

Protection Equipment



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Protection Equipment

Introduction

Overview



Type	3RV10	3RV11	3RV13	3RV14	3RV16	3RV16	3RV17	3RV18
3RV1 circuit breakers/motor starter protectors up to 100 A								
Uses								
System protection	✓ ¹⁾	✓ ¹⁾	--	--	--	--	✓	✓
Motor protection	✓	--	--	--	--	--	--	--
Motor protection with overload relay function	--	✓	--	--	--	--	--	--
Starter combinations	--	--	✓	--	--	--	--	--
Transformer protection	--	--	--	✓	--	--	✓	✓
Fuse monitoring	--	--	--	--	✓	--	--	--
Voltage transformer circuit breakers for distance protection	--	--	--	--	--	✓	--	--
Size	S00, S0, S2, S3	S0, S2, S3	S0, S2, S3	S0, S2	S00	S00	S0, S3	S0
Rated current I_n								
Size S00	A to 12	--	--	--	0.2	to 3	--	--
Size S0	A to 25	to 25	to 25	to 20	--	--	to 22	to 20
Size S2	A to 50	to 50	to 50	to 40	--	--	--	--
Size S3	A to 100	to 100	to 100	--	--	--	to 70	--
Rated operational voltage U_e acc. to IEC	V 690 AC ²⁾	690 AC ²⁾	690 AC ²⁾	690 AC ²⁾	690 AC ²⁾	400 AC	690 AC	690 AC
Rated frequency	Hz 50/60	50/60	50/60	50/60	50/60	16 ² / ₃ ... 60	50/60	50/60
Trip class	CLASS 10 CLASS 20	CLASS 10	--	CLASS 10	--	--	--	--
Thermal overload release	A 0.11 ... 0.16 to A 80 ... 100	0.11 ... 0.16 to 80 ... 100	None ³⁾	0.11 ... 0.16 to 28 ... 40	0.2	1.4 ... 3	0.16 ... 70 non-adjustable	0.16 ... 20 non-adjustable
Electronic trip units								
A multiple of the rated current	13 times	13 times	13 times	20 times	6 times	4 ... 7 times	13 times	20 times
Short-circuit breaking capacity I_{cu} at 400 V AC	kA 50/100	50/100	50/100	50/100	100	50	4) 13 times	4) 20 times

Accessories

For sizes	S00 S0 S2 S3	S0 S2 S3	S0 S2 S3	S0 S2	S00	S00	S0, S3	S0
Auxiliary switches	✓ ✓ ✓ ✓	✓ ✓ ✓	✓ ✓ ✓	✓ ✓	✓	✓	✓ ⁵⁾	✓ ⁵⁾
Signal switch	-- ✓ ✓ ✓	✓ ✓ ✓	✓ ✓ ✓	✓ ✓	--	--	--	--
Undervoltage trip units	✓ ✓ ✓ ✓	-- -- --	✓ ✓ ✓	✓ ✓	✓	✓	✓	✓
Shunt trip units	✓ ✓ ✓ ✓	-- -- --	✓ ✓ ✓	✓ ✓	✓	✓	✓	✓
Isolator modules	-- ✓ ✓ --	✓ ✓ --	✓ ✓ --	✓ ✓	--	--	--	--
Insulated three-phase busbar systems	✓ ✓ ✓ --	-- ✓ --	✓ ✓ --	✓ ✓	✓	✓	--	--
Busbar adapters	✓ ✓ ✓ ✓	✓ ✓ ✓	✓ ✓ ✓	✓ ✓	✓	✓	--	--
Door-coupling rotary operating mechanisms	-- ✓ ✓ ✓	✓ ✓ ✓	✓ ✓ ✓	✓ ✓	--	--	✓	✓
Remote motorized operating mechanisms	-- -- ✓ ✓	-- ✓ ✓	-- ✓ ✓	-- ✓	--	--	--	--
Link modules	✓ ✓ ✓ ✓	✓ ✓ ✓	✓ ✓ ✓	✓ ✓	✓	✓	--	--
Enclosures for surface mounting	✓ ✓ ✓ --	✓ ✓ --	✓ ✓ --	✓ ✓	✓	✓	--	--
Enclosures for flush mounting	✓ ✓ -- --	✓ -- --	✓ -- --	✓ --	✓	✓	--	--
Front plates	✓ ✓ ✓ ✓	✓ ✓ ✓	✓ ✓ ✓	✓ ✓	✓	✓	--	--
Infeed system	✓ ✓ -- --	-- -- --	✓ -- --	✓ --	--	--	--	--

¹⁾ For symmetrical loading of the three phases.

