RM22TG20

Harmony, Modular 3-phase supply control relay, 8A, 2 CO, 183...528VAC





Main

Range of product	Harmony Control Relays
Relay type	Control relay
Product or component type	3-phase control relay
Network number of phases	3 phases
Relay name	RM22TG
Relay monitored parameters	Phase sequence Phase failure detection (2 or more phase cut)
Time delay type	Without
Switching capacity in VA	2000 VA
Measurement range	208480 V voltage AC
Contacts type and composition	2 C/O

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	AC/DC
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 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 mm² (AWG 20AWG 14) solid without cable end Screw terminals, 2 x 0.22 x 1.5 mm² (AWG 24AWG 16) flexible with cable end Screw terminals, 1 x 0.51 x 3.3 mm² (AWG 20AWG 12) solid without cable end Screw terminals, 1 x 0.21 x 2.5 mm² (AWG 24AWG 14) flexible with cable end
Tightening torque	0.61 N.m conforming to IEC 60947-1
Housing material	Self-extinguishing plastic
Status LED	LED (yellow) relay ON LED (green) power ON
Mounting support	35 mm DIN rail conforming to IEC 60715
Electrical durability	100000 cycles
Mechanical durability	10000000 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	
[Un] rated nominal voltage	, self-powered	
Safety reliability data	MTTFd = 924.6 years	
	B10d = 850000	
Contacts material	Cadmium free	
Control type	With test button	
Width	22.5 mm	
Net weight	0.09 kg	

Environment

Immunity to microbreaks	10 ms
Electromagnetic compatibility	Immunity for residential, commercial and light-industrial environments conforming to IEC 61000-6-1 Immunity for industrial environments conforming to IEC 61000-6-2 Emission standard for residential, commercial and light-industrial environments conforming to IEC 61000-6-3 Emission standard for industrial environments conforming to IEC 61000-6-4 Electrostatic discharge - test level: 6 kV level 3 (contact discharge) conforming to IEC 61000-4-2 Electrostatic discharge - test level: 8 kV level 3 (air discharge) conforming to IEC 61000-4-2 Radiated radio-frequency electromagnetic field immunity test - test level: 10 V/m level 3 conforming to IEC 61000-4-3 Electrical fast transient/burst immunity test - test level: 4 kV level 4 (direct) conforming to IEC 61000-4-4 Electrical fast transient/burst immunity test - test level: 2 kV level 4 (capacitive coupling) conforming to IEC 61000-4-4 Surge immunity test - test level: 4 kV level 4 (common mode) conforming to IEC 61000-4-5 Surge immunity test - test level: 2 kV level 4 (differential mode) conforming to IEC 61000-4-5 Conducted and radiated emissions class B group 1 conforming to CISPR 11
Standards	Conducted and radiated emissions class B conforming to CISPR 22 IEC 60255-1
Product certifications	CE[RETURN]EAC[RETURN]RCM[RETURN]GL[RETURN]CSA[RETURN]UL[RETURN]
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 (duration = 11 ms) for not in operation conforming to IEC 60068-2-27 5 gn (duration = 11 ms) for in operation conforming to IEC 60068-2-27
IP degree of protection	IP20 (terminals) conforming to IEC 60529 IP40 (housing) conforming to IEC 60529 IP50 (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, 1 min AC 50 Hz conforming to IEC 60255-27

Packing Units

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Unit Type of Package 1	PCE
Number of Units in Package 1	1
Package 1 Height	2.500 cm
Package 1 Width	8.200 cm
Package 1 Length	9.500 cm
Package 1 Weight	103.000 g
Unit Type of Package 2	CAR
Number of Units in Package 2	40
Package 2 Height	14.400 cm

Package 2 Width	39.600 cm
Package 2 Length	29.600 cm
Package 2 Weight	4.630 kg
Unit Type of Package 3	P06
Number of Units in Package 3	640
Package 3 Height	50.000 cm
Package 3 Width	60.000 cm
Package 3 Length	80.000 cm
Package 3 Weight	86.180 kg

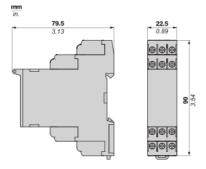
Offer Sustainability

Sustainable offer status	Green Premium product
REACh Regulation	☑ REACh Declaration
EU RoHS Directive	Pro-active compliance (Product out of EU RoHS legal scope)
Mercury free	Yes
China RoHS Regulation	[™] China RoHS Declaration
RoHS exemption information	₫Yes
Environmental Disclosure	Product Environmental Profile
Circularity Profile	End Of Life Information

Product data sheet Dimensions Drawings

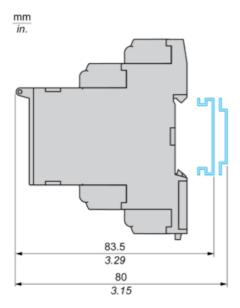
RM22TG20

Dimensions



Mounting and Clearance

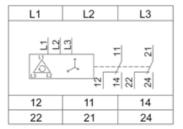
Rail Mounting



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3-Phase Control Relay

Wiring Diagram

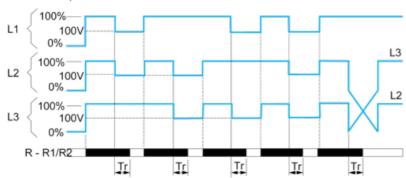


L1,L2,L3 : Supply to be monitored 11-14,12 : 1st C/O contact of output relay

21-24,22 : 2nd C/O contact of output relay

Function Diagram

Phase Sequence Control and Total Loss of Phase Detection



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.