Product data sheet

Specifications



level control relay, Harmony Control Relays, 8A, 2CO, 24...240V AC DC

RM22LA32MR

Product availability: Stock - Normally stocked in distribution facility

Main

Range of Product	Harmony Control Relays
Relay Type	Level control relay
Product or Component Type	Level control relay
Relay name	RM22L
Relay monitored parameters	Detection by resistive probes
time delay	Adjustable 0.1...30 s, +/- 10 % of the full scale value Tt- time delay upon fault
Switching capacity in VA	2000 VA
Minimum switching current	10 mA 5 V DC
Maximum switching current	8 A AC
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
Contacts type and composition	2 C/O

Complementary

Maximum switching voltage	250 V AC
[Un] rated nominal voltage	24...240 V AC/DC 50/60 Hz, non self-powered
Supply voltage limits	20.4…264 V AC/DC
power consumption	1.5 W DC
Output contacts	2 C/O
nominal output current	8 A
delay at power up	2.5 s 0.6 s
Maximum electrode voltage	12 V AC
Maximum electrode current	1 mA
Repeat accuracy	+/- 2 % time delay
Measurement error	< 1 % over the whole range with voltage variation 0.05 %/°C with temperature variation
Maximum cable distance between devices	328.08 ft (100 m) probe and delay
Sensitivity scale	0.25...5 kOhm LS (Low Sensitivity) 5...100 kOhm St (Standard Sensitivity) 50...1000 kOhm HS (High Sensitivity)
Sensitivity adjustment	5…100 %
Maximum supply current for sensors	1 mA

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

Disclaimer: This documentation is not intended as a substitute for and is not to be used for determining suitability or reliability of these products for specific user applications

Cable capacitance	1 nF HS (High Sensitivity) probe cable 2.2 nF St (Standard Sensitivity) probe cable 4.7 nF LS (Low Sensitivity) probe cable
Overvoltage category	III conforming to IEC 60664-1
Insulation	Between supply and measurement
Connections - terminals	Screw terminals, 2 x 0.5...2 x 2.5 mm² AWG 20...AWG 14) solid without cable end Screw terminals, 2 x 0.2...2 x 1.5 mm² AWG 24...AWG 16) flexible with cable end Screw terminals, 1 x 0.5...1 x 3.3 mm² AWG 20...AWG 12) solid without cable end Screw terminals, 1 x 0.2...1 x 2.5 mm² AWG 24...AWG 14) flexible with cable end
Tightening torque	5.3…8.9 lbf.in (0.6…1 N.m) IEC 60947-1
Housing material	Polycarbonate
Mounting support	35 mm DIN rail conforming to IEC 60715
Mounting position	Any position
Electrical durability	100000 cycles
Mechanical durability	10000000 cycles
Contacts material	Cadmium free
Measurement range	0.25...1000 kOhm
Safety reliability data	MTTFd = 182.6 years B10d = 170000
Width	0.9 in (22.5 mm)
Control Type	With test button
Product Weight	0.24 lb(US) (0.11 kg)

Environment

Immunity to microbreaks	100 ms DC 90 ms AC
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	UL RCM CSA GL CCC CE EAC
Ambient Air Temperature for Storage	-40…158 °F (-40…70 °C)

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
Dielectric test voltage	2.5 kV AC 50 Hz, 1 min IEC 60255-27

Ordering and shipping details

Category	US10CP222380
Discount Schedule	0CP2
GTIN	3606480792342
Returnability	Yes
Country of origin	ID

Packing Units

Unit Type of Package 1	PCE
Nbr. of units in pkg.	1
Package 1 Height	1.02 in (2.6 cm)
Package 1 Width	3.2 in (8.2 cm)
Package 1 Length	3.7 in (9.5 cm)
Package weight(Lbs)	4.3 oz (122.0 g)
Unit Type of Package 2	S02
Number of Units in Package 2	40
Package 2 Height	5.9 in (15.0 cm)
Package 2 Width	11.8 in (30.0 cm)
Package 2 Length	15.7 in (40.0 cm)
Package 2 Weight	12.108 lb(US) (5.492 kg)
Unit Type of Package 3	P06
Number of Units in Package 3	640
Package 3 Height	23.6 in (60.0 cm)
Package 3 Width	31.5 in (80.0 cm)
Package 3 Length	23.6 in (60.0 cm)
Package 3 Weight	209.75 lb(US) (95.14 kg)

