

SIRIUS 3RV Motor Starter Protectors/Circuit Breakers up to 100 A

General data



Size S0 motor starter protector

3RV1 motor starter protectors are compact, current limiting motor starter protectors which are optimized for load feeders. The motor starter protectors are used for switching and protecting induction motors of up to 45 kW at 400 V AC and for other loads with rated currents of up to 100 A.

Type of construction

The motor starter protectors are available in four sizes:

- Size S00 - width 45 mm,
max. rated current 12 A,
at 400 V AC suitable for induction motors up to 5.5 kW.
- Size S0 – width 45 mm,
max. rated current 25 A,
at 400 V AC suitable for induction motors up to 11 kW.
- Size S2 – width 55 mm,
max. rated current 50 A,
at 400 V AC suitable for induction motors up to 22 kW.
- Size S3 – width 70 mm,
max. rated current 100 A,
at 400 V AC suitable for induction motors up to 45 kW.

Note



Screw terminals



Cage Clamp terminals

The terminals are indicated in the selection and ordering data by orange backgrounds.

"Increased safety" type of protection EEx e according to ATEX directive 94/9/EC

The 3RV10 motor starter protectors are suitable for the overload protection of explosion-proof motors with "increased safety" type of protection EEx e; see Chapter 20 "Appendix" --> "Standards and approvals" --> "Type overview of approved devices for explosion-protected areas (ATEX Explosion Protection)".

Application

Operating conditions

3RV1 motor starter protectors are suitable for use in any climate. They are intended for use in enclosed rooms in which no severe operating conditions (such as dust, caustic vapors, hazardous gases) prevail. When installed in dusty and damp areas, suitable enclosures must be provided.

3RV1 motor starter protectors can optionally be fed from the top or from below.

The permissible ambient temperatures, the maximum switching capacities, the tripping currents and other boundary conditions can be found in the technical specifications and tripping characteristics, [see note on Technical Information on page 5/1](#).

3RV1 motor starter protectors are suitable for operation in IT systems (IT networks). In this case, the different short-circuit breaking capacity in the IT system must be taken into account.

Since operational currents, starting currents and current peaks are different even for motors with identical power ratings due to the inrush current, the motor ratings in the selection tables are only guide values. The specific rated and start-up data of the motor to be protected is always paramount to the choice of the most suitable motor starter protector. This also applies to motor starter protectors for transformer protection.

Possible uses

The 3RV1 motor starter protectors can be used:

- For short-circuit protection
- For motor protection (also with overload relay function)
- For system protection
- For short-circuit protection for starter combinations
- For transformer protection
- As main control and EMERGENCY-STOP switches
- For fuse monitoring
- For use in IT systems (IT networks)
- For switching of DC currents
- As voltage transformer circuit breakers
- In areas subject to explosion hazard (ATEX)

[More information can be found in "Configuration", see note on Technical Information on page 5/1.](#)

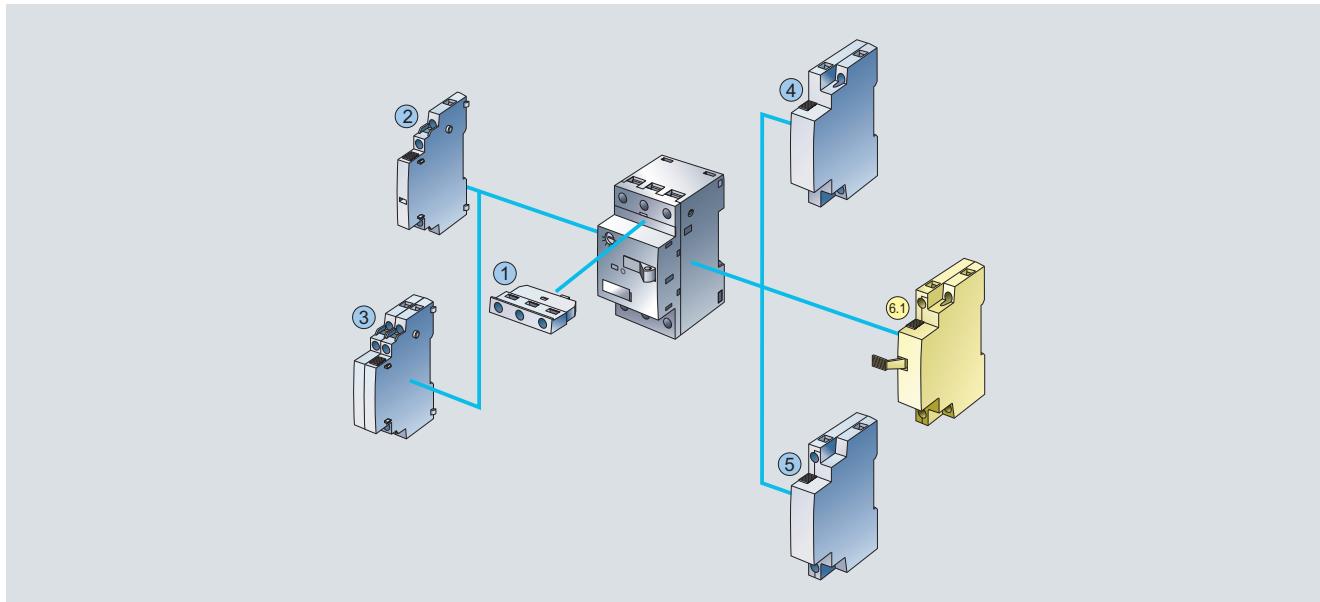
SIRIUS 3RV Motor Starter Protectors/Circuit Breakers up to 100 A

General data

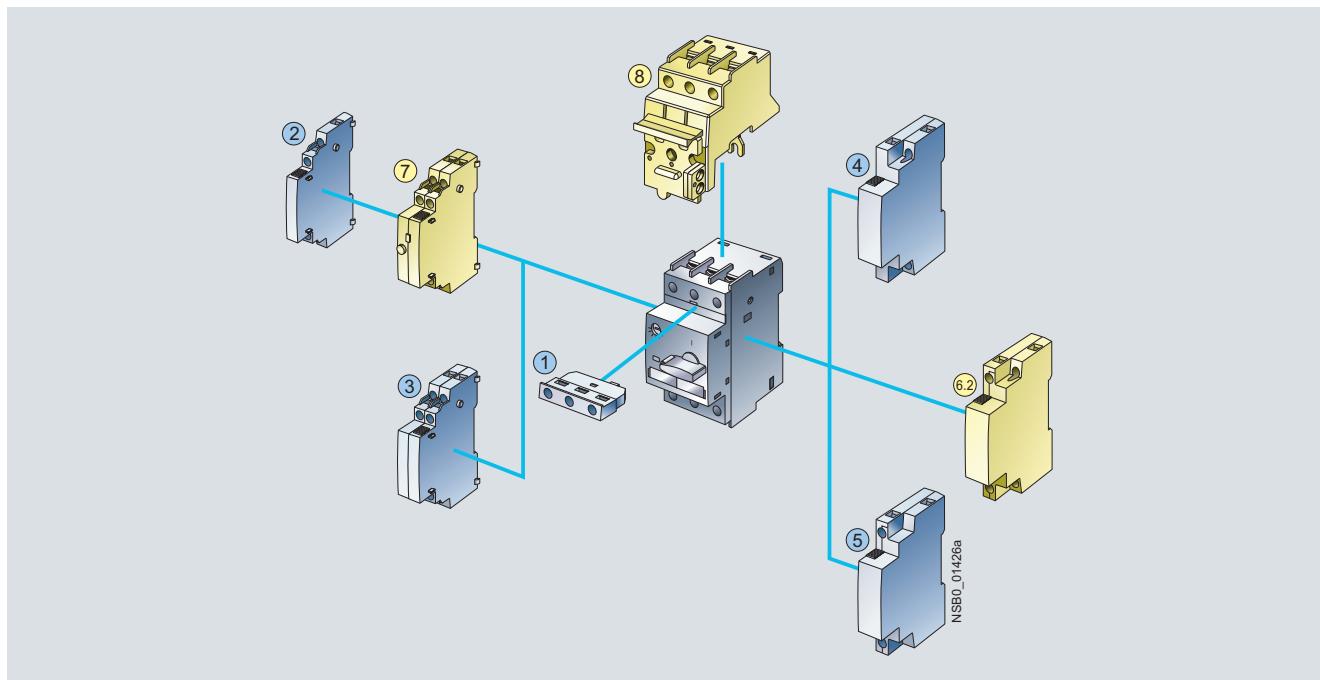
Overview

The following illustrations show our 3RV1 motor starter protectors/circuit breakers with the accessories which can be mounted for the various sizes, [see also "Introduction" --> "Overview"](#).

