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

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	
Control circuit voltage limits	183528 V AC	
Power consumption in VA	15 VA at 480 V AC 60 Hz	
Voltage detection threshold	< 100 V AC	
Supply 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	ſ
Mounting position	Any position	

Connections - terminals	Screw terminals $2 \times 0.52 \times 2.5$ mm² - AWG 20AWG 14, solid cable without cable end Screw terminals $2 \times 0.22 \times 1.5$ mm² - AWG 24AWG 16, flexible cable with cable end Screw terminals $1 \times 0.51 \times 3.3$ mm² - AWG 20AWG 12, solid cable without cable end Screw terminals $1 \times 0.21 \times 2.5$ mm² - AWG 24AWG 14, flexible cable with cable end
Tightening torque	0.61 N.m conforming to IEC 60947-1
Housing material	Self-extinguishing plastic
Status LED	LED yellow for relay ON LED green for power ON
Mounting support	35 mm DIN rail conforming to EN/IEC 60715
Electrical durability	100000 cycles
Mechanical durability	10000000 cycles
Utilisation category	AC-1 conforming to IEC 60947-4-1 DC-1 conforming to IEC 60947-4-1 AC-15 conforming to IEC 60947-5-1 DC-13 conforming to IEC 60947-5-1
Safety reliability data	MTTFd = 924.6 years B10d = 850000
Contacts material	Cadmium free
Width	22.5 mm
Product weight	0.09 kg

Environment

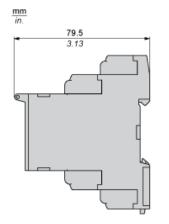
Immunity to microbreaks	<= 10 ms
Electromagnetic compatibility	Conducted and radiated emissions class B conforming to CISPR 22 Immunity for residential, commercial and light-industrial environments conforming to EN/IEC 61000-6-1 Electrostatic discharge 6 kV level 3 contact discharge conforming to IEC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

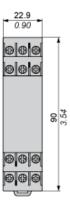
Dielectric test voltage	2.5 kV for 1 min AC 50 Hz conforming to IEC 60255-27	
Offer Sustainability		
Sustainable offer status	Green Premium product	
RoHS (date code: YYWW)	Compliant - since 1524 - Schneider Electric declaration of conformity Schneider Electric declaration of conformity	
REACh	Reference not containing SVHC above the threshold Reference not containing SVHC above the threshold	
Product environmental profile	Available Product environmental	
Product end of life instructions	Available In the second of life manual	

Product data sheet Dimensions Drawings

RM22TG20

Dimensions

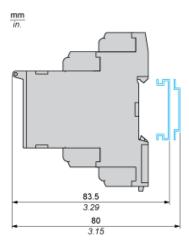




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Mounting and Clearance

Rail Mounting

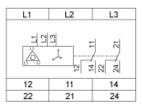


Product data sheet Connections and Schema

RM22TG20

3-Phase Control Relay

Wiring Diagram



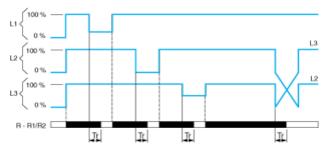
L1,L2,L3 : Supply to be monitored

11-14,12 : 1st C/O contact of output relay 21-24,22 : 2nd C/O contact of output relay

Technical Description

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.