# Product data sheet

Specifications




## level control relay, Harmony Control Relays, 8A, 1CO, 380...415V AC DC

RM22LG11MT

**Product availability: Non-Stock - Not normally stocked in distribution facility**

## Main

| | |
|---|---|
| **Range of Product** | Harmony Control Relays |
| **Relay Type** | Level control relay |
| **Product or Component Type** | Level control relay |
| **Relay name** | RM22L |
| **Relay monitored parameters** | Detection by resistive probes |
| **time delay** | Without |
| **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<br>DC-13 IEC 60947-5-1<br>AC-1 IEC 60947-4-1<br>DC-1 IEC 60947-4-1 |
| **Contacts type and composition** | 1 C/O |

## Complementary

| | |
|---|---|
| **Maximum switching voltage** | 250 V AC |
| **[Un] rated nominal voltage** | 380...415 V AC/DC 50/60 Hz, non self-powered |
| **Supply voltage limits** | 323…456.5 V AC |
| **Output contacts** | 2 C/O |
| **nominal output current** | 8 A |
| **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<br>0.05 %/°C with temperature variation |
| **Maximum cable distance between devices** | 328.08 ft (100 m) probe and delay |
| **Sensitivity scale** | 5...100 kOhm St (Standard Sensitivity) |
| **Sensitivity adjustment** | 5…100 % |
| **Maximum supply current for sensors** | 1 mA |
| **Cable capacitance** | 1 nF HS (High Sensitivity) probe cable<br>2.2 nF St (Standard Sensitivity) probe cable<br>4.7 nF LS (Low Sensitivity) probe cable |

Price is “List Price” and may be subject to a trade discount – check with your local distributor or retailer for actual price.

Disclaimer: 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

| | |
|---|---|
| **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 20 AWG...14 AWG) solid without cable end<br>Screw terminals, 2 x 0.2...2 x 1.5 mm² 24 AWG...16 AWG) flexible with cable end<br>Screw terminals, 1 x 0.5...1 x 3.3 mm² 20 AWG...12 AWG) solid without cable end<br>Screw terminals, 1 x 0.2...1 x 2.5 mm² 24 AWG...14 AWG) flexible with cable end |
| **Tightening torque** | 5.3…8.9 lbf.in (0.6…1 N.m) IEC 60947-1 |
| **Housing material** | Polycarbonate |
| **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 |
| **Measurement range** | 5...100 kOhm |
| **Safety reliability data** | MTTFd = 125.5 years<br>B10d = 120000 |
| **Width** | 0.9 in (22.5 mm) |
| **Control Type** | With test button |
| **Net Weight** | 0.2 lb(US) (0.1 kg) |

# Environment

| | |
|---|---|
| **Immunity to microbreaks** | 100 ms DC<br>90 ms AC |
| **Electromagnetic compatibility** | Immunity for residential, commercial and light-industrial environments conforming to IEC 61000-6-1<br>Immunity for industrial environments conforming to IEC 61000-6-2<br>Emission standard for residential, commercial and light-industrial environments conforming to IEC 61000-6-3<br>Emission standard for industrial environments conforming to IEC 61000-6-4<br>Electrostatic discharge - test level: 6 kV level 3 (contact discharge) conforming to IEC 61000-4-2<br>Electrostatic discharge - test level: 8 kV level 3 (air discharge) conforming to IEC 61000-4-2<br>Radiated radio-frequency electromagnetic field immunity test - test level: 10 V/m level 3 conforming to IEC 61000-4-3<br>Electrical fast transient/burst immunity test - test level: 4 kV level 4 (direct) conforming to IEC 61000-4-4<br>Electrical fast transient/burst immunity test - test level: 2 kV level 4 (capacitive coupling) conforming to IEC 61000-4-4<br>Surge immunity test - test level: 4 kV level 4 (common mode) conforming to IEC 61000-4-5<br>Surge immunity test - test level: 2 kV level 4 (differential mode) conforming to IEC 61000-4-5<br>Conducted and radiated emissions class B group 1 conforming to CISPR 11<br>Conducted and radiated emissions class B conforming to CISPR 22 |
| **Standards** | IEC 60255-1 |
| **Product Certifications** | CSA<br>GL<br>RCM<br>UL<br>EAC<br>CE<br>CCC |
| **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<br>1 gn 10…58.1 Hz) not in operation IEC 60068-2-6<br>0.035 mm 58.1…150 Hz) in operation IEC 60068-2-6<br>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<br>5 gn 11 ms) in operation IEC 60068-2-27 |
| **IP degree of protection** | IP20 IEC 60529 terminals)<br>IP40 IEC 60529 housing)<br>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** | US10CP222380 |
| **Discount Schedule** | 0CP2 |
| **GTIN** | 3606480792335 |
| **Returnability** | Yes |
| **Country of origin** | ID |