Motor starter protectors/circuit breakers, size S00, with mountable accessories



Motor starter protectors/circuit breakers, sizes S0, S2 or S3, with mountable accessories



Mountable accessories for all sizes S00 ... S3

- (1) Transverse auxiliary switch (can not be used with 3RV17 and 3RV18 circuit breakers)
- (2) Lateral auxiliary switch with 2 contacts
- (3) Lateral auxiliary switch with 4 contacts
- (4) Shunt release
- (5) Undervoltage release

Mountable accessories

- | | |
|--|-----------|
| (6.1) Undervoltage release with leading auxiliary contacts | For sizes |
| (6.2) Undervoltage release with leading auxiliary contacts | S0 ... S3 |
| (7) Alarm switch | S0 ... S3 |
| (8) Isolator module | S0 and S2 |

For accessories see page 5/17 onwards.

SIRIUS 3RV Motor Starter Protectors/Circuit Breakers up to 100 A

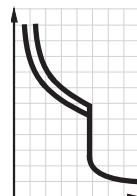
Motor Starter Protectors

For motor protection

Selection and ordering data

CLASS 10, without auxiliary switches

PU (UNIT, SET, M)=1
 PS* =1 unit
 PG =101



3RV10 11-0JA10



3RV10 21-0JA10



3RV10 11-1EA20

Rated current	Suitable for induction motors ¹⁾ with P	Setting range for thermal overload releases	Instantaneous over-current releases	Short-circuit breaking capacity at 400 V AC	DT	Screw terminals		Weight per PU approx.	DT	Cage Clamp terminals		Weight per PU approx.
						Order No.	Price per PU			Order No.	Price per PU	
I_n						kg	kg					
Size S00												
0.16	0.04	0.11 ... 0.16	2.1	100	►	3RV10 11-0AA10	0.230 ►	3RV10 11-0AA20	0.233	3RV10 11-0AA20	0.233	
0.2	0.06	0.14 ... 0.2	2.6	100	►	3RV10 11-0BA10	0.231 ►	3RV10 11-0BA20	0.234	3RV10 11-0BA20	0.234	
0.25	0.06	0.18 ... 0.25	3.3	100	►	3RV10 11-0CA10	0.233 ►	3RV10 11-0CA20	0.234	3RV10 11-0CA20	0.234	
0.32	0.09	0.22 ... 0.32	4.2	100	►	3RV10 11-0DA10	0.233 ►	3RV10 11-0DA20	0.234	3RV10 11-0DA20	0.234	
0.4	0.09	0.28 ... 0.4	5.2	100	►	3RV10 11-0EA10	0.235 ►	3RV10 11-0EA20	0.236	3RV10 11-0EA20	0.236	
0.5	0.12	0.35 ... 0.5	6.5	100	►	3RV10 11-0FA10	0.232 ►	3RV10 11-0FA20	0.232	3RV10 11-0FA20	0.232	
0.63	0.18	0.45 ... 0.63	8.2	100	►	3RV10 11-0GA10	0.233 ►	3RV10 11-0GA20	0.234	3RV10 11-0GA20	0.234	
0.8	0.18	0.55 ... 0.8	10	100	►	3RV10 11-0HA10	0.235 ►	3RV10 11-0HA20	0.237	3RV10 11-0HA20	0.237	
1	0.25	0.7 ... 1	13	100	►	3RV10 11-0JA10	0.233 ►	3RV10 11-0JA20	0.235	3RV10 11-0JA20	0.235	
1.25	0.37	0.9 ... 1.25	16	100	►	3RV10 11-0KA10	0.279 ►	3RV10 11-0KA20	0.281	3RV10 11-0KA20	0.281	
1.6	0.55	1.1 ... 1.6	21	100	►	3RV10 11-1AA10	0.281 ►	3RV10 11-1AA20	0.283	3RV10 11-1AA20	0.283	
2	0.75	1.4 ... 2	26	100	►	3RV10 11-1BA10	0.280 ►	3RV10 11-1BA20	0.282	3RV10 11-1BA20	0.282	
2.5	0.75	1.8 ... 2.5	33	100	►	3RV10 11-1CA10	0.281 ►	3RV10 11-1CA20	0.284	3RV10 11-1CA20	0.284	
3.2	1.1	2.2 ... 3.2	42	100	►	3RV10 11-1DA10	0.283 ►	3RV10 11-1DA20	0.285	3RV10 11-1DA20	0.285	
4	1.5	2.8 ... 4	52	100	►	3RV10 11-1EA10	0.281 ►	3RV10 11-1EA20	0.284	3RV10 11-1EA20	0.284	
5	1.5	3.5 ... 5	65	100	►	3RV10 11-1FA10	0.285 ►	3RV10 11-1FA20	0.286	3RV10 11-1FA20	0.286	
6.3	2.2	4.5 ... 6.3	82	100	►	3RV10 11-1GA10	0.288 ►	3RV10 11-1GA20	0.288	3RV10 11-1GA20	0.288	
8	3	5.5 ... 8	104	50	►	3RV10 11-1HA10	0.289 ►	3RV10 11-1HA20	0.290	3RV10 11-1HA20	0.290	
10	4	7 ... 10	130	50	►	3RV10 11-1JA10	0.284 ►	3RV10 11-1JA20	0.286	3RV10 11-1JA20	0.286	
12	5.5	9 ... 12	156	50	►	3RV10 11-1KA10	0.280 ►	3RV10 11-1KA20	0.282	3RV10 11-1KA20	0.282	
Size S0												
0.16	0.04	0.11 ... 0.16	2.1	100	►	3RV10 21-0AA10	0.286	--	--	--	--	
0.2	0.06	0.14 ... 0.2	2.6	100	►	3RV10 21-0BA10	0.288	--	--	--	--	
0.25	0.06	0.18 ... 0.25	3.3	100	►	3RV10 21-0CA10	0.287	--	--	--	--	
0.32	0.09	0.22 ... 0.32	4.2	100	►	3RV10 21-0DA10	0.286	--	--	--	--	
0.4	0.09	0.28 ... 0.4	5.2	100	►	3RV10 21-0EA10	0.288	--	--	--	--	
0.5	0.12	0.35 ... 0.5	6.5	100	►	3RV10 21-0FA10	0.287	--	--	--	--	
0.63	0.18	0.45 ... 0.63	8.2	100	►	3RV10 21-0GA10	0.289	--	--	--	--	
0.8	0.18	0.55 ... 0.8	10	100	►	3RV10 21-0HA10	0.287	--	--	--	--	
1	0.25	0.7 ... 1	13	100	►	3RV10 21-0JA10	0.350	--	--	--	--	
1.25	0.37	0.9 ... 1.25	16	100	►	3RV10 21-0KA10	0.353	--	--	--	--	
1.6	0.55	1.1 ... 1.6	21	100	►	3RV10 21-1AA10	0.357	--	--	--	--	
2	0.75	1.4 ... 2	26	100	►	3RV10 21-1BA10	0.356	--	--	--	--	
2.5	0.75	1.8 ... 2.5	33	100	►	3RV10 21-1CA10	0.357	--	--	--	--	
3.2	1.1	2.2 ... 3.2	42	100	►	3RV10 21-1DA10	0.356	--	--	--	--	
4	1.5	2.8 ... 4	52	100	►	3RV10 21-1EA10	0.354	--	--	--	--	
5	1.5	3.5 ... 5	65	100	►	3RV10 21-1FA10	0.358	--	--	--	--	
6.3	2.2	4.5 ... 6.3	82	100	►	3RV10 21-1GA10	0.357	--	--	--	--	
8	3	5.5 ... 8	104	100	►	3RV10 21-1HA10	0.356	--	--	--	--	
10	4	7 ... 10	130	100	►	3RV10 21-1JA10	0.361	--	--	--	--	
12.5	5.5	9 ... 12.5	163	100	►	3RV10 21-1KA10	0.358	--	--	--	--	
16	7.5	11 ... 16	208	50	►	3RV10 21-4AA10	0.366	--	--	--	--	
20	7.5	14 ... 20	260	50	►	3RV10 21-4BA10	0.363	--	--	--	--	
22	11	17 ... 22	286	50	►	3RV10 21-4CA10	0.361	--	--	--	--	
25	11	20 ... 25	325	50	►	3RV10 21-4DA10	0.364	--	--	--	--	

¹⁾ Guide value for 4-pole standard motors at AC 50 Hz 400 V. The actual starting and rated data of the motor to be protected must be considered when selecting the units.

