

# Product data sheet

Specifications



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

RM35LM33MW

### 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 at 5 V DC
Maximum switching current	5 A AC/DC
power consumption	5 VA AC
Measurement range	250 Ohm...1 MΩ
Utilisation category	AC-12 conforming to IEC 60947-5-1 AC-13 conforming to IEC 60947-5-1 AC-14 conforming to IEC 60947-5-1 AC-15 conforming to IEC 60947-5-1 DC-12 conforming to IEC 60947-5-1 DC-13 conforming to 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 % for time delay
Measurement error	0.5 %/°C with temperature variation

<b>Sensitivity scale</b>	0.25...5 kOhm LS (Low Sensitivity) 5...100 kOhm St (Standard Sensitivity) 50...1000 kOhm HS (High Sensitivity)
<b>Sensitivity adjustment</b>	5...100 %
<b>Maximum supply current for sensors</b>	1 mA
<b>Cable capacitance</b>	1 nF at HS (High Sensitivity) for probe cable 2.2 nF at St (Standard Sensitivity) for probe cable 4.7 nF at LS (Low Sensitivity)
<b>Marking</b>	CE : 73/23/EEC CE : EMC 89/336/EEC
<b>Overvoltage category</b>	III conforming to IEC 60664-1
<b>Insulation resistance</b>	> 500 MOhm at 500 V DC between supply and relay output conforming to IEC 60255-5 > 500 MOhm at 500 V DC between measurement and relay output conforming to IEC 60664-1 > 1 MOhm at 500 V DC between supply and measurement conforming to IEC 60255-5 > 500 MOhm at 500 V DC between supply and relay output conforming to IEC 60664-1 > 500 MOhm at 500 V DC between measurement and relay output conforming to IEC 60255-5 > 1 MOhm at 500 V DC between supply and measurement conforming to IEC 60664-1
<b>[Ui] rated insulation voltage</b>	250 V conforming to IEC 60664-1
<b>Operating position</b>	Any position without derating
<b>Connections - terminals</b>	Screw terminals, 1 x 0.5...1 x 4 mm <sup>2</sup> (AWG 20...AWG 11) solid without cable end 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 0.2...1 x 2.5 mm <sup>2</sup> (AWG 24...AWG 12) flexible with cable end
<b>Tightening torque</b>	0.6...1 N.m conforming to IEC 60947-1
<b>Housing material</b>	Self-extinguishing plastic
<b>Local signalling</b>	LED (yellow) for relay ON LED (green) for power ON LED (yellow) for timer ON
<b>Mounting support</b>	35 mm symmetrical DIN rail conforming to IEC 60715
<b>Electrical durability</b>	100000 cycles
<b>Mechanical durability</b>	30000000 cycles
<b>Operating rate</b>	<= 360 operations/hour full load
<b>Measurement range</b>	0.25...1000 kOhm
<b>Safety reliability data</b>	B10d = 170000 MTTFd = 182.6 years
<b>Width</b>	35 mm
<b>Control type</b>	Without test button

## Environment

<b>Immunity to microbreaks</b>	100 ms DC 90 ms AC
<b>Electromagnetic compatibility</b>	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
<b>Standards</b>	IEC 60255-6

<b>Product certifications</b>	CSA GL UL C-Tick GOST
<b>Ambient air temperature for storage</b>	-40...70 °C
<b>Ambient air temperature for operation</b>	-20...50 °C
<b>Relative humidity</b>	95 % at 55 °C conforming to IEC 60068-2-30
<b>IP degree of protection</b>	IP20 (terminals) conforming to IEC 60529 IP30 (casing) conforming to IEC 60529
<b>Pollution degree</b>	3 conforming to IEC 60664-1
<b>Dielectric test voltage</b>	2 kV, 1 min AC 50 Hz conforming to IEC 60255-5 2 kV, 1 min AC 50 Hz conforming to IEC 60664-1

## Packing Units

<b>Unit Type of Package 1</b>	PCE
<b>Number of Units in Package 1</b>	1
<b>Package 1 Height</b>	4.400 cm
<b>Package 1 Width</b>	7.800 cm
<b>Package 1 Length</b>	9.500 cm
<b>Package 1 Weight</b>	134.000 g
<b>Unit Type of Package 2</b>	S03
<b>Number of Units in Package 2</b>	48
<b>Package 2 Height</b>	30.000 cm
<b>Package 2 Width</b>	30.000 cm
<b>Package 2 Length</b>	40.000 cm
<b>Package 2 Weight</b>	7.155 kg
<b>Unit Type of Package 3</b>	P06
<b>Number of Units in Package 3</b>	384
<b>Package 3 Height</b>	75.000 cm
<b>Package 3 Width</b>	60.000 cm
<b>Package 3 Length</b>	80.000 cm
<b>Package 3 Weight</b>	65.660 kg

