

## RM22LG11MT

Releji za kontrolu razine RM22-L - 380...415 V AC - 1 C/O



### Glavno

|                            |  |
|----------------------------|--|
| Range of product           | Zelio Control                          |
| Product or component type  | Modular measurement and control relays |
| 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                           |

### Komplementarno

|                                |  |
|--------------------------------|--|
| Reset time                     | <= 1750 ms   |
| Maximum switching voltage      | 250 V AC   |
| Minimum switching current      | 10 mA at 5 V DC  |
| Maximum switching current      | 8 A AC   |
| [Us] rated supply voltage      | 380...415 V AC, 50/60 Hz   |
| Supply voltage limits          | 323...456.5 V AC   |
| Control circuit voltage limits | - 15 % + 10 % Un   |
| Power consumption in VA        | 8 VA AC  |
| 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<br>0.05 %/°C with temperature variation  |
| Sensitivity scale              | 5...100 kOhm at St (Standard Sensitivity)  |
| Sensitivity adjustment         | 5...100 %  |
| Supply current for sensors     | <= 1 mA  |
| Cable distance between devices | 1000 m between probe and delay   |
| Cable capacitance              | 1 nF at HS (High Sensitivity)for probe cable<br>2.2 nF at St (Standard Sensitivity)for probe cable<br>4.7 nF at LS (Low Sensitivity)for probe cable  |
| Overvoltage category           | III conforming to IEC 60664-1  |
| Insulation resistance          | > 100 MOhm at 500 V DC conforming to 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 <sup>2</sup> - AWG 20...AWG 14, solid cable without cable end<br>Screw terminals 2 x 0.2...2 x 1.5 mm <sup>2</sup> - AWG 24...AWG 16, flexible cable with cable end<br>Screw terminals 1 x 0.5...1 x 3.3 mm <sup>2</sup> - AWG 20...AWG 12, solid cable without cable end<br>Screw terminals 1 x 0.2...1 x 2.5 mm <sup>2</sup> - AWG 24...AWG 14, flexible cable with cable end |
| Tightening torque              | 0.6...1 N.m conforming to IEC 60947-1  |
| Housing material               | Self-extinguishing plastic   |

Informacije dane u ovoj dokumentaciji sadrže opće opise i/ili tehničke karakteristike o performansama ovdje sadržanih proizvoda. Ova dokumentacija nije namijenjena kao zamjena za niti bi se trebala koristiti za određivanje prikladnosti ili pouzdanosti predmetnih proizvoda za konkretne korisničke primjene. Svaki takav korisnik ili integrator dužan je provesti odgovarajuću i potpunu analizu rizika, procjenu i ispitivanje proizvoda u odnosu na odgovarajuću specifičnu primjenu ili uporabu istog. Niti društvo Schneider Electric Industries SAS niti bilo koje od njegovih povezanih poduzeća ili podružnica neće preuzeti obvezu ili snositi odgovornost za pogrešnu upotrebu ovdje sadržanih informacija.

|                         |  |
|-------------------------|--|
| Status LED              | LED yellow for relay ON<br>LED green for power ON  |
| Mounting support        | 35 mm DIN rail conforming to EN/IEC 60715  |
| Electrical durability   | 100000 cycles  |
| Mechanical durability   | 10000000 cycles  |
| Utilisation category    | AC-15 conforming to IEC 60947-5-1<br>DC-13 conforming to IEC 60947-5-1<br>AC-1 conforming to IEC 60947-4-1<br>DC-1 conforming to IEC 60947-4-1 |
| Safety reliability data | MTTFd = 125.5 years<br>B10d = 120000   |
| Contacts material       | Cadmium free   |
| Width                   | 22.5 mm  |
| Product weight          | 0.1 kg   |