²⁾ 500 V AC with molded-plastic enclosure.

³⁾ For overload protection of the motors, appropriate overload relays must be used.

⁴⁾ According to UL 489

- at 480 Y/277 V AC: for size S0 50 kA, for size S3 65 kA;

- at 480 V AC: for size S3 (10 A up to 30 A) 65 kA.

⁵⁾ Only lateral auxiliary switches can be fitted.

✓ Has this function or can use this accessory

-- Does not have this function or cannot use this accessory



Type	3RV10			3RV13						
3RV1 molded case motor starter protectors up to 800 A										
Uses										
Motor protection	✓			--						
Starter combinations	--			✓						
Switching capacity	Standard switching capacity			Standard switching capacity						Increased switching capacity
Size	3RV10 63	3RV10 73	3RV10 83	3RV13 53	3RV13 63	3RV13 73	3RV13 83	3RV13 64	3RV13 74	
Rated current I_n	A 100, 160, 200	400	630	1 ... 32	100, 160, 250	400, 630	630, 800	100, 160, 250	400	
Rated operational voltage U_e acc. to IEC	690 AC			690 AC						
Rated frequency	Hz 50/60			50/60						
Trip class	CLASS 10A CLASS 10 CLASS 20 CLASS 30			-- ¹⁾						
Thermal overload release	A 40 ... 100 to A 252 ... 630			None ¹⁾						
Electronic trip units A multiple of the rated current	Adjustable, 6 ... 13 times			Non-adjustable 1 A ... 12.5 A: 13 times; adjustable 20 A, 32 A: 6 ... 12 times	1 ... 10 times					
Short-circuit breaking capacity I_{cu} at 400 V AC	kA 120	120	100	85	120	120	100	200	200	
Trip unit	TU 4			TU 1: 1 A ... 12.5 A; TU 2: 20 A, 32 A	TU 3					

Accessories

For molded case motor starter protectors	3RV10 63	3RV10 73	3RV10 83	3RV13 53	3RV13 63	3RV13 73	3RV13 83	3RV13 64	3RV13 74
Auxiliary switches	✓	✓	✓	✓	✓	✓	✓	✓	✓
Undervoltage trip units	✓	✓	✓	✓	✓	✓	✓	✓	✓
Shunt trip units	✓	✓	✓	✓	✓	✓	✓	✓	✓
Rotary operating mechanisms	✓	✓	✓	✓	✓	✓	✓	✓	✓
Connection methods									
• Front-extended terminals	✓	✓	--	✓	✓	✓	--	✓	✓
• Front-accessible cable terminals	✓	✓	✓	✓	✓	✓	✓	✓	✓
• Rear-accessible terminals	✓	✓	✓	✓	✓	✓	✓	✓	✓

¹⁾ For overload protection of the motors, appropriate overload relays must be used.

✓ Has this function or can use this accessory

-- Does not have this function or cannot use this accessory

3RV Motor Starter Protectors 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.

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

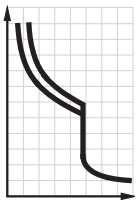



The 3RV1 motor starter protectors can be used:

- 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 is available under "[Configuration](#)".

