

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
Relay Type	Control relay
Product or Component Type	3-phase 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	208...480 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	AC/DC
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 conforming to IEC 60664-1 III conforming to UL 508
Insulation resistance	> 100 MΩ 500 V DC IEC 60255-27
Mounting position	Any position
Connections - terminals	Screw terminals, 2 x 0.5...2 x 2.5 mm ² AWG 20...AWG 14) solid without cable end Screw terminals, 2 x 0.2...2 x 1.5 mm ² AWG 24...AWG 16) flexible with cable end Screw terminals, 1 x 0.5...1 x 3.3 mm ² AWG 20...AWG 12) solid without cable end Screw terminals, 1 x 0.2...1 x 2.5 mm ² AWG 24...AWG 14) flexible with cable end

Price is "List Price" and may be subject to a trade discount – check with your local distributor or retailer for actual price.

Tightening torque	5.3...8.9 lbf.in (0.6...1 N.m) 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 IEC 60947-5-1 DC-13 IEC 60947-5-1 AC-1 IEC 60947-4-1 DC-1 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	0.9 in (22.5 mm)
Net Weight	0.20 lb(US) (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 Conducted and radiated emissions class B conforming to CISPR 22
Standards	IEC 60255-1
Product Certifications	CE EAC RCM GL CSA UL CCC
Ambient Air Temperature for Storage	-40...158 °F (-40...70 °C)
Ambient air temperature for operation	-4...122 °F (-20...50 °C) 60 Hz -4...140 °F (-20...60 °C) 50 Hz AC/DC
Relative humidity	93...97 % 77...131 °F (25...55 °C) IEC 60068-2-30

Vibration resistance	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
Shock resistance	15 gn 11 ms) not in operation IEC 60068-2-27 5 gn 11 ms) in operation IEC 60068-2-27
IP degree of protection	IP20 IEC 60529 terminals) IP40 IEC 60529 housing) IP50 IEC 60529 front panel)
Pollution degree	3 IEC 60664-1 3 UL 508
Dielectric test voltage	2.5 kV AC 50 Hz, 1 min IEC 60255-27

Ordering and shipping details

Category	US10CP222380
Discount Schedule	0CP2
GTIN	3606480792137
Returnability	Yes
Country of origin	ID

Packing Units

Unit Type of Package 1	PCE
Nbr. of units in pkg.	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 weight(Lbs)	3.668 oz (104.000 g)
Unit Type of Package 2	S02
Number of Units in Package 2	40
Package 2 Height	5.91 in (15.000 cm)
Package 2 Width	11.81 in (30.000 cm)
Package 2 Length	15.75 in (40.000 cm)
Package 2 Weight	10.177 lb(US) (4.616 kg)
Unit Type of Package 3	P06
Number of Units in Package 3	640
Package 3 Height	29.53 in (75.000 cm)
Package 3 Width	23.62 in (60.000 cm)
Package 3 Length	31.50 in (80.000 cm)
Package 3 Weight	189.995 lb(US) (86.180 kg)



Environmental Data

Schneider Electric aims to achieve Net Zero status by 2050 through supply chain partnerships, lower impact materials, and circularity via our ongoing “Use Better, Use Longer, Use Again” campaign to extend product lifetimes and recyclability.

[Environmental Data explained >](#)

[How we assess product sustainability >](#)

Environmental footprint

Carbon footprint (kg CO2 eq, Total Life cycle)	95
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Use Better

Materials and Substances

Packaging made with recycled cardboard	Yes
Packaging without single use plastic	Yes
EU RoHS Directive	Pro-active compliance (Product out of EU RoHS legal scope)
SCIP Number	3c095d35-159c-493c-8604-58788d456aa9
REACH Regulation	REACH Declaration
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 www.P65Warnings.ca.gov

Use Again

Repack and remanufacture

Take-back	No
WEEE	The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins.