## Packing Units

| | |
|---|---|
| **Unit Type of Package 1** | PCE |
| **Nbr. of units in pkg.** | 1 |
| **Package 1 Height** | 1.02 in (2.6 cm) |
| **Package 1 Width** | 3.2 in (8.2 cm) |
| **Package 1 Length** | 3.7 in (9.5 cm) |
| **Package weight(Lbs)** | 3.8 oz (107.0 g) |
| **Unit Type of Package 2** | S02 |
| **Number of Units in Package 2** | 40 |
| **Package 2 Height** | 5.9 in (15 cm) |
| **Package 2 Width** | 11.8 in (30 cm) |
| **Package 2 Length** | 15.7 in (40 cm) |
| **Package 2 Weight** | 10.386 lb(US) (4.711 kg) |
| **Unit Type of Package 3** | P06 |
| **Number of Units in Package 3** | 640 |
| **Package 3 Height** | 31.5 in (80.0 cm) |
| **Package 3 Width** | 31.5 in (80.0 cm) |
| **Package 3 Length** | 23.6 in (60.0 cm) |
| **Package 3 Weight** | 185.76 lb(US) (84.26 kg) |

## Contractual warranty

| | |
|---|---|
| **Warranty (in months)** | 18 |

## Environmental Data

Schneider Electric aims to achieve Net Zero status by 2050 through supply chain partnerships, lower impact materials, and circularity via our ongoing “Use Better, Use Longer, Use Again” campaign to extend product lifetimes and recyclability.

Environmental Data explained >

How we assess product sustainability >

### Environmental footprint

| | |
|---|---|
| Total lifecycle Carbon footprint | **44 kg CO2 eq.** |
| Carbon footprint of the manufacturing phase [A1 to A3] | **2 kg CO2 eq.** |
| Carbon footprint of the distribution phase [A4] | **0.1 kg CO2 eq.** |
| Carbon footprint of the installation phase [A5] | **0 kg CO2 eq.** |
| Carbon footprint of the use phase [B2, B3, B4, B6] | **41 kg CO2 eq.** |
| Carbon footprint of the end-of-life phase [C1 to C4] | **0.3 kg CO2 eq.** |
| Environmental Disclosure | **Product Environmental Profile** |

## Use Better

### Materials and Substances

| | |
|---|---|
| Packaging made with recycled cardboard | **Yes** |
| Packaging without single use plastic | **Yes** |
| SCIP Number | **5e3fdf99-611b-4d07-ad17-6eba84ab488b** |
| EU RoHS Directive | **Compliant By Exemption** |
| REACh Regulation | **Reference contains Substances of Very High Concern above the threshold** |
| 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** |

