

# Product data sheet

Specifications



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

RM22TG20

**Product availability : Stock - Normally stocked in distribution facility**

### Main

Range of Product	Harmony Control Relays
Product or Component Type	3-phase control relay
Relay Type	Control relay
Phase	3 phase
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	183...528 V voltage AC
Contacts type and composition	2 C/O

### Complementary

Reset time	1500 ms at maximum voltage
Maximum switching voltage	250 V AC
Minimum switching current	10 mA 5 V DC
Maximum switching current	8 A AC
[Us] Rated Supply Voltage	208...480 V AC
Supply voltage limits	183...528 V AC
Operating limits	183...528 V AC
Power consumption in VA	15 VA 480 V AC 60 Hz
Voltage detection threshold	< 100 V AC
Supply voltage frequency	50...60 Hz +/- 10 %
Output contacts	2 C/O
Run-up delay at power-up	650 ms
Response time	<= 200 ms
Overvoltage category	III IEC 60664-1 III UL 508
Insulation resistance	> 100 MOhm 500 V DC IEC 60255-27
Mounting position	Any position

<b>Connections - terminals</b>	Screw terminals, 2 x 0.5...2 x 2.5 mm <sup>2</sup> AWG 20...AWG 14) solid without cable end Screw terminals, 2 x 0.2...2 x 1.5 mm <sup>2</sup> AWG 24...AWG 16) flexible with cable end Screw terminals, 1 x 0.5...1 x 3.3 mm <sup>2</sup> AWG 20...AWG 12) solid without cable end Screw terminals, 1 x 0.2...1 x 2.5 mm <sup>2</sup> AWG 24...AWG 14) flexible with cable end
<b>Tightening torque</b>	5.31...8.85 lbf.in (0.6...1 N.m) IEC 60947-1
<b>Housing material</b>	Self-extinguishing plastic
<b>Status LED</b>	LED (Yellow) relay ON LED (Green) power ON
<b>Mounting support</b>	35 mm DIN rail conforming to EN/IEC 60715
<b>Electrical durability</b>	100000 cycles
<b>Mechanical durability</b>	10000000 cycles
<b>Utilisation category</b>	AC-15 IEC 60947-5-1 DC-13 IEC 60947-5-1 AC-1 IEC 60947-4-1 DC-1 IEC 60947-4-1
<b>Safety reliability data</b>	MTTFd = 924.6 years B10d = 850000
<b>Contacts material</b>	Cadmium free
<b>Width</b>	0.89 in (22.5 mm)
<b>Net Weight</b>	0.20 lb(US) (0.09 kg)
<b>Environment</b>	
<b>Immunity to microbreaks</b>	10 ms
<b>Electromagnetic compatibility</b>	Immunity for residential, commercial and light-industrial environments EN/IEC 61000-6-1 Immunity for industrial environments EN/IEC 61000-6-2 Emission standard for residential, commercial and light-industrial environments EN/IEC 61000-6-3 Emission standard for industrial environments EN/IEC 61000-6-4 Electrostatic discharge 6 kV contact discharge)level 3 IEC 61000-4-2 Electrostatic discharge 8 kV air discharge)level 3 IEC 61000-4-2 Radiated radio-frequency electromagnetic field immunity test 10 V/mlevel 3 IEC 61000-4-3 Electrical fast transient/burst immunity test 4 kV direct)level 4 IEC 61000-4-4 Electrical fast transient/burst immunity test 2 kV capacitive coupling)level 4 IEC 61000-4-4 Surge immunity test 4 kV common mode)level 4 IEC 61000-4-5 Surge immunity test 2 kV differential mode)level 4 IEC 61000-4-5 Conducted and radiated emissionsclass B group 1 CISPR 11 Conducted and radiated emissionsclass B CISPR 22
<b>Standards</b>	EN/IEC 60255-1
<b>Product Certifications</b>	CE EAC RCM GL CSA UL CCC
<b>Ambient Air Temperature for Storage</b>	-40...158 °F (-40...70 °C)
<b>Ambient air temperature for operation</b>	-4...122 °F (-20...50 °C) 60 Hz -4...140 °F (-20...60 °C) 50 Hz AC/DC
<b>Relative humidity</b>	93...97 % 77...131 °F (25...55 °C) IEC 60068-2-30
<b>Vibration resistance</b>	0.075 mm 10...58.1 Hz) not in operation IEC 60068-2-6 1 gn 10...58.1 Hz) not in operation IEC 60068-2-6 0.035 mm 58.1...150 Hz) in operation IEC 60068-2-6 0.5 gn 58.1...150 Hz) in operation IEC 60068-2-6
<b>Shock resistance</b>	15 gn 11 ms) not in operation IEC 60068-2-27 5 gn 11 ms) in operation IEC 60068-2-27
<b>IP degree of protection</b>	IP20 IEC 60529 terminals) IP40 IEC 60529 housing) IP50 IEC 60529 front panel)
<b>Pollution degree</b>	3 IEC 60664-1 3 UL 508
<b>Dielectric test voltage</b>	2.5 kV AC 50 Hz, 1 min IEC 60255-27