Auxiliary switches can be ordered separately (see "Mountable accessories").

For multi-unit packing and reusable packaging, see Chapter 20 "Appendix" --> "Ordering notes".

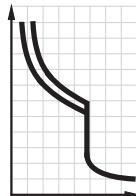
SIRIUS 3RV Motor Starter Protectors/Circuit Breakers up to 100 A

Motor Starter Protectors

For motor protection

CLASS 10, with transverse auxiliary switch (1 NO + 1 NC)

PU (UNIT, SET, M)=1
PS* = 1 unit
PG = 101



3RV10 11-OKA15
with integrated trans-
verse auxiliary switch



3RV10 21-1GA15
with integrated trans-
verse auxiliary switch



3RV10 11-0GA25
with integrated trans-
verse auxiliary switch

Rated current	Suitable for induction motors ¹⁾ with P	Setting range for thermal overload releases	Instantaneous over-current releases	Short-circuit breaking capacity at 400 V AC	DT	Screw terminals		Weight per PU approx.	DT	Cage Clamp terminals		Weight per PU approx.
						Order No.	Price per PU			Order No.	Price per PU	
I_n				I_{cu}				kg				kg
Size S00												
0.16	0.04	0.11 ... 0.16	2.1	100	▶	3RV10 11-0AA15		0.245 B	3RV10 11-0AA25			0.245
0.2	0.06	0.14 ... 0.2	2.6	100	▶	3RV10 11-0BA15		0.246 B	3RV10 11-0BA25			0.245
0.25	0.06	0.18 ... 0.25	3.3	100	▶	3RV10 11-0CA15		0.246 B	3RV10 11-0CA25			0.246
0.32	0.09	0.22 ... 0.32	4.2	100	▶	3RV10 11-0DA15		0.247 B	3RV10 11-0DA25			0.246
0.4	0.09	0.28 ... 0.4	5.2	100	▶	3RV10 11-0EA15		0.250 B	3RV10 11-0EA25			0.250
0.5	0.12	0.35 ... 0.5	6.5	100	▶	3RV10 11-0FA15		0.247 B	3RV10 11-0FA25			0.247
0.63	0.18	0.45 ... 0.63	8.2	100	▶	3RV10 11-0GA15		0.249 B	3RV10 11-0GA25			0.252
0.8	0.18	0.55 ... 0.8	10	100	▶	3RV10 11-0HA15		0.250 B	3RV10 11-0HA25			0.250
1	0.25	0.7 ... 1	13	100	▶	3RV10 11-0JA15		0.249 B	3RV10 11-0JA25			0.249
1.25	0.37	0.9 ... 1.25	16	100	▶	3RV10 11-0KA15		0.297 B	3RV10 11-0KA25			0.297
1.6	0.55	1.1 ... 1.6	21	100	▶	3RV10 11-1AA15		0.298 B	3RV10 11-1AA25			0.298
2	0.75	1.4 ... 2	26	100	▶	3RV10 11-1BA15		0.297 B	3RV10 11-1BA25			0.297
2.5	0.75	1.8 ... 2.5	33	100	▶	3RV10 11-1CA15		0.298 B	3RV10 11-1CA25			0.298
3.2	1.1	2.2 ... 3.2	42	100	▶	3RV10 11-1DA15		0.299 B	3RV10 11-1DA25			0.300
4	1.5	2.8 ... 4	52	100	▶	3RV10 11-1EA15		0.296 B	3RV10 11-1EA25			0.298
5	1.5	3.5 ... 5	65	100	▶	3RV10 11-1FA15		0.301 B	3RV10 11-1FA25			0.303
6.3	2.2	4.5 ... 6.3	82	100	▶	3RV10 11-1GA15		0.303 B	3RV10 11-1GA25			0.303
8	3	5.5 ... 8	104	50	▶	3RV10 11-1HA15		0.304 B	3RV10 11-1HA25			0.304
10	4	7 ... 10	130	50	▶	3RV10 11-1JA15		0.300 B	3RV10 11-1JA25			0.300
12	5.5	9 ... 12	156	50	▶	3RV10 11-1KA15		0.297 B	3RV10 11-1KA25			0.298
Size S0												
0.16	0.04	0.11 ... 0.16	2.1	100	▶	3RV10 21-0AA15		0.300	--			
0.2	0.06	0.14 ... 0.2	2.6	100	▶	3RV10 21-0BA15		0.304	--			
0.25	0.06	0.18 ... 0.25	3.3	100	▶	3RV10 21-0CA15		0.302	--			
0.32	0.09	0.22 ... 0.32	4.2	100	▶	3RV10 21-0DA15		0.303	--			
0.4	0.09	0.28 ... 0.4	5.2	100	▶	3RV10 21-0EA15		0.303	--			
0.5	0.12	0.35 ... 0.5	6.5	100	▶	3RV10 21-0FA15		0.304	--			
0.63	0.18	0.45 ... 0.63	8.2	100	▶	3RV10 21-0GA15		0.305	--			
0.8	0.18	0.55 ... 0.8	10	100	▶	3RV10 21-0HA15		0.370	--			
1	0.25	0.7 ... 1	13	100	▶	3RV10 21-0JA15		0.368	--			
1.25	0.37	0.9 ... 1.25	16	100	▶	3RV10 21-0KA15		0.369	--			
1.6	0.55	1.1 ... 1.6	21	100	▶	3RV10 21-1AA15		0.371	--			
2	0.75	1.4 ... 2	26	100	▶	3RV10 21-1BA15		0.371	--			
2.5	0.75	1.8 ... 2.5	33	100	▶	3RV10 21-1CA15		0.372	--			
3.2	1.1	2.2 ... 3.2	42	100	▶	3RV10 21-1DA15		0.375	--			
4	1.5	2.8 ... 4	52	100	▶	3RV10 21-1EA15		0.370	--			
5	1.5	3.5 ... 5	65	100	▶	3RV10 21-1FA15		0.376	--			
6.3	2.2	4.5 ... 6.3	82	100	▶	3RV10 21-1GA15		0.374	--			
8	3	5.5 ... 8	104	100	▶	3RV10 21-1HA15		0.374	--			
10	4	7 ... 10	130	100	▶	3RV10 21-1JA15		0.375	--			
12.5	5.5	9 ... 12.5	163	100	▶	3RV10 21-1KA15		0.374	--			
16	7.5	11 ... 16	208	50	▶	3RV10 21-4AA15		0.382	--			
20	7.5	14 ... 20	260	50	▶	3RV10 21-4BA15		0.376	--			
22	11	17 ... 22	286	50	▶	3RV10 21-4CA15		0.378	--			
25	11	20 ... 25	325	50	▶	3RV10 21-4DA15		0.382	--			

¹⁾ Guide value for 4-pole standard motors at AC 50 Hz 400 V. The actual starting and rated data of the motor to be protected must be considered when selecting the units.

Auxiliary switches can be ordered separately (see "Mountable accessories").

For multi-unit packing and reusable packaging, see Chapter 20 "Appendix" --> "Ordering notes".

