltages are also possible.

3) The current measuring modules required for 3UF7 or 3RB22/3RB23 are specified in each case. For details of the basic units 3UF7 or 3RB22/3RB23 which are also required see page 9.

4) Alternatively 3VL37 25-3DK36 also possible.

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

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



500 V AC

Standard induction motor 4-pole at 500 V AC[1]		Setting range Overload release Motor starter protector/circuit breaker[2]	Motor starter protector/circuit breaker	Contactor[3]	Size	SIMOCODE pro (current measuring module)[4]	Setting range Overload release Overload relay	Short-circuit breaking capacity I_q
Standard output P	Motor current (guide value) I							
kW	A	A	Order No.	Order No.		Order No.	A	kA
Type of coordination 2								
0.12	0.3	None	3RV13 21-1AC10	3RT10 24-1AP00	S0/S0	3UF7 100-1AA0	0.30 ... 3.00	50
0.18	0.5	None	3RV13 21-1BC10	3RT10 24-1AP00	S0/S0		0.30 ... 3.00	50
0.25	0.7	1.40 ... 2.00	3RV10 21-1BA10	3RT10 24-1AP00	S0/S0		0.30 ... 3.00	50
0.37	0.9	1.80 ... 2.50	3RV10 21-1CA10	3RT10 26-1AP00	S0/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/S2		2.40 ... 25.0	50
4	6.8	14.0 ... 20.0	3RV10 31-4BA10	3RT10 34-1AP00	S2/S2		2.40 ... 25.0	50
5.5	9.2	18.0 ... 25.0	3RV10 31-4DA10	3RT10 34-1AP00	S2/S2		2.40 ... 25.0	50
7.5	12.4	22.0 ... 32.0	3RV10 31-4EA10	3RT10 34-1AP00	S2/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/S3		10.0 ... 100	50
18.5	28	45.0 ... 63.0	3RV10 42-4JB10	3RT10 45-1AP00	S3/S3		10.0 ... 100	50
22	33	57.0 ... 75.0	3RV10 42-4KB10	3RT10 45-1AP00	S3/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	None	3VL27 10-3DK33	3RT10 55-1AP36	–/S6		20.0 ... 200	50
55	78	None	3VL27 16-3DK33	3RT10 56-6AP36	–/S6		20.0 ... 200	50
75	106	None	3VL27 16-3DK33	3RT10 64-6AP36	–/S10	3UF7 104-1AA0	63.0 ... 630	50
90	128	None	3VL37 25-3DK33	3RT12 65-6AP36	–/S10V		63.0 ... 630	50
110	156	None	3VL37 25-3DK33	3RT12 65-6AP36	–/S10V		63.0 ... 630	50
132	184	None	3VL47 31-3DK36	3RT10 76-6AP36	–/S12		63.0 ... 630	50
160	224	None	3VL47 31-3DK36	3RT10 76-6AP36	–/S12		63.0 ... 630	50
200	280	None	3VL57 50-3DK36	3RT12 76-6AP36	–/S12V		63.0 ... 630	50
Type of coordination 1								
250	344	None	3VL67 80-2DE36	3TF69 44-0CM7	–/14	3UF7 104-1AA0	63.0 ... 630	50

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

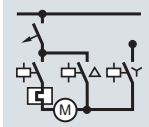
2) The motor starter protector/circuit breaker is to be set to maximum current value.

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

4) The current measuring modules required for 3UF7 are specified.
For details of the 3UF7 basic units which are also required see page 9.

Motor starter protector + wye-delta starting + 3RU11 thermal overload relay

CLASS 5 and CLASS 10, types of coordination 2 and 1, short-circuit breaking capacity I_q = 50 kA



500 V AC

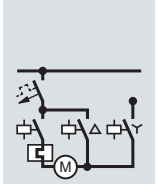
Standard induction motor 4-pole at 500 V AC[1]		Setting range Overload release Motor starter protector	Motor starter protector	Contactors[2]		Size	Overload relay	Setting range Overload release Overload relay	Short-circuit breaking capacity I_q
Standard output P	Motor current (guide value) I			Line contactor + delta contactor	Star contactor				
kW	A	A	Order No.	Order No.	Order No.		Order No.	A	kA
Type of coordination 2									
7.5	12.4	None	3RV13 31-4AC10	3RT10 34-1AP00	3RT10 24-1AP00	S2/S2/S0	3RU11 36-1JB0	7.00 ... 10.0	50
11	17.6	None	3RV13 31-4BC10	3RT10 34-1AP00	3RT10 24-1AP00	S2/S2/S0	3RU11 36-1KB0	9.00 ... 12.5	50
15	22	None	3RV13 31-4DC10	3RT10 34-1AP00	3RT10 24-1AP00	S2/S2/S0	3RU11 36-4AB0	11.0 ... 16.0	50
18.5	29	None	3RV13 31-4EC10	3RT10 34-1AP00	3RT10 24-1AP00	S2/S2/S0	3RU11 36-4BB0	14.0 ... 20.0	50
22	34	None	3RV13 31-4FC10	3RT10 35-1AP00	3RT10 24-1AP00	S2/S2/S0	3RU11 36-4DB0	18.0 ... 25.0	50
30	46	None	3RV13 31-4HC10	3RT10 36-1AP00	3RT10 26-1AP00	S2/S2/S0	3RU11 36-4EB0	22.0 ... 32.0	50
37	53	None	3RV13 41-4JC10	3RT10 44-1AP00	3RT10 34-1AP00	S3/S3/S2	3RU11 46-4FB0	28.0 ... 40.0	50
45	65	None	3RV13 41-4KC10	3RT10 44-1AP00	3RT10 34-1AP00	S3/S3/S2	3RU11 46-4HB0	36.0 ... 50.0	50
55	79	None	3RV13 41-4LC10	3RT10 45-1AP00	3RT10 34-1AP00	S3/S3/S2		36.0 ... 50.0	50
Type of coordination 1									
7.5	12.4	None	3RV13 21-4AC10	3RT10 17-1AP01	3RT10 15-1AP01	S0/S0/S00	3RU11 16-1JB0	7.00 ... 10.0	50
11	17.6	None	3RV13 21-4BC10	3RT10 24-1AP00	3RT10 24-1AP00	S0/S0/S0	3RU11 26-1KB0	9.00 ... 12.5	50
15	22	None	3RV13 21-4DC10	3RT10 24-1AP00	3RT10 24-1AP00	S0/S0/S0	3RU11 26-4AB0	11.0 ... 16.0	50
18.5	29	None	3RV13 31-4EC10	3RT10 26-1AP00	3RT10 24-1AP00	S2/S0/S0	3RU11 26-4BB0	14.0 ... 20.0	50
22	34	None	3RV13 31-4FC10	3RT10 34-1AP00	3RT10 24-1AP00	S2/S2/S0	3RU11 36-4DB0	18.0 ... 25.0	50
30	46	None	3RV13 31-4HC10	3RT10 34-1AP00	3RT10 26-1AP00	S2/S2/S0	3RU11 36-4EB0	22.0 ... 32.0	50
37	53	None	3RV13 41-4JC10	3RT10 34-1AP00	3RT10 34-1AP00	S3/S2/S2	3RU11 36-4FB0	28.0 ... 40.0	50
45	65	None	3RV13 41-4KC10	3RT10 35-1AP00	3RT10 34-1AP00	S3/S2/S2	3RU11 36-4GB0	36.0 ... 45.0	50
55	79	None	3RV13 41-4LC10	3RT10 36-1AP00	3RT10 34-1AP00	S3/S2/S2	3RU11 36-4HB0	40.0 ... 50.0	50

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

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

Motor starter protector/circuit breaker + wye-delta starting + 3RB20/3RB21 solid-state overload relay

CLASS 5 and CLASS 10, type of coordination 2, short-circuit breaking capacity I_q = 50 kA