Selection and ordering data

CLASS 10, without auxiliary switches

	Rated current	Suitable for three-phase induction motors ¹⁾ with P	Setting range for thermal overload release	Instantaneous electronic trip unit	Short-circuit breaking capacity at 400 V AC	DT	Screw terminals 	PU (UNIT, SET, M)	PS*	PG	Weight per PU approx.	
	I_n	kW	A	A	A	kA		Order No.	Price per PU			kg
Size S00												
	0.16	0.04	0.11 ... 0.16	2.1	100	▶	3RV10 11-0AA10	1	1 unit	101	0.230	
	0.2	0.06	0.14 ... 0.2	2.6	100	▶	3RV10 11-0BA10	1	1 unit	101	0.231	
	0.25	0.06	0.18 ... 0.25	3.3	100	▶	3RV10 11-0CA10	1	1 unit	101	0.233	
	0.32	0.09	0.22 ... 0.32	4.2	100	▶	3RV10 11-0DA10	1	1 unit	101	0.233	
	0.4	0.09	0.28 ... 0.4	5.2	100	▶	3RV10 11-0EA10	1	1 unit	101	0.235	
	0.5	0.12	0.35 ... 0.5	6.5	100	▶	3RV10 11-0FA10	1	1 unit	101	0.232	
	0.63	0.18	0.45 ... 0.63	8.2	100	▶	3RV10 11-0GA10	1	1 unit	101	0.233	
	0.8	0.18	0.55 ... 0.8	10	100	▶	3RV10 11-0HA10	1	1 unit	101	0.235	
	1	0.25	0.7 ... 1	13	100	▶	3RV10 11-0JA10	1	1 unit	101	0.233	
	1.25	0.37	0.9 ... 1.25	16	100	▶	3RV10 11-0KA10	1	1 unit	101	0.279	
	1.6	0.55	1.1 ... 1.6	21	100	▶	3RV10 11-1AA10	1	1 unit	101	0.281	
	2	0.75	1.4 ... 2	26	100	▶	3RV10 11-1BA10	1	1 unit	101	0.280	
	2.5	0.75	1.8 ... 2.5	33	100	▶	3RV10 11-1CA10	1	1 unit	101	0.281	
	3.2	1.1	2.2 ... 3.2	42	100	▶	3RV10 11-1DA10	1	1 unit	101	0.283	
	4	1.5	2.8 ... 4	52	100	▶	3RV10 11-1EA10	1	1 unit	101	0.281	
	5	1.5	3.5 ... 5	65	100	▶	3RV10 11-1FA10	1	1 unit	101	0.285	
	6.3	2.2	4.5 ... 6.3	82	100	▶	3RV10 11-1GA10	1	1 unit	101	0.288	
	8	3	5.5 ... 8	104	50	▶	3RV10 11-1HA10	1	1 unit	101	0.289	
	10	4	7 ... 10	130	50	▶	3RV10 11-1JA10	1	1 unit	101	0.284	
	12	5.5	9 ... 12	156	50	▶	3RV10 11-1KA10	1	1 unit	101	0.280	
Size S0												
	0.16	0.04	0.11 ... 0.16	2.1	100	▶	3RV10 21-0AA10	1	1 unit	101	0.286	
	0.2	0.06	0.14 ... 0.2	2.6	100	▶	3RV10 21-0BA10	1	1 unit	101	0.288	
	0.25	0.06	0.18 ... 0.25	3.3	100	▶	3RV10 21-0CA10	1	1 unit	101	0.287	
	0.32	0.09	0.22 ... 0.32	4.2	100	▶	3RV10 21-0DA10	1	1 unit	101	0.286	
	0.4	0.09	0.28 ... 0.4	5.2	100	▶	3RV10 21-0EA10	1	1 unit	101	0.288	
	0.5	0.12	0.35 ... 0.5	6.5	100	▶	3RV10 21-0FA10	1	1 unit	101	0.287	
	0.63	0.18	0.45 ... 0.63	8.2	100	▶	3RV10 21-0GA10	1	1 unit	101	0.289	
	0.8	0.18	0.55 ... 0.8	10	100	▶	3RV10 21-0HA10	1	1 unit	101	0.287	
	1	0.25	0.7 ... 1	13	100	▶	3RV10 21-0JA10	1	1 unit	101	0.350	
	1.25	0.37	0.9 ... 1.25	16	100	▶	3RV10 21-0KA10	1	1 unit	101	0.353	
	1.6	0.55	1.1 ... 1.6	21	100	▶	3RV10 21-1AA10	1	1 unit	101	0.357	
	2	0.75	1.4 ... 2	26	100	▶	3RV10 21-1BA10	1	1 unit	101	0.356	
	2.5	0.75	1.8 ... 2.5	33	100	▶	3RV10 21-1CA10	1	1 unit	101	0.357	
	3.2	1.1	2.2 ... 3.2	42	100	▶	3RV10 21-1DA10	1	1 unit	101	0.356	
	4	1.5	2.8 ... 4	52	100	▶	3RV10 21-1EA10	1	1 unit	101	0.354	
	5	1.5	3.5 ... 5	65	100	▶	3RV10 21-1FA10	1	1 unit	101	0.358	
	6.3	2.2	4.5 ... 6.3	82	100	▶	3RV10 21-1GA10	1	1 unit	101	0.357	
	8	3	5.5 ... 8	104	100	▶	3RV10 21-1HA10	1	1 unit	101	0.356	
	10	4	7 ... 10	130	100	▶	3RV10 21-1JA10	1	1 unit	101	0.361	
	12.5	5.5	9 ... 12.5	163	100	▶	3RV10 21-1KA10	1	1 unit	101	0.358	
16	7.5	11 ... 16	208	50	▶	3RV10 21-4AA10	1	1 unit	101	0.366		
20	7.5	14 ... 20	260	50	▶	3RV10 21-4BA10	1	1 unit	101	0.363		
22	11	17 ... 22	286	50	▶	3RV10 21-4CA10	1	1 unit	101	0.361		
25	11	20 ... 25	325	50	▶	3RV10 21-4DA10	1	1 unit	101	0.364		

