Product data sheet

Specifications





voltage control relay, Harmony Control Relays, 8A, 2CO, 15…500V AC, 380…415V AC

RM22UA33MT

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

Price*: 136.89 USD

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 | DC | |
| Relay name | RM22UA | |
| Relay monitored parameters | Overvoltage or undervoltage detection Undervoltage and overvoltage in window mode | |
| time delay | Adjustable 0.130 s, +/- 10 % of the full scale value Tt- time delay upon fault | |
| Switching capacity in VA | 2000 VA | |
| Measurement range | 15500 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 | 323456.5 V AC |
| Power consumption in VA | 8 VA AC |
| Immunity to microbreaks | 10 ms |
| Resistance across terminals | 150 kOhm E2-M terminals 300 kOhm E1-M terminals 500 kOhm E3-M terminals |
| Output contacts | 2 C/O |
| Nominal output current | 8 A |
| Hysteresis | 3 % fixed full scale for window mode 550 % adjustable threshold setting |
| delay at power up | 600 ms |
| Maximum measuring cycle | 100 ms measurement cycle as true rms value |
| Repeat accuracy | +/- 0.5 % input and measurement circuit +/- 2 % time delay |

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

| Measurement error | < 1 % over the whole range with voltage variation 0.05 %/°C with temperature variation | |
|----------------------------|--|--|
| Response time | <= 500 ms | |
| Insulation resistance | > 100 MOhm 500 V DC | |
| Overvoltage category | III IEC 60664-1 | |
| Insulation | Between supply and measurement | |
| Connections - terminals | Screw terminals, 2 x 0.52 x 2.5 mm ² AWG 20AWG 14) solid without cable end Screw terminals, 2 x 0.22 x 1.5 mm ² AWG 24AWG 16) flexible with cable end Screw terminals, 1 x 0.51 x 3.3 mm ² AWG 20AWG 12) solid without cable end Screw terminals, 1 x 0.21 x 2.5 mm ² AWG 24AWG 14) flexible with cable end | |
| Tightening torque | 5.38.9 lbf.in (0.61 N.m) IEC 60947-1 | |
| Housing material | Self-extinguishing plastic | |
| Mounting support | 35 mm DIN rail conforming to IEC 60715 | |
| Electrical durability | 100000 cycles | |
| Mechanical durability | 1000000 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 | |
| [Un] rated nominal voltage | 380415 V AC 50/60 Hz, non self-powered | |
| Safety reliability data | MTTFd = 308.2 years B10d = 290000 | |
| Contacts material | Cadmium free | |
| Control Type | With test button | |
| Width | 0.9 in (22.5 mm) | |
| Net Weight | 0.24 lb(US) (0.11 kg) | |
| | | |

Environment

| Electromagnetic compatibility | Immunity for residential, commercial and light-industrial environments conforming to IEC 61000-6-1 | | |
|-------------------------------|--|--|--|
| | Immunity for industrial environments conforming to IEC 61000-6-2 Emission standard for industrial environments conforming to IEC 61000-6-4 Electrostatic discharge - test level: 6 kV level 3 (contact discharge) conforming to IEC 61000-4-2 Electrostatic discharge - test level: 8 kV level 3 (air discharge) conforming to IEC 61000-4-2 Radiated radio-frequency electromagnetic field immunity test - test level: 10 V/m level 3 conforming to IEC 61000-4-3 Electrical fast transient/burst immunity test - test level: 4 kV level 4 (direct) conforming to IEC 61000-4-4 Electrical fast transient/burst immunity test - test level: 2 kV level 4 (capacitive coupling) conforming to IEC 61000-4-4 Surge immunity test - test level: 4 kV level 4 (common mode) conforming to IEC 61000-4-5 Surge immunity test - test level: 2 kV level 4 (differential mode) conforming to IEC 61000-4-5 | | |
| | | Conducted and radiated emissions class B group 1 conforming to CISPR 11 Conducted and radiated emissions class B conforming to CISPR 22 | |
| | | Emission standard for residential, commercial and light-industrial environments (except radiated emission) conforming to IEC 61000-6-3 | |
| | | Ambient air temperature for operation | -4122 °F (-2050 °C) 60 Hz -4140 °F (-2060 °C) 50 Hz |
| | | | |