500 V AC

Standard induction motor 4-pole at 500 V AC[1]		Setting range Overload release Motor starter protector/circuit breaker[2]	Motor starter protector/circuit breaker	Contactors[3]		Size	Overload relay	Setting range Overload release Overload relay	Short-circuit breaking capacity I_q
Standard output P	Motor current (guide value) I			Line contactor + delta contactor	Star contactor				
kW	A	A	Order No.	Order No.	Order No.		Order No.	A	kA
7.5	12.4	None	3RV13 31-4AC10	3RT10 34-1AP00	3RT10 24-1AP00	S2/S2/S0	3RB20 36-1QB0/ 3RB21 23-4QB0	6.00 ... 25.0	50
11	17.6	None	3RV13 31-4BC10	3RT10 34-1AP00	3RT10 24-1AP00	S2/S2/S0			50
15	22	None	3RV13 31-4EC10	3RT10 34-1AP00	3RT10 24-1AP00	S2/S2/S0	3RB20 36-1UB0/ 3RB21 33-4UW1	12.5 ... 50.0	50
18.5	28	28.0 ... 40.0	3RV10 31-4FA10	3RT10 35-1AP00	3RT10 24-1AP00	S2/S2/S0			50
22	33	40.0 ... 50.0	3RV10 31-4HA10	3RT10 36-1AP00	3RT10 24-1AP00	S2/S2/S0			50
30	44	None	3RV13 41-4HC10	3RT10 44-1AP00	3RT10 34-1AP00	S3/S3/S2	3RB20 46-1EB0/ 3RB21 43-4EB0	25.0 ... 100	50
37	53	None	3RV13 41-4JC10	3RT10 44-1AP00	3RT10 34-1AP00	S3/S3/S2			50
45	64	57.0 ... 75.0	3RV10 41-4KA10	3RT10 44-1AP00	3RT10 34-1AP00	S3/S3/S2			50
55	78	70.0 ... 90.0	3RV10 41-4LA10	3RT10 45-1AP00	3RT10 34-1AP00	S3/S3/S2			50
75	106	None	3VL27 16-3DK33	3RT10 54-1AP36	3RT10 44-1AP00	-/S6/S3	3RB20 56-1FW2/ 3RB21 53-4FW2	50.0 ... 200	50
90	128	None	3VL27 16-3DK33	3RT10 55-1AP36	3RT10 44-1AP00	-/S6/S3	3RB20 56-1FC2/ 3RB21 53-4FC2	50.0 ... 200	50
110	156	None	3VL27 16-3DK33	3RT10 56-6AP36	3RT10 44-1AP00	-/S6/S3			50
110	156	None	3VL37 25-3DK36	3RT10 56-6AP36	3RT10 44-1AP00	-/S6/S3			50
132	184	None	3VL37 25-3DK36	3RT10 64-6AP36	3RT10 54-1AP36	-/S10/S6	3RB20 66-1GC2/ 3RB21 63-4GC2	55.0 ... 250	50
160	224	None	3VL37 25-3DK36	3RT10 65-6AP36	3RT10 54-1AP36	-/S10/S6			50
160	224	None	3VL47 31-3DK36	3RT10 65-6AP36	3RT10 54-1AP36	-/S10/S6			50
200	280	None	3VL47 31-3DK36	3RT10 66-6AP36	3RT10 54-1AP36	-/S10/S6	3RB20 66-1MC2/ 3RB21 63-4MC2	160 ... 630	50
250	344	None	3VL57 50-3DK36	3RT10 75-6AP36	3RT10 64-6AP36	-/S12/S10			50
315	432	None	3VL57 50-3DK36	3RT10 75-6AP36	3RT10 64-6AP36	-/S12/S10			50
355	488	None	3VL57 50-3DK36	3RT10 75-6AP36	3RT10 64-6AP36	-/S12/S10			50

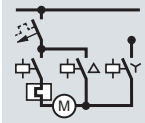
1) Guide value for 4-pole standard motors for 500 V AC, 50 Hz. Selection depends on the concrete startup and rated data of the protected motor.

2) The motor starter prot./circ. break. is to be set to maximum current value.

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

Motor starter protector/circuit breaker + wye-delta starting + SIMOCODE pro 3UF7 / 3RB22/3RB23 solid-state overload relay

CLASS 5 and CLASS 10, type of coordination 2, short-circuit breaking capacity I_q = 50 kA



500 V AC

Standard induction motor 4-pole at 500 V AC[1]		Setting range Overload release Motor starter protector/circuit breaker[2]	Motor starter protector/circuit breaker	Contactors[3]		Size	Overload relay or SIMOCODE pro (current measuring module)[4]	Setting range Overload release Overload relay	Short-circuit breaking capacity I_q
Standard output P	Motor current (guide value) I			Line contactor + delta contactor	Star contactor				
kW	A	A	Order No.	Order No.	Order No.		Order No.	A	kA
7.5	12.4	None	3RV13 31-4AC10	3RT10 34-1AP00	3RT10 24-1AP00	S2/S2/S0	3UF7 101-1AA0/ 3RB29 06-2DG1	2.40 ... 25.0	50
11	17.6	None	3RV13 31-4BC10	3RT10 34-1AP00	3RT10 24-1AP00	S2/S2/S0			50
15	23	None	3RV13 31-4EC10	3RT10 34-1AP00	3RT10 24-1AP00	S2/S2/S0	3UF7 102-1AA0/ 3RB29 06-2JG1	10.0 ... 100	50
18.5	28	None	3RV13 31-4FC10	3RT10 35-1AP00	3RT10 24-1AP00	S2/S2/S0			50
22	33	40.0 ... 50.0	3RV10 31-4HA10	3RT10 36-1AP00	3RT10 24-1AP00	S2/S2/S0			50
30	44	None	3RV13 41-4HC10	3RT10 44-1AP00	3RT10 34-1AP00	S3/S3/S2			50
37	53	None	3RV13 41-4JC10	3RT10 44-1AP00	3RT10 34-1AP00	S3/S3/S2			50
45	64	None	3RV13 41-4KC10	3RT10 44-1AP00	3RT10 34-1AP00	S3/S3/S2			50
55	78	70.0 ... 90.0	3RV10 41-4LA10	3RT10 45-1AP00	3RT10 34-1AP00	S3/S3/S2			50
75	106	None	3VL27 16-3DK33	3RT10 54-1AP36	3RT10 44-1AP00	-/S6/S3	3UF7 103-1AA0/ 3RB29 56-2TG2	20.0 ... 200	50
90	128	None	3VL27 16-3DK33	3RT10 55-1AP36	3RT10 44-1AP00	-/S6/S3			50
110	156	None	3VL27 16-3DK33	3RT10 56-6AP36	3RT10 44-1AP00	-/S6/S3			50
110	156	None	3VL27 25-3DK33	3RT10 56-6AP36	3RT10 44-1AP00	-/S6/S3			50
132	184	None	3VL37 25-3DK36	3RT10 64-6AP36	3RT10 54-1AP36	-/S10/S6	3UF7 104-1BA0/ 3RB29 66-2WH2	63.0 ... 630	50
160	224	None	3VL37 25-3DK36	3RT10 65-6AP36	3RT10 54-1AP36	-/S10/S6			50
160	224	None	3VL37 31-3DK36	3RT10 65-6AP36	3RT10 54-1AP36	-/S10/S6			50
200	280	None	3VL47 31-3DK36	3RT10 66-6AP36	3RT10 54-1AP36	-/S10/S6			50
250	344	None	3VL57 50-3DK36	3RT10 75-6AP36	3RT10 64-6AP36	-/S12/S10			50
315	432	None	3VL57 50-3DK36	3RT10 75-6AP36	3RT10 64-6AP36	-/S12/S10			50
355	488	None	3VL57 50-3DK36	3RT10 75-6AP36	3RT10 64-6AP36	-/S12/S10			50

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

2) The motor starter protector/circuit breaker is to be set to maximum current value.

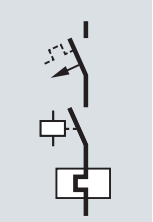
3) Rated control supply voltage 230 V AC, 50 Hz.
Other control voltages are also possible.

4) The current measuring modules required for 3UF7 or 3RB22/3RB23 are specified in each case. For details of the basic units 3UF7 or 3RB22/3RB23 which are also required see page 9.

Selection tables 550 V AC

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

CLASS 5 and CLASS 10, type of coordination 2, short-circuit breaking capacity I_q = 50 kA



