Product data sheet

Specifications

Harmony, Modular liquid level control relay, 8 A, 2 CO, 380…415 V AC/DC

RM22LA32MT

Discontinued on: Mar 26, 2021

Discontinued

Main

Range Of Product	Harmony Relay
Relay Type	Level control relay
Product Or Component Type	Modular measurement and control relays
Relay Name	RM22L
Relay Monitored Parameters	Detection by resistive probes
Time Delay	Adjustable 0.1...30 s, +/- 10 % of the full scale value on crossing the threshold Tt
Switching Capacity In Va	2000 VA
Minimum Switching Current	10 mA at 5 V DC
Maximum Switching Current	8 A AC
Utilisation Category	AC-15 conforming to IEC 60947-5-1 DC-13 conforming to IEC 60947-5-1 AC-1 conforming to IEC 60947-4-1 DC-1 conforming to IEC 60947-4-1

Complementary

Maximum Switching Voltage	250 V AC
Supply Voltage Limits	323…456.5 V AC
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 % for time delay
Measurement Error	< 1 % over the whole range with voltage variation 0.05 %/°C with temperature variation
Maximum Cable Distance Between Devices	1000 m between 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

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) for 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	0.6…1 N.m conforming to IEC 60947-1
Housing Material	Self-extinguishing plastic
Mounting Support	35 mm DIN rail conforming to EN/IEC 60715
Mounting Position	Any position
Electrical Durability	100000 cycles
Mechanical Durability	10000000 cycles
Contacts Material	Cadmium free
Safety Reliability Data	MTTFd = 182.6 years B10d = 170000
Width	22.5 mm
Net Weight	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 EN/IEC 61000-6-1 Immunity for industrial environments conforming to EN/IEC 61000-6-2 Emission standard for residential, commercial and light-industrial environments conforming to EN/IEC 61000-6-3 Emission standard for industrial environments conforming to EN/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	EN/IEC 60255-1
Product Certifications	GL UL CCC EAC RCM CE CSA
Ambient Air Temperature For Storage	-40…70 °C
Relative Humidity	93…97 % at 25…55 °C conforming to IEC 60068-2-30

Vibration Resistance	0.075 mm (f= 10…58.1 Hz) not in operation conforming to IEC 60068-2-6 1 gn (f= 10…58.1 Hz) not in operation conforming to IEC 60068-2-6 0.035 mm (f= 58.1…150 Hz) in operation conforming to IEC 60068-2-6 0.5 gn (f= 58.1…150 Hz) in operation conforming to IEC 60068-2-6
Shock Resistance	15 gn (duration = 11 ms) for not in operation conforming to IEC 60068-2-27 5 gn (duration = 11 ms) for in operation conforming to IEC 60068-2-27
Ip Degree Of Protection	IP20 (terminals) conforming to IEC 60529 IP40 (housing) conforming to IEC 60529 IP50 (front panel) conforming to IEC 60529
Pollution Degree	3 conforming to IEC 60664-1
Dielectric Test Voltage	2.5 kV, 1 min AC 50 Hz conforming to IEC 60255-27

Packing Units

Unit Type Of Package 1	PCE
Number Of Units In Package 1	1

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

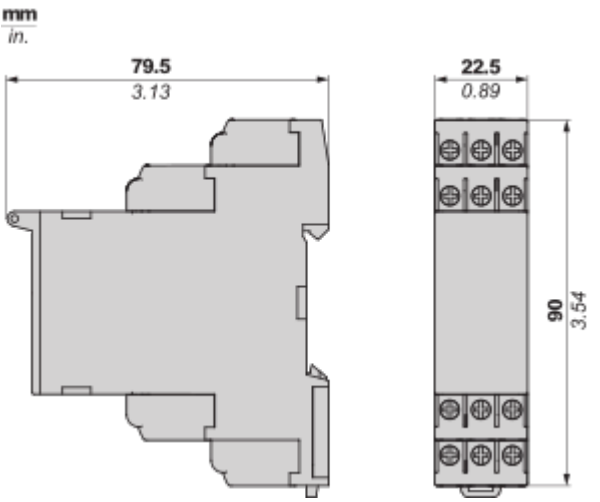
Mercury Free	
Rohs Exemption Information	Yes

