# Product data sheet

Specifications




## voltage control relay, Harmony Control Relays, 8A, 2CO, 80...300V AC DC, 110...240V AC DC

RM22UB34

**Product availability: Stock - Normally stocked in distribution facility**

## Main

| | |
|---|---|
| **Range of Product** | Harmony Control Relays |
| **Relay Type** | Voltage control relay |
| **Product or Component Type** | Voltage control relay |
| **Phase** | 1 phase |
| **Supply circuit type** | AC/DC |
| **Relay name** | RM22UA |
| **Relay monitored parameters** | Overvoltage and undervoltage detection |
| **time delay** | Adjustable 0.1...30 s, +/- 10 % of the full scale value Tt- time delay upon fault |
| **Switching capacity in VA** | 2000 VA |
| **Measurement range** | 80...300 V AC/DC |
| **Contacts type and composition** | 2 C/O |

## Complementary

| | |
|---|---|
| **Reset time** | 1500 ms at maximum voltage |
| **Maximum switching voltage** | 250 V AC |
| **Minimum switching current** | 10 mA 5 V DC |
| **Maximum switching current** | 8 A AC |
| **Supply voltage limits** | 60…280 V AC |
| **Power consumption in VA** | 5 VA AC |
| **Maximum power consumption in W** | 2 W DC |
| **Immunity to microbreaks** | 20 ms |
| **Output contacts** | 2 C/O |
| **nominal output current** | 8 A |
| **Hysteresis** | 5 % fixed threshold setting |
| **delay at power up** | 600 ms |
| **Maximum measuring cycle** | 250 ms measurement cycle as true rms value |
| **Repeat accuracy** | +/- 0.5 % input and measurement circuit<br>+/- 2 % time delay |
| **Measurement error** | < 1 % over the whole range with voltage variation<br>0.2 %/°C with temperature variation |
| **Response time** | <= 500 ms |
| **Insulation resistance** | > 100 MOhm 500 V DC |

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 |
| **Connections - terminals** | Screw terminals, 2 x 0.5...2 x 2.5 mm² AWG 20...AWG 14) solid without cable end<br>Screw terminals, 2 x 0.2...2 x 1.5 mm² AWG 24...AWG 16) flexible with cable end<br>Screw terminals, 1 x 0.5...1 x 3.3 mm² AWG 20...AWG 12) solid without cable end<br>Screw terminals, 1 x 0.2...1 x 2.5 mm² AWG 24...AWG 14) 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 |
| **Electrical durability** | 100000 cycles |
| **Mechanical durability** | 10000000 cycles |
| **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 |
| **[Un] rated nominal voltage** | 110...240 V AC/DC 50/60 Hz, non self-powered |
| **Safety reliability data** | MTTFd = 433.7 years<br>B10d = 400000 |
| **Contacts material** | Cadmium free |
| **Control Type** | With test button |
| **Width** | 0.9 in (22.5 mm) |
| **Product Weight** | 0.20 lb(US) (0.09 kg) |

# Environment

| | |
|---|---|
| **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 |
| **Ambient air temperature for operation** | -4…122 °F (-20…50 °C) 60 Hz<br>-4…140 °F (-20…60 °C) 50 Hz |
| **Standards** | IEC 60255-1 |
| **Product Certifications** | CCC<br>CE<br>CSA<br>EAC<br>UL<br>GL<br>RCM |
| **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** | 3606480792274 |
| **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)** | 3.7 oz (104.0 g) |
| **Unit Type of Package 2** | S02 |
| **Number of Units in Package 2** | 40 |
| **Package 2 Height** | 5.9 in (15.0 cm) |
| **Package 2 Width** | 11.8 in (30.0 cm) |
| **Package 2 Length** | 15.7 in (40.0 cm) |
| **Package 2 Weight** | 10.10 lb(US) (4.58 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** | 189.99 lb(US) (86.18 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 | **43 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] | **0.2 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 Longer