550 V AC

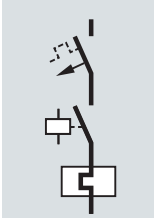
Standard induction motor 4-pole at 550 V AC[1]		Setting range	Motor starter protector	Contactor[2]	Size	Overload relay	Setting range	Short-circuit breaking capacity
Standard output *P*	Motor current (guide value) *I*	Overload release Motor starter protector					Overload release Overload relay	I_q
kW	A		Order No.	Order No.		Order No.	A	A
0.37	0.8	None	3RV13 53-6AP10	3RT10 24-1AP00	-/S0	3RB21 13-4NB0/ 3RB21 13-4NB0	0.32 ... 1.25	50
0.55	1.1	None	3RV13 53-6BP10	3RT10 24-1AP00	-/S0	3RB20 16-1PB0/ 3RB21 13-4PB0	1.00 ... 4.00	50
0.75	1.4	None	3RV13 53-6BP10	3RT10 26-1AP00	-/S0		1.00 ... 4.00	50
1.10	2.0	None	3RV13 53-6CP10	3RT10 26-1AP00	-/S0		1.00 ... 4.00	50
1.50	2.6	None	3RV13 53-6DP10	3RT10 26-1AP00	-/S0		1.00 ... 4.00	50
2.20	3.6	None	3RV13 53-6EP10	3RT10 34-1AP00	-/S2		1.00 ... 4.00	50
3.00	4.7	None	3RV13 53-6FP10	3RT10 34-1AP00	-/S2	3RB20 16-1SB0/ 3RB21 13-4SB0	3.00 ... 12.0	50
4.00	6.2	None	3RV13 53-6GP10	3RT10 34-1AP00	-/S2		3.00 ... 12.0	50
5.50	8.4	None	3RV13 53-6HP10	3RT10 34-1AP00	-/S2		3.00 ... 12.0	50
7.50	11.3	None	3RV13 53-6JP10	3RT10 34-1AP00	-/S2	3RB20 26-1QB0/ 3RB21 23-4QB0	6.00 ... 25.0	50
9.00	13.1	None	3RV13 53-6LM10	3RT10 34-1AP00	-/S2	3RB20 46-1UB0 3RB21 43-4UB0	12.5 ... 50.0	50
11.0	16.0	None	3RV13 53-6LM10	3RT10 34-1AP00	-/S2		12.5 ... 50.0	50
15.0	21	None	3RV13 53-6MM10	3RT10 34-1AP00	-/S2		12.5 ... 50.0	50
18.5	25	None	3RV13 53-6MM10	3RT10 34-1AP00	-/S2		12.5 ... 50.0	50
22.0	30	None	3RV13 53-6MM10	3RT10 35-1AP00	-/S2	3RB20 46-1UB0/ 3RB21 43-4UB0	12.5 ... 50.0	50
30	40	None	3RV13 63-7AN10	3RT10 54-1AP36	-/S6		12.5 ... 50.0	50
37	48	None	3RV13 63-7AN10	3RT10 54-1AP36	-/S6		12.5 ... 50.0	50
45	58	None	3RV13 63-7AN10	3RT10 54-1AP36	-/S6	3RB20 56-1FW2/ 3RB21 53-4FW2	50.0 ... 200	50
55	71	None	3RV13 63-7AN10	3RT10 54-1AP36	-/S6		50.0 ... 200	50
75	96	None	3RV13 63-7CN10	3RT10 54-1AP36	-/S6		50.0 ... 200	50
90	116	None	3RV13 63-7CN10	3RT10 55-6AP36	-/S6		50.0 ... 200	50
110	142	None	3RV13 63-7EN10	3RT10 56-6AP36	-/S6		50.0 ... 200	50
132	167	None	3RV13 63-7EN10	3RT10 64-6AP36	-/S10	3RB20 66-1GC2/ 3RB21 63-4GC2	55.0 ... 250	50
160	204	None	3RV13 73-7GN10	3RT10 65-6AP36	-/S10		55.0 ... 250	50
185	235	None	3RV13 73-7GN10	3RT10 66-6AP36	-/S10		55.0 ... 250	50
200	255	None	3RV13 73-7JN10	3RT10 66-6AP36	-/S12	3RB20 66-1MC2/ 3RB21 63-4MC2	160 ... 630	50
250	313	None	3RV13 73-7JN10	3RT10 75-6AP36	-/S12		160 ... 630	50
315	393	None	3RV13 83-7JN10	3RT10 76-6AP36	-/S12		160 ... 630	50
355	444	None	3RV13 83-7KN10	3RT10 76-6AP36	-/S12		160 ... 630	50

1) Guide value for 4-pole standard motors for 550 V AC, 50 Hz. Selection depends on the concrete startup and rated data of the protected motor.

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

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

CLASS 10, type of coordination 2, short-circuit breaking capacity I_q = 50 kA



550 V AC

Standard induction motor 4-pole at 550 V AC[1]		Setting range Overload release Motor starter protector	Motor starter protector	Contactor[2]	Size	Overload relay or SIMOCODE pro (current measuring module)[3]	Setting range Overload release Motor starter protector	Short-circuit breaking capacity I_q
Standard output P	Motor current (guide value) I							
kW	A	A	Order No.	Order No.		Order No.	A	A
0.37	0.8	None	3RV13 53-6AP10	3RT10 24-1AP00	-/S0	3UF7 100-1AA0/ 3RB29 06-2BG1	0.30 ... 3.00	50
0.55	1.1	None	3RV13 53-6BP10	3RT10 24-1AP00	-/S0		0.30 ... 3.00	50
0.75	1.4	None	3RV13 53-6BP10	3RT10 26-1AP00	-/S0		0.30 ... 3.00	50
1.10	2.0	None	3RV13 53-6CP10	3RT10 26-1AP00	-/S0		0.30 ... 3.00	50
1.50	2.6	None	3RV13 53-6DP10	3RT10 26-1AP00	-/S0		0.30 ... 3.00	50
2.20	3.6	None	3RV13 53-6EP10	3RT10 34-1AP00	-/S2	3UF7 101-1AA0/ 3RB29 06-2DG1	2.40 ... 25.0	50
3.00	4.7	None	3RV13 53-6FP10	3RT10 34-1AP00	-/S2		2.40 ... 25.0	50
4.00	6.2	None	3RV13 53-6GP10	3RT10 34-1AP00	-/S2		2.40 ... 25.0	50
5.50	8.4	None	3RV13 53-6HP10	3RT10 34-1AP00	-/S2		2.40 ... 25.0	50
7.50	11.3	None	3RV13 53-6JP10	3RT10 34-1AP00	-/S2		2.40 ... 25.0	50
9.00	13.1	None	3RV13 53-6LM10	3RT10 34-1AP00	-/S2		2.40 ... 25.0	50
11.0	16.0	None	3RV13 53-6LM10	3RT10 34-1AP00	-/S2		2.40 ... 25.0	50
15.0	21	None	3RV13 53-6MM10	3RT10 34-1AP00	-/S2		2.40 ... 25.0	50
18.5	25	None	3RV13 53-6MM10	3RT10 34-1AP00	-/S2	3UF7 102-1AA0/ 3RB29 06-2JG1	10.0 ... 100	50
22.0	30	None	3RV13 53-6MM10	3RT10 35-1AP00	-/S2		10.0 ... 100	50
30	40	None	3RV13 63-7AN10	3RT10 54-1AP36	-/S6		10.0 ... 100	50
37	48	None	3RV13 63-7AN10	3RT10 54-1AP36	-/S6		10.0 ... 100	50
45	58	None	3RV13 63-7AN10	3RT10 54-1AP36	-/S6		10.0 ... 100	50
55	71	None	3RV13 63-7AN10	3RT10 54-1AP36	-/S6		10.0 ... 100	50
75	96	None	3RV13 63-7CN10	3RT10 54-1AP36	-/S6	3UF7 103-1AA0/ 3RB29 56-2TG2	20.0 ... 200	50
90	116	None	3RV13 63-7CN10	3RT10 55-1AP36	-/S6		20.0 ... 200	50
110	142	None	3RV13 63-7EN10	3RT10 56-1AP36	-/S6		20.0 ... 200	50
132	167	None	3RV13 63-7EN10	3RT10 64-6AP36	-/S10		20.0 ... 200	50
160	204	None	3RV13 73-7GN10	3RT10 65-6AP36	-/S10	3UF7 104-1BA0/ 3RB29 66-2WH2	63.0 ... 630	50
185	235	None	3RV13 73-7GN10	3RT10 66-6AP36	-/S10		63.0 ... 630	50
200	255	None	3RV13 73-7JN10	3RT10 66-6AP36	-/S10		63.0 ... 630	50
250	313	None	3RV13 73-7JN10	3RT10 75-6AP36	-/S12		63.0 ... 630	50
315	393	None	3RV13 73-7JN10	3RT10 76-6AP36	-/S12		63.0 ... 630	50
355	444	None	3RV13 83-7KN10	3RT10 76-6AP36	-/S12		63.0 ... 630	50

1) Guide value for 4-pole standard motors for 550 V AC, 50 Hz. Selection depends on the concrete startup and rated data of the protected motor.

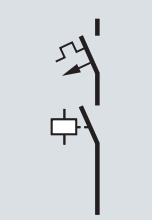
2) Rated control supply voltage 230 V AC, 50 Hz.
Other control voltages are also possible.

3) The current measuring modules required for 3UF7 or 3RB22/3RB23 are specified in each case. For details of the basic units 3UF7 or 3RB22/3RB23 which are also required see page 9.