Contractual warranty

Warranty (in months)	18

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

Total lifecycle Carbon footprint	**37 kg CO2 eq.**
Carbon footprint of the manufacturing phase [A1 to A3]	**3 kg CO2 eq.**
Carbon footprint of the distribution phase [A4]	**0.1 kg CO2 eq.**
Carbon footprint of the installation phase [A5]	**0 kg CO2 eq.**
Carbon footprint of the use phase [B2, B3, B4, B6]	**34 kg CO2 eq.**
Carbon footprint of the end-of-life phase [C1 to C4]	**0.3 kg CO2 eq.**
Environmental Disclosure	Product Environmental Profile

Use Better

Materials and Substances

Packaging made with recycled cardboard	**Yes**
Packaging without single use plastic	**Yes**
SCIP Number	**3c095d35-159c-493c-8604-58788d456aa9**
EU RoHS Directive	Compliant By Exemption
REACh Regulation	Reference contains Substances of Very High Concern above the threshold
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 Longer

Lifetime extension

Repair	**No**

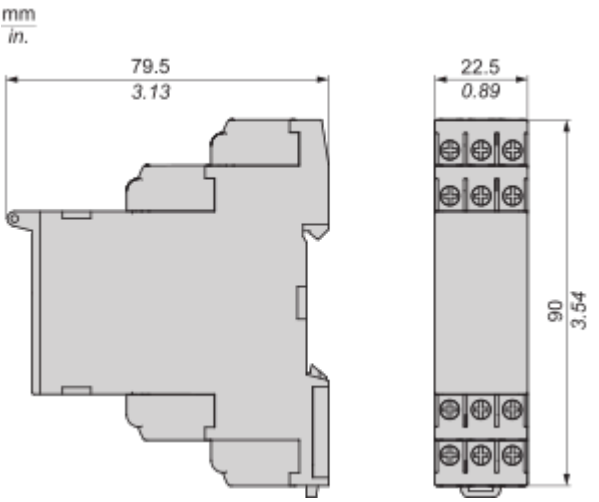
Use Again

Repack and remanufacture

Recyclability potential, in %	**18**
Circularity Profile	End of Life Information
Take-back	**No**

Dimensions Drawings

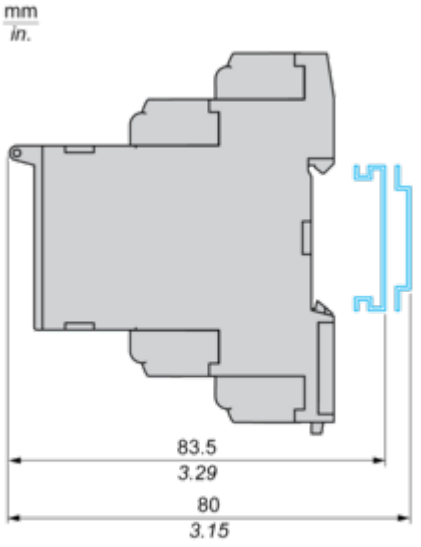
Dimensions



Mounting and Clearance

Mounting and Clearance

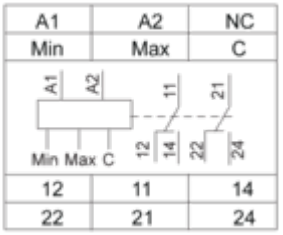
Rail Mounting



Connections and Schema

Level Control Relay

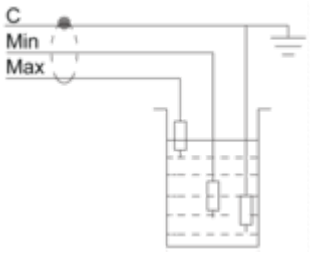
Wiring Diagram



A1,A2 : Supply voltage
Max : High level
Min : Low level
C : References or Tank earth electrode
11-14,12 : 1st C/O contact of output relay
21-24,22 : 2nd C/O contact of output relay

