

Protection Equipment

Introduction

Overview



Type	3RV10	3RV11	3RV13	3RV14	3RV16	3RV16	3RV17	3RV18
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SIRIUS 3RV1 motor starter protectors and circuit breakers up to 100 A

Applications

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
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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_n 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
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Rated frequency	Hz	50/60	50/60	50/60	50/60	50/60	16 ² / ₃ ... 60	50/60	50/60
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Trip class	CLASS 10 CLASS 20	CLASS 10	--	CLASS 10	--	--	--	--	--
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Thermal overload releases	A	0.11 ... 0.16 to 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
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Electronic releases	A multiple of the rated current	13 times	13 times	13 times	20 times	6 times	4 ... 7 times	13 times	20 times
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Short-circuit breaking capacity I_{cu} at 400 V AC	kA	50/100	50/100	50/100	50/100	100	50	⁴⁾	⁴⁾
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Accessories

For sizes	S00 S0 S2 S3	S0 S2 S3	S0 S2 S3	S0 S2	S00	S00	S0, S3	S0
Auxiliary switches	✓ ✓ ✓ ✓	✓ ✓ ✓ ✓	✓ ✓ ✓ ✓	✓ ✓ ✓	✓	✓	✓ ⁵⁾	✓ ⁵⁾
Signaling switches	-- ✓ ✓ ✓ ✓	✓ ✓ ✓ ✓	✓ ✓ ✓ ✓	✓ ✓ ✓	--	--	--	--
Undervoltage releases	✓ ✓ ✓ ✓	-- -- --	✓ ✓ ✓ ✓	✓ ✓ ✓	✓	✓	✓	✓
Shunt releases	✓ ✓ ✓ ✓	-- -- --	✓ ✓ ✓ ✓	✓ ✓ ✓	✓	✓	✓	✓
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 AC 480 Y/277 V: for size S0 50 kA, for size S3 65 kA;
- at 480 V AC: for size S3 (10 A 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