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.

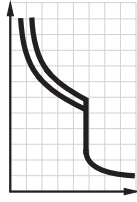
Auxiliary switches can be ordered separately (see "Mountable accessories").

For multi-unit packing and reusable packaging, see "Appendix" --> "Order information".

3RV Motor Starter Protectors up to 100 A

For motor protection

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



Rated current	Suitable for three-phase induction motors ¹⁾ with P	Setting range for thermal overload release	Instantaneous electronic trip unit	Short-circuit breaking capacity at 400 V AC	DT	Screw terminals	PU (UNIT, SET, M)	PS*	PG	Weight per PU approx.		
I_n				I_{cu}			Order No.	Price per PU		kg		
A	kW	A	A	kA								
Size S00												
	0.16	0.04	0.11 ... 0.16	2.1	100	▶	3RV10 11-0AA15		1	1 unit	101	0.245
	0.2	0.06	0.14 ... 0.2	2.6	100	▶	3RV10 11-0BA15		1	1 unit	101	0.246
	0.25	0.06	0.18 ... 0.25	3.3	100	▶	3RV10 11-0CA15		1	1 unit	101	0.246
	0.32	0.09	0.22 ... 0.32	4.2	100	▶	3RV10 11-0DA15		1	1 unit	101	0.247
	0.4	0.09	0.28 ... 0.4	5.2	100	▶	3RV10 11-0EA15		1	1 unit	101	0.250
	0.5	0.12	0.35 ... 0.5	6.5	100	▶	3RV10 11-0FA15		1	1 unit	101	0.247
	0.63	0.18	0.45 ... 0.63	8.2	100	▶	3RV10 11-0GA15		1	1 unit	101	0.249
	0.8	0.18	0.55 ... 0.8	10	100	▶	3RV10 11-0HA15		1	1 unit	101	0.250
	1	0.25	0.7 ... 1	13	100	▶	3RV10 11-0JA15		1	1 unit	101	0.249
	1.25	0.37	0.9 ... 1.25	16	100	▶	3RV10 11-0KA15		1	1 unit	101	0.297
	1.6	0.55	1.1 ... 1.6	21	100	▶	3RV10 11-1AA15		1	1 unit	101	0.298
	2	0.75	1.4 ... 2	26	100	▶	3RV10 11-1BA15		1	1 unit	101	0.297
	2.5	0.75	1.8 ... 2.5	33	100	▶	3RV10 11-1CA15		1	1 unit	101	0.298
	3.2	1.1	2.2 ... 3.2	42	100	▶	3RV10 11-1DA15		1	1 unit	101	0.299
	4	1.5	2.8 ... 4	52	100	▶	3RV10 11-1EA15		1	1 unit	101	0.296
	5	1.5	3.5 ... 5	65	100	▶	3RV10 11-1FA15		1	1 unit	101	0.301
6.3	2.2	4.5 ... 6.3	82	100	▶	3RV10 11-1GA15		1	1 unit	101	0.303	
8	3	5.5 ... 8	104	50	▶	3RV10 11-1HA15		1	1 unit	101	0.304	