Control by Electrodes

Wiring Diagram



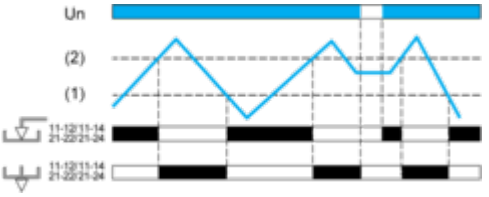
A1,A2 : Supply voltage
Max : High level
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11-14,12 : 1st C/O contact of output relay

Technical Description

Function Diagrams

Control of Two Levels

Fill/Empty function

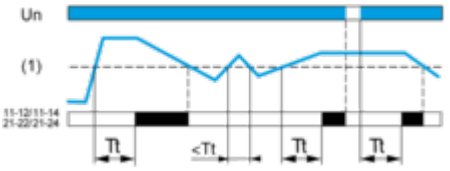


Legend

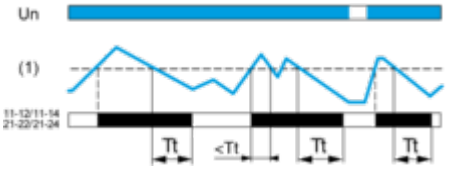
Un Supply voltage
(1) Min. level
(2) Max. level
11-12/11-14, 21-22/21-24 Output relay connections
Relay status: black color = energized.

Control of One Level

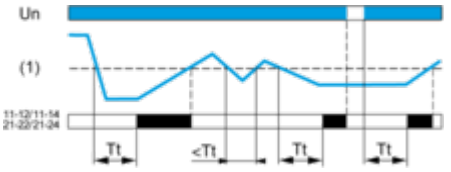
Empty function T on



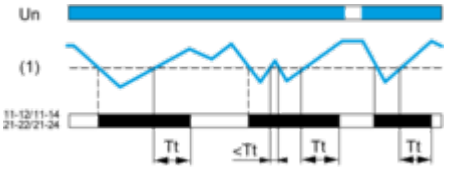
Empty function T off



Fill function T on



Fill function T off



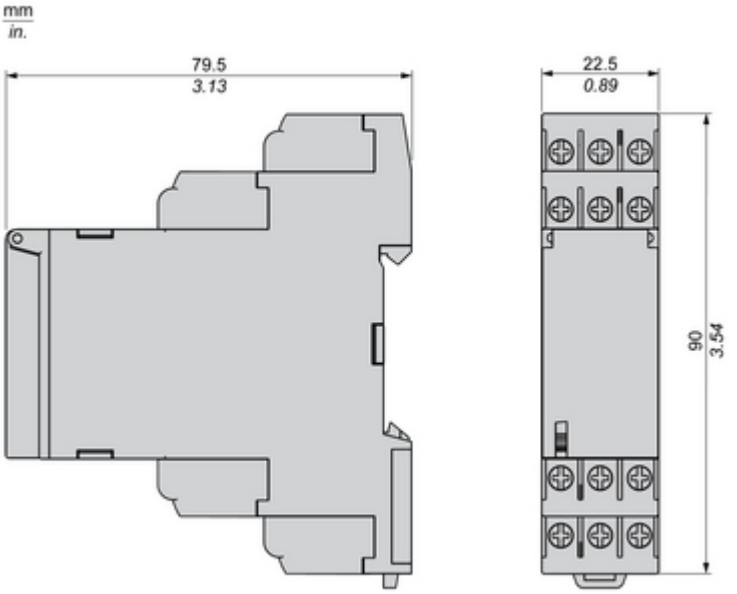
Legend

Tt Time delay after crossing of threshold
Un Supply voltage
(1) Level threshold
11-12/11-14, 21-22/21-24 Output relay connections

Relay status: black color = energized.