SIRIUS 3RV Motor Starter Protectors/Circuit Breakers up to 100 A

Motor Starter Protectors

For motor protection

CLASS 10, without auxiliary switches

Rated current I_n A	Suitable for induction motors ¹⁾ with P kW	Setting range for thermal overload releases A	Instantaneous over-current releases A	Short-circuit breaking capacity at 400 V AC kA	DT	Screw terminals		PU (UNIT, SET, M)	PS*	PG	Weight per PU approx.
						Order No.	Price per PU				
Size S2											
	16	7.5	11 ... 16	208	50	▶	3RV10 31-4AA10	1	1 unit	101	1.046
	20	7.5	14 ... 20	260	50	▶	3RV10 31-4BA10	1	1 unit	101	1.043
	25	11	18 ... 25	325	50	▶	3RV10 31-4DA10	1	1 unit	101	1.031
	32	15	22 ... 32	416	50	▶	3RV10 31-4EA10	1	1 unit	101	1.028
	40	18.5	28 ... 40	520	50	▶	3RV10 31-4FA10	1	1 unit	101	1.047
	45	22	36 ... 45	585	50	▶	3RV10 31-4GA10	1	1 unit	101	1.039
	50	22	40 ... 50	650	50	▶	3RV10 31-4HA10	1	1 unit	101	1.027
3RV10 31-4HA10											
Size S3											
	40	18.5	28 ... 40	520	50	▶	3RV10 41-4FA10	1	1 unit	101	2.219
	50	22	36 ... 50	650	50	▶	3RV10 41-4HA10	1	1 unit	101	2.240
	63	30	45 ... 63	819	50	▶	3RV10 41-4JA10	1	1 unit	101	2.247
	75	37	57 ... 75	975	50	▶	3RV10 41-4KA10	1	1 unit	101	2.253
	90	45	70 ... 90	1170	50	▶	3RV10 41-4LA10	1	1 unit	101	2.280
	100	45	80 ... 100	1235	50	▶	3RV10 41-4MA10	1	1 unit	101	2.295
3RV10 41-4LA10											
Size S3, with increased switching capacity											
	16	7.5	11 ... 16	208	100	▶	3RV10 42-4AA10	1	1 unit	101	2.174
	20	7.5	14 ... 20	260	100	▶	3RV10 42-4BA10	1	1 unit	101	2.185
	25	11	18 ... 25	325	100	▶	3RV10 42-4DA10	1	1 unit	101	2.211
	32	15	22 ... 32	416	100	▶	3RV10 42-4EA10	1	1 unit	101	2.222
	40	18.5	28 ... 40	520	100	▶	3RV10 42-4FA10	1	1 unit	101	2.203
	50	22	36 ... 50	650	100	▶	3RV10 42-4HA10	1	1 unit	101	2.230
	63	30	45 ... 63	819	100	▶	3RV10 42-4JA10	1	1 unit	101	2.255
	75	37	57 ... 75	975	100	▶	3RV10 42-4KA10	1	1 unit	101	2.266
	90	45	70 ... 90	1170	100	▶	3RV10 42-4LA10	1	1 unit	101	2.268
	100	45	80 ... 100	1235	100	▶	3RV10 42-4MA10	1	1 unit	101	2.275
3RV10 42-4JA10											

CLASS 20, without auxiliary switches

Size S2	16	7.5	11 ... 16	208	50	A	3RV10 31-4AB10		1	1 unit	101	1.067
							3RV10 31-4BB10	3RV10 31-4DB10				
	20	7.5	14 ... 20	260	50	A	3RV10 31-4BB10	1	1 unit	101	1.071	
	25	11	18 ... 25	325	50	A	3RV10 31-4DB10	1	1 unit	101	1.054	
	32	15	22 ... 32	416	50	A	3RV10 31-4EB10	1	1 unit	101	1.067	
	40	18.5	28 ... 40	520	50	A	3RV10 31-4FB10	1	1 unit	101	1.076	
	45	22	36 ... 45	585	50	A	3RV10 31-4GB10	1	1 unit	101	1.073	
	50	22	40 ... 50	650	50	A	3RV10 31-4HB10	1	1 unit	101	1.071	
Size S3, with increased switching capacity												
	40	18.5	28 ... 40	520	100	A	3RV10 42-4FB10	1	1 unit	101	2.222	
	50	22	36 ... 50	650	100	A	3RV10 42-4HB10	1	1 unit	101	2.265	
	63	30	45 ... 63	819	100	A	3RV10 42-4JB10	1	1 unit	101	2.278	
	75	37	57 ... 75	975	100	A	3RV10 42-4KB10	1	1 unit	101	2.268	
	90	45	70 ... 90	1170	100	A	3RV10 42-4LB10	1	1 unit	101	2.313	
	100	45	80 ... 100	1235	100	A	3RV10 42-4MB10	1	1 unit	101	2.322	
3RV10 42-4KB10												

¹⁾ Guide value for 4-pole standard motors at AC 50 Hz 400 V. The actual starting and rated data of the motor to be protected must be considered when selecting the units.

Auxiliary switches can be ordered separately (see "Mountable accessories").

For multi-unit packing and reusable packaging, see Chapter 20 "Appendix" --> "Ordering notes".

SIRIUS 3RV Motor Starter Protectors/Circuit Breakers up to 100 A

Motor Starter Protectors

For motor protection with overload relay function

Selection and ordering data

CLASS 10, with overload relay function (automatic RESET), without auxiliary switches

	Rated current I_n	Suitable for induction motors ¹⁾ with P	Setting range for thermal overload releases	Instantaneous over-current releases	Short-circuit breaking capacity at 400 V AC I_{cu}	DT	Screw terminals		PU (UNIT, SET, M)	PS*	PG	Weight per PU approx.										
							Order No.	Price per PU														
A kW A A kA																						
Size S0²⁾																						
 3RV11 21-0KA10	0.16	0.04	0.11 ... 0.16	2.1	100	A	3RV11 21-0AA10		1	1 unit	101	0.354										
	0.2	0.06	0.14 ... 0.2	2.6	100	A	3RV11 21-0BA10		1	1 unit	101	0.358										
	0.25	0.06	0.18 ... 0.25	3.3	100	A	3RV11 21-0CA10		1	1 unit	101	0.352										
	0.32	0.09	0.22 ... 0.32	4.2	100	A	3RV11 21-0DA10		1	1 unit	101	0.352										
	0.4	0.09	0.28 ... 0.4	5.2	100	A	3RV11 21-0EA10		1	1 unit	101	0.355										
	0.5	0.12	0.35 ... 0.5	6.5	100	A	3RV11 21-0FA10		1	1 unit	101	0.356										
	0.63	0.18	0.45 ... 0.63	8.2	100	A	3RV11 21-0GA10		1	1 unit	101	0.358										
	0.8	0.18	0.55 ... 0.8	10	100	A	3RV11 21-0HA10		1	1 unit	101	0.421										
	1	0.25	0.7 ... 1	13	100	A	3RV11 21-0JA10		1	1 unit	101	0.416										
	1.25	0.37	0.9 ... 1.25	16	100	A	3RV11 21-0KA10		1	1 unit	101	0.426										
	1.6	0.55	1.1 ... 1.6	21	100	A	3RV11 21-1AA10		1	1 unit	101	0.422										
	2	0.75	1.4 ... 2	26	100	A	3RV11 21-1BA10		1	1 unit	101	0.427										
	2.5	0.75	1.8 ... 2.5	33	100	A	3RV11 21-1CA10		1	1 unit	101	0.422										
	3.2	1.1	2.2 ... 3.2	42	100	A	3RV11 21-1DA10		1	1 unit	101	0.428										
	4	1.5	2.8 ... 4	52	100	A	3RV11 21-1EA10		1	1 unit	101	0.420										
	5	1.5	3.5 ... 5	65	100	A	3RV11 21-1FA10		1	1 unit	101	0.429										
	6.3	2.2	4.5 ... 6.3	82	100	A	3RV11 21-1GA10		1	1 unit	101	0.426										
	8	3	5.5 ... 8	104	100	A	3RV11 21-1HA10		1	1 unit	101	0.425										
	10	4	7 ... 10	130	100	A	3RV11 21-1JA10		1	1 unit	101	0.428										
	12.5	5.5	9 ... 12.5	163	100	A	3RV11 21-1KA10		1	1 unit	101	0.426										
	16	7.5	11 ... 16	208	50	A	3RV11 21-4AA10		1	1 unit	101	0.436										
	20	7.5	14 ... 20	260	50	A	3RV11 21-4BA10		1	1 unit	101	0.430										
	22	11	17 ... 22	286	50	A	3RV11 21-4CA10		1	1 unit	101	0.427										
	25	11	20 ... 25	325	50	A	3RV11 21-4DA10		1	1 unit	101	0.432										
Size S2²⁾																						
 3RV11 31-4EA10	16	7.5	11 ... 16	208	50	A	3RV11 31-4AA10		1	1 unit	101	1.123										
	20	7.5	14 ... 20	260	50	A	3RV11 31-4BA10		1	1 unit	101	1.109										
	25	11	18 ... 25	325	50	A	3RV11 31-4DA10		1	1 unit	101	1.114										
	32	15	22 ... 32	416	50	A	3RV11 31-4EA10		1	1 unit	101	1.111										
	40	18.5	28 ... 40	520	50	A	3RV11 31-4FA10		1	1 unit	101	1.123										
	45	22	36 ... 45	585	50	A	3RV11 31-4GA10		1	1 unit	101	1.101										
Size S3, with increased switching capacity²⁾																						
 3RV11 42-4AA10	16	7.5	11 ... 16	208	100	A	3RV11 42-4AA10		1	1 unit	101	2.247										
	20	7.5	14 ... 20	260	100	A	3RV11 42-4BA10		1	1 unit	101	2.255										
	25	11	18 ... 25	325	100	A	3RV11 42-4DA10		1	1 unit	101	2.284										
	32	15	22 ... 32	416	100	A	3RV11 42-4EA10		1	1 unit	101	2.295										
	40	18.5	28 ... 40	520	100	A	3RV11 42-4FA10		1	1 unit	101	2.288										
	50	22	36 ... 50	650	100	A	3RV11 42-4HA10		1	1 unit	101	2.320										
	63	30	45 ... 63	819	100	A	3RV11 42-4JA10		1	1 unit	101	2.333										
	75	37	57 ... 75	975	100	A	3RV11 42-4KA10		1	1 unit	101	2.368										
	90	45	70 ... 90	1170	100	A	3RV11 42-4LA10		1	1 unit	101	2.353										
	100	45	80 ... 100	1235	100	A	3RV11 42-4MA10		1	1 unit	101	2.346										

¹⁾ Guide value for 4-pole standard motors at AC 50 Hz 400 V. The actual starting and rated data of the motor to be protected must be considered when selecting the units.