10	4	7 ... 10	130	50	▶	3RV10 11-1JA15		1	1 unit	101	0.300	
12	5.5	9 ... 12	156	50	▶	3RV10 11-1KA15		1	1 unit	101	0.297	
Size S0												
	0.16	0.04	0.11 ... 0.16	2.1	100	▶	3RV10 21-0AA15		1	1 unit	101	0.300
	0.2	0.06	0.14 ... 0.2	2.6	100	▶	3RV10 21-0BA15		1	1 unit	101	0.304
	0.25	0.06	0.18 ... 0.25	3.3	100	▶	3RV10 21-0CA15		1	1 unit	101	0.302
	0.32	0.09	0.22 ... 0.32	4.2	100	▶	3RV10 21-0DA15		1	1 unit	101	0.303
	0.4	0.09	0.28 ... 0.4	5.2	100	▶	3RV10 21-0EA15		1	1 unit	101	0.303
	0.5	0.12	0.35 ... 0.5	6.5	100	▶	3RV10 21-0FA15		1	1 unit	101	0.304
	0.63	0.18	0.45 ... 0.63	8.2	100	▶	3RV10 21-0GA15		1	1 unit	101	0.305
	0.8	0.18	0.55 ... 0.8	10	100	▶	3RV10 21-0HA15		1	1 unit	101	0.370
	1	0.25	0.7 ... 1	13	100	▶	3RV10 21-0JA15		1	1 unit	101	0.368
	1.25	0.37	0.9 ... 1.25	16	100	▶	3RV10 21-0KA15		1	1 unit	101	0.369
	1.6	0.55	1.1 ... 1.6	21	100	▶	3RV10 21-1AA15		1	1 unit	101	0.371
	2	0.75	1.4 ... 2	26	100	▶	3RV10 21-1BA15		1	1 unit	101	0.371
	2.5	0.75	1.8 ... 2.5	33	100	▶	3RV10 21-1CA15		1	1 unit	101	0.372
	3.2	1.1	2.2 ... 3.2	42	100	▶	3RV10 21-1DA15		1	1 unit	101	0.375
	4	1.5	2.8 ... 4	52	100	▶	3RV10 21-1EA15		1	1 unit	101	0.370
	5	1.5	3.5 ... 5	65	100	▶	3RV10 21-1FA15		1	1 unit	101	0.376
6.3	2.2	4.5 ... 6.3	82	100	▶	3RV10 21-1GA15		1	1 unit	101	0.374	
8	3	5.5 ... 8	104	100	▶	3RV10 21-1HA15		1	1 unit	101	0.374	
10	4	7 ... 10	130	100	▶	3RV10 21-1JA15		1	1 unit	101	0.375	
12.5	5.5	9 ... 12.5	163	100	▶	3RV10 21-1KA15		1	1 unit	101	0.374	
16	7.5	11 ... 16	208	50	▶	3RV10 21-4AA15		1	1 unit	101	0.382	
20	7.5	14 ... 20	260	50	▶	3RV10 21-4BA15		1	1 unit	101	0.376	
22	11	17 ... 22	286	50	▶	3RV10 21-4CA15		1	1 unit	101	0.378	
25	11	20 ... 25	325	50	▶	3RV10 21-4DA15		1	1 unit	101	0.382	

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.

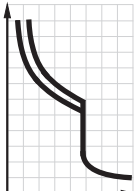


Auxiliary switches can be ordered separately (see "Mountable accessories").

For multi-unit packing and reusable packaging, see "Appendix" --> "Order information".