Selection tables 690 V AC

Motor starter protector + contactor

CLASS 10, type of coordination 2, short-circuit breaking capacity I_q = 50... 100 kA



690 V AC

Standard induction motor 4-pole at 690 V AC[1]		Setting range Overload release Motor starter protector	Standard motor starter protector with limiter function	Motor starter protector[3]	Contactor[2]	Size	Short-circuit breaking capacity I_q
Standard output P	Motor current (guide value) I						
kW	A	A	Type	Order No.	Order No.		kA
0.09	0.2	0.14 ... 0.20	Not required	**3RV10 21-0BA10**	**3RT10 15-1AP01**	S0/S00	100
0.12	0.2	0.18 ... 0.25	Not required	**3RV10 21-0CA10**	**3RT10 15-1AP01**	S0/S00	100
0.12	0.2	0.22 ... 0.32	Not required	**3RV10 21-0DA10**	**3RT10 15-1AP01**	S0/S00	100
0.18	0.4	0.28 ... 0.40	Not required	**3RV10 21-0EA10**	**3RT10 15-1AP01**	S0/S00	100
0.18	0.4	0.35 ... 0.50	Not required	**3RV10 21-0FA10**	**3RT10 15-1AP01**	S0/S00	100
0.25	0.5	0.45 ... 0.63	Not required	**3RV10 21-0GA10**	**3RT10 15-1AP01**	S0/S00	100
0.37	0.6	0.55 ... 0.80	Not required	**3RV10 21-0HA10**	**3RT10 15-1AP01**	S0/S00	100
0.55	0.9	0.70 ... 1.00	Not required	**3RV10 21-0JA10**	**3RT10 15-1AP01**	S0/S00	100
0.75	1.1	0.90 ... 1.25	Not required	**3RV10 21-0KA10**	**3RT10 15-1AP01**	S0/S00	100
0.75	1.1	1.10 ... 1.60	Not required	**3RV10 21-1AA10**	**3RT10 15-1AP01**	S0/S00	100
1.1	1.6	1.40 ... 2.00	**3RV13 21-4DC10** Size S0 I_n = 25 A	**3RV10 21-1BA10**	**3RT10 24-1AP00**	S0/S0	100
1.5	2.1	1.80 ... 2.50		**3RV10 21-1CA10**	**3RT10 24-1AP00**	S0/S0	100
2.2	2.8	2.20 ... 3.20		**3RV10 21-1DA10**	**3RT10 24-1AP00**	S0/S0	100
3.0	3.8	3.50 ... 5.00		**3RV10 21-1FA10**	**3RT10 24-1AP00**	S0/S0	100
4.0	4.9	4.50 ... 6.30		**3RV10 21-1GA10**	**3RT10 24-1AP00/ 3RT10 34-1AP00**	S0/S0	100
5.5	6.7	5.50 ... 8.00	**3RV13 31-4HC10** Size S2 I_n = 50 A	**3RV10 21-1HA10**	**3RT10 24-1AP00/ 3RT10 34-1AP00**	S0/S0	50/ 100
7.5	8.9	7.00 ... 10.0		**3RV10 21-1JA10**	**3RT10 24-1AP00/ 3RT10 34-1AP00**	S0/S0	50/ 100
11	12.8	11.0 ... 16.0		**3RV10 21-4AA10**	**3RT10 25-1AP00/ 3RT10 34-1AP00**	S0/S0	50/ 100
11	12.8	11.0 ... 16.0	**3RV13 31-4HC10** Size S2 I_n = 50 A	**3RV10 31-4AA10**	**3RT10 34-1AP00**	S2/S2	100
15	17	14.0 ... 20.0		**3RV10 31-4BA10**	**3RT10 34-1AP00**	S2/S2	100
18.5	21	18.0 ... 25.0		**3RV10 31-4DA10**	**3RT10 35-1AP00**	S2/S2	100
22	24	22.0 ... 32.0		**3RV10 31-4EA10**	**3RT10 35-1AP00**	S2/S2	80
30	32	28.0 ... 40.0	**3RV13 31-4HC10** Size S3 I_n = 50 A	**3RV10 31-4FA10**	**3RT10 44-1AP00**	S2/S3	50
37	39	36.0 ... 45.0		**3RV10 31-4GA10**	**3RT10 44-1AP00**	S2/S3	50
45	47	40.0 ... 50.0		**3RV10 31-4HA10**	**3RT10 45-1AP00**	S2/S3	50
30	32	28.0 ... 40.0		**3RV10 41-4FA10**	**3RT10 46-1AP00**	S3/S3	100
37	39	36.0 ... 50.0		**3RV10 41-4HA10**	**3RT10 46-1AP00**	S3/S3	100
45	47	36.0 ... 50.0		**3RV10 41-4HA10**	**3RT10 46-1AP00**	S3/S3	100
55	57	40.0 ... 100	Not required	**3RV10 63-7AL10**	**3RT10 55-6AP36**	-/S6	100
75	77	40.0 ... 100	Not required	**3RV10 63-7AL10**	**3RT10 55-6AP36**	-/S6	100
90	93	64.0 ... 160	Not required	**3RV10 63-7CL10**	**3RT10 55-6AP36**	-/S6	100
110	113	64.0 ... 160	Not required	**3RV10 63-7CL10**	**3RT10 56-6AP36**	-/S6	100
132	134	80.0 ... 200	Not required	**3RV10 63-7DL10**	**3RT10 64-6AP36**	-/S10	80
160	162	80.0 ... 200	Not required	**3RV10 63-7DL10**	**3RT10 64-6AP36**	-/S10	80
200	203	160 ... 400	Not required	**3RV10 73-7GL10**	**3RT10 64-6AP36**	-/S10	70
250	250	160 ... 400	Not required	**3RV10 73-7GL10**	**3RT10 65-6AP36**	-/S10	70
315	316	252 ... 630	Not required	**3RV10 83-7JL10**	**3RT10 75-6AP36**	-/S12	35
355	354	252 ... 630	Not required	**3RV10 83-7JL10**	**3RT10 75-6AP36**	-/S12	35
400	400	252 ... 630	Not required	**3RV10 83-7JL10**	**3RT10 75-6AP36**	-/S12	35
500	493	252 ... 630	Not required	**3RV10 83-7JL10**	**3RT10 76-6AP36**	-/S12	35

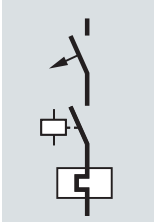
1) Guide value for 4-pole standard motors for 690 V AC, 50 Hz. Selection depends on the concrete startup and rated data of the protected motor.

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

3) If the corresponding link module is not used, the distance between the motor starter protector and the contactor must be at least 10 cm for sizes S00 to S3. (For link modules see Catalog LV 1, Chapter 5, 3RV Motor Starter Protectors up to 100 A, Accessories, Mounting Accessories)

Motor starter protector + contactor + 3RU11 thermal overload relay

CLASS 10, type of coordination 2, short-circuit breaking capacity I_q = 50 ... 100 kA



