



Main

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| 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 ² AWG 20...AWG 14) solid without cable end Screw terminals, 2 x 0.2...2 x 1.5 mm ² AWG 24...AWG 16) flexible with cable end Screw terminals, 1 x 0.5...1 x 3.3 mm ² AWG 20...AWG 12) solid without cable end Screw terminals, 1 x 0.2...1 x 2.5 mm ² 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.

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|-------------------------|--|
| 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 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 | 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 EN/IEC 61000-6-1 Immunity for industrial environments EN/IEC 61000-6-2 Emission standard for residential, commercial and light-industrial environments EN/IEC 61000-6-3 Emission standard for industrial environments EN/IEC 61000-6-4 Electrostatic discharge 6 kV contact discharge)level 3 IEC 61000-4-2 Electrostatic discharge 8 kV air discharge)level 3 IEC 61000-4-2 Radiated radio-frequency electromagnetic field immunity test 10 V/mlevel 3 IEC 61000-4-3 Electrical fast transient/burst immunity test 4 kV direct)level 4 IEC 61000-4-4 Electrical fast transient/burst immunity test 2 kV capacitive coupling)level 4 IEC 61000-4-4 Surge immunity test 4 kV common mode)level 4 IEC 61000-4-5 Surge immunity test 2 kV differential mode)level 4 IEC 61000-4-5 Conducted and radiated emissionsclass B group 1 CISPR 11 Conducted and radiated emissionsclass B CISPR 22 |
| Standards | EN/IEC 60255-1 |
| Product Certifications | UL RCM CSA GL CCC CE 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

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|-----------------------|--------------------------------------|
| Category | 22380-RELAYS-MEASUREMENT (RM17-RM35) |
| Discount Schedule | CP2 |
| GTIN | 3606480792342 |
| Nbr. of units in pkg. | 1 |
| Package weight(Lbs) | 4.30 oz (122.0 g) |
| Returnability | Yes |
| Country of origin | ID |

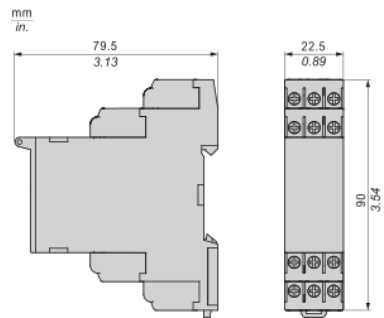
Packing Units

| | |
|------------------------------|--------------------------|
| Unit Type of Package 1 | PCE |
| 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) |
| Unit Type of Package 2 | S02 |
| Number of Units in Package 2 | 40 |
| Package 2 Weight | 12.11 lb(US) (5.492 kg) |
| Package 2 Height | 5.91 in (15 cm) |
| Package 2 width | 11.81 in (30 cm) |
| Package 2 Length | 15.75 in (40 cm) |
| Unit Type of Package 3 | P06 |
| Number of Units in Package 3 | 640 |
| Package 3 Weight | 209.75 lb(US) (95.14 kg) |
| Package 3 Height | 23.62 in (60 cm) |
| Package 3 width | 31.50 in (80 cm) |
| Package 3 Length | 23.62 in (60 cm) |

Offer Sustainability

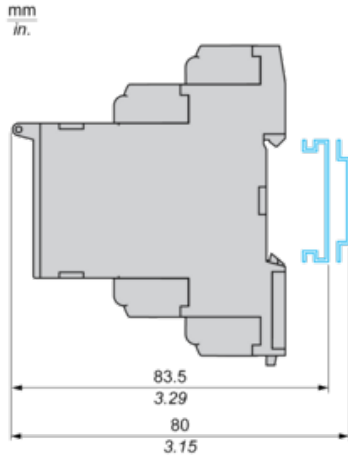
| | |
|----------------------------|---|
| Sustainable offer status | Green Premium product |
| California proposition 65 | WARNING: This product can expose you to chemicals including: Lead and lead compounds, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov |
| REACH Regulation | REACH Declaration |
| EU RoHS Directive | Pro-active compliance (Product out of EU RoHS legal scope) EU RoHS Declaration |
| Mercury free | Yes |
| RoHS exemption information | Yes |
| China RoHS Regulation | China RoHS Declaration |
| Environmental Disclosure | Product Environmental Profile |
| Circularity Profile | End Of Life Information |

Dimensions



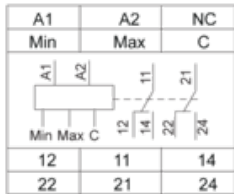
Mounting and Clearance

Rail Mounting



Level Control Relay

Wiring Diagram



A1,A2 : Supply voltage

Max : High level

Min : Low level

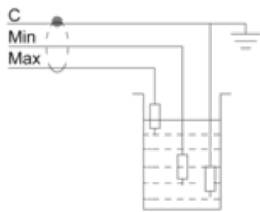
C : References or Tank earth electrode

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

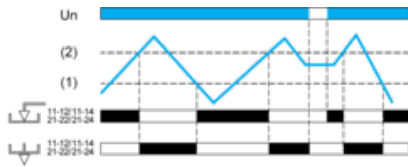
C : References or Tank earth electrode

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

Function Diagrams

Control of Two Levels

Fill/Empty function

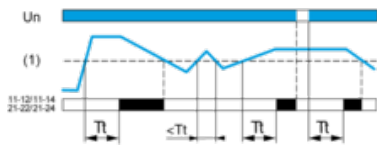


Legend

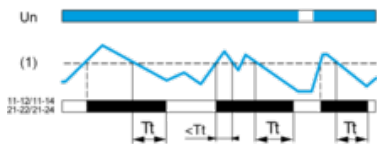
- Un Supply voltage
- (1) Min. level
- (2) Max. level
- 11-12/11-14, 21-22/21-24 Output relay connections
- Relay status: black color = energized.

Control of One Level

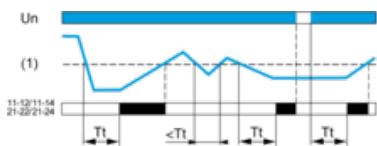
Empty function T on



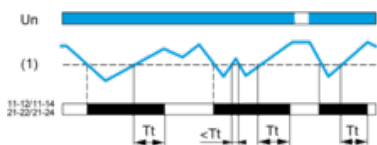
Empty function T off



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.