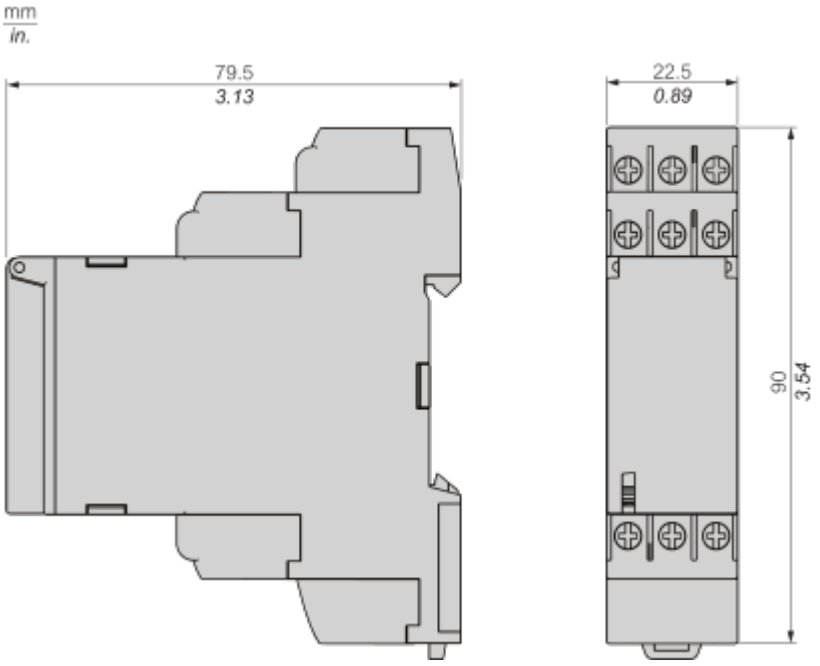
## Use Again

### Repack and remanufacture

| | |
|---|---|
| Recyclability potential, in % | **18** |
| Circularity Profile | **End of Life Information** |
| Take-back | **No** |