690 V AC

Standard induction motor 4-pole at 690 V AC[1]		Setting range Overload release Motor starter protector	Standard motor starter protector with limiter function	Motor starter protector[3]	Contactor[2]	Size	Overload relay	Setting range Overload release Overload relay	Short-circuit breaking capacity I_q
Standard output P	Motor current (guide value) I								
kW	A	A	Type	Order No.	Order No.		Order No.	A	kA
0.09	0.2	None	Not required	**3RV13 21-0BC10**	**3RT10 15-1AP01**	S0/S00	**3RU11 16-0BB0**	0.14 ... 0.20	100
0.12	0.2	None	Not required	**3RV13 21-0CC10**	**3RT10 15-1AP01**	S0/S00	**3RU11 16-0CB0**	0.18 ... 0.25	100
0.12	0.2	None	Not required	**3RV13 21-0DC10**	**3RT10 15-1AP01**	S0/S00	**3RU11 16-0DB0**	0.22 ... 0.32	100
0.18	0.4	None	Not required	**3RV13 21-0EC10**	**3RT10 15-1AP01**	S0/S00	**3RU11 16-0EB0**	0.28 ... 0.40	100
0.18	0.4	None	Not required	**3RV13 21-0FC10**	**3RT10 15-1AP01**	S0/S00	**3RU11 16-0FB0**	0.35 ... 0.50	100
0.25	0.5	None	Not required	**3RV13 21-0GC10**	**3RT10 15-1AP01**	S0/S00	**3RU11 16-0GB0**	0.45 ... 0.63	100
0.37	0.6	None	Not required	**3RV13 21-0HC10**	**3RT10 15-1AP01**	S0/S00	**3RU11 16-0HB0**	0.55 ... 0.80	100
0.55	0.9	None	Not required	**3RV13 21-0JC10**	**3RT10 15-1AP01**	S0/S00	**3RU11 16-0JB0**	0.70 ... 1.00	100
0.75	1.1	None	Not required	**3RV13 21-0KC10**	**3RT10 15-1AP01**	S0/S00	**3RU11 16-0KB0**	0.90 ... 1.25	100
0.75	1.1	None	Not required	**3RV13 21-1AC10**	**3RT10 15-1AP01**	S0/S00	**3RU11 16-1AB0**	1.10 ... 1.60	100
1.1	1.6	None	**3RV13 21-4DC10** Size S0 I_n = 25 A	**3RV13 21-1BC10**	**3RT10 24-1AP00**	S0/S0	**3RU11 16-1BB0**	1.40 ... 2.00	100
1.5	2.1	None		**3RV13 21-1CC10**	**3RT10 26-1AP00**	S0/S0	**3RU11 26-1CB0**	1.80 ... 2.50	100
2.2	2.8	None		**3RV13 21-1DC10**	**3RT10 26-1AP00**	S0/S0	**3RU11 26-1DB0**	2.20 ... 3.20	100
3.0	3.8	None		**3RV13 21-1FC10**	**3RT10 34-1AP00**	S0/S0	**3RU11 26-1FB0**	3.50 ... 5.00	100
4.0	4.9	None		**3RV13 21-1GC10**	**3RT10 34-1AP00**	S0/S0	**3RU11 26-1GB0**	4.50 ... 6.30	100
5.5	6.7	None	**3RV13 31-4HC10** Size S2 I_n = 50 A	**3RV13 21-1HC10**	**3RT10 34-1AP00**	S2/S0	**3RU11 26-1HB0**	5.50 ... 8.00	100
7.5	8.9	None		**3RV13 21-1JC10**	**3RT10 34-1AP00**	S2/S0	**3RU11 26-1JB0**	7.00 ... 10.0	100
11	12.8	None		**3RV13 21-4AC10**	**3RT10 34-1AP00**	S2/S0	**3RU11 26-1KB0**	11.0 ... 16.0	100
11	12.8	None	**3RV13 31-4HC10** Size S2 I_n = 50 A	**3RV13 31-4AC10**	**3RT10 34-1AP00**	S2/S2	**3RU11 36-4AB0**	11.0 ... 16.0	100
15	17	None		**3RV13 31-4BC10**	**3RT10 34-1AP00**	S2/S2	**3RU11 36-4BB0**	14.0 ... 20.0	100
18.5	21	None		**3RV13 31-4DC10**	**3RT10 35-1AP00**	S2/S2	**3RU11 36-4DB0**	18.0 ... 25.0	100
22	24	None		**3RV13 31-4EC10**	**3RT10 35-1AP00**	S2/S2	**3RU11 36-4EB0**	22.0 ... 32.0	80
30	32	None	**3RV13 31-4HC10** Size S3 I_n = 50 A	**3RV13 31-4FC10**	**3RT10 44-1AP00**	S2/S3	**3RU11 46-4FB0**	28.0 ... 40.0	50
37	39	None		**3RV13 31-4GC10**	**3RT10 44-1AP00**	S2/S3	**3RU11 46-4HB0**	36.0 ... 50.0	50
45	47	None		**3RV13 31-4HC10**	**3RT10 45-1AP00**	S2/S3	**3RU11 46-4HB0**	36.0 ... 50.0	50
30	32	None	**3RV13 41-4HC10**	**3RV13 41-4FC10**	**3RT10 44-1AP00**	S3/S3	**3RU11 46-4FB0**	28.0 ... 40.0	100
37	39	None	**3RV13 41-4HC10**	**3RV13 41-4HC10**	**3RT10 44-1AP00**	S3/S3	**3RU11 46-4HB0**	36.0 ... 50.0	100
45	47	None	**3RV13 41-4HC10**	**3RV13 41-4HC10**	**3RT10 46-1AP00**	S3/S3	**3RU11 46-4HB0**	36.0 ... 50.0	100

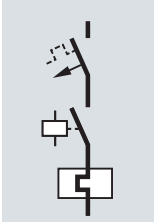
1) Guide value for 4-pole standard motors for 690 V AC, 50 Hz. Selection depends on the concrete startup and rated data of the protected motor.

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

3) If the corresponding link module is not used, the distance between the motor starter protector and the contactor must be at least 10 cm for sizes S00 to S3. (For link modules see Catalog LV 1, Chapter 5, 3RV Motor Starter Protectors up to 100 A, Accessories, Mounting Accessories)

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

CLASS 10, type of coordination 2, short-circuit breaking capacity I_q = 50 ... 100 kA



690 V AC

Standard induction motor 4-pole at 690 V AC[1]		Setting range Overload release Motor starter protector[2]	Standard motor starter protector with limiter function	Motor starter protector[4]	Contactor[3]	Size	Overload relay	Setting range Overload release Overload relay	Short-circuit breaking capacity I_q
Standard output P	Motor current (guide value) I								
kW	A	A	Type	Order No.	Order No.		Order No.	A	kA
0.09	0.2	None	Not required	3RV13 21-0CC10	3RT10 15-1AP01	S0/S00	3RB20 16-1RB0 3RB21 13-4RB0	0.10 ... 0.40	100
0.12	0.2	None	Not required	3RV13 21-0EC10	3RT10 15-1AP01	S0/S00		0.10 ... 0.40	100
0.12	0.2	None	Not required	3RV13 21-0EC10	3RT10 15-1AP01	S0/S00		0.10 ... 0.40	100
0.18	0.4	None	Not required	3RV13 21-0HC10	3RT10 15-1AP01	S0/S00		0.10 ... 0.40	100
0.18	0.4	None	Not required	3RV13 21-0HC10	3RT10 15-1AP01	S0/S00	3RB20 16-1NB0 3RB21 13-4NB0	0.32 ... 1.25	100
0.25	0.5	None	Not required	3RV13 21-0JC10	3RT10 15-1AP01	S0/S00		0.32 ... 1.25	100
0.37	0.6	None	Not required	3RV13 21-0JC10	3RT10 15-1AP01	S0/S00		0.32 ... 1.25	100
0.55	0.9	None	Not required	3RV13 21-0KC10	3RT10 15-1AP01	S0/S00		0.32 ... 1.25	100
0.75	1.1	None	Not required	3RV13 21-1AC10	3RT10 24-1AP00	S0/S0	3RB20 16-1PB0 3RB21 13-4PB0	1.00 ... 4.00	100
0.75	1.1	None	Not required	3RV13 21-1AC10	3RT10 24-1AP00	S0/S0		1.00 ... 4.00	100
1.1	1.6	None	3RV13 21-4DC10	3RV13 21-1BC10	3RT10 24-1AP00	S0/S0/S0		1.00 ... 4.00	100
1.5	2.1	None	3RV13 21-4DC10	3RV13 21-1CC10	3RT10 24-1AP00	S0/S0/S0		1.00 ... 4.00	100
2.2	2.8	None	3RV13 21-4DC10	3RV13 21-1DC10	3RT10 26-1AP00	S0/S0/S0		1.00 ... 4.00	100
3.0	3.8	None	3RV13 21-4DC10	3RV13 21-1EC10	3RT10 26-1AP00	S0/S0/S0	3RB20 26-1SB0 3RB21 23-4SB0	3.00 ... 12.0	100
4.0	4.9	None	3RV13 21-4DC10	3RV13 21-1GC10	3RT10 34-1AP00	S0/S0/S2		3.00 ... 12.0	100
5.5	6.7	None	3RV13 31-4HC10	3RV13 21-1HC10	3RT10 34-1AP00	S2/S0/S2		3.00 ... 12.0	100
7.5	8.9	None	3RV13 31-4HC10	3RV13 21-1JC10	3RT10 34-1AP00	S2/S0/S2	3RB20 26-1QB0 3RB21 23-4QB0	6.00 ... 25.0	100
11	12.8	None	3RV13 31-4HC10	3RV13 21-4AC10	3RT10 34-1AP00	S2/S0/S2		6.00 ... 25.0	100
11	12.8	None	3RV13 31-4HC10	3RV13 31-4AC10	3RT10 34-1AP00	S2/S2/S2	3RB20 36-1QB0 3RB21 33-4QB0	6.00 ... 25.0	100
15	17	None	3RV13 31-4HC10	3RV13 31-4BC10	3RT10 34-1AP00	S2/S2/S2	3RB20 36-1UB0 3RB21 33-4UB0	12.5 ... 50.0	100
18.5	21	None	3RV13 31-4HC10	3RV13 31-4EC10	3RT10 35-1AP00	S2/S2/S2		12.5 ... 50.0	100
22	24	22.0 ... 32.0	3RV13 31-4HC10	3RV10 31-4EA10	3RT10 35-1AP00	S2/S2/S2		12.5 ... 50.0	80
30	32	28.0 ... 40.0	3RV13 31-4HC10	3RV10 31-4FB10	3RT10 44-1AP00	S2/S2/S3	3RB20 46-1EB0 3RB21 43-4EB0	25.0 ... 100	50
30	32	None	3RV13 41-4HC10	3RV13 41-4FC10	3RT10 46-1AP00	S3/S3/S3		25.0 ... 100	100
37	39	36.0 ... 45.0	3RV10 31-4HB10	3RV10 31-4GB10	3RT10 44-1AP00	S2/S2/S3		25.0 ... 100	50
37	39	None	3RV13 41-4HC10	3RV13 41-4FC10	3RT10 46-1AP00	S3/S3/S3		25.0 ... 100	100
45	47	40.0 ... 50.0	3RV10 31-4HB10	3RV10 31-4HB10	3RT10 45-1AP00	S2/S2/S3		25.0 ... 100	50
45	47	None	3RV13 41-4HC10	3RV13 41-4HC10	3RT10 46-1AP00	S3/S3/S3		25.0 ... 100	100
55	57	None	Not required	3RV13 64-7AN10	3RT10 55-6AP36	-/S6	3RB20 56-1FW2 3RB21 53-4FW2	50.0 ... 200	100
75	77	None	Not required	3RV13 64-7AN10	3RT10 55-6AP36	-/S6		50.0 ... 200	100
90	93	None	Not required	3RV13 64-7CN10	3RT10 55-6AP36	-/S6		50.0 ... 200	100
110	113	None	Not required	3RV13 64-7CN10	3RT10 56-6AP36	-/S6		50.0 ... 200	100
132	134	None	Not required	3RV13 64-7EN10	3RT10 64-6AP36	-/S10	3RB20 66-1GC2 3RB21 63-4GC2	55.0 ... 250	80
160	162	None	Not required	3RV13 64-7EN10	3RT10 64-6AP36	-/S10		55.0 ... 250	80
200	203	None	Not required	3RV13 74-7GN10	3RT10 64-6AP36	-/S10		55.0 ... 250	70
250	250	None	Not required	3RV13 74-7GN10	3RT10 65-6AP36	-/S10	3RB20 66-1MC2 3RB21 63-4MC2	160 ... 630	70
315	316	None	Not required	3RV13 73-7JN10	3RT10 75-6AP36	-/S12		160 ... 630	70
355	354	None	Not required	3RV13 83-7JN10	3RT10 75-6AP36	-/S12		160 ... 630	35
400	400	None	Not required	3RV13 83-7KN10	3RT10 75-6AP36	-/S12		160 ... 630	35
500	493	None	Not required	3RV13 83-7KN10	3RT10 76-6AP36	-/S12		160 ... 630	35

