CONTROL RELAY RM22TG20

URL:https://www.sxplc.com/control-relay-rm22tg20

Product data sheet

Main Information

Product Family Harmony Control Relays

Relay Type Control Relay

Product type 3-phase control relay

Number of phases in the grid 3-phase

Relay Name RM22TG

Relay Monitoring Parameters Phase Sequence

Phase failure detection (2 or more phase cut)

Time delay type None

Switching capacity in VA 2000 VA

Measuring range 208.... .480 V Voltage AC

Contact type 2 OC

Additional information

Reset time 1500 ms at max. voltage

Max. switching voltage 250 V AC

Min. switching current [Imin] 10 mA at ... on 5 V DC

Max. switching current 8 A AC

Nominal supply voltage [Us] AC/DC

Supply voltage range 183...528 V AC

Operating limits 183.... .528 V AC

Power consumption VA 15 VA at... on 480 V AC 60 Hz

Voltage monitoring threshold < 100 V AC

Supply voltage frequency 50.... .60 Hz +/- 10 %

Output contacts 2 C/O

Rise delay at energization 650 ms

Response time <= 200 ms

Overvoltage category III according to IEC 60664-1

III according to UL 508

Insulation resistance > 100 MΩ 500 V DC on ... in accordance with IEC 60255-27

Mounting position Any position

Wiring capacity Screw terminals, 2 x 0.5.... .2 x 2.5 mm² (AWG 20....AWG 14) Hardwire not available .AWG 14) Hardwire without terminals

Screw terminals, 2 x 0.2.... .2 x 1.5 mm² (AWG 24... .AWG 16) Flexible cable .AWG 16) Flexible cable with terminals

Screw terminals, 1 x 0.5.... .1 x 3.3 mm² (AWG 20....AWG 12) .AWG 12) Hardwire without terminals

Screw terminals, 1 x 0.2.... .1 x 2.5 mm² (AWG 24.... ...AWG 14) Soft cord with terminal block

Tightening torque 0.6...1 N.m according to IEC 60947-1

Cover material Flame-retardant plastic

LED status LED (yellow) Relay ON

LED (green) energized

Mounting type 35 mm DIN rail in accordance with IEC 60715

Electrical life 100000 cycles

Mechanical life 10000000 cycles

Category of use AC-15 to IEC 60947-5-1

DC-13 Conforms to IEC 60947-5-1

AC-1 Conforms to IEC 60947-4-1

DC-1 Conforms to IEC 60947-4-1

[Un] rated nominal voltage , self-powered power supply

Safety and reliability data MTTFd = 924.6 years

B10d = 850000

Contact material Cadmium-free

UL/CSA ratings

full-load current (FLA) for 3-phase AC motor

● at 480 V rated value 21 A

● at 600 V rated value 22 A

yielded mechanical performance [hp]

● for single-phase AC motor

— at 110/120 V rated value 2 hp

— at 230 V rated value 3 hp

● for 3-phase AC motor

— at 200/208 V rated value 5 hp

— at 220/230 V rated value 7.5 hp

— at 460/480 V rated value 15 hp

— at 575/600 V rated value 20 hp

contact rating of auxiliary contacts according to UL A600 / P600

Short-circuit protection

design of the fuse link

● for short-circuit protection of the main circuit

— with type of coordination 1 required gG: 100 A (690 V, 100 kA), aM: 50 A (690 V, 100 kA), BS88: 100 A (415 V, 80

kA)

— with type of assignment 2 required gG: 35A (690V, 100kA), aM: 20A (690V, 100kA), BS88: 35A (415V, 80kA)

● for short-circuit protection of the auxiliary switch required gG: 10 A (500 V, 1 kA)

Installation/ mounting/ dimensions

mounting position +/-180° rotation possible on vertical mounting surface; can be tilted forward and backward by +/- 22.5° on vertical mounting surface

fastening method screw and snap-on mounting onto 35 mm DIN rail according to DIN EN 60715

height 85 mm

width 45 mm

depth 107 mm

required spacing

● with side-by-side mounting

— forwards 10 mm

— upwards 10 mm

— downwards 10 mm

— at the side 0 mm

● for grounded parts

— forwards 10 mm

— upwards 10 mm

— at the side 6 mm

— downwards 10 mm

● for live parts

— forwards 10 mm

— upwards 10 mm

— downwards 10 mm

— at the side 6 mm

Connections/ Terminals

type of electrical connection

● for main current circuit screw-type terminals

● for auxiliary and control circuit screw-type terminals

● at contactor for auxiliary contacts Screw-type terminals

● of magnet coil Screw-type terminals

type of connectable conductor cross-sections

● for main contacts

— solid 2x (1 ... 2.5 mm²), 2x (2.5 ... 10 mm²)

— solid or stranded 2x (1 ... 2.5 mm²), 2x (2.5 ... 10 mm²)

— finely stranded with core end processing 2x (1 ... 2.5 mm²), 2x (2.5 ... 6 mm²), 1x 10 mm²

● for AWG cables for main contacts 2x (16 ... 12), 2x (14 ... 8)

connectable conductor cross-section for main contacts

● solid 1 ... 10 mm²

● stranded 1 ... 10 mm²

● finely stranded with core end processing 1 ... 10 mm²

connectable conductor cross-section for auxiliary contacts

● solid or stranded 0.5 ... 2.5 mm²

● finely stranded with core end processing 0.5 ... 2.5 mm²

type of connectable conductor cross-sections

● for auxiliary contacts

— solid or stranded 2x (0.5 ... 1.5 mm²), 2x (0.75 ... 2.5 mm²)

— finely stranded with core end processing 2x (0.5 ... 1.5 mm²), 2x (0.75 ... 2.5 mm²)

● for AWG cables for auxiliary contacts 2x (20 ... 16), 2x (18 ... 14)

AWG number as coded connectable conductor cross

section

● for main contacts 16 ... 8

● for auxiliary contacts 20 ... 14