

Protective Devices: Circuit-Breakers

Introduction

Overview

4



Type

3RV10

3RV11

3RV13

3RV14

3RV16

3RV16

SIRIUS circuit-breakers up to 100 A

Applications

Plant 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
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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	–	–
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	–	–	–

Rated operating voltage U_e	V	AC 690 ²⁾	AC 690 ²⁾	AC 690 ²⁾	AC 690 ²⁾	AC 690 ²⁾	AC 400
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Rated frequency	Hz	50/60	50/60	50/60	50/60	50/60	16 ²⁾ /3 ... 60
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Trip class		CLASS 10 CLASS 20	CLASS 10	–	CLASS 10	–	–
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Thermal overload release	A	0.11 ... 0.16 to	0.11 ... 0.16 to	none ³⁾	0.11 ... 0.16 to	0.2	1.4 ... 3
	A	80 ... 100	80 ... 100		28 ... 40		

Overcurrent release multiple of the rated current		13 times	13 times	13 times	20 times	6 times	4 to 7 times
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Short-circuit switching capacity I_{cu} kA at AC 400 V		50/100	50/100	50/100	50/100	100	50
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Accessories

For sizes	S00	S0	S2	S3	S0	S2	S3	S0	S2	S3	S0	S2	S00	S00
Auxiliary switch	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Alarm switch	–	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	–	–
Undervoltage release	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Shunt release	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Isolator module	–	✓	✓	–	✓	✓	–	✓	✓	–	✓	✓	–	–
Insulated 3-phase busbar system	✓	✓	✓	–	–	✓	–	✓	✓	–	✓	✓	✓	✓
Busbar adapters for circuit-breakers	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Door-coupling rotary operating mechanism	–	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	–	–
Remote motorized operating mechanisms	–	–	✓	✓	–	✓	✓	–	✓	✓	–	✓	–	–
Link modules	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Surface enclosure	✓	✓	✓	–	✓	✓	–	✓	✓	–	✓	✓	✓	✓
Bay enclosure	✓	✓	–	–	✓	–	–	✓	–	–	✓	–	✓	✓
Front plates	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Cage Clamp infeed system	✓ ⁴⁾	✓	–	–	–	–	–	✓	–	–	✓	–	–	–

1) For symmetrical loading of the three phases.

2) With molded-plastic enclosure AC 500 V.

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

4) Only for circuit-breakers with Cage Clamp terminals.