3RV Motor Starter Protectors up to 100 A

For motor protection

CLASS 10, without auxiliary switches

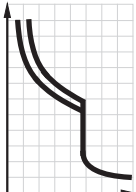


	Rated current	Suitable for three-phase induction motors ¹⁾ with P	Setting range for thermal overload release	Instantaneous electronic trip unit	Short-circuit breaking capacity at 400 V AC	DT	Cage Clamp terminals 	PU (UNIT, SET, M)	PS*	PG	Weight per PU approx.	
	I_n	kW	A	A	A	kA		Order No.	Price per PU			kg
Size S00												
 3RV10 11-1EA20	0.16	0.04	0.11 ... 0.16	2.1	100	▶	3RV10 11-0AA20		1	1 unit	101	0.233
	0.2	0.06	0.14 ... 0.2	2.6	100	▶	3RV10 11-0BA20		1	1 unit	101	0.234
	0.25	0.06	0.18 ... 0.25	3.3	100	▶	3RV10 11-0CA20		1	1 unit	101	0.234
	0.32	0.09	0.22 ... 0.32	4.2	100	▶	3RV10 11-0DA20		1	1 unit	101	0.234
	0.4	0.09	0.28 ... 0.4	5.2	100	▶	3RV10 11-0EA20		1	1 unit	101	0.236
	0.5	0.12	0.35 ... 0.5	6.5	100	▶	3RV10 11-0FA20		1	1 unit	101	0.232
	0.63	0.18	0.45 ... 0.63	8.2	100	▶	3RV10 11-0GA20		1	1 unit	101	0.234
	0.8	0.18	0.55 ... 0.8	10	100	▶	3RV10 11-0HA20		1	1 unit	101	0.237
	1	0.25	0.7 ... 1	13	100	▶	3RV10 11-0JA20		1	1 unit	101	0.235
	1.25	0.37	0.9 ... 1.25	16	100	▶	3RV10 11-0KA20		1	1 unit	101	0.281
	1.6	0.55	1.1 ... 1.6	21	100	▶	3RV10 11-1AA20		1	1 unit	101	0.283
	2	0.75	1.4 ... 2	26	100	▶	3RV10 11-1BA20		1	1 unit	101	0.282
2.5	0.75	1.8 ... 2.5	33	100	▶	3RV10 11-1CA20		1	1 unit	101	0.284	
3.2	1.1	2.2 ... 3.2	42	100	▶	3RV10 11-1DA20		1	1 unit	101	0.285	
4	1.5	2.8 ... 4	52	100	▶	3RV10 11-1EA20		1	1 unit	101	0.284	
5	1.5	3.5 ... 5	65	100	▶	3RV10 11-1FA20		1	1 unit	101	0.286	
6.3	2.2	4.5 ... 6.3	82	100	▶	3RV10 11-1GA20		1	1 unit	101	0.288	
8	3	5.5 ... 8	104	50	▶	3RV10 11-1HA20		1	1 unit	101	0.290	
10	4	7 ... 10	130	50	▶	3RV10 11-1JA20		1	1 unit	101	0.286	
12	5.5	9 ... 12	156	50	▶	3RV10 11-1KA20		1	1 unit	101	0.282	

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.

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

For multi-unit packing and reusable packaging, see "Appendix" -> "Order information".