²⁾ Accessories for mounting on the right (for sizes S0 to S3) and 3RV19 15 three-phase busbars (for size S0) cannot be used.

Auxiliary switches can be ordered separately
(see "Mountable accessories").

* You can order this quantity or a multiple thereof.

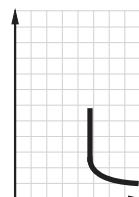
SIRIUS 3RV Motor Starter Protectors/Circuit Breakers up to 100 A

Motor Starter Protectors

For starter combinations

Selection and ordering data

Without auxiliary switches



	Rated current I_n	Suitable for induction motors ¹⁾ with P	Thermal overload releases ²⁾	Instantaneous over-current releases	Short-circuit breaking capacity at 400 V AC I_{cu}	DT	Screw terminals		PU (UNIT, SET, M)	PS*	PG	Weight per PU approx.
							Order No.	Price per PU				
kg												
Size S0												
	0.16	0.04	Without	2.1	100	A	3RV13 21-0AC10		1	1 unit	101	0.282
	0.2	0.06	Without	2.6	100	A	3RV13 21-0BC10		1	1 unit	101	0.284
	0.25	0.06	Without	3.3	100	A	3RV13 21-0CC10		1	1 unit	101	0.285
	0.32	0.09	Without	4.2	100	A	3RV13 21-0DC10		1	1 unit	101	0.282
	0.4	0.09	Without	5.2	100	A	3RV13 21-0EC10		1	1 unit	101	0.286
	0.5	0.12	Without	6.5	100	A	3RV13 21-0FC10		1	1 unit	101	0.283
	0.63	0.18	Without	8.2	100	A	3RV13 21-0GC10		1	1 unit	101	0.348
	0.8	0.18	Without	10	100	A	3RV13 21-0HC10		1	1 unit	101	0.283
	1	0.25	Without	13	100	A	3RV13 21-0JC10		1	1 unit	101	0.345
	1.25	0.37	Without	16	100	A	3RV13 21-0KC10		1	1 unit	101	0.351
	1.6	0.55	Without	21	100	A	3RV13 21-1AC10		1	1 unit	101	0.352
	2	0.75	Without	26	100	A	3RV13 21-1BC10		1	1 unit	101	0.352
	2.5	0.75	Without	33	100	A	3RV13 21-1CC10		1	1 unit	101	0.352
	3.2	1.1	Without	42	100	A	3RV13 21-1DC10		1	1 unit	101	0.353
	4	1.5	Without	52	100	A	3RV13 21-1EC10		1	1 unit	101	0.349
	5	1.5	Without	65	100	A	3RV13 21-1FC10		1	1 unit	101	0.354
	6.3	2.2	Without	82	100	A	3RV13 21-1GC10		1	1 unit	101	0.355
	8	3	Without	104	100	A	3RV13 21-1HC10		1	1 unit	101	0.354
	10	4	Without	130	100	A	3RV13 21-1JC10		1	1 unit	101	0.357
	12.5	5.5	Without	163	100	A	3RV13 21-1KC10		1	1 unit	101	0.354
	16	7.5	Without	208	50	A	3RV13 21-4AC10		1	1 unit	101	0.362
	20	7.5	Without	260	50	A	3RV13 21-4BC10		1	1 unit	101	0.357
	22	11	Without	286	50	A	3RV13 21-4CC10		1	1 unit	101	0.358
	25	11	Without	325	50	A	3RV13 21-4DC10		1	1 unit	101	0.359
Size S2												
	16	7.5	Without	208	50	A	3RV13 31-4AC10		1	1 unit	101	1.038
	20	7.5	Without	260	50	A	3RV13 31-4BC10		1	1 unit	101	1.037
	25	11	Without	325	50	A	3RV13 31-4DC10		1	1 unit	101	1.014
	32	15	Without	416	50	A	3RV13 31-4EC10		1	1 unit	101	1.018
	40	18.5	Without	520	50	A	3RV13 31-4FC10		1	1 unit	101	1.033
	45	22	Without	585	50	A	3RV13 31-4GC10		1	1 unit	101	1.040
	50	22	Without	650	50	A	3RV13 31-4HC10		1	1 unit	101	1.019
3RV13 31-4AC10												
Size S3												
	40	18.5	Without	520	50	A	3RV13 41-4FC10		1	1 unit	101	2.197
	50	22	Without	650	50	A	3RV13 41-4HC10		1	1 unit	101	2.227
	63	30	Without	819	50	A	3RV13 41-4JC10		1	1 unit	101	2.244
	75	37	Without	975	50	A	3RV13 41-4KC10		1	1 unit	101	2.247
	90	45	Without	1170	50	A	3RV13 41-4LC10		1	1 unit	101	2.269
	100	45	Without	1235	50	A	3RV13 41-4MC10		1	1 unit	101	2.292
3RV13 41-4JC10												
Size S3, with increased switching capacity												
	16	7.5	Without	208	100	A	3RV13 42-4AC10		1	1 unit	101	2.175
	20	7.5	Without	260	100	A	3RV13 42-4BC10		1	1 unit	101	2.188
	25	11	Without	325	100	A	3RV13 42-4DC10		1	1 unit	101	2.219
	32	15	Without	416	100	A	3RV13 42-4EC10		1	1 unit	101	2.208
	40	18.5	Without	520	100	A	3RV13 42-4FC10		1	1 unit	101	2.218
	50	22	Without	650	100	A	3RV13 42-4HC10		1	1 unit	101	2.218
	63	30	Without	819	100	A	3RV13 42-4JC10		1	1 unit	101	2.248
	75	37	Without	975	100	A	3RV13 42-4KC10		1	1 unit	101	2.278
	90	45	Without	1170	100	A	3RV13 42-4LC10		1	1 unit	101	2.266
	100	45	Without	1235	100	A	3RV13 42-4MC10		1	1 unit	101	2.293
3RV13 42-4JC10												

¹⁾ Guide value for 4-pole standard motors at 50 Hz 400 V AC. The actual starting and rated data of the motor to be protected must be considered when selecting the units.

²⁾ For overload protection of the motors, appropriate overload relays must be used.

Auxiliary switches can be ordered separately (see "Mountable accessories").

For multi-unit packing and reusable packaging, see Chapter 20 "Appendix" --> "Ordering notes".

SIRIUS 3RV Motor Starter Protectors/Circuit Breakers up to 100 A

Motor Starter Protectors

For transformer protection

Selection and ordering data

CLASS 10, without auxiliary switches

Motor starter protectors for the protection of transformers with high inrush current

