Product data sheet

Specifications

level control relay, Harmony Control Relays, 5A, 2CO, 24â€¦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 MOhm
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

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 at HS (High Sensitivity) for probe cable 2.2 nF at St (Standard Sensitivity) for probe cable 4.7 nF at 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 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
[Ui] Rated Insulation Voltage	250 V conforming to 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	0.6…1 N.m conforming to IEC 60947-1
Housing Material	Self-extinguishing plastic
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	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…70 °C
Ambient Air Temperature For Operation	-20…50 °C
Relative Humidity	95 % at 55 °C conforming to IEC 60068-2-30
Ip Degree Of Protection	IP20 (terminals) conforming to IEC 60529 IP30 (casing) conforming to IEC 60529
Pollution Degree	3 conforming to IEC 60664-1
Dielectric Test Voltage	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

Unit Type Of Package 1	PCE
Number Of Units In Package 1	1
Package 1 Height	4.700 cm
Package 1 Width	7.800 cm
Package 1 Length	9.700 cm
Package 1 Weight	141.000 g
Unit Type Of Package 2	S03
Number Of Units In Package 2	48
Package 2 Height	30.000 cm
Package 2 Width	30.000 cm
Package 2 Length	40.000 cm
Package 2 Weight	7.448 kg
Unit Type Of Package 3	P06
Number Of Units In Package 3	384
Package 3 Height	75.000 cm
Package 3 Width	60.000 cm
Package 3 Length	80.000 cm
Package 3 Weight	65.660 kg

Contractual warranty

Warranty	18 months

Sustainability

Green Premium™ label is Schneider Electric's commitment to delivering products with best-in-class environmental performance. Green Premium promises compliance with the latest regulations, transparency on environmental impacts, as well as circular and low-CO_2 products.

Guide to assessing product sustainability is a white paper that clarifies global eco-label standards and how to interpret environmental declarations.

Learn more about Green Premium >

Guide to assess a product's sustainability >

Transparency

RoHS/REACh

Well-being performance

Mercury Free	
Rohs Exemption Information	Yes

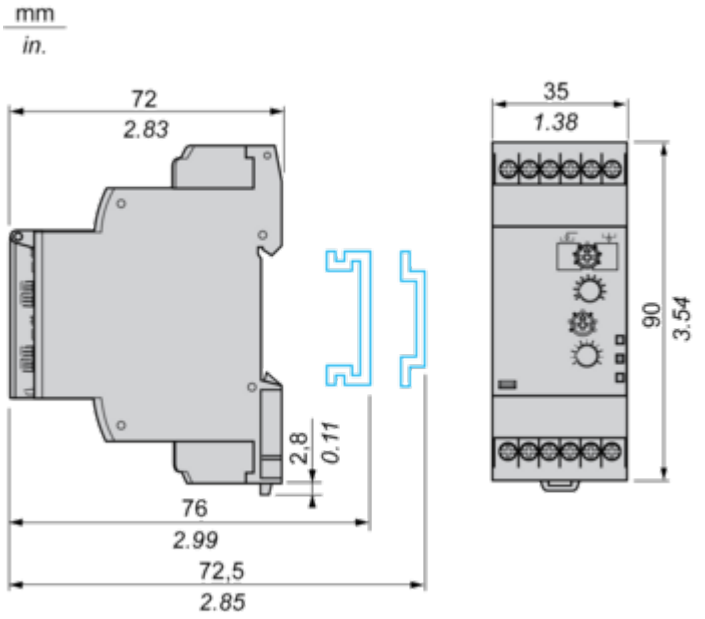
Certifications & Standards

Reach Regulation	REACh Declaration
Eu Rohs Directive	Pro-active compliance (Product out of EU RoHS legal scope)
China Rohs Regulation	China RoHS declaration
Environmental Disclosure	Product Environmental Profile
Circularity Profile	End of Life Information
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

Dimensions Drawings

Level Control Relays

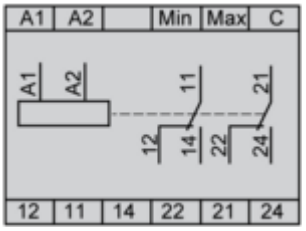
Dimensions and Mounting



Connections and Schema

Level Control Relays

Wiring Diagram

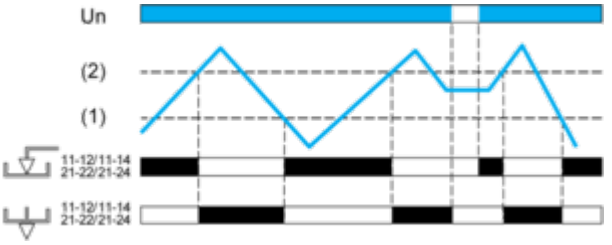


Technical Description

Function Diagrams

Control of Two Levels

Fill/Empty function

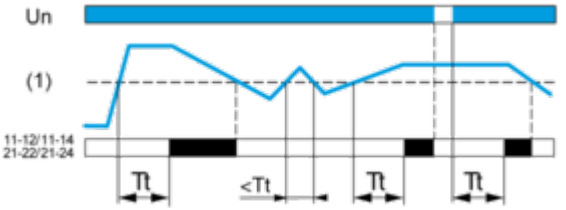


Legend

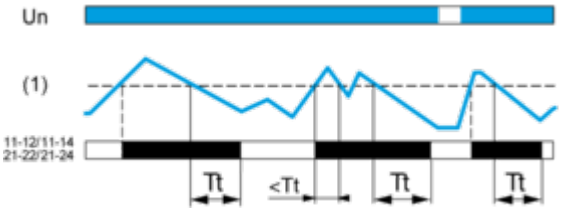
Un Supply voltage
(1) Min. level
(2) Max. level
11-12/11-14, 21-22/21-24 Output relay connections
Relay status: black color = energized.

Control of One Level

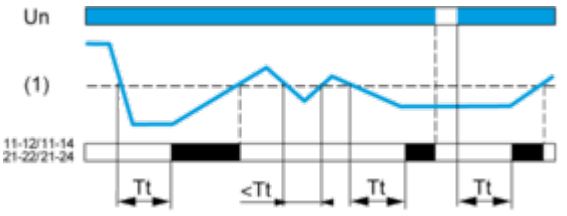
Empty function T on



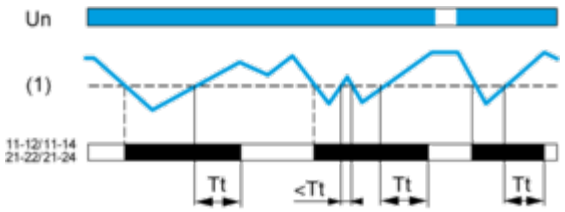
Empty function T off



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.