## Ordering and shipping details

Category	22380-RELAYS-MEASUREMENT (RM17-RM35)
Discount Schedule	CP2
GTIN	3606480792137
Returnability	Yes
Country of origin	ID

## Packing Units

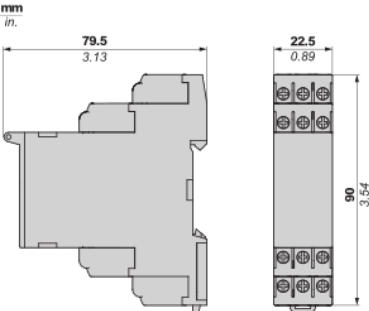
Unit Type of Package 1	PCE
Number of Units in Package 1	1
Package 1 Height	0.98 in (2.500 cm)
Package 1 Width	3.23 in (8.200 cm)
Package 1 Length	3.74 in (9.500 cm)
Package 1 Weight	3.63 oz (103.000 g)
Unit Type of Package 2	CAR
Number of Units in Package 2	40
Package 2 Height	5.67 in (14.400 cm)
Package 2 Width	15.59 in (39.600 cm)
Package 2 Length	11.65 in (29.600 cm)
Package 2 Weight	10.21 lb(US) (4.630 kg)
Unit Type of Package 3	S02
Number of Units in Package 3	40
Package 3 Height	5.91 in (15.000 cm)
Package 3 Width	15.75 in (40.000 cm)
Package 3 Length	11.81 in (30.000 cm)
Package 3 Weight	10.70 lb(US) (4.855 kg)

## Offer Sustainability

Sustainable offer status	Green Premium product
California proposition 65	WARNING: This product can expose you to chemicals including: Lead and lead compounds, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to <a href="http://www.P65Warnings.ca.gov">www.P65Warnings.ca.gov</a>
REACH Regulation	<a href="#">REACH Declaration</a>
EU RoHS Directive	Pro-active compliance (Product out of EU RoHS legal scope) <a href="#">EU RoHS Declaration</a>
Mercury free	Yes
China RoHS Regulation	<a href="#">China RoHS declaration</a>
RoHS exemption information	<a href="#">Yes</a>
Environmental Disclosure	<a href="#">Product Environmental Profile</a>
Circularity Profile	<a href="#">End of Life Information</a>

Dimensions

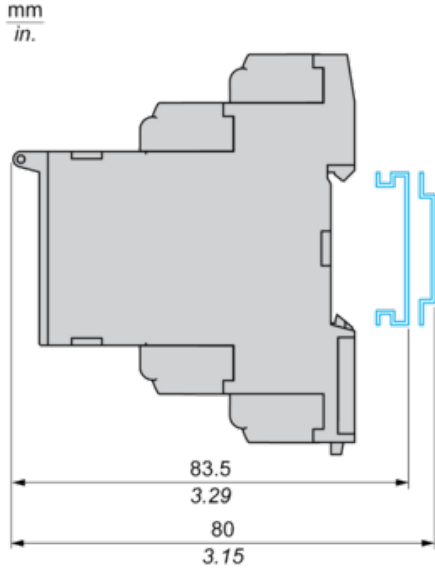
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Mounting and Clearance

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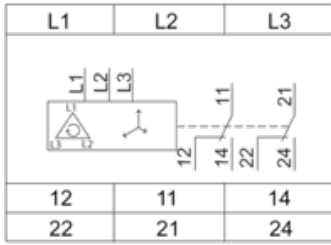
Rail Mounting



**3-Phase Control Relay**

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Wiring Diagram



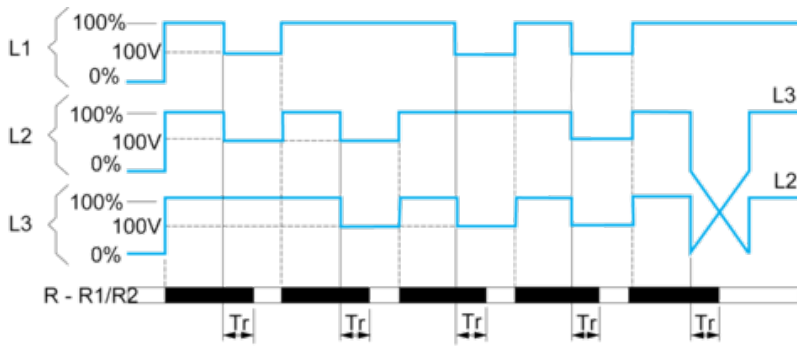
**L1,L2,L3** : Supply to be monitored

**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.

**Recommended replacement(s)**