	Rated current I_n	Setting range for thermal overload releases	Instantane- ous over- current releases	Short-circuit breaking capacity at 400 V AC I_{cu}	DT	Screw terminals		PU (UNIT, SET, M)	PS*	PG	Weight per PU approx.
						Order No.	Price per PU				
Size S0											
	0.16	0.11 ... 0.16	3.3	100	▶	3RV14 21-0AA10		1	1 unit	101	0.286
3RV14 21-0KA10	0.2	0.14 ... 0.2	4.2	100	▶	3RV14 21-0BA10		1	1 unit	101	0.287
	0.25	0.18 ... 0.25	5.2	100	▶	3RV14 21-0CA10		1	1 unit	101	0.286
	0.32	0.22 ... 0.32	6.5	100	▶	3RV14 21-0DA10		1	1 unit	101	0.288
	0.4	0.28 ... 0.4	8.2	100	▶	3RV14 21-0EA10		1	1 unit	101	0.287
	0.5	0.35 ... 0.5	10	100	▶	3RV14 21-0FA10		1	1 unit	101	0.286
	0.63	0.45 ... 0.63	13	100	▶	3RV14 21-0GA10		1	1 unit	101	0.290
	0.8	0.55 ... 0.8	16	100	▶	3RV14 21-0HA10		1	1 unit	101	0.290
	1	0.7 ... 1	21	100	▶	3RV14 21-0JA10		1	1 unit	101	0.353
	1.25	0.9 ... 1.25	26	100	▶	3RV14 21-0KA10		1	1 unit	101	0.354
	1.6	1.1 ... 1.6	33	100	▶	3RV14 21-1AA10		1	1 unit	101	0.353
	2	1.4 ... 2	42	100	▶	3RV14 21-1BA10		1	1 unit	101	0.358
	2.5	1.8 ... 2.5	52	100	▶	3RV14 21-1CA10		1	1 unit	101	0.354
	3.2	2.2 ... 3.2	65	100	▶	3RV14 21-1DA10		1	1 unit	101	0.358
	4	2.8 ... 4	82	100	▶	3RV14 21-1EA10		1	1 unit	101	0.354
	5	3.5 ... 5	104	100	▶	3RV14 21-1FA10		1	1 unit	101	0.357
	6.3	4.5 ... 6.3	130	100	▶	3RV14 21-1GA10		1	1 unit	101	0.356
	8	5.5 ... 8	163	100	▶	3RV14 21-1HA10		1	1 unit	101	0.358
	10	7 ... 10	208	100	▶	3RV14 21-1JA10		1	1 unit	101	0.362
	12.5	9 ... 12.5	260	100	▶	3RV14 21-1KA10		1	1 unit	101	0.360
	16	11 ... 16	286	50	▶	3RV14 21-4AA10		1	1 unit	101	0.365
	20	14 ... 20	325	50	▶	3RV14 21-4BA10		1	1 unit	101	0.365
Size S2											
	16	11 ... 16	325	50	▶	3RV14 31-4AA10		1	1 unit	101	1.029
3RV14 31-4DA10	20	14 ... 20	416	50	▶	3RV14 31-4BA10		1	1 unit	101	1.034
	25	18 ... 25	520	50	▶	3RV14 31-4DA10		1	1 unit	101	1.038
	32	22 ... 32	660	50	▶	3RV14 31-4EA10		1	1 unit	101	1.029
	40	28 ... 40	836	50	▶	3RV14 31-4FA10		1	1 unit	101	1.039

Auxiliary switches can be ordered separately
(see "Mountable accessories").

For multi-unit packing and reusable packaging, see Chapter 20
"Appendix" --> "Ordering notes".

SIRIUS 3RV Motor Starter Protectors/Circuit Breakers up to 100 A

Motor Starter Protectors

For fuse monitoring

Selection and ordering data

Without auxiliary switches

	Rated current I_n A	Thermal overload releases 	Instantaneous over-current releases 	Short-circuit breaking capacity at 400 V AC I_{cu} kA	DT	Screw terminals		PU (UNIT, SET, M)	PS*	PG	Weight per PU approx.
						Order No.	Price per PU				
Size S00											
	0.2	0.2	1.2	100	▶	3RV16 11-0BD10		1	1 unit	101	0.289

Note:

The auxiliary switch required for signaling must be ordered separately.

For multi-unit packing and reusable packaging, see Chapter 20 "Appendix" --> "Ordering notes".

Accessories

	Version	Contacts	DT	Screw terminals		PU (UNIT, SET, M)	PS*	PG	Weight per PU approx.
				Order No.	Price per PU				
Mountable auxiliary switches (essential accessories)									
	Transverse auxiliary switches With screw terminals, mountable on front	1 NO + 1 NC	▶	3RV19 01-1E		1	1 unit	101	0.018
	Lateral auxiliary switches With screw terminals, mountable on the left	1 NO + 1 NC	▶	3RV19 01-1A		1	1 unit	101	0.045

Additional auxiliary switches and other accessories
see "Mountable accessories".

SIRIUS 3RV Motor Starter Protectors/Circuit Breakers up to 100 A

Circuit Breakers

**For system protection
according to UL 489/CSA C22.2 No. 5-02**

Selection and ordering data

Without auxiliary switches

Circuit breakers for system protection and non-motor loads according to UL/CSA

	Rated current 1) I_n 1)	Thermal overload releases (non-adjustable)	Instantaneous over-current releases	Short-circuit breaking capacity at AC 480 Y/277 V ²⁾ 480 V AC	DT	Screw terminals		PU (UNIT, SET, M)	PS*	PG	Weight per PU approx.
						I_{bc}	I_{bc}				
Size S0											
 3RV17 21-0AD10	0.16	0.16	2.1	50	--	C	3RV17 21-0AD10	1	1 unit	101	0.460
	0.2	0.2	2.6	50	--	C	3RV17 21-0BD10	1	1 unit	101	0.460
	0.25	0.25	3.3	50	--	C	3RV17 21-0CD10	1	1 unit	101	0.460
	0.32	0.32	4.2	50	--	C	3RV17 21-0DD10	1	1 unit	101	0.460
	0.4	0.4	5.2	50	--	C	3RV17 21-0ED10	1	1 unit	101	0.460
	0.5	0.5	6.5	50	--	C	3RV17 21-0FD10	1	1 unit	101	0.460
	0.63	0.63	8.2	50	--	C	3RV17 21-0GD10	1	1 unit	101	0.460
	0.8	0.8	10	50	--	C	3RV17 21-0HD10	1	1 unit	101	0.530
	1	1	13	50	--	C	3RV17 21-0JD10	1	1 unit	101	0.530
	1.25	1.25	16	50	--	C	3RV17 21-0KD10	1	1 unit	101	0.530
	1.6	1.6	21	50	--	C	3RV17 21-1AD10	1	1 unit	101	0.530
	2	2	26	50	--	C	3RV17 21-1BD10	1	1 unit	101	0.530
	2.5	2.5	33	50	--	C	3RV17 21-1CD10	1	1 unit	101	0.530
	3.2	3.2	42	50	--	C	3RV17 21-1DD10	1	1 unit	101	0.530
	4	4	52	50	--	C	3RV17 21-1ED10	1	1 unit	101	0.530
	5	5	65	50	--	C	3RV17 21-1FD10	1	1 unit	101	0.530
 3RV17 42-5FD10	6.3	6.3	82	50	--	C	3RV17 21-1GD10	1	1 unit	101	0.530
	8	8	104	50	--	C	3RV17 21-1HD10	1	1 unit	101	0.530
	10	10	130	50	--	C	3RV17 21-1JD10	1	1 unit	101	0.530
	12.5	12.5	163	50	--	C	3RV17 21-1KD10	1	1 unit	101	0.530
	15	15	208	50	--	C	3RV17 21-4AD10	1	1 unit	101	0.530
	20	20	260	50	--	C	3RV17 21-4BD10	1	1 unit	101	0.530
	22	22	286	50	--	C	3RV17 21-4CD10	1	1 unit	101	0.530
	10	10	150	65	65	B	3RV17 42-5AD10	1	1 unit	101	0.460
	15	15	225	65	65	B	3RV17 42-5BD10	1	1 unit	101	0.460
	20	20	260	65	65	B	3RV17 42-5CD10	1	1 unit	101	0.460
	25	25	325	65	65	B	3RV17 42-5DD10	1	1 unit	101	0.460
	30	30	390	65	65	B	3RV17 42-5ED10	1	1 unit	101	0.460
	35	35	455	65	--	B	3RV17 42-5FD10	1	1 unit	101	0.460
	40	40	520	65	--	B	3RV17 42-5GD10	1	1 unit	101	0.460
	45	45	585	65	--	B	3RV17 42-5HD10	1	1 unit	101	0.460
	50	50	650	65	--	B	3RV17 42-5JD10	1	1 unit	101	0.460
	60	60	780	65	--	B	3RV17 42-5LD10	1	1 unit	101	0.460
	70	70	910	65	--	B	3RV17 42-5QD10	1	1 unit	101	0.460

1) Rated value 100 % according to UL 489 and IEC 60947-2 ("100 % rated breaker").

2) For values for AC 600 Y/347 V "Technical specifications" --> "Permissible rated data of devices approved for North America (UL/CSA)" --> "3RV17 and 3RV18 motor starter protectors as circuit breakers" see note on Technical Information on page 5/1.

Transverse auxiliary switches must not be mounted, lateral auxiliary switches can be ordered separately (see "Mountable accessories").