### Lifetime extension

| | |
|---|---|
| Repair | **No** |

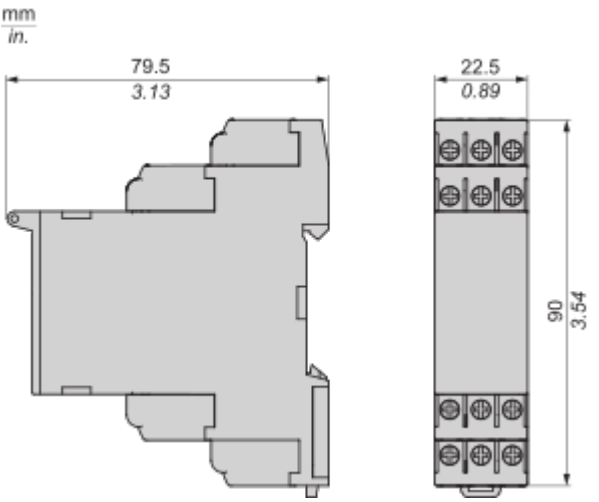
## Use Again

### Repack and remanufacture

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

Dimensions Drawings

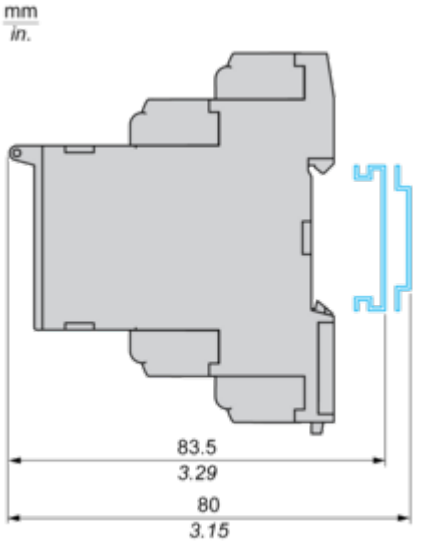
## Dimensions



Mounting and Clearance

## Mounting and Clearance

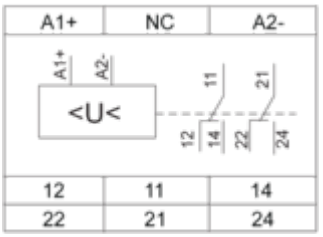
### Rail Mounting



## Connections and Schema

### Voltage Control Relay

Wiring Diagram

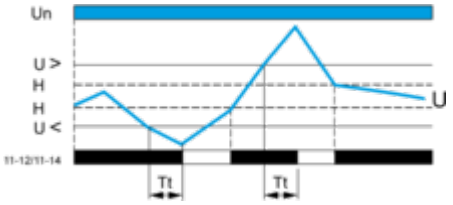



**A1+,A2- :** Voltage to be monitored
**11-14,12 :** 1st C/O contact of output relay
**21-24,22 :** 2nd C/O contact of output relay

Technical Description

## Function Diagram

### Control of Overvoltage and Undervoltage in Window Mode

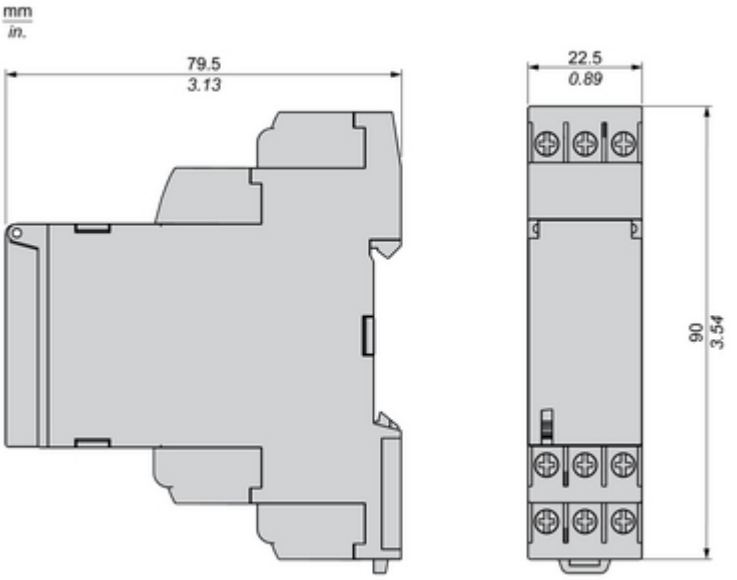



### Legend

**Tt** Time delay after crossing of threshold
**Un** Nominal supply voltage
**U** Monitored supply voltage
**H** Hysteresis
**U>** Overvoltage threshold
**U<** Undervoltage threshold
**11-12, 11-14** Output relay connections
**Relay status:** black color = energized.