1) Guide value for 4-pole standard motors for 690 V AC, 50 Hz. Selection depends on the concrete startup and rated data of the protected motor.

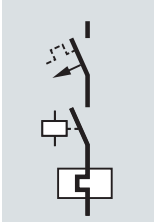
2) The motor starter protector is to be set to maximum current value.

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

4) If the corresponding link module is not used, the distance between the motor starter protector and the contactor must be at least 10 cm for sizes S00 to S3. (For link modules see Catalog LV 1, Chapter 5, 3RV Motor Starter Protectors up to 100 A, Accessories, Mounting Accessories)

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

CLASS 10, type of coordination 2, short-circuit breaking capacity I_q = 50 ... 100 kA



690 V AC

Standard induction motor 4-pole at 690 V AC[1]		Setting range Overload release Motor starter protector[2]	Motor starter protector with limiter function	Motor starter protector[5]	Contactors[3]	Size	Overload relay or SIMOCODE pro (current measuring module)[4]	Setting range Overload release Overload relay	Short-circuit breaking capacity I_q
Standard output P	Motor current (guide value) I				Line contactor + delta contactor				
kW	A	A	Order No.	Order No.	Order No.		Order No.	A	kA
0.18	0.4	None	Not required	3RV13 21-0HC10	3RT10 15-1AP01	S0/S00	3UF7 100-1AA0/ 3RB29 06-2BG1	0.30 ... 3.00	100
0.18	0.4	None	Not required	3RV13 21-0HC10	3RT10 15-1AP01	S0/S00		0.30 ... 3.00	100
0.25	0.5	None	Not required	3RV13 21-0JC10	3RT10 15-1AP01	S0/S00		0.30 ... 3.00	100
0.37	0.6	None	Not required	3RV13 21-0JC10	3RT10 15-1AP01	S0/S00		0.30 ... 3.00	100
0.55	0.9	None	Not required	3RV13 21-0KC10	3RT10 15-1AP01	S0/S00		0.30 ... 3.00	100
0.75	1.1	None	Not required	3RV13 21-1AC10	3RT10 24-1AP00	S0/S0		0.30 ... 3.00	100
0.75	1.1	None	Not required	3RV13 21-1AC10	3RT10 24-1AP00	S0/S0		0.30 ... 3.00	100
1.1	1.6	None	3RV13 21-4DC10	3RV13 21-1BC10	3RT10 24-1AP00	S0/S0/S0		0.30 ... 3.00	100
1.5	2.1	None	3RV13 21-4DC10	3RV13 21-1CC10	3RT10 26-1AP00	S0/S0/S0		0.30 ... 3.00	100
2.2	2.8	None	3RV13 21-4DC10	3RV13 21-1DC10	3RT10 26-1AP00	S0/S0/S0	3UF7 101-1AA0/ 3RB29 06-2DG1	2.40 ... 25.0	100
3	3.8	None	3RV13 21-4DC10	3RV13 21-1EC10	3RT10 26-1AP00	S0/S0/S0		2.40 ... 25.0	100
4	4.9	None	3RV13 21-4DC10	3RV13 21-1GC10	3RT10 34-1AP00	S0/S0/S2		2.40 ... 25.0	100
5.5	6.7	None	3RV13 31-4HC10	3RV13 21-1HC10	3RT10 34-1AP00	S2/S0/S2		2.40 ... 25.0	100
7.5	8.9	None	3RV13 31-4HC10	3RV13 21-1JC10	3RT10 34-1AP00	S2/S0/S2		2.40 ... 25.0	100
11	12.8	None	3RV13 31-4HC10	3RV13 21-4AC10	3RT10 34-1AP00	S2/S0/S2		2.40 ... 25.0	100
11	12.8	None	3RV13 31-4HC10	3RV13 31-4AC10	3RT10 34-1AP00	S2/S2/S2		2.40 ... 25.0	100
15	17	None	3RV13 31-4HC10	3RV13 31-4BC10	3RT10 34-1AP00	S2/S2/S2		2.40 ... 25.0	100
18.5	21	None	3RV13 31-4HC10	3RV13 31-4EC10	3RT10 35-1AP00	S2/S2/S2	3UF7 102-1AA0/ 3RB29 06-2JG1	10.0 ... 100	100
22	24	None	3RV13 31-4HC10	3RV13 31-4EC10	3RT10 35-1AP00	S2/S2/S2		10.0 ... 100	80
30	32	28.0 ... 40.0	3RV13 31-4HC10	3RV10 31-4FB10	3RT10 44-1AP00	S2/S2/S3		10.0 ... 100	50
30	32	None	3RV13 41-4HC10	3RV13 41-4FC10	3RT10 46-1AP00	S3/S3/S3		10.0 ... 100	100
37	39	36.0 ... 45.0	3RV10 31-4HB10	3RV10 31-4GB10	3RT10 44-1AP00	S2/S2/S3		10.0 ... 100	50
37	39	None	3RV13 41-4HC10	3RV13 41-4FC10	3RT10 46-1AP00	S3/S3/S3		10.0 ... 100	100
45	47	40.0 ... 50.0	3RV10 31-4HB10	3RV10 31-4HB10	3RT10 45-1AP00	S2/S2/S3		10.0 ... 100	50
45	47	None	3RV13 41-4HC10	3RV13 41-4HC10	3RT10 46-1AP00	S3/S3/S3		10.0 ... 100	100
55	57	None	Not required	3RV13 64-7AN10	3RT10 55-6AP36	-/S6	3UF7 103-1AA0/ 3RB29 56-2TG2	20.0 ... 200	100
75	77	None	Not required	3RV13 64-7AN10	3RT10 55-6AP36	-/S6		20.0 ... 200	100
90	93	None	Not required	3RV13 64-7CN10	3RT10 55-6AP36	-/S6		20.0 ... 200	100
110	113	None	Not required	3RV13 64-7CN10	3RT10 56-6AP36	-/S6	3UF7 103-1AA0/ 3RB29 56-2TG2	20.0 ... 200	100
132	134	None	Not required	3RV13 64-7EN10	3RT10 64-6AP36	-/S10	3UF7 104-1BA0/ 3RB29 66-2WH2	63.0 ... 630	80
160	162	None	Not required	3RV13 64-7EN10	3RT10 64-6AP36	-/S10		63.0 ... 630	80
200	203	None	Not required	3RV13 74-7GN10	3RT10 64-6AP36	-/S10		63.0 ... 630	70
250	250	None	Not required	3RV13 74-7GN10	3RT10 65-6AP36	-/S10		63.0 ... 630	70
315	316	None	Not required	3RV13 73-7JN10	3RT10 75-6AP36	-/S12		63.0 ... 630	70
355	354	None	Not required	3RV13 83-7JN10	3RT10 75-6AP36	-/S12		63.0 ... 630	35
400	400	None	Not required	3RV13 83-7KN10	3RT10 75-6AP36	-/S12		63.0 ... 630	35
500	493	None	Not required	3RV13 83-7KN10	3RT10 76-6AP36	-/S12		63.0 ... 630	35

1) Guide value for 4-pole standard motors for 690 V AC, 50 Hz. Selection depends on the concrete startup and rated data of the protected motor.