SIRIUS 3RV Motor Starter Protectors/Circuit Breakers up to 100 A

Circuit Breakers

For transformer protection
according to UL 489/CSA C22.2 No. 5-02

Selection and ordering data

Without auxiliary switches

Circuit breakers for system and transformer protection according to UL/CSA,
specially designed for transformers with high inrush current

	Rated current ¹⁾ I_n ¹⁾	Thermal overload releases (non-adjustable) 	Instantaneous overcurrent releases 	Short-circuit breaking capacity at AC 480 Y/277 V ²⁾ I_{bc} kA	DT	Screw terminals		PU (UNIT, SET, M)	PS*	PG	Weight per PU approx.
						Order No.	Price per PU				
Size S0											
 3RV18 21-0AD10	0.16	0.16	3.3	50	C	3RV18 21-0AD10		1	1 unit	101	0.450
	0.2	0.2	4.2	50	C	3RV18 21-0BD10		1	1 unit	101	0.450
	0.25	0.25	5.2	50	C	3RV18 21-0CD10		1	1 unit	101	0.450
	0.32	0.32	6.5	50	C	3RV18 21-0DD10		1	1 unit	101	0.450
	0.4	0.4	8.2	50	C	3RV18 21-0ED10		1	1 unit	101	0.450
	0.5	0.5	10	50	C	3RV18 21-0FD10		1	1 unit	101	0.450
	0.63	0.63	13	50	C	3RV18 21-0GD10		1	1 unit	101	0.450
	0.8	0.8	16	50	C	3RV18 21-0HD10		1	1 unit	101	0.450
	1	1	21	50	C	3RV18 21-0JD10		1	1 unit	101	0.520
	1.25	1.25	26	50	C	3RV18 21-0KD10		1	1 unit	101	0.520
	1.6	1.6	33	50	C	3RV18 21-1AD10		1	1 unit	101	0.520
	2	2	42	50	C	3RV18 21-1BD10		1	1 unit	101	0.520
	2.5	2.5	52	50	C	3RV18 21-1CD10		1	1 unit	101	0.520
	3.2	3.2	65	50	C	3RV18 21-1DD10		1	1 unit	101	0.520
	4	4	82	50	C	3RV18 21-1ED10		1	1 unit	101	0.520
	5	5	104	50	C	3RV18 21-1FD10		1	1 unit	101	0.520
	6.3	6.3	130	50	C	3RV18 21-1GD10		1	1 unit	101	0.520
	8	8	163	50	C	3RV18 21-1HD10		1	1 unit	101	0.520
	10	10	208	50	C	3RV18 21-1JD10		1	1 unit	101	0.520
	12.5	12.5	260	50	C	3RV18 21-1KD10		1	1 unit	101	0.520
	15	15	286	50	C	3RV18 21-4AD10		1	1 unit	101	0.520
	20	20	325	50	C	3RV18 21-4BD10		1	1 unit	101	0.520

¹⁾ Rated value 100 % according to UL 489 and IEC 60947-2 ("100 % rated breaker").

²⁾ For values for AC 600 Y/347 V "Technical specifications" --> "Permissible rated data of devices approved for North America (UL/CSA)"
--> "3RV17 and 3RV18 motor starter protectors as circuit breakers" see note on Technical Information on page 5/1.

Transverse auxiliary switches must not be mounted,
lateral auxiliary switches can be ordered separately
(see "Mountable accessories").

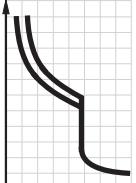
SIRIUS 3RV Motor Starter Protectors/Circuit Breakers up to 100 A

Motor Starter Protectors

For distance protection

Selection and ordering data

Voltage transformer circuit breakers with auxiliary switches (1 CO)

 Size S00  3RV16 11-1.G14	Rated current	Thermal overload releases	Instantaneous overcurrent releases	Auxiliary switch integrated in the MSP, transverse	Short-circuit breaking capacity at 400 V AC	DT	Screw terminals	PU (UNIT, SET, M)	PS*	PG	Weight per PU approx.
	I_n	A	A	A	I_{cu}	kA		Order No.	Price per PU		kg
	1.4	1.4	6	1 CO	50	B	3RV16 11-1AG14		1	1 unit	101 0.314
	2.5	2.5	10.5	1 CO	50		3RV16 11-1CG14		1	1 unit	101 0.318
	3	3	20	1 CO	50		3RV16 11-1DG14		1	1 unit	101 0.315

Accessories

Mountable auxiliary switches for other signaling purposes  3RV19 01-1A	Version	Contacts	DT	Screw terminals	PU (UNIT, SET, M)	PS*	PG	Weight per PU approx.
				Order No.	Price per PU			kg
	Lateral auxiliary switches With screw terminals, mountable on the left	1 NO + 1 NC	►	3RV19 01-1A		1	1 unit	101 0.045

Additional auxiliary switches and other accessories see "Mountable accessories".

More information

Conversion of 3VU13 to 3RV1 voltage transformer circuit breakers

The 3VU13 voltage transformer circuit breakers previously available have been discontinued. The 3RV1 voltage transformer circuit breakers are offered as replacement types.

Previous type	Replacement type
3VU13 11-6HR00	3RV16 11-1CG14
3VU13 21-6HR00	3RV16 11-1CG14 + 3RV19 01-1A
3VU13 11-6JR00	3RV16 11-1DG14

SIRIUS 3RV Motor Starter Protectors up to 100 A

Accessories

Mountable accessories

Overview

Mounting location and function

The 3RV1 motor starter protectors/circuit breakers have three main contact elements. In order to achieve maximum flexibility, auxiliary switches, signaling switches, auxiliary releases and isolator modules can be supplied separately.

Front side

Notes:

- A maximum of 4 auxiliary contacts with auxiliary switches can be attached to each motor starter protector.
- Transverse auxiliary switches must not be used for the 3RV17 and 3RV18 circuit breakers.

Transverse auxiliary switches

1 NO + 1 NC
or
2 NO
or
1 CO contact

These components can be fitted as required on the motor starter protectors without using tools.

For overview graphic see "General Data" --> "Overview".

Left-hand side

Notes:

- A maximum of 4 auxiliary contacts with auxiliary switches can be attached to each motor starter protector/circuit breaker.
- Auxiliary switches (2 contacts) and signal switches can be mounted separately or together.
- The signaling switch cannot be used for the 3RV17 and 3RV18 circuit breakers.

Lateral auxiliary switches (2 contacts)

1 NO + 1 NC
or
2 NO
or
2 NC

One of the three auxiliary switches can be mounted laterally at the left side for each motor starter protector. The contacts of the auxiliary switch close and open together with the main contacts of the motor starter protector.

The overall width of the lateral auxiliary switch with 2 contacts is 9 mm.

Lateral auxiliary switches (4 contacts)

2 NO + 2 NC

One auxiliary switch with 4 contacts can be mounted at left side laterally for each motor starter protector/circuit breaker. The contacts of the auxiliary switch close and open together with the main contacts of the motor starter protector/circuit breaker.

The overall width of the lateral auxiliary switch with 4 contacts is 18 mm.

Signaling switches for sizes S0, S2 and S3

Tripping 1 NO + 1 NC
Short-circuit 1 NO + 1 NC

One signaling switch can be mounted at the left side of each motor starter protector/circuit breaker with a rotary operating mechanism.

The signaling switch has two contact systems.

One contact system always signals tripping irrespective of whether this was caused by a short-circuit, an overload or an auxiliary release. The other contact system only switches in the event of a short-circuit. There is no signaling as a result of switching off with the handle.

In order to be able to switch on the motor starter protector again after a short-circuit, the signaling switch must be reset manually after the error cause has been eliminated.

The overall width of the signaling switch is 18 mm.

Right-hand side

Notes:

- One auxiliary release can be mounted per motor starter protector/circuit breaker.
- Accessories cannot be mounted at the right-hand side of the 3RV11 motor starter protectors for motor protection with over-load relay function.

Auxiliary releases

Shunt releases

For remote-controlled tripping of the motor starter protector/circuit breaker. The release coil should only be energized for short periods (see schematics).

or

Undervoltage releases

Trips the motor starter protector/circuit breaker when the voltage is interrupted and prevents the motor from being restarted accidentally when the voltage is restored. Used for remote-controlled tripping of the motor starter protector.

Particularly suitable for EMERGENCY-STOP disconnection by way of the corresponding EMERGENCY-STOP pushbutton according to EN 60204-1 (VDE 0113).

or

Undervoltage releases with leading auxiliary contacts (2 NO)

Function and use as for the undervoltage release without leading auxiliary contacts, but with the following additional function: the auxiliary contacts will open in switch position OFF to deenergize the coil of the undervoltage release, thus interrupting energy consumption. In the "tripped" position, these auxiliary contacts are not guaranteed to open. The leading contacts permit the motor starter protector to reclose.