Dimensions Drawings

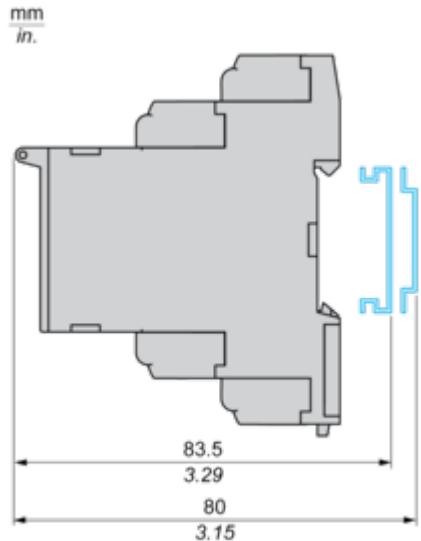
Dimensions



Mounting and Clearance

Mounting and Clearance

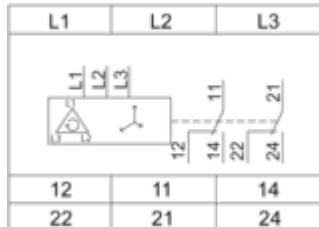
Rail Mounting



Connections and Schema

3-Phase Control Relay

Wiring Diagram

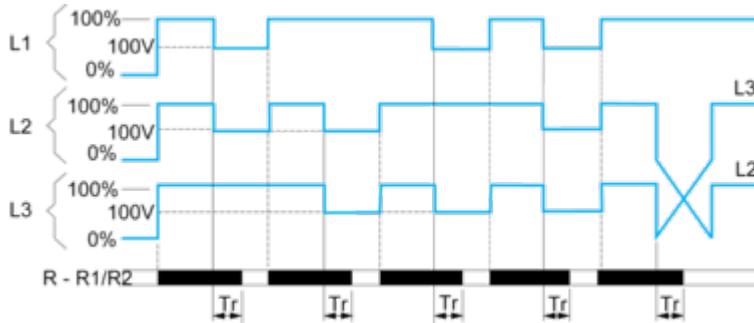


L1,L2,L3 : Supply to be monitored
11-14,12 : 1st C/O contact of output relay
21-24,22 : 2nd C/O contact of output relay

Technical Description

Function Diagram

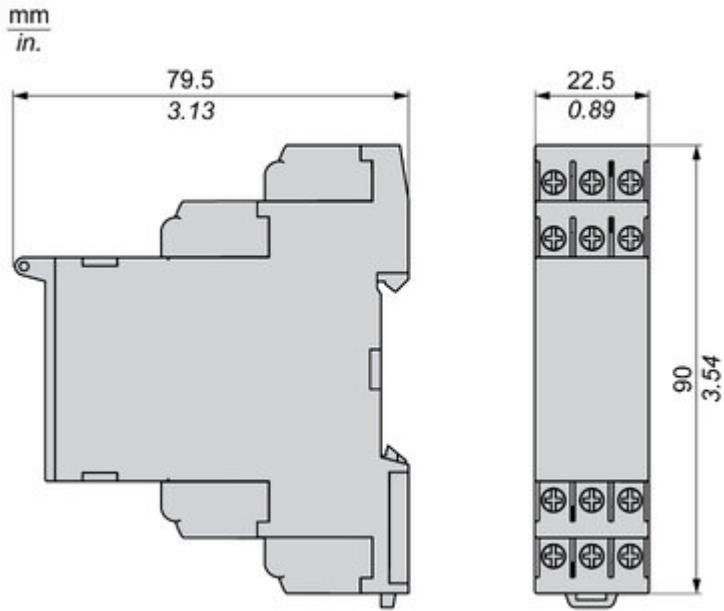
Phase Sequence Control and Total Loss of Phase Detection

**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.

Technical Illustration

Dimensions



Offer Marketing Illustration

Product benefits / Features

Features

Harmony Control Relay



Wide monitoring parameters (phase, current, voltage, liquid level, frequency, speed, temperature, and pump control) to meet your application needs.

True RMS measurement that minimizes the possibility of unexpected trips from highly polluted networks (except RM17TG and RM22TG)

Experience unprecedented accuracy, predictive maintenance, and superior security.