2) The motor starter protector is to be set to maximum current value.

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

4) The current measuring modules required for 3UF7 or 3RB22/3RB23 are specified in each case. For details of the basic units 3UF7 or 3RB22/3RB23 which are also required see page 9.

5) If the corresponding link module is not used, the distance between the motor starter protector and the contactor must be at least 10 cm for sizes S00 to S3. (For link modules see Catalog LV 1, Chapter 5, 3RV Motor Starter Protectors up to 100 A, Accessories, Mounting Accessories)

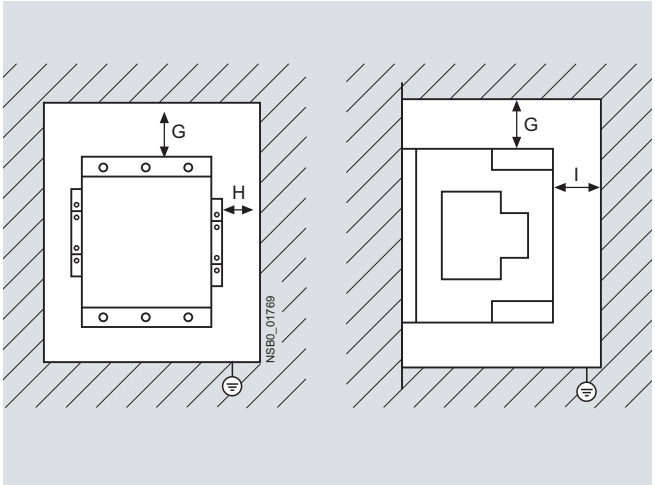
Installation Guidelines

Installation guidelines for all voltages

Distance to grounded parts for 3RT10/3RT12 contactors (sizes S6/S10/S12)

Contactor	Rated operational voltage	Distance to grounded or live parts		
		G	H	I
	V	mm	mm	mm
3RT10 5	400/440/480/500/550/690	40	10	20
3RT10 6	400/440/480/500/550/690	20	10	20
3RT10 7	400/440/480/500/550/690	20	10	20
3RT12 6	400/440/480/500/550/690	20	10	20
3RT12 7	400/440/480/500/550/690	20	10	20

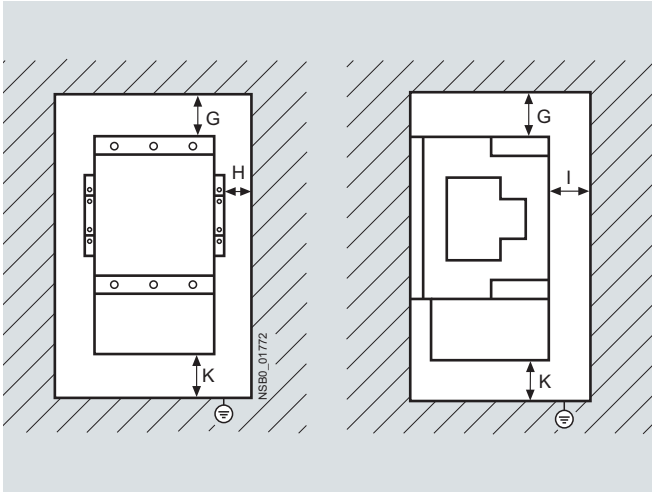
G = distance to the coil terminals. If using cables with cable lugs or busbar connection, 3RT19 56-4EA1 (S6) or 3RT19 66-4EA1 (S10/S12) terminal covers must be used.



Distance to grounded parts for 3RT10/3RT12 contactors with mounted overload relay

Contactor	Rated operational voltage	Distance to grounded or live parts			
		G	H	I	K
	V	mm	mm	mm	mm
3RT10 1	550	40	20	40	20
3RT10 2	550	40	20	40	20
3RT10 3	550	40	20	40	20
3RT10 4	550	40	20	40	20
3RT10 5	400/500/550/690	40	10	20	20
3RT10 6	400/500/550/690	20	10	20	20
3RT10 7	400/500/550/690	20	10	20	20
3RT12 6	400/500/550/690	20	10	20	20
3RT12 7	400/500/550/690	20	10	20	20

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

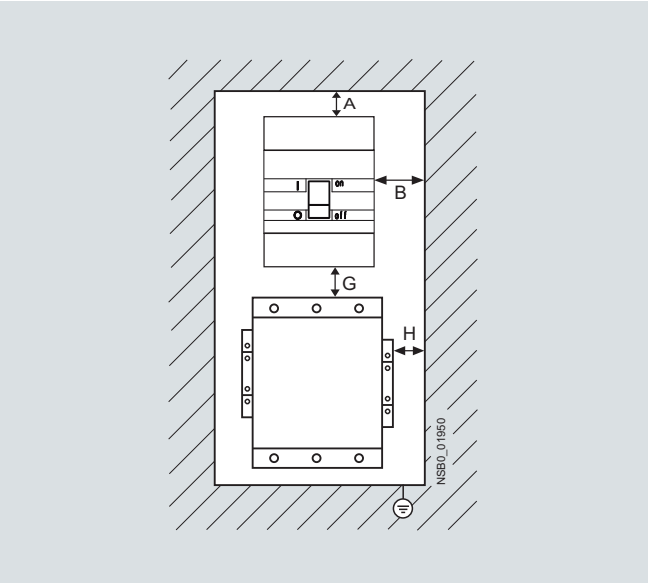


Installation Guidelines for Combinations: 3RV1. 5 ... 3RV1. 8

Distances to grounded parts for 3RT10/3RT12 contactors

3RT19 66-4EA1 terminal covers must be used on the line side of the contactor. Do not use box terminals for size S12 contactors.

Motor starter protector	Contactor	Rated operational voltage	Distance to grounded or live parts		
			A	B	G
		V	mm	mm	mm
3RV1. 5	S00 ...S3	440/480/550/690	130	25	150
3RV1. 6/7/8	S3 ... S12	440/480/550/690	130	25	200



For all combinations of motor starter protectors 3RV1. 5 ... 3RV1. 8 with contactors, phase barriers must be used.

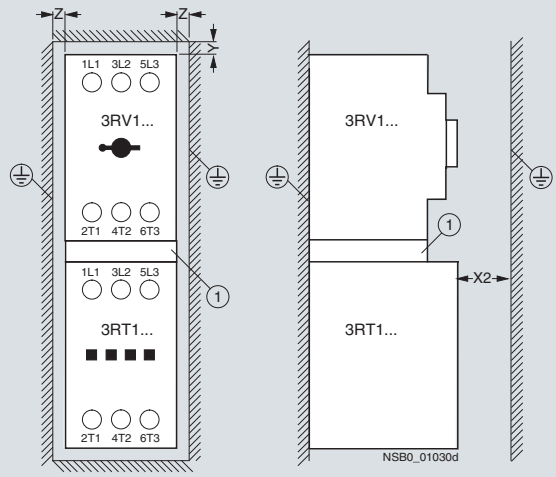
Motor starter protector	Phase barrier
3RV1. 5	3RV19 55-5GA0
3RV1. 6/7	3RV19 75-5GA0
3RV1. 8	3RV19 85-5GA0

Installation Guidelines for 400/440/480/500 V AC

Distance to grounded parts for 3RV motor starter protectors + 3RT10 contactor (sizes S00/S0/S2/S3)

Motor starter protector	Contactor	Rated operational voltage	Distance to grounded or live parts		
			Y	X2[1]	Z
		V	mm	mm	mm
3RV1. 1	3RT10 1	400/440/480/500	20	10	9
3RV1. 2	3RT10 1	400/440/480/500	30	10	9
	3RT10 2	400/440/480/500	30	10	9
	3RT10 3	400/440/480/500	30	10	9
	3RF24 .	400	30	–	9
3RV1. 3	3RT10 2	400/440/480/500	50	10	10
	3RT10 3	400/440/480/500	50	10	10
	3RT10 4	400/440/480/500	50	10	10
3RV1. 4	3RT10 4	400	90	10	12
	3RT10 4	500	220	10	20

1) Minimum distance to contactor at the front. In the case of motor starter protectors and solid-state contactors, no minimum distance is required at the front.



