



## Main

Range of Product	Harmony Control Relays
Product or Component Type	Level control relay
Relay 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 on crossing the threshold Tt
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
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	3280.84 ft (1000 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
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 IEC 60664-1
Insulation	Between supply and measurement
Connections - terminals	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 0.5...1 x 3.3 mm <sup>2</sup> AWG 20...AWG 12) solid without cable end Screw terminals, 1 x 0.2...1 x 2.5 mm <sup>2</sup> AWG 24...AWG 14) flexible with cable end

The information provided in this documentation contains general descriptions and/or technical characteristics of the performance of the products contained herein. 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. It is the duty of any such user or integrator to perform the appropriate and complete risk analysis, evaluation and testing of the products with respect to the relevant specific application or use thereof. Neither Schneider Electric Industries SAS nor any of its affiliates or subsidiaries shall be responsible or liable for misuse of the information contained herein.

Tightening torque	5.31...8.85 lbf.in (0.6...1 N.m) IEC 60947-1
Housing material	Self-extinguishing plastic
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
Safety reliability data	MTTFd = 182.6 years B10d = 170000
Width	0.89 in (22.5 mm)
Net 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[RETURN]RCM[RETURN]CSA[RETURN]GL[RETURN]CCC[RETURN]CE[RETURN]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	22380-RELAYS-MEASUREMENT (RM17-RM35)
Discount Schedule	CP2
GTIN	3606480792342
Returnability	Yes
Country of origin	ID

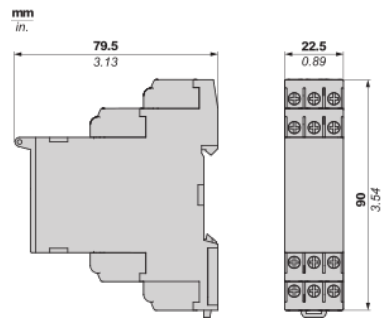
## Packing Units

Unit Type of Package 1	PCE
Number of Units in Package 1	1
Package 1 Height	1.02 in (2.6 cm)
Package 1 Width	3.23 in (8.2 cm)
Package 1 Length	3.74 in (9.5 cm)
Package 1 Weight	4.30 oz (122.0 g)
Unit Type of Package 2	S02
Number of Units in Package 2	40
Package 2 Height	5.91 in (15.0 cm)
Package 2 Width	11.81 in (30.0 cm)
Package 2 Length	15.75 in (40.0 cm)
Package 2 Weight	12.11 lb(US) (5.492 kg)
Unit Type of Package 3	P06
Number of Units in Package 3	640
Package 3 Height	23.62 in (60.0 cm)
Package 3 Width	31.50 in (80.0 cm)
Package 3 Length	23.62 in (60.0 cm)
Package 3 Weight	209.75 lb(US) (95.14 kg)

## Offer Sustainability

Sustainable offer status	Green Premium product
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 <a href="http://www.P65Warnings.ca.gov">www.P65Warnings.ca.gov</a>
REACH Regulation	<a href="#">REACH Declaration</a>
EU RoHS Directive	Pro-active compliance (Product out of EU RoHS legal scope)
Mercury free	Yes
China RoHS Regulation	<a href="#">China RoHS Declaration</a>
RoHS exemption information	<a href="#">Yes</a>
Environmental Disclosure	<a href="#">Product Environmental Profile</a>
Circularity Profile	<a href="#">End Of Life Information</a>

Dimensions



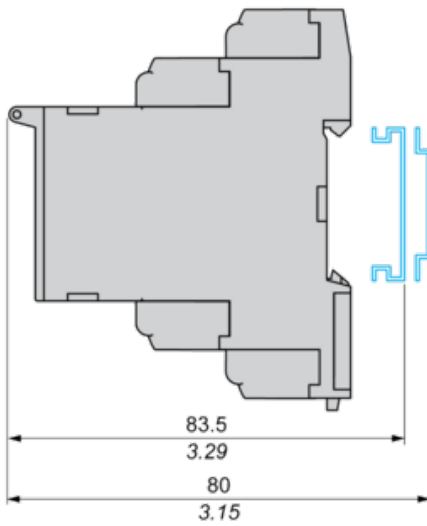
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Mounting and Clearance

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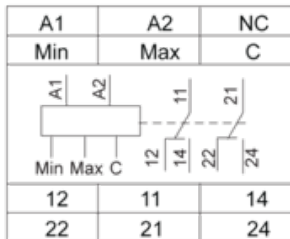
Rail Mounting

mm  
in.



Level Control Relay

Wiring Diagram



A1,A2 : Supply voltage

Max : High level

Min : Low level

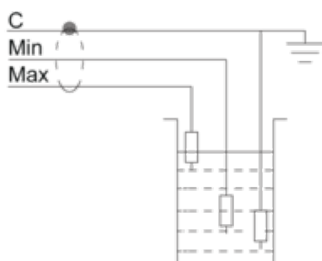
C : References or Tank earth electrode

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

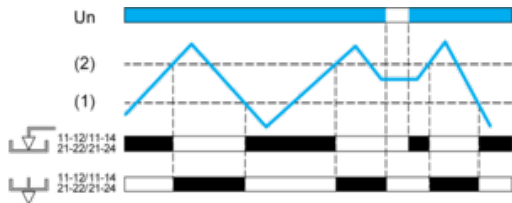
C : References or Tank earth electrode

11-14,12 : 1st C/O contact of output relay

Function Diagrams

Control of Two Levels

Fill/Empty function

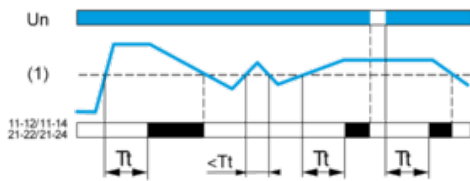


Legend

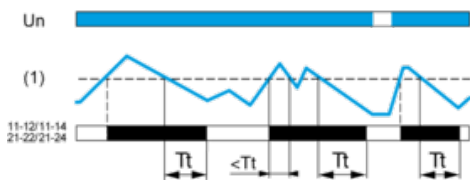
- $U_n$  Supply voltage
- (1) Min. level
- (2) Max. level
- 11-12/11-14, 21-22/21-24 Output relay connections
- Relay status: black color = energized.

Control of One Level

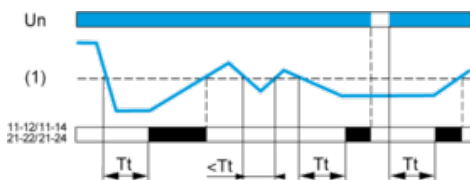
Empty function T on



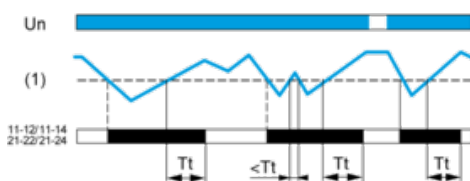
Empty function T off



Fill function T on



Fill function T off



Legend

- $T_t$  Time delay after crossing of threshold
- $U_n$  Supply voltage
- (1) Level threshold
- 11-12/11-14, 21-22/21-24 Output relay connections
- Relay status: black color = energized.