

Characteristics according to IEC 60947-3 and IEC 60947-6-1

40 to 160 A

Thermal current I_{th} at 40°C	40 A	63 A	80 A	100 A	125 A	160 A
Rated insulation voltage U_i (V) (power circuit)	800	800	800	800	800	800
Rated impulse withstand voltage U_{imp} (kV) (power circuit)	6	6	6	6	6	6
Rated insulation voltage U_i (V) (control circuit)	300	300	300	300	300	300
Rated impulse withstand voltage U_{imp} (kV) (control circuit) - ATyS d M	4	4	4	4	4	4
Rated impulse withstand voltage U_{imp} (kV) (control circuit) - ATyS t M, g M and p M	2.5	2.5	2.5	2.5	2.5	2.5

Rated operational currents I_e (A) according to IEC 60947-6-1

Rated voltage	Utilisation category	A/B ⁽¹⁾	A/B ⁽¹⁾	A/B ⁽¹⁾	A/B ⁽¹⁾	A/B ⁽¹⁾	A/B ⁽¹⁾
415 VAC	AC-31 A / AC-31 B	40/40	63/63	80/80	100/100	100/125	100/160
415 VAC	AC-32 A / AC-32 B	40/40	63/63	80/80	100/100	100/125	100/160
415 VAC	AC-33 A / AC-33 B	-/40	-/63	-/80	-/100	-/125	-/160

Rated operational currents I_e (A) according to IEC 60947-3

Rated voltage	Utilisation category	A/B ⁽¹⁾	A/B ⁽¹⁾	A/B ⁽¹⁾	A/B ⁽¹⁾	A/B ⁽¹⁾	A/B ⁽¹⁾
415 VAC	AC-20 A / AC-20 B	40/40	63/63	80/80	100/100	125/125	160/160
415 VAC	AC-21 A / AC-21 B	40/40	63/63	80/80	100/100	125/125	160/160
415 VAC	AC-22 A / AC-22 B	40/40	63/63	80/80	100/100	125/125	160/160
415 VAC	AC-23 A / AC-23 B	40/40	63/63	80/80	100/100	125/125	125/160
690 VAC	AC-21 A / AC-21 B	40/40	63/63	80/80	100/100	125/125	160/160
690 VAC	AC-22 A / AC-22 B	40/40	63/63	80/80	80/80	100/125	100/125
690 VAC	AC-23 A / AC-23 B	40/40	63/63	63/63	80/80	80/80	80/80

Current rated as conditional short-circuit with fuse gG DIN

Conditional short-circuit current (kA rms)	50	50	50	50	50	40
Associated fuse rating (A)	40	63	80	100	125	160

Current rated as conditional short-circuit with any brand of circuit breaker that ensures tripping in less than 0.3s⁽⁴⁾

Current rated as short-time withstand I_{cw} 0.3s (kA rms)	7	7	7	7	7	7
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Short-circuit operation (switch only)

Current rated as short-time withstand I_{cw} 1s (kA rms) ⁽²⁾	4	4	4	4	4	4
Rated peak withstand current (kA peak) ⁽²⁾	17	17	17	17	17	17

Connection

Min. connection cross-section	10	10	10	10	10	10
Minimum Cu cable cross-section (mm ²)	70	70	70	70	70	70
Tightening torque (Nm)	5	5	5	5	5	5

Switching time⁽⁵⁾

I - 0 or II - 0, following a command (ms)	45	45	45	45	45	45
Transfer time I - II or II - I, following a command (ms)	180	180	180	180	180	180
I-0 or II-0, after outage (s)	1.2	1.2	1.2	1.2	1.2	1.2
I-II or II-I transfer time, after outage (s)	1.4	1.4	1.4	1.4	1.4	1.4
Contact transfer time ("black-out") I-II min. (ms) ⁽³⁾	150	150	150	150	150	150

Power supply

Min./max. supply (VAC) (ATyS d M, t M and g M)	176/288	176/288	176/288	176/288	176/288	176/288
Min./max. supply (VAC) (ATyS p M)	160/305	160/305	160/305	160/305	160/305	160/305

Control supply power demand

Rated power (VA)	6	6	6	6	6	6
Max. intensity at 230 VAC (A) - ATyS d M, t M and g M	30	30	30	30	30	30
Max. intensity at 230 VAC (A) - ATyS p M	20	20	20	20	20	20

Mechanical specifications

Durability (number of operating cycles)	10,000	10,000	10,000	10,000	10,000	10,000
Weight of single-phase models - non-packaged (kg)	2.8	2.8	2.8	2.8	2.8	2.8
Weight of single-phase models - including packaging (kg)	3.5	3.5	3.5	3.5	3.5	3.5
Weight of three-phase models - non-packaged (kg)	3.5	3.5	3.5	3.5	3.5	3.5
Weight of three-phase models - including packaging (kg)	4.2	4.2	4.2	4.2	4.2	4.2

(1) Category with index A = frequent operation / Category with index B = infrequent operation.

(2) For a rated operational voltage $U_o = 400$ VAC.

(3) 5% tolerance.

(4) Value for coordination with any circuit breaker that ensures tripping in less than 0.3s.

For coordination with specific circuit-breaker references, higher short-circuit current values are available. Please contact us.

(5) At rated voltage - excluding time delays, where applicable.