

Protection Equipment

Introduction

Overview



Type	3RV10	3RV11	3RV13	3RV14	3RV16	3RV16	3RV17	3RV18
3RV1 circuit breakers/motor starter protectors 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
Rated current I_n								
Size S00	A up to 12	--	--	--	up to 0.2	up to 3	--	--
Size S0	A up to 25	up to 25	up to 25	up to 20	--	--	up to 22	up to 20
Size S2	A up to 50	up to 50	up to 50	up to 40	--	--	--	--
Size S3	A up to 100	up to 100	up to 100	--	--	--	up to 70	--
Rated operational voltage U_e according 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 A up to 80 ... 100	0.11 ... 0.16 up to 80 ... 100	None ³⁾	0.11 ... 0.16 up 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) 4)	4) 4)
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 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 AC 480 Y/277 V.: for size S0 50 kA, for size S3 65 kA.

⁵⁾ Only lateral auxiliary switches.

✓ Has this function or can use this accessory

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