

Protection Equipment

Motor Starter Protectors/Circuit Breakers

Introduction

Overview



Type	3RV20	3RV21	3RV23	3RV24	3RV27	3RV28
SIRIUS 3RV2 motor starter protectors/circuit breakers up to 80 A						
Applications						
• System protection	✓ ¹⁾	✓ ¹⁾	--	--	✓	✓
• Motor protection	✓	--	--	--	--	--
• Motor protection with overload relay function	--	✓	--	--	--	--
• Starter combinations	--	--	✓	--	--	--
• Transformer protection	--	--	--	✓	✓	✓
Size	S00, S0, S2	S00, S0, S2	S00, S0, S2	S00, S0, S2	S00, S0	S00, S0
Rated current I_n						
• Size S00	A Up to 16	Up to 16	Up to 16	Up to 16	Up to 15	Up to 15
• Size S0	A Up to 40	Up to 32	Up to 40	Up to 25	Up to 22	Up to 22
• Size S2	A Up to 80	Up to 80	Up to 80	Up to 65	--	--
Rated operational voltage U_e according to IEC	V 690 AC ²⁾	690 AC ²⁾	690 AC ²⁾	690 AC ²⁾	690 AC	690 AC
Rated frequency	Hz 50/60	50/60	50/60	50/60	50/60	50/60
Trip class	CLASS 10 (S00 ... S2), CLASS 20 (S2)	CLASS 10	--	CLASS 10	--	--
Thermal overload releases						
A	0.11 ... 0.16 up to 70 ... 80	0.11 ... 0.16 up to 70 ... 80	None ³⁾	0.11 ... 0.16 up to 54 ... 65	0.16 ... 22 Non-adjustable	0.16 ... 22 Non-adjustable
Electronic release						
A multiple of the rated current	13 times	13 times	13 times	20 times	13 times	20 times
Short-circuit breaking capacity I_{cu} at 400 V AC						
kA	20/55/65/100	55/65/100	20/55/65/100	55/65/100	4)	4)
Pages	7/21 ... 7/23	7/25	7/26, 7/27	7/28	7/29	7/30

Accessories						
For sizes	S00 S0 S2	S00 S0 S2	S00 S0 S2	S00 S0 S2	S00 S0	S00 S0
Auxiliary switches	✓ ✓ ✓	✓ ✓ ✓	✓ ✓ ✓	✓ ✓ ✓	✓ ✓	✓ ✓
Signaling switches	✓ ✓ ✓	✓ ✓ ✓	✓ ✓ ✓	✓ ✓ ✓	-- --	-- --
Undervoltage releases	✓ ✓ ✓	-- -- --	✓ ✓ ✓	✓ ✓ ✓	✓ ✓	✓ ✓
Shunt releases	✓ ✓ ✓	-- -- --	✓ ✓ ✓	✓ ✓ ✓	✓ ✓	✓ ✓
Isolator modules	✓ ✓ ✓	✓ ✓ ✓	✓ ✓ ✓	✓ ✓ ✓	-- --	-- --
Insulated three-phase busbar system	✓ ✓ ✓	-- -- --	✓ ✓ ✓	✓ ✓ ✓	-- --	-- --
Busbar adapters	✓ ✓ ✓	✓ ✓ ✓	✓ ✓ ✓	✓ ✓ ✓	-- --	-- --
Door-coupling rotary operating mechanisms	✓ ✓ ✓	✓ ✓ ✓	✓ ✓ ✓	✓ ✓ ✓	✓ ✓	✓ ✓
Link modules	✓ ✓ ✓	✓ ✓ ✓	✓ ✓ ✓	✓ ✓ ✓	-- --	-- --
Enclosures for surface mounting	✓ ✓ ✓	✓ ✓ ✓	✓ ✓ ✓	✓ ✓ ✓	-- --	-- --
Enclosures for flush mounting	✓ ✓ --	✓ ✓ --	✓ ✓ --	✓ ✓ --	-- --	-- --
Front plates	✓ ✓ ✓	✓ ✓ ✓	✓ ✓ ✓	✓ ✓ ✓	-- --	-- --
Infeed system	✓ ✓ --	-- -- --	✓ ✓ --	✓ ✓ --	-- --	-- --
Terminal covers for ring terminal lug connections	✓ ⁵⁾ ✓ ⁵⁾ --	-- -- --	-- -- --	-- -- --	-- --	-- --
Sealable scale covers for setting knobs	✓ ✓ ✓	✓ ✓ ✓	-- -- --	✓ ✓ ✓	-- --	-- --
Pages	7/31 ... 7/50					

✓ Has this function or can use this accessory
 -- Does not have this function or cannot use this accessory

¹⁾ For symmetrical loading of the three phases.

²⁾ With molded-plastic enclosure 500 V AC.

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

⁴⁾ According to UL 489 at 480 Y/277 V AC: 65 kA or 50 kA.

⁵⁾ Terminal covers are available for 3RV20 motor starter protectors with ring terminal lug connection to ensure finger-safety.