## Product datasheet 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

	< 1500 mo et movimum voltage
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 IEC 60664-1 III conforming to UL 508
Insulation resistance	> 100 MOhm at 500 V DC conforming to IEC 60255-27
Mounting position	Any position
Connections - terminals	Screw terminals 2 x 0.52 x 2.5 mm <sup>2</sup> - AWG 20AWG 14, solid cable without cable end Screw terminals 2 x 0.22 x 1.5 mm <sup>2</sup> - AWG 24AWG 16, flexible cable with cable end Screw terminals 1 x 0.51 x 3.3 mm <sup>2</sup> - AWG 20AWG 12, solid cable without cable end Screw terminals 1 x 0.21 x 2.5 mm <sup>2</sup> - 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	1000000 cycles
Utilisation category	AC-15 conforming to IEC 60947-5-1 DC-13 conforming to IEC 60947-5-1 AC-1 conforming to IEC 60947-4-1 DC-1 conforming to IEC 60947-4-1
Safety reliability data	MTTFd = 924.6 years B10d = 850000



Width	22.5 mm
Product weight	0.09 kg

#### Environment

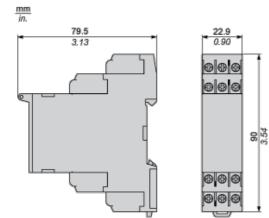
immunity to microbreaks	<= 10 ms
electromagnetic compatibility	Emission standard for industrial environments conforming to EN/IEC 61000-6-4 Emission standard for residential, commercial and light-industrial environments conforming to EN/IEC 61000-6-3 Immunity for industrial environments conforming to EN/IEC 61000-6-2 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 Surge immunity test 2 kV level 4 differential mode conforming to IEC 61000-4-5 Surge immunity test 2 kV level 4 differential mode conforming to IEC 61000-4-5
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	-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 0701 - Schneider Electric declaration of conformity
REACh	Reference not containing SVHC above the threshold
Product environmental profile	Available
Product end of life instructions	Available

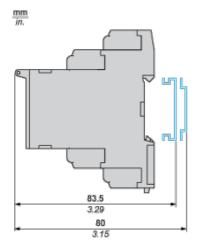
### Dimensions





#### **Mounting and Clearance**

#### **Rail Mounting**



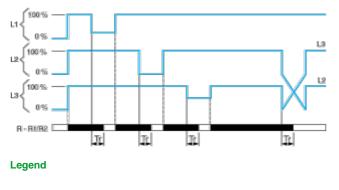
## **3-Phase Control Relay**

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

## **Function Diagram**

#### Phase Sequence Control and Total Loss of Phase Detection





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.

