Product data sheet Characteristics

RM22TG20

three-Phase control relay 183...528Vac, 2 C/O



Main

Range of product	Zelio Control
Product or component type	Modular measurement and control relays
Relay type	Control relay
Network number of phases	3 phases
Relay name	RM22TG
Relay monitored parameters	Phase failure detection Phase sequence
Time delay type	Without
Switching capacity in VA	2000 VA
Measurement range	183528 V voltage AC

Complementary

Complementary	
Reset time	<= 1500 ms at maximum voltage
Maximum switching voltage	250 V AC
Minimum switching current	10 mA at 5 V DC
Maximum switching current	8 A AC
[Us] rated supply voltage	208480 V AC
Supply voltage limits	183528 V AC
Operating limits	183528 V AC
Power consumption in VA	15 VA at 480 V AC 60 Hz
Voltage detection threshold	< 100 V AC
Supply voltage frequency	5060 Hz +/- 10 %
Output contacts	2 C/O
Run-up delay at power-up	<= 650 ms
Response time	<= 200 ms
Overvoltage category	III conforming to UL 508 III conforming to IEC 60664-1
Insulation resistance	> 100 MOhm at 500 V DC conforming to IEC 60255-27
Mounting position	Any position
Connections - terminals	Screw terminals 1 x 0.21 x 2.5 mm² - AWG 24AWG 14, flexible cable with cable end Screw terminals 1 x 0.51 x 3.3 mm² - AWG 20AWG 12, solid cable without cable end Screw terminals 2 x 0.22 x 1.5 mm² - AWG 24AWG 16, flexible cable with cable end Screw terminals 2 x 0.52 x 2.5 mm² - AWG 20AWG 14, solid cable without cable end
Tightening torque	0.61 N.m conforming to IEC 60947-1
Housing material	Self-extinguishing plastic
Status LED	LED green for power ON LED yellow for relay ON
Mounting support	35 mm DIN rail conforming to EN/IEC 60715
Electrical durability	100000 cycles
Mechanical durability	10000000 cycles
Utilisation category	DC-1 conforming to IEC 60947-4-1 AC-1 conforming to IEC 60947-4-1 DC-13 conforming to IEC 60947-5-1 AC-15 conforming to IEC 60947-5-1
Contacts material	Cadmium free

Width	22.5 mm
Product weight	0.09 kg

Environment

Immunity to microbreaks	<= 10 ms
Electromagnetic compatibility	Conducted and radiated emissions class B conforming to CISPR 22 Conducted and radiated emissions class B group 1 conforming to CISPR 11 Surge immunity test 2 kV level 4 differential mode conforming to IEC 61000-4-5 Surge immunity test 4 kV level 4 common mode conforming to IEC 61000-4-5 Electrical fast transient/burst immunity test 2 kV level 4 capacitive coupling conforming to IEC 61000-4-4 Electrical fast transient/burst immunity test 4 kV level 4 direct conforming to IEC 61000-4-4 Radiated radio-frequency electromagnetic field immunity test 10 V/m level 3 conforming to IEC 61000-4-3 Electrostatic discharge 8 kV level 3 air discharge conforming to IEC 61000-4-2 Electrostatic discharge 6 kV level 3 contact discharge conforming to IEC 61000-6-4 Emission standard for industrial environments conforming to EN/IEC 61000-6-3 Immunity for industrial environments conforming to EN/IEC 61000-6-2 Immunity for residential, commercial and light-industrial environments conforming to EN/IEC 61000-6-1
Standards	EN/IEC 60255-1
Product certifications	CCC CE CSA GL UL RCM EAC China RoHS
Ambient air temperature for storage	-4070 °C
Ambient air temperature for operation	-2060 °C at 50 Hz AC/DC -2050 °C at 60 Hz
Relative humidity	9397 % at 2555 °C conforming to IEC 60068-2-30
Vibration resistance	0.5 gn (f = 58.1150 Hz) (in operation) conforming to IEC 60068-2-6 0.035 mm (f = 58.1150 Hz) (in operation) conforming to IEC 60068-2-6 1 gn (f = 1058.1 Hz) (not in operation) conforming to IEC 60068-2-6 0.075 mm (f = 1058.1 Hz) (not in operation) conforming to IEC 60068-2-6
Shock resistance	5 gn for 11 ms (in operation) conforming to IEC 60068-2-27 15 gn for 11 ms (not in operation) conforming to IEC 60068-2-27
IP degree of protection	IP50 on front panel conforming to IEC 60529 IP40 on housing conforming to IEC 60529 IP20 on terminals conforming to IEC 60529
Pollution degree	3 conforming to UL 508 3 conforming to IEC 60664-1
Dielectric test voltage	2.5 kV for 1 min AC 50 Hz conforming to IEC 60255-27

Offer Sustainability

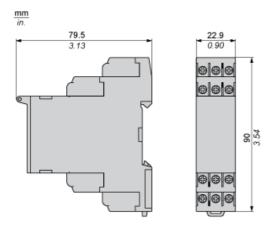
Sustainable offer status	Not Green Premium product
RoHS (date code: YYWW)	Compliant - since 2015 - Schneider Electric declaration of conformity



Product data sheet Dimensions Drawings

RM22TG20

Dimensions

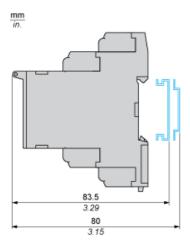


Product data sheet Mounting and Clearance

RM22TG20

Mounting and Clearance

Rail Mounting



Product data sheet Connections and Schema

RM22TG20

3-Phase Control Relay

Wiring Diagram

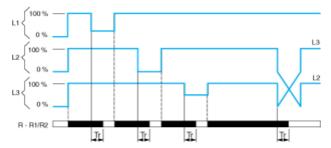


L1,L2,L3 : Supply to be monitored 11-14,12 : 1st C/O contact of output relay 21-24,22 : 2nd C/O contact of output relay

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Function Diagram

Phase Sequence Control and Total Loss of Phase Detection



Legend

Tr Response time on appearance of a fault

L1, L2, L3 Phases of the supply voltage monitored

R - R1/R2 Output relay(s),

Relay status: black color = energized.