Product data sheet

Specifications



level control relay, Harmony Control Relays, 5A, 2CO, 24...240V AC DC

RM35LM33MW

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	RM35L
Relay monitored parameters	Detection by resistive probes
time delay	Adjustable 0.1...5 s, +/- 10 % Tt- time delay upon fault
Switching capacity in VA	1250 VA
Minimum switching current	10 mA 5 V DC
Maximum switching current	5 A AC/DC
power consumption	5 VA AC
Measurement range	250 Ohm...1 MOhm
Utilisation category	AC-12 IEC 60947-5-1 AC-13 IEC 60947-5-1 AC-14 IEC 60947-5-1 AC-15 IEC 60947-5-1 DC-12 IEC 60947-5-1 DC-13 IEC 60947-5-1
Contacts type and composition	2 C/O

Complementary

Reset time	1750 ms
Maximum switching voltage	250 V AC/DC
[Un] rated nominal voltage	24...240 V AC/DC 50/60 Hz, non self-powered
Supply voltage limits	20.4…264 V AC/DC
operating voltage tolerance	- 15 % + 10 % Un
power consumption	1.5 W DC
Output contacts	2 C/O
nominal output current	5 A
delay at power up	0.6 s
Measurement accuracy	+/- 10 % of the full scale value +/- 20 % for the HS range
Repeat accuracy	+/- 2 % time delay
Measurement error	0.5 %/°C with temperature variation
Maximum cable distance between devices	328.08 ft (100 m)

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

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
Cable capacitance	1 nF HS (High Sensitivity) probe cable 2.2 nF St (Standard Sensitivity) probe cable 4.7 nF LS (Low Sensitivity)
Marking	CE : 73/23/EEC CE : EMC 89/336/EEC
Overvoltage category	III conforming to IEC 60664-1
Insulation resistance	> 500 MOhm 500 V DC between supply and relay output IEC 60255-5 > 500 MOhm 500 V DC between measurement and relay output IEC 60664-1 > 1 MOhm 500 V DC between supply and measurement IEC 60255-5 > 500 MOhm 500 V DC between supply and relay output IEC 60664-1 > 500 MOhm 500 V DC between measurement and relay output IEC 60255-5 > 1 MOhm 500 V DC between supply and measurement IEC 60664-1
[Ui] rated insulation voltage	250 V IEC 60664-1
Operating position	Any position without derating
Connections - terminals	Screw terminals, 1 x 0.5...1 x 4 mm² AWG 20...AWG 11) solid without cable end 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 0.2...1 x 2.5 mm² AWG 24...AWG 12) flexible with cable end
Tightening torque	5.3…8.9 lbf.in (0.6…1 N.m) IEC 60947-1
Housing material	Polycarbonate
Local signalling	LED (yellow) for relay ON LED (green) for power ON LED (yellow) for timer ON
Mounting support	35 mm symmetrical DIN rail conforming to IEC 60715
Electrical durability	100000 cycles
Mechanical durability	30000000 cycles
Operating rate	<= 360 operations/hour full load
Measurement range	0.25...1000 kOhm
Safety reliability data	B10d = 170000 MTTFd = 182.6 years
Width	1.4 in (35 mm)
Control Type	Without test button

Environment

Immunity to microbreaks	100 ms DC 90 ms AC
Electromagnetic compatibility	Emission standard for industrial environments conforming to IEC 61000-6-4 Emission standard for residential, commercial and light-industrial environments conforming to IEC 61000-6-3 Immunity for industrial environments conforming to NF EN/IEC 61000-6-2
Standards	IEC 60255-6
Product Certifications	CSA GL UL C-tick GOST
Ambient Air Temperature for Storage	-40…158 °F (-40…70 °C)

Ambient air temperature for operation	-4…122 °F (-20…50 °C)
Relative humidity	95 % 131 °F (55 °C) IEC 60068-2-30
IP degree of protection	IP20 IEC 60529 terminals) IP30 IEC 60529 casing)
Pollution degree	3 IEC 60664-1
Dielectric test voltage	2 kV AC 50 Hz, 1 min IEC 60255-5 2 kV AC 50 Hz, 1 min IEC 60664-1

Ordering and shipping details

Category	US10CP222380
Discount Schedule	0CP2
GTIN	3389119405232
Returnability	Yes
Country of origin	ID

Packing Units

Unit Type of Package 1	PCE
Nbr. of units in pkg.	1
Package 1 Height	1.732 in (4.400 cm)
Package 1 Width	3.071 in (7.800 cm)
Package 1 Length	3.740 in (9.500 cm)
Package weight(Lbs)	4.727 oz (134.000 g)
Unit Type of Package 2	S03
Number of Units in Package 2	48
Package 2 Height	11.811 in (30.000 cm)
Package 2 Width	11.811 in (30.000 cm)
Package 2 Length	15.748 in (40.000 cm)
Package 2 Weight	15.774 lb(US) (7.155 kg)
Unit Type of Package 3	P06
Number of Units in Package 3	384
Package 3 Height	29.528 in (75.000 cm)
Package 3 Width	23.622 in (60.000 cm)
Package 3 Length	31.496 in (80.000 cm)
Package 3 Weight	144.756 lb(US) (65.660 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	**43 kg CO2 eq.**
Carbon footprint of the manufacturing phase [A1 to A3]	**9 kg CO2 eq.**
Carbon footprint of the distribution phase [A4]	**0 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**
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