Standards

IEC 60255-1

| Product Certifications | RCM |
|--|--|
| | GL |
| | CCC |
| | CSA |
| | UL |
| | EAC |
| | CE |
| Ambient Air Temperature for Storage | -40158 °F (-4070 °C) |
| Relative humidity | 9397 % 77131 °F (2555 °C) IEC 60068-2-30 |
| Vibration resistance | 0.075 mm 1058.1 Hz) not in operation IEC 60068-2-6 |
| | 1 gn 1058.1 Hz) not in operation IEC 60068-2-6 |
| | 0.035 mm 58.1150 Hz) in operation IEC 60068-2-6 |
| | 0.5 gn 58.1150 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

| Category | US10CP222380 |
|-------------------|---------------|
| Discount Schedule | 0CP2 |
| GTIN | 3606480792267 |
| Returnability | No |
| Country of origin | ID |

Packing Units

| V | |
|------------------------------|--------------------------|
| Unit Type of Package 1 | PCE |
| Number of Units in Package 1 | 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 1 Weight | 4.2 oz (120.0 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 | 11.451 lb(US) (5.194 kg) |
| Unit Type of Package 3 | P06 |
| Number of Units in Package 3 | 640 |
| Package 3 Height | 19.7 in (50.0 cm) |
| Package 3 Width | 31.5 in (80.0 cm) |
| Package 3 Length | 23.6 in (60.0 cm) |
| Package 3 Weight | 204.10 lb(US) (92.58 kg) |

Sustainability Screen Premium

Green PremiumTM label is Schneider Electric's commitment to delivering products with best-inclass environmental performance. Green Premium promises compliance with the latest regulations, transparency on environmental impacts, as well as circular and low-CO₂ products.

Guide to assessing product sustainability is a white paper that clarifies global eco-label standards and how to interpret environmental declarations.

Yes

Learn more about Green Premium >

Guide to assess a product's sustainability >



Transparency RoHS/REACh

Well-being performance



Rohs Exemption Information

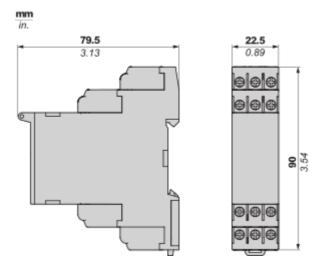
Certifications & Standards

| Reach Regulation | REACh Declaration |
|---------------------------|---|
| Eu Rohs Directive | Pro-active compliance (Product out of EU RoHS legal scope) |
| China Rohs Regulation | China RoHS declaration |
| Environmental Disclosure | Product Environmental Profile |
| Weee | The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins. |
| Circularity Profile | End of Life Information |
| 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" |

Product data sheet

Dimensions Drawings

Dimensions

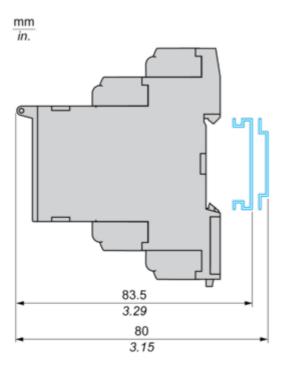


Product data sheet

Mounting and Clearance

Mounting and Clearance

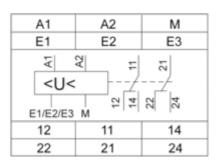
Rail Mounting



Connections and Schema

Voltage Measurement Relay

Wiring Diagram



A1,A2 : Supply voltage

E1,E2,E3,M : Voltages to be measured

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

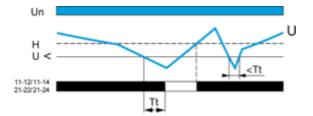
21-24,22 : 2nd C/O contact of output relay

Technical Description

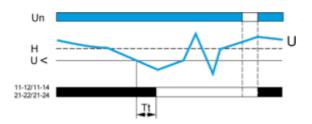
Function Diagrams

Undervoltage Control

Without memory ("No Memory" mode)

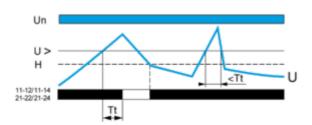


With memory ("Memory" mode)

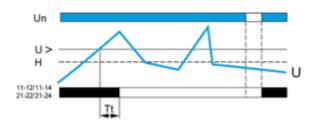


Overvoltage Control

Without memory ("No Memory" mode)



With memory ("Memory" 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, 21-22/21-24 Output relay connections Relay status: black color = energized.

NOTE: In "Memory" mode, the relay opens when crossing of the threshold is detected and then stays in that position. The power supply voltage must be switched off to reset the product.