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

	Rated current	Suitable for three-phase induction motors ¹⁾ with P	Setting range for thermal overload release	Instantaneous electronic trip unit	Short-circuit breaking capacity at 400 V AC	DT	Cage Clamp terminals 	PU (UNIT, SET, M)	PS*	PG	Weight per PU approx.	
	I_n	kW	A	A	A	kA		Order No.	Price per PU			kg
Size S00												
 3RV10 11-0GA25 with integrated transverse auxiliary switch	0.16	0.04	0.11 ... 0.16	2.1	100	B	3RV10 11-0AA25		1	1 unit	101	0.245
	0.2	0.06	0.14 ... 0.2	2.6	100	B	3RV10 11-0BA25		1	1 unit	101	0.245
	0.25	0.06	0.18 ... 0.25	3.3	100	B	3RV10 11-0CA25		1	1 unit	101	0.246
	0.32	0.09	0.22 ... 0.32	4.2	100	B	3RV10 11-0DA25		1	1 unit	101	0.246
	0.4	0.09	0.28 ... 0.4	5.2	100	B	3RV10 11-0EA25		1	1 unit	101	0.250
	0.5	0.12	0.35 ... 0.5	6.5	100	B	3RV10 11-0FA25		1	1 unit	101	0.247
	0.63	0.18	0.45 ... 0.63	8.2	100	B	3RV10 11-0GA25		1	1 unit	101	0.252
	0.8	0.18	0.55 ... 0.8	10	100	B	3RV10 11-0HA25		1	1 unit	101	0.250
	1	0.25	0.7 ... 1	13	100	B	3RV10 11-0JA25		1	1 unit	101	0.249
	1.25	0.37	0.9 ... 1.25	16	100	B	3RV10 11-0KA25		1	1 unit	101	0.297
	1.6	0.55	1.1 ... 1.6	21	100	B	3RV10 11-1AA25		1	1 unit	101	0.298
	2	0.75	1.4 ... 2	26	100	B	3RV10 11-1BA25		1	1 unit	101	0.297
2.5	0.75	1.8 ... 2.5	33	100	B	3RV10 11-1CA25		1	1 unit	101	0.298	
3.2	1.1	2.2 ... 3.2	42	100	B	3RV10 11-1DA25		1	1 unit	101	0.300	
4	1.5	2.8 ... 4	52	100	B	3RV10 11-1EA25		1	1 unit	101	0.298	
5	1.5	3.5 ... 5	65	100	B	3RV10 11-1FA25		1	1 unit	101	0.303	
6.3	2.2	4.5 ... 6.3	82	100	B	3RV10 11-1GA25		1	1 unit	101	0.303	
8	3	5.5 ... 8	104	50	B	3RV10 11-1HA25		1	1 unit	101	0.304	
10	4	7 ... 10	130	50	B	3RV10 11-1JA25		1	1 unit	101	0.300	
12	5.5	9 ... 12	156	50	B	3RV10 11-1KA25		1	1 unit	101	0.298	

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.

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

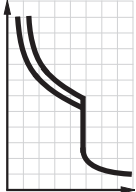


For multi-unit packing and reusable packaging, see "Appendix" -> "Order information".

3RV Motor Starter Protectors up to 100 A

For fuse monitoring

Selection and ordering data

Without auxiliary switches

	Rated current	Thermal overload release	Instantaneous electronic trip unit	Short-circuit breaking capacity at 400 V AC	DT	Screw terminals	PU (UNIT, SET, M)	PS*	PG	Weight per PU approx.
	I_n			I_{cu}		Order No.	Price per PU			kg
	A	A	A	kA						

Size S00



3RV16 11-0BD10

0.2	0.2	1.2	100	▶	3RV16 11-0BD10		1	1 unit	101	0.289
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Note:

The auxiliary switch required for signaling must be ordered separately.

For multi-unit packing and reusable packaging, see "Appendix" --> "Order information".

Accessories

Version	Contacts	DT	Screw terminals	PU (UNIT, SET, M)	PS*	PG	Weight per PU approx.
			Order No.	Price per PU			kg

Mountable auxiliary switches (essential accessories)



3RV19 01-1E

Transverse auxiliary switches With screw terminals, mountable on front	1 NO + 1 NC	▶	3RV19 01-1E		1	1 unit	101	0.018
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3RV19 01-1A

Lateral auxiliary switches With screw terminals, mountable on the left	1 NO + 1 NC	▶	3RV19 01-1A		1	1 unit	101	0.045
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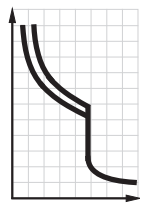
Additional auxiliary switches and other accessories see "Mountable accessories".

3RV Motor Starter Protectors up to 100 A

For distance protection

Selection and ordering data

Voltage transformer circuit breakers with auxiliary switches (1 W)



Rated current	Thermal overload release	Instantaneous electronic trip units	Auxiliary switch integrated in the motor starter protector, transverse	Short-circuit breaking capacity at 400 V AC	DT	Screw terminals	PU (UNIT, SET, M)	PS*	PG	Weight per PU approx.
I_n				I_{cu}						
A	A	A		kA		Order No.	Price per PU			kg

Size S00



3RV16 11-1.G14

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

Version	Contacts	DT	Screw terminals	PU (UNIT, SET, M)	PS*	PG	Weight per PU approx.
			Order No.	Price per PU			kg

Mountable auxiliary switches for other signaling purposes



3RV19 01-1A

Lateral auxiliary switches With screw terminals, mountable on the left	1 NO + 1 NC	▶	3RV19 01-1A		1	1 unit	101	0.045
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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