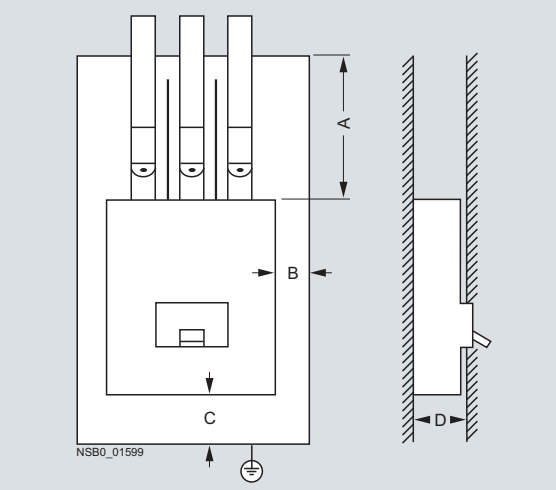
① For combinations with S3 motor starter protectors and S6 contactors at 440/480 V, a distance of 220 mm is required.

Distance to grounded parts for 3VL circuit breakers

Circuit breaker	Rated operational voltage U_e	Distance to grounded or live parts			
		A	B	C	D
	V	mm	mm	mm	mm
3VL2/3[1]	max. 400	100	25	30	87
3VL2/3[2]	400 ... 525	100	25	30	87
3VL4/5[1]	max. 525	100	35	30	106,5

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

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



Installation Guidelines for 690 V AC

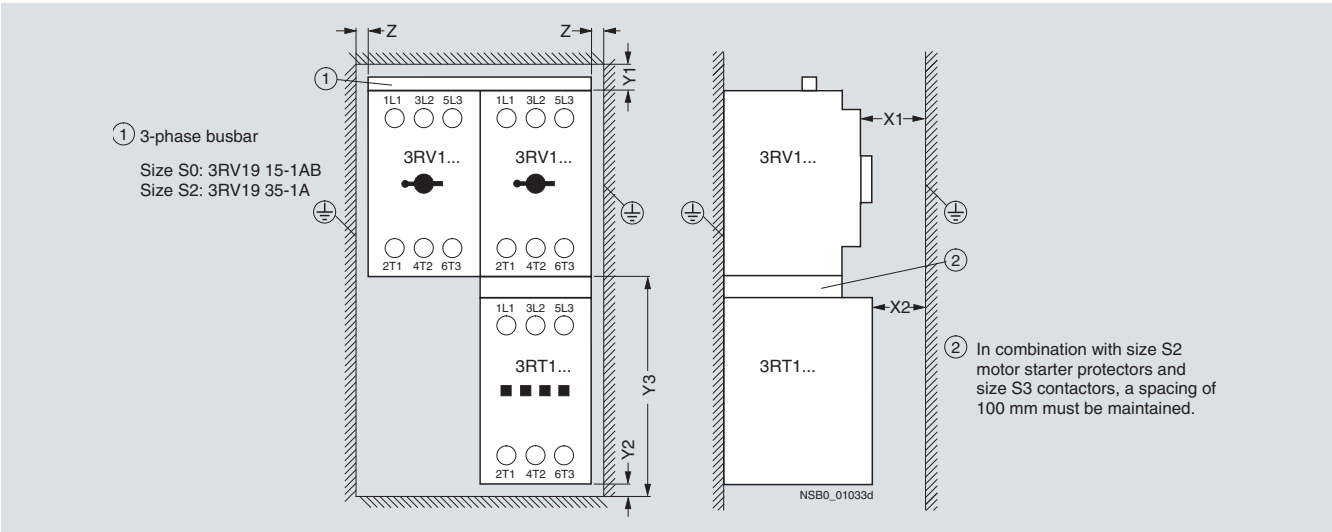
Distance to grounded parts for 3RV motor starter protectors + 3RT10 contactor (sizes S0/S2/S3)

Two motor starter protectors in combination with contactors			Distance to grounded or live parts					
Motor starter protector	Contactor	Rated operational voltage	Y1	Y2	Y3	X1	X2	Z
		V	mm	mm	mm	mm	mm	mm
3RV1. 2 with	3RT10 1/ 3RT10 2	690	80	10	95	20	14	20
3RV1. 3 with	3RT10 3	690	50	10	120	10	32	10
	3RT10 4	690	50	10	120	10	40	10
3RV1. 4[1)] with	3RT10 4	690	50	20	130	10	40	15

[1)] Terminal block for 3RV1.4 required, Order No.: 3RV19 48-1K.

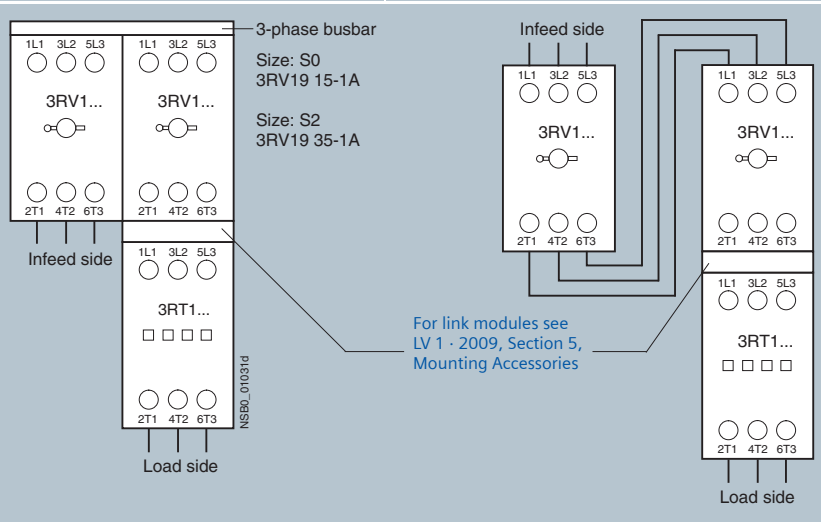
In limiter circuits with motor starter protectors of different sizes (e. g. 3RV133 and 3RV1.2 with 3RT102 contactor) you must observe the respective distances to grounded parts for both motor starter protectors.

Distance to grounded parts for 3RV1 motor starter protectors. 4 (S3) 3RT10 4 contactors



The diagram applies accordingly also for when motor starter protectors of different sizes are used.

Mounting methods for 3RV motor starter protectors + 3RT10 contactors (sizes S0/S2/S3)

Size	Mounting methods	Standard mounting for size S0 ... 5.5 kW, S2 and S3	Mounting for size S0 from 7.5 ... 12 kW
S0:	Mounting on an insulated base plate. If screws are used for mounting, the screws must not be grounded. Alternatively, the standard mounting rail adapter can be used without restriction.		
S2/S3:	Mounting on an insulated base plate. Alternatively, the standard mounting rail adapter can also be used.		

- For the distance to grounded parts for 3RT10/3RT12 contactor (sizes S6/S10/S12), please refer to the installation guidelines for all voltages.
- For the distance to grounded parts for 3RT10/3RT12 contactors (sizes S6/S10/S12) with mounted overload relays, please refer to the installation guidelines for all voltages.

Notes

Notes

Notes

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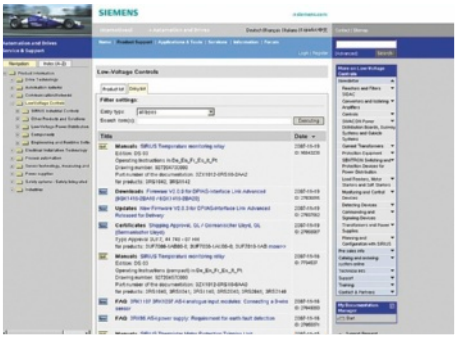

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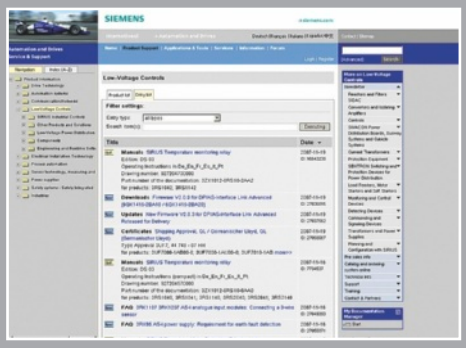

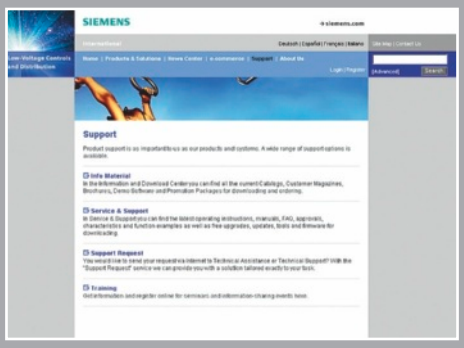

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