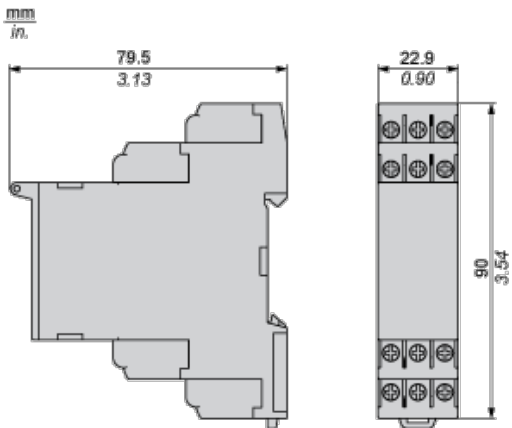
## Okolina

|                                       |  |
|---------------------------------------|--|
| immunity to microbreaks               | 100 ms DC<br>90 ms AC  |
| electromagnetic compatibility         | Emission standard for industrial environments conforming to EN/IEC 61000-6-4<br>Emission standard for residential, commercial and light-industrial environments conforming to EN/IEC 61000-6-3<br>Immunity for industrial environments conforming to EN/IEC 61000-6-2<br>Conducted and radiated emissions class B conforming to CISPR 22<br>Immunity for residential, commercial and light-industrial environments conforming to EN/IEC 61000-6-1<br>Electrostatic discharge 6 kV level 3 contact discharge conforming to IEC 61000-4-2<br>Electrostatic discharge 8 kV level 3 air discharge conforming to IEC 61000-4-2<br>Radiated radio-frequency electromagnetic field immunity test 10 V/m level 3 conforming to IEC 61000-4-3<br>Electrical fast transient/burst immunity test 4 kV level 4 direct conforming to IEC 61000-4-4<br>Electrical fast transient/burst immunity test 2 kV level 4 capacitive coupling conforming to IEC 61000-4-4<br>Surge immunity test 4 kV level 4 common mode conforming to IEC 61000-4-5<br>Surge immunity test 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 |
| standards                             | EN/IEC 60255-1   |
| product certifications                | CCC<br>CE<br>CSA<br>GL<br>UL<br>RCM<br>EAC<br>China RoHS   |
| ambient air temperature for storage   | -40...70 °C  |
| ambient air temperature for operation | -20...50 °C at 60 Hz<br>-20...60 °C at 50 Hz AC/DC   |
| 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<br>1 gn (f = 10...58.1 Hz) (not in operation) conforming to IEC 60068-2-6<br>0.035 mm (f = 58.1...150 Hz) (in operation) conforming to IEC 60068-2-6<br>0.5 gn (f = 58.1...150 Hz) (in operation) conforming to IEC 60068-2-6   |
| shock resistance                      | 15 gn for 11 ms (not in operation) conforming to IEC 60068-2-27<br>5 gn for 11 ms (in operation) conforming to IEC 60068-2-27  |
| IP degree of protection               | IP20 on terminals conforming to IEC 60529<br>IP40 on housing conforming to IEC 60529<br>IP50 on front panel conforming to IEC 60529  |
| pollution degree                      | 3 conforming to IEC 60664-1  |
| dielectric test voltage               | 2.5 kV for 1 min AC 50 Hz conforming to IEC 60255-27   |

## Offer Sustainability

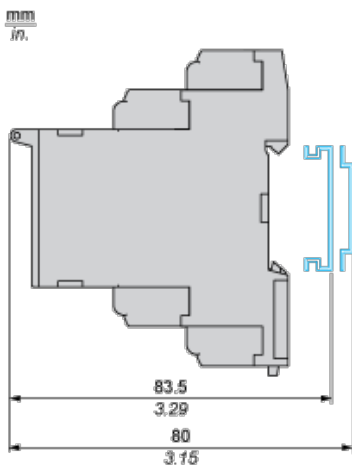
|   |   |
|---|---|
| Green Premium product   | Green Premium product   |
| Compliant - since 0701 - Schneider Electric declaration of conformity | Compliant - since 0701 - Schneider Electric declaration of conformity |
| Reference not containing SVHC above the threshold                     | Reference not containing SVHC above the threshold                     |

## Dimensions



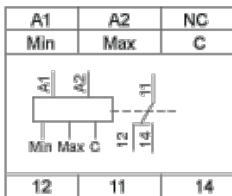
## Mounting and Clearance

### Rail Mounting



## Level Control Relay

### Wiring Diagram



A1,A2 : Supply voltage

Max : High level

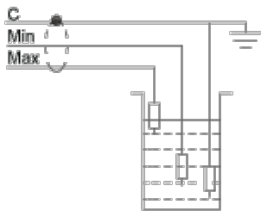
Min : Low level

C : References or Tank earth electrode

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

## Control by Electrodes

### Wiring Diagram



A1,A2 : Supply voltage

Max : High level

Min : Low level

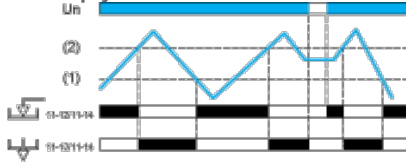
C : References or Tank earth electrode

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

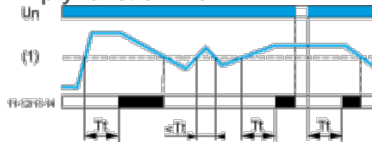
(2) Max. level

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

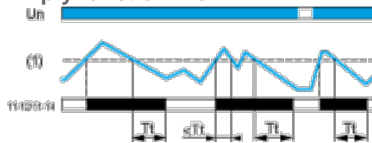
Relay status: black color = energized.

### Control of One Level

#### Empty function T on



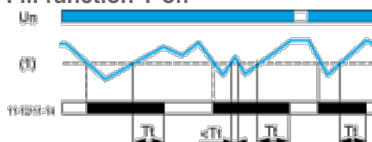
#### Empty function T off



#### 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.