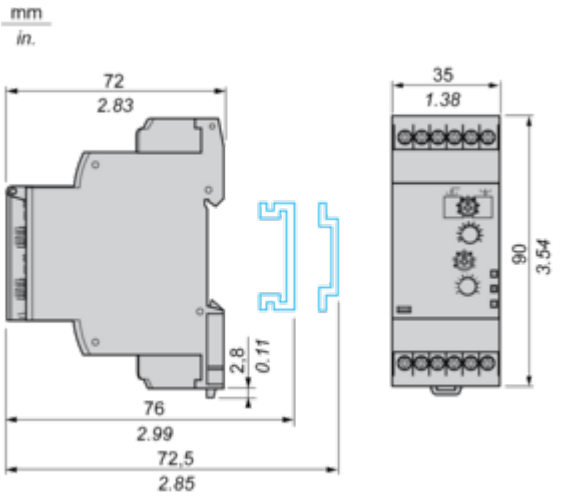
Repack and remanufacture

Recyclability potential, in %	**0**
Circularity Profile	End of Life Information
Take-back	**No**

Dimensions Drawings

Level Control Relays

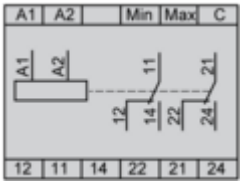
Dimensions and Mounting



Connections and Schema

Level Control Relays

Wiring Diagram

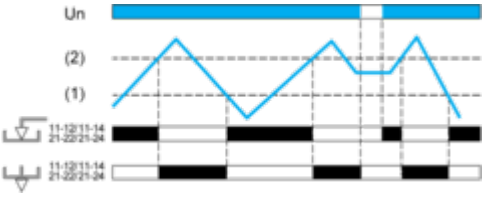


Technical Description

Function Diagrams

Control of Two Levels

Fill/Empty function

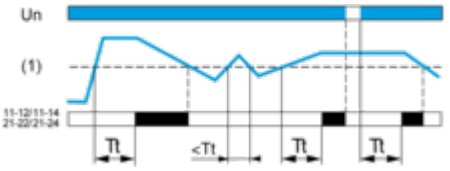


Legend

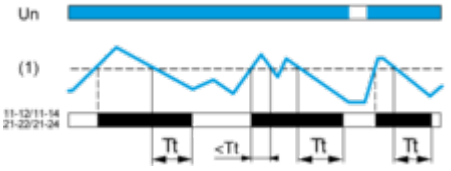
Un Supply voltage
(1) Min. level
(2) Max. level
11-12/11-14, 21-22/21-24 Output relay connections
Relay status: black color = energized.

Control of One Level

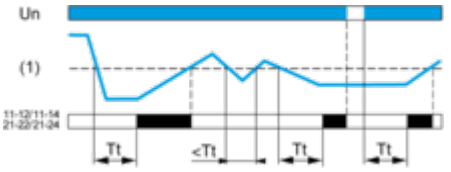
Empty function T on



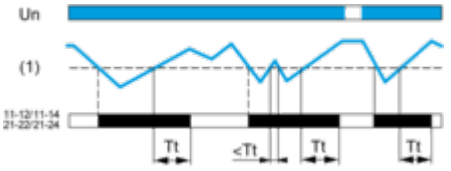
Empty function T off



Fill function T on



Fill function T off



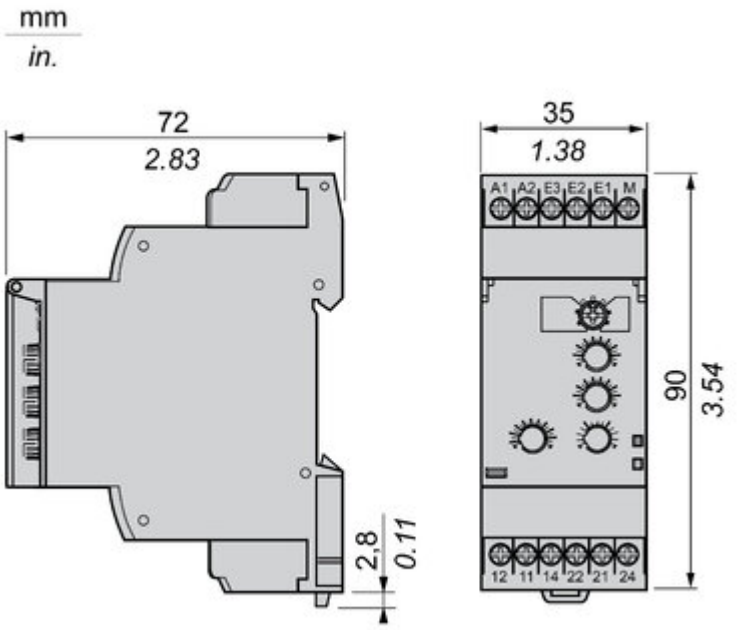
Legend

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.