## Contractual warranty

<b>Warranty</b>	18 months
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## 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

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](#) Pro-active compliance (Product out of EU RoHS legal scope)

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

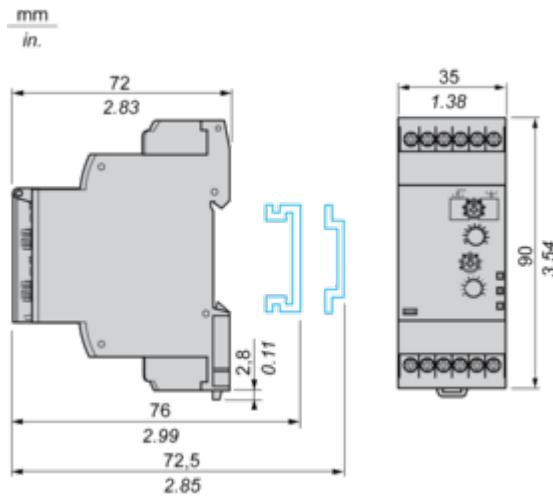
End of life manual availability [End of Life Information](#)

Take-back No

## Dimensions Drawings

Level Control Relays

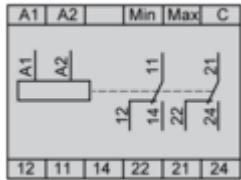
## Dimensions and Mounting



## Connections and Schema

Level Control Relays

## Wiring Diagram

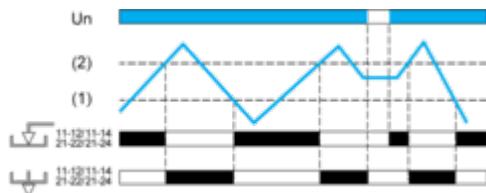


## Technical Description

Function Diagrams

## Control of Two Levels

## Fill/Empty function

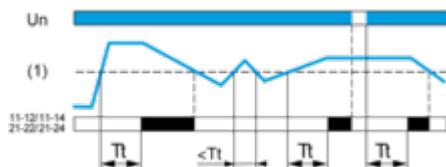


## Legend

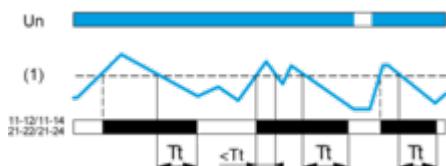
- Un Supply voltage
- (1) Min. level
- (2) Max. level
- 11-12/11-14, 21-22/21-24 Output relay connections
- Relay status: black color = energized.

## Control of One Level

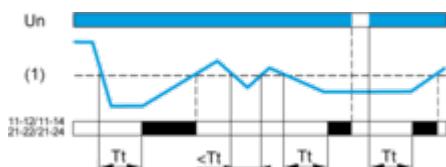
## Empty function T on



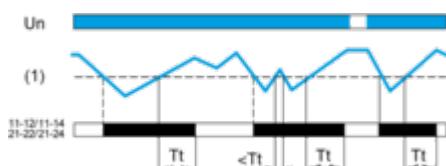
## Empty function T off



## 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

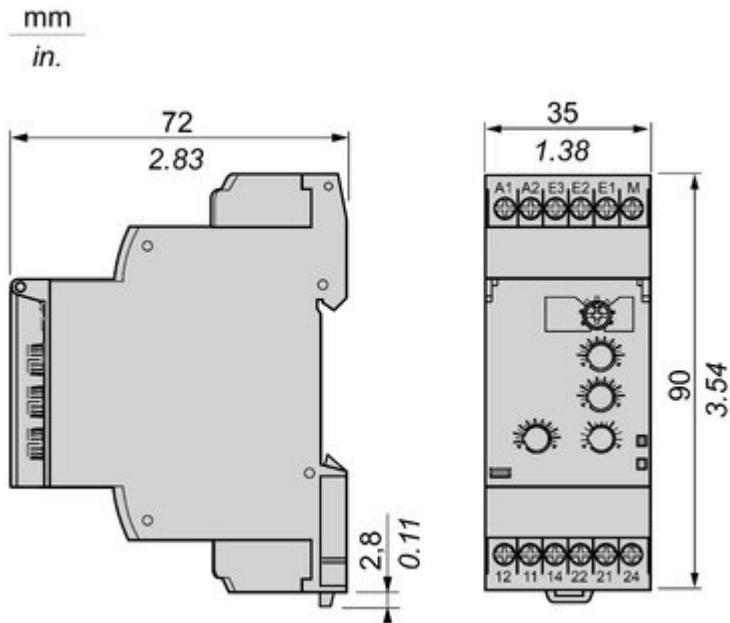


Image of product / Alternate images

Alternative

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