



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 type | Without |
| Switching capacity in VA | 2000 VA |
| Measurement range | 5...100 kOhm |
| Contacts type and composition | 2 C/O |

Complementary

| | |
|--|--|
| Reset time | 1750 ms |
| Maximum switching voltage | 250 V AC |
| Minimum switching current | 10 mA 5 V DC |
| Maximum switching current | 8 A AC |
| [Us] rated supply voltage | 24...240 V AC/DC 50/60 Hz |
| Supply voltage limits | 20.4...264 V AC/DC |
| Operating limits | - 15 % + 10 % Un |
| Power consumption in VA | 5 VA AC |
| Maximum power consumption in W | 1.5 W DC |
| Output contacts | 2 C/O |
| Nominal output current | 8 A |
| Run-up delay at power-up | 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 |
| Sensitivity scale | 5...100 kOhm St (Standard Sensitivity) |
| Sensitivity adjustment | 5...100 % |
| Maximum supply current for sensors | 1 mA |
| Maximum cable distance between devices | 3280.84 ft (1000 m) probe and delay |
| 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 resistance | > 100 MOhm 500 V DC IEC 60255-27 |
| Insulation | Between supply and measurement |
| Mounting position | Any position |
| 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 |
| Tightening torque | 5.31...8.85 lbf.in (0.6...1 N.m) IEC 60947-1 |

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.

| | |
|-------------------------|--|
| Housing material | Self-extinguishing plastic |
| Status LED | Relay ON LED Yellow) Power ON LED Green) |
| Mounting support | 35 mm DIN rail conforming to EN/IEC 60715 |
| Electrical durability | 100000 cycles |
| Mechanical durability | 10000000 cycles |
| 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 |
| Safety reliability data | B10d = 120000 MTTFd = 125.5 years |
| Contacts material | Cadmium free |
| Width | 0.89 in (22.5 mm) |
| Net Weight | 0.22 lb(US) (0.1 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/m level 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 emissions class B group 1 CISPR 11 Conducted and radiated emissions class B CISPR 22 |
| Standards | EN/IEC 60255-1 |
| Product certifications | GL RCM CCC CSA UL EAC CE |
| Ambient air temperature for storage | -40...158 °F (-40...70 °C) |
| Ambient air temperature for operation | -4...122 °F (-20...50 °C) 60 Hz -4...140 °F (-20...60 °C) 50 Hz AC/DC |
| 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 conforming to 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 | 00785901103967 |
| Nbr. of units in pkg. | 1 |
| Package weight(Lbs) | 0.24 lb(US) (0.11 kg) |

| | |
|-------------------|-----|
| Returnability | Yes |
| Country of origin | ID |

Packing Units

| | |
|------------------|----------|
| Package 1 Height | 0.260 dm |
| Package 1 width | 0.820 dm |
| Package 1 Length | 0.950 dm |

Offer Sustainability

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|----------------------------|---|
| 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 |
| 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 |
| WEEE | The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins. |

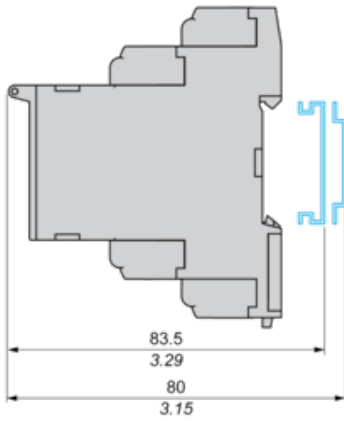
Dimensions



Mounting and Clearance

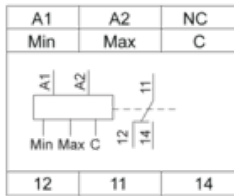
Rail Mounting

mm
in.



Level Control Relay

Wiring Diagram



A1,A2 : Supply voltage

Max : High level

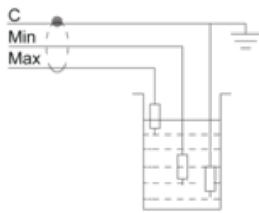
Min : Low level

C : References or Tank earth electrode

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

Control by Electrodes

Wiring Diagram



A1,A2 : Supply voltage

Max : High level

Min : Low level

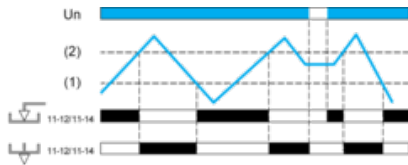
C : References or Tank earth electrode

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

Function Diagrams

Control of Two Levels

Fill/Empty function



Legend

Un Nominal supply voltage

(1) Min. level

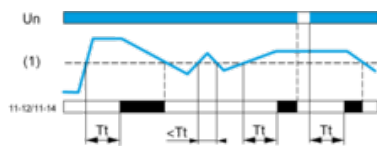
(2) Max. level

11-12/11-14, 21-22/21-24 Output relay connections

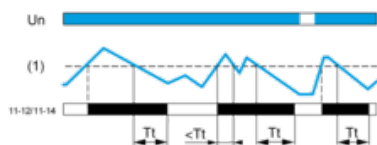
Relay status: black color = energized.

Control of One Level

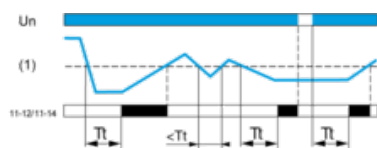
Empty function T on



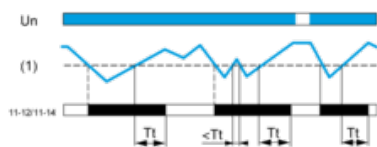
Empty function T off



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.