Technical Illustration

**Dimensions**



Offer Marketing Illustration

**Product benefits / Features**



Offer Marketing Illustration

**Product benefits / Features**

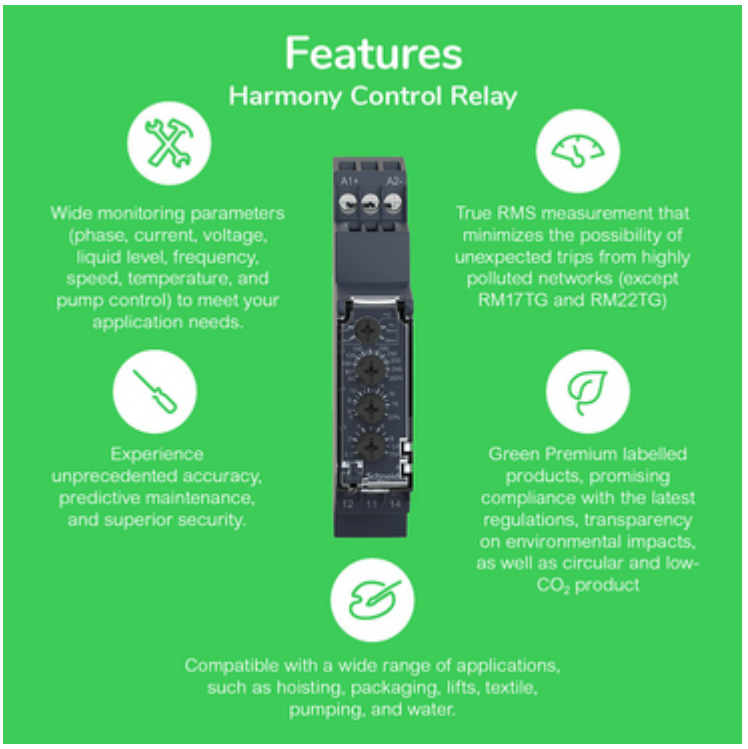


Image of product / Alternate images

**Alternative**









12
11
14
22
21
24

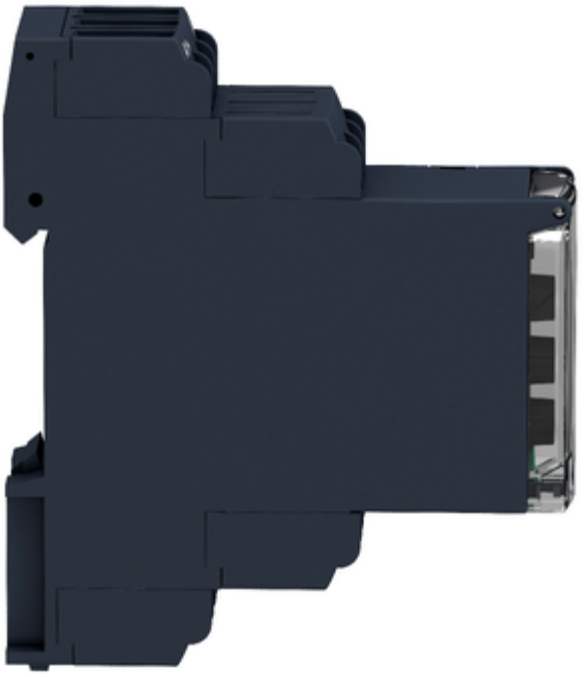




Image of product in real life situation