The overall width of the auxiliary release is 18 mm.

Top

Notes:

- The isolator module cannot be used for the 3RV17 and 3RV18 circuit breakers.
- The isolator module covers the terminal screws of the transverse auxiliary switch. If the isolator module is used, we therefore recommend that either the lateral auxiliary switches be fitted or that the isolator module not be mounted until the auxiliary switch has been wired.

Isolator modules for sizes S0 and S2

Isolator modules can be mounted to the upper terminal end of motor starter protectors of sizes S0 and S2.

The supply cable is connected to the motor starter protector through the isolator module.

The plug can only be unplugged when the motor starter protector/circuit breaker is open and isolates all 3 poles of the motor starter protector from the network. The shock-protected isolation point is clearly visible and secured with a padlock to prevent reinsertion of the plug.

For a complete overview of which accessories can be used for the various motor starter protectors see "Introduction" --> "Overview" --> "Motor starter protectors".

SIRIUS 3RV Motor Starter Protectors up to 100 A

Accessories

Mountable accessories

Selection and ordering data

Version	Contacts	For motor starter protectors/circuit breakers Size	DT	Screw terminals		PU (UNIT, SET, M)	PS*	PG	Weight per PU approx.
				Order No.	Price per PU				
Auxiliary switches¹⁾									
 3RV19 01-1E	Transverse auxiliary switches With screw terminals, mountable on front	1 CO 1 NO + 1 NC 2 NO	S00, S0, S2, S3	► 3RV19 01-1D ► 3RV19 01-1E ► 3RV19 01-1F	1 1 1	1 unit 1 unit 1 unit	101	0.015 0.018 0.018	
 3RV19 01-1G	Solid-state compatible transverse auxiliary switches With screw terminals, front mountable, for operation in dusty atmosphere and in solid-state circuits with low operating currents	1 CO	S00, S0, S2, S3	A 3RV19 01-1G	1	1 unit	101	0.016	
 3RV19 01-0H	Covers for transverse auxiliary switches	--	S00, S0, S2, S3	► 3RV19 01-0H	1	10 units	101	0.006	
 3RV19 01-1A	Lateral auxiliary switches With screw terminals, mountable on the left	1 NO + 1 NC 2 NO 2 NC 2 NO + 2 NC	S00, S0, S2, S3	► 3RV19 01-1A ► 3RV19 01-1B ► 3RV19 01-1C A 3RV19 01-1J	1 1 1 1	1 unit 1 unit 1 unit 1 unit	101	0.045 0.045 0.045 0.083	
 3RV19 01-1J									

- ¹⁾ Each motor starter protector can be fitted with one transverse and one lateral auxiliary switch. The lateral auxiliary switch with 2 NO + 2 NC is used without a transverse auxiliary switch. Transverse auxiliary switches must not be used for the 3RV17 and 3RV18 circuit breakers.

Version	Contacts	For motor starter protectors/circuit breakers Size	DT	Cage Clamp terminals		PU (UNIT, SET, M)	PS*	PG	Weight per PU approx.
				Order No.	Price € per PU				
Auxiliary switches¹⁾									
 3RV19 01-2E	Transverse auxiliary switches With Cage Clamp terminals, mountable on front	1 NO + 1 NC 2 NO	S00, S0, S2, S3	► 3RV19 01-2E ► 3RV19 01-2F	1 1	1 unit 1 unit	101	0.017 0.018	
 3RV19 01-2A	Lateral auxiliary switches With Cage Clamp terminals, mountable on left	1 NO + 1 NC 2 NO 2 NC	S00, S0, S2, S3	► 3RV19 01-2A ► 3RV19 01-2B ► 3RV19 01-2C	1 1 1	1 unit 1 unit 1 unit	101	0.040 0.040 0.040	
 3RV19 01-2A									

- ¹⁾ Each motor starter protector can be fitted with one transverse and one lateral auxiliary switch. Transverse auxiliary switches must not be used for the 3RV17 and 3RV18 circuit breakers.

* You can order this quantity or a multiple thereof.

SIRIUS 3RV Motor Starter Protectors up to 100 A**Accessories****Mountable accessories**

Version	For motor starter protectors/ circuit breakers Size	DT	Screw terminals	PU (UNIT, SET, M)	PS*	PG	Weight per PU approx.
			Order No.	Price per PU	kg		
Signaling switches¹⁾							
	Signaling switches One signaling switch can be mounted on the left per motor starter protector.	Separate tripped and short-circuit alarms, 1 NO + 1 NC each	S0, S2, S3	▶ 3RV19 21-1M	1	1 unit	101 0.094
Isolator modules¹⁾							
	Isolator modules Visible isolating distance S0 for isolating individual motor starter protectors from the network, lock- able in disconnected position.	Visible isolating distance S0 for isolating individual motor starter protectors from the network, lock- able in disconnected position.	S2	▶ 3RV19 28-1A ▶ 3RV19 38-1A	1	1 unit	101 0.157
3RV19 38-1A with padlock					1	1 unit	101 0.324

¹⁾ This accessory cannot be used for the 3RV17 and 3RV18 circuit breakers.

SIRIUS 3RV Motor Starter Protectors up to 100 A

Accessories

Mountable accessories

	Rated control supply voltage U_s					For motor starter protectors/ circuit breakers Size	DT	Screw terminals 	PU (UNIT, SET, M)	PS*	PG	Weight per PU approx.	
	AC 50 Hz	AC 60 Hz	AC 50/60 Hz	AC/DC 50/60 Hz, DC	DC								
V	V	V	V	V									kg
Auxiliary releases³⁾													
Undervoltage releases													
3RV19 02-1DP0	--	--	--	--	24	S00, S0, S2, S3	A	3RV19 02-1AB4		1	1 unit	101	0.138
	24	--	--	--	--	S00, S0, S2, S3	A	3RV19 02-1AB0		1	1 unit	101	0.134
	110	120	--	--	--	S00, S0, S2, S3	A	3RV19 02-1AF0		1	1 unit	101	0.134
	--	208	--	--	--	S00, S0, S2, S3	A	3RV19 02-1AM1		1	1 unit	101	0.128
	230	240	--	--	--	S00, S0, S2, S3	►	3RV19 02-1AP0		1	1 unit	101	0.131
	400	440	--	--	--	S00, S0, S2, S3	►	3RV19 02-1AV0		1	1 unit	101	0.127
	415	480	--	--	--	S00, S0, S2, S3	A	3RV19 02-1AV1		1	1 unit	101	0.129
	500	600	--	--	--	S00, S0, S2, S3	A	3RV19 02-1AS0		1	1 unit	101	0.127
Undervoltage releases with leading auxiliary contacts 2 NO													
3RV19 12-1CP0	230	240	--	--	--	S00	A	3RV19 12-1CP0		1	1 unit	101	0.140
	400	440	--	--	--	S00	A	3RV19 12-1CV0		1	1 unit	101	0.137
	415	480	--	--	--	S00	A	3RV19 12-1CV1		1	1 unit	101	0.139
	230	240	--	--	--	S0, S2, S3	A	3RV19 22-1CP0		1	1 unit	101	0.139
	400	440	--	--	--	S0, S2, S3	A	3RV19 22-1CV0		1	1 unit	101	0.136
	415	480	--	--	--	S0, S2, S3	A	3RV19 22-1CV1		1	1 unit	101	0.138
Shunt releases													
	--	--	20 ... 24	20 ... 70	--	S00, S0, S2, S3	►	3RV19 02-1DB0		1	1 unit	101	0.133
	--	--	90 ... 110	70 ... 190	--	S00, S0, S2, S3	A	3RV19 02-1DF0		1	1 unit	101	0.135
	--	--	210 ... 240	190 ... 330	--	S00, S0, S2, S3	►	3RV19 02-1DP0		1	1 unit	101	0.130
	--	--	350 ... 415	330 ... 500	--	S00, S0, S2, S3	A	3RV19 02-1DV0		1	1 unit	101	0.129
	--	--	500	500	--	S00, S0, S2, S3	A	3RV19 02-1DS0		1	1 unit	101	0.126

¹⁾ The voltage range is valid for 100 % (infinite) ON period. The response voltage lies at 0.9 of the lower limit of the voltage range.

²⁾ The voltage range is valid for 5 s ON period at AC 50 Hz/60 Hz and DC. The response voltage lies at 0.85 of the lower limit of the voltage range.

³⁾ One auxiliary release can be mounted on the right per motor starter protector (does not apply to 3RV11 motor starter protectors with overload relay function).