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

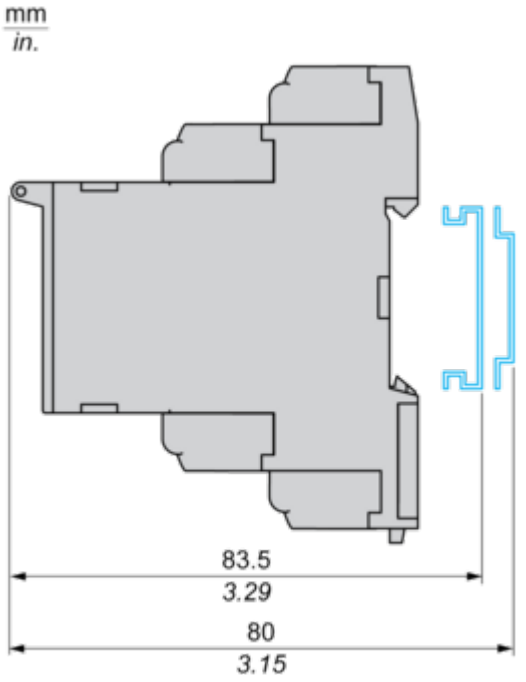
Dimensions



Mounting and Clearance

Mounting and Clearance

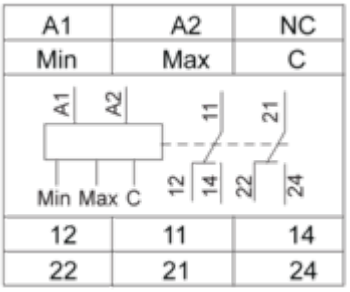
Rail Mounting



Connections and Schema

Level Control Relay

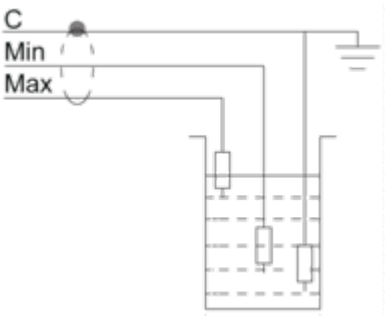
Wiring Diagram



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



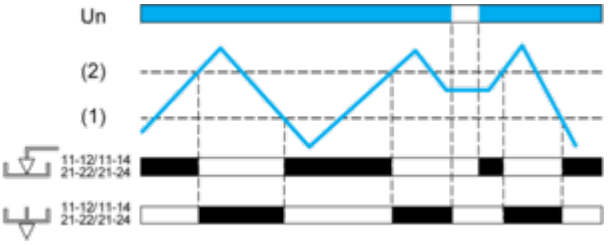
A1,A2 : Supply voltage
Max : High level
Min : Low level
C : References or Tank earth electrode
11-14,12 : 1st C/O contact of output relay

Technical Description

Function Diagrams

Control of Two Levels

Fill/Empty function

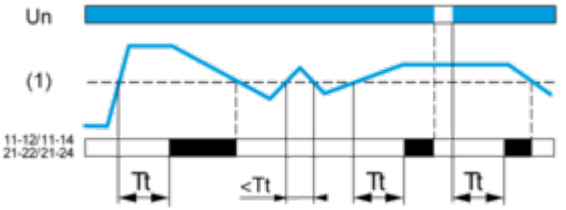


Legend

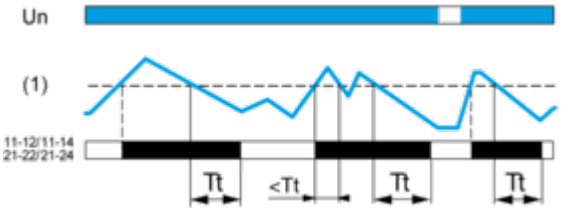
Un Supply voltage
(1) Min. level
(2) Max. level
11-12/11-14, 21-22/21-24 Output relay connections
Relay status: black color = energized.

Control of One Level

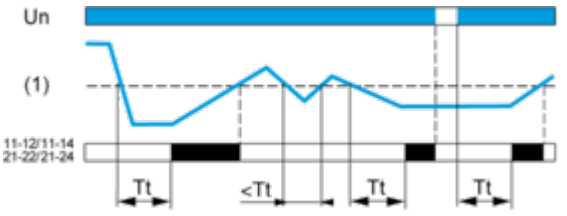
Empty function T on



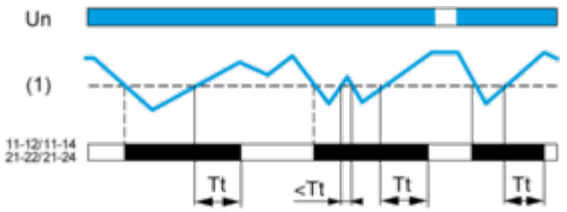
Empty function T off



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.