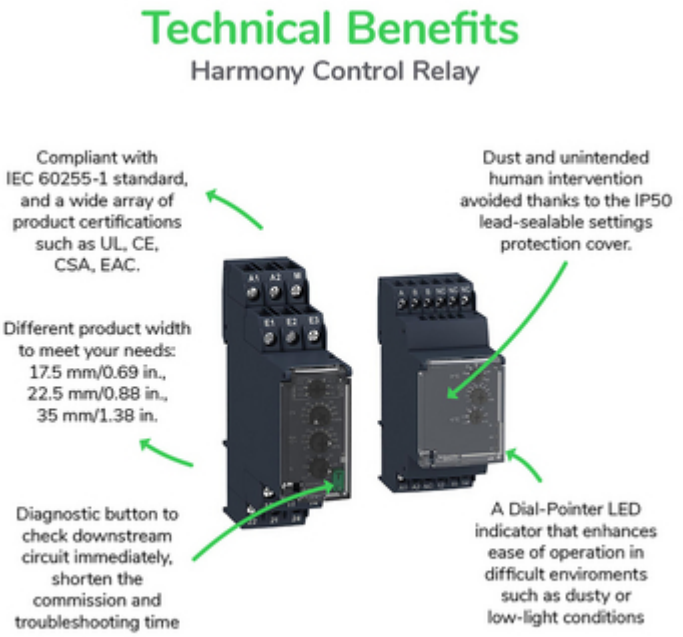
Technical Illustration

Dimensions



Offer Marketing Illustration

Product benefits / Features



Offer Marketing Illustration

Product benefits / Features

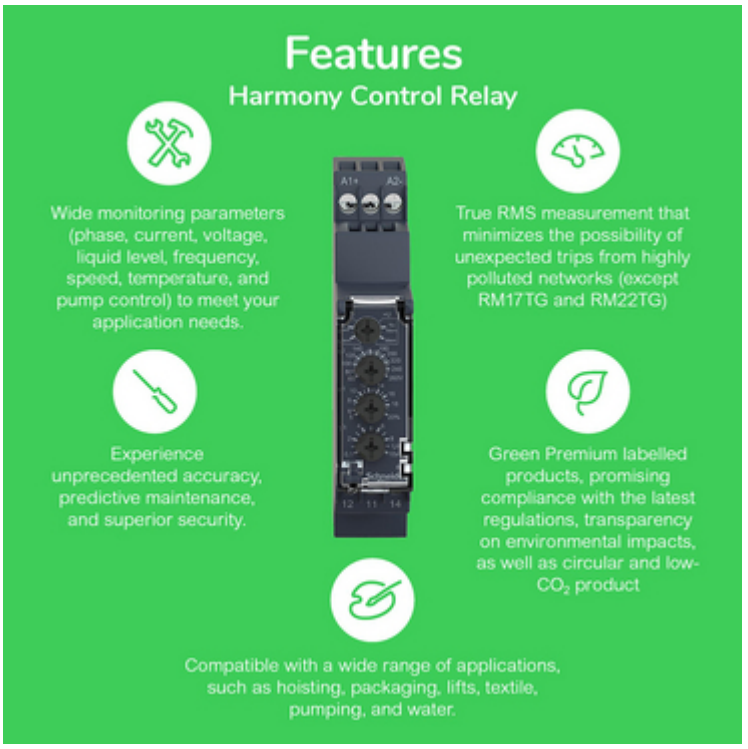


Image of product / Alternate images

Alternative






12
11
14
22
21
24

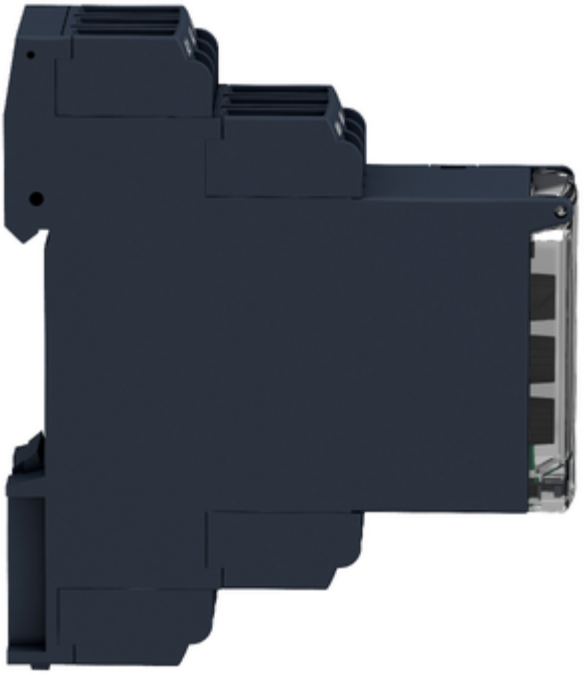






Image of product in real life situation