Green Premium labelled products, promising compliance with the latest regulations, transparency on environmental impacts, as well as circular and low-CO₂ product

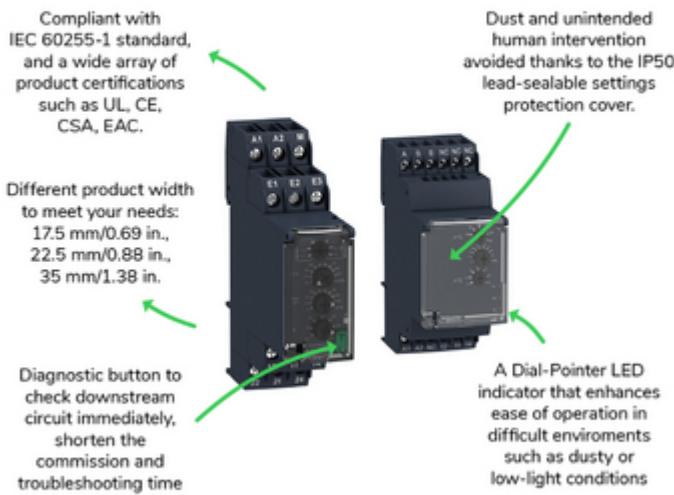
Compatible with a wide range of applications, such as hoisting, packaging, lifts, textile, pumping, and water.

Offer Marketing Illustration

Product benefits / Features

Technical Benefits

Harmony Control Relay



Offer Marketing Illustration

Product benefits / Features

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Offer Marketing Illustration

Product benefits / Features

Technical Benefits

Harmony Control Relay

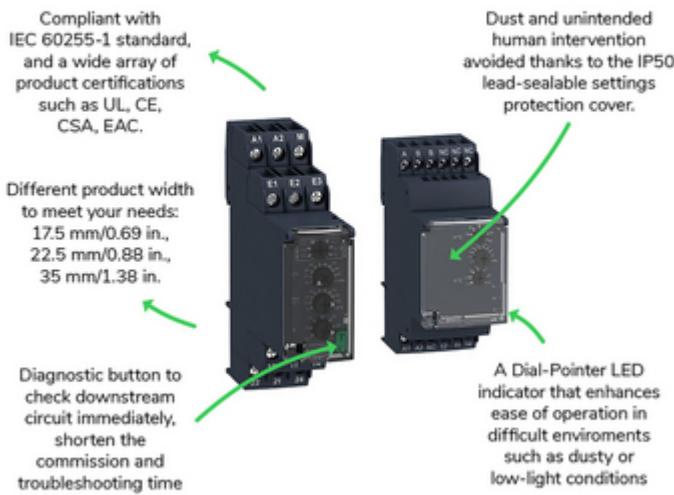
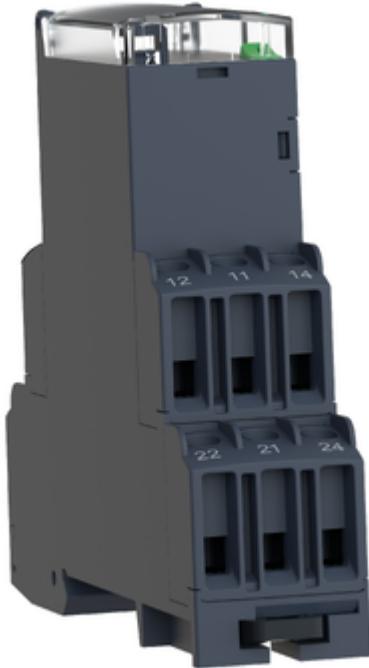


Image of product / Alternate images

Alternative





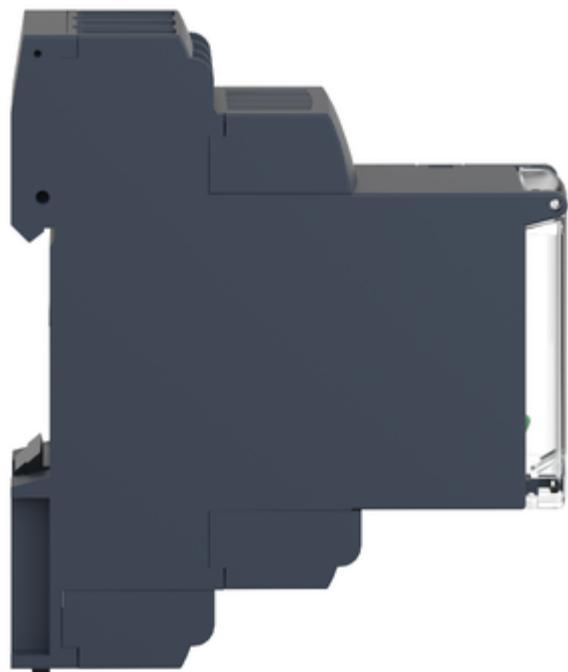


Image of product in real life situation