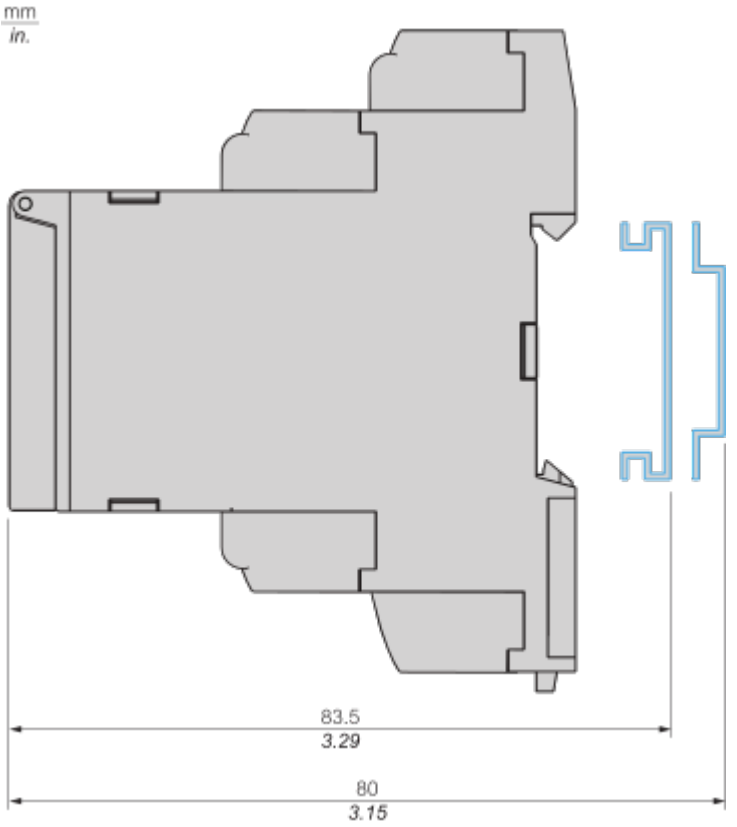
Dimensions Drawings

## Dimensions



Mounting and Clearance

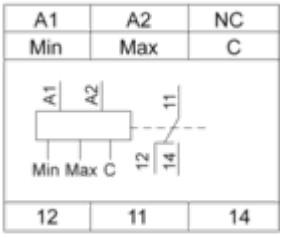
**Rail Mounting**



## Connections and Schema

### Level Control Relay

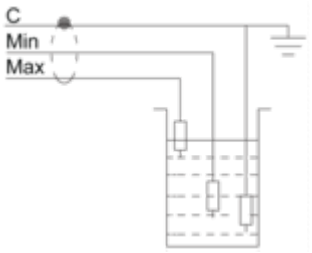
Wiring Diagram




**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

## Control by Electrodes

Wiring Diagram



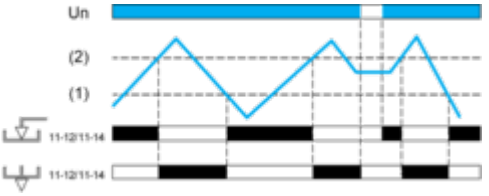

**A1,A2 :** Supply voltage
**Max :** High level
**Min :** Low level
**C :** References or Tank earth electrode
**11-14,12 :** 1st C/O contact of output relay

Technical Description

## Function Diagrams

### Control of Two Levels

**Fill/Empty function**

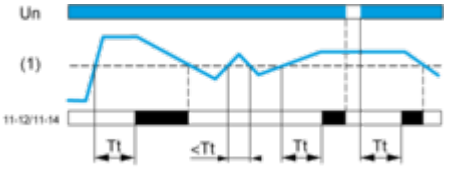



### Legend

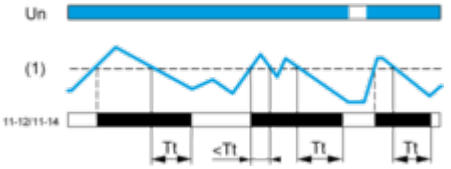
**Un** Nominal supply voltage
**(1)** Min. level
**(2)** Max. level
**11-12/11-14, 21-22/21-24** Output relay connections
**Relay status:** black color = energized.

### Control of One Level

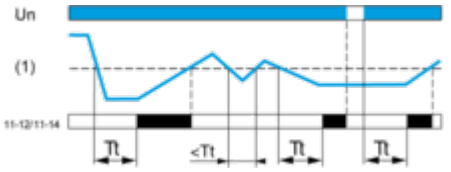
**Empty function T on**



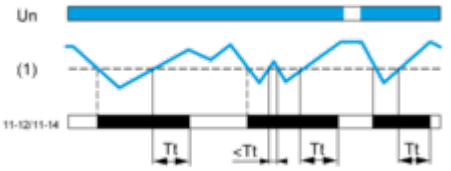

**Empty function T off**




**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.

Image of product / Alternate images

**Alternative**











A1
A2
NC
Min
Max
C
12
11
14

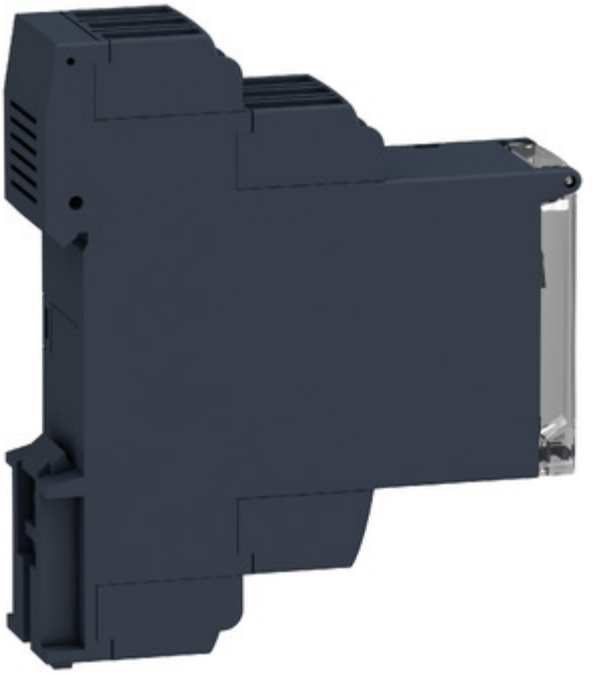


Image of product in real life situation