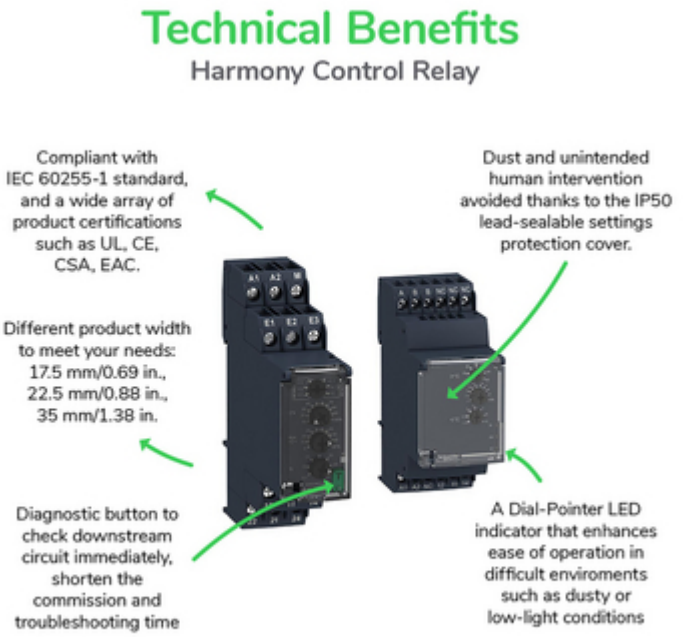
Technical Illustration

Dimensions



Offer Marketing Illustration

Product benefits / Features



Offer Marketing Illustration

Product benefits / Features

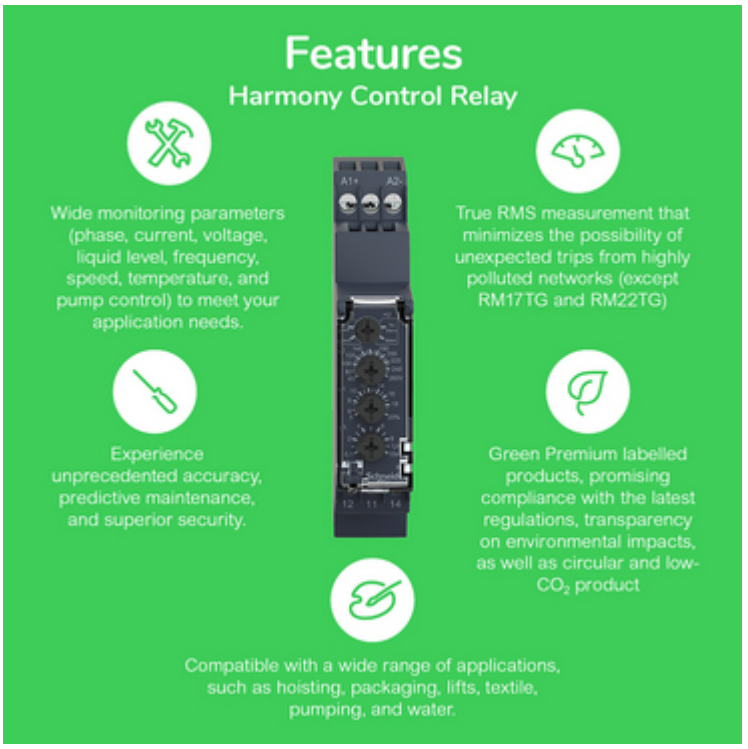
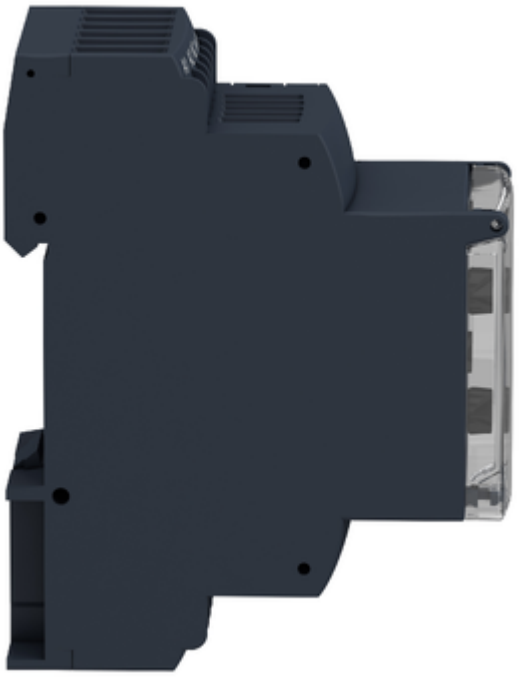


Image of product / Alternate images

Alternative










A1
A2
NC
Min
Max
C
Sensitivity
Level
Tt
Schneider
12
11
14
22
21
24

