Product data sheet Characteristics

RM17UBE15

Harmony, Modular 1-phase voltage control relay, 5 A, 1 CO, 65...260 V AC/DC





Main

| IVIAIII | |
|-------------------------------|---|
| Range of product | Harmony Control Relays |
| Product or component type | Voltage control relay |
| Relay type | Voltage control relay |
| Product specific application | For single-phase and DC supply |
| Relay name | RM17UBE |
| Relay monitored parameters | Self-powered Overvoltage and undervoltage detection |
| Time delay | Adjustable 0.110 s, 0 + 10 % on crossing the threshold |
| Switching capacity in VA | 1250 VA |
| Minimum switching current | 10 mA at 5 V DC |
| Maximum switching current | 5 A AC/DC |
| Power consumption in VA | 03 VA AC |
| Measurement range | 65260 V voltage AC/DC |
| Utilisation category | AC-12 conforming to IEC 60947-5-1 AC-13 conforming to IEC 60947-5-1 AC-14 conforming to IEC 60947-5-1 AC-15 conforming to IEC 60947-5-1 DC-12 conforming to IEC 60947-5-1 DC-13 conforming to IEC 60947-5-1 DC-14 conforming to IEC 60947-5-1 |
| Contacts type and composition | 1 C/O |

Complementary

| Reset time | 1500 ms time delay |
|--------------------------------|----------------------------------|
| Maximum switching voltage | 250 V AC/DC |
| [Us] rated supply voltage | 110240 V AC/DC 50/60 Hz +/- 10 % |
| Supply voltage limits | 50270 V AC/DC |
| Maximum power consumption in W | 1 W DC |

| Immunity to microbreaks | 20 ms |
|-------------------------------|---|
| Control circuit frequency | 5060 Hz +/- 10 % |
| Output contacts | 1 C/O |
| Nominal output current | 5 A |
| Maximum measuring cycle | 150 ms measurement cycle as true rms value |
| Hysteresis | 3 % fixed of threshold setting |
| Delay at power up | 1000 ms DC 500 ms AC |
| Measurement accuracy | +/- 10 % of the full scale value |
| Repeat accuracy | +/- 0.5 % for input and measurement circuit +/- 1 % for time delay |
| Measurement error | < 1 % over the whole range with voltage variation 0.2 %/°C with temperature variation |
| Polarity | Non reversible polarity on DC supply |
| Quality labels | CE |
| Overvoltage category | III conforming to IEC 60664-1 |
| Insulation resistance | > 500 MOhm at 500 V DC conforming to IEC 60255-5 > 500 MOhm at 500 V DC conforming to IEC 60664-1 |
| [Ui] rated insulation voltage | 250 V conforming to IEC 60664-1 400 V conforming to IEC 60664-1 |
| Operating position | Any position without derating |
| Connections - terminals | Screw terminals, 1 x 0.51 x 4 mm² (AWG 20AWG 11) solid without cable end Screw terminals, 2 x 0.52 x 2.5 mm² (AWG 20AWG 14) solid without cable end Screw terminals, 1 x 0.22 x 2.5 mm² (AWG 24AWG 12) flexible with cable end Screw terminals, 2 x 0.22 x 1.5 mm² (AWG 24AWG 16) flexible with cable end |
| Tightening torque | 0.61 N.m conforming to IEC 60947-1 |
| Housing material | Self-extinguishing plastic |
| Local signalling | LED (green) for power ON LED (yellow) for relay ON |
| Mounting support | 35 mm symmetrical DIN rail conforming to EN/IEC 60715 |
| Electrical durability | 100000 cycles |
| Mechanical durability | 30000000 cycles |
| Operating rate | <= 360 operations/hour full load |
| Safety reliability data | B10d = 470000 MTTFd = 502.2 years |
| Width | 17.5 mm |
| Net weight | 0.08 kg |
| Functionality | Overvoltage and undervoltage detection |
| Compatibility code | RM17 |
| | |

Environment

| Electromagnetic compatibility | Emission standard for industrial environments conforming to EN/IEC 61000-6-4 Emission standard for residential, commercial and light-industrial environments conforming to EN/IEC 61000-6-3 Immunity for industrial environments conforming to NF EN/IEC 61000-6-2 |
|---------------------------------------|--|
| Standards | EN/IEC 60255-6 |
| Product certifications | UL GL GOST C-Tick CSA |
| Directives | 73/23/EEC - low voltage directive 89/336/EEC - electromagnetic compatibility |
| Ambient air temperature for storage | -4070 °C |
| Ambient air temperature for operation | -2050 °C |
| Relative humidity | 95 % at 55 °C conforming to IEC 60068-2-30 |
| Vibration resistance | 0.35 mm (f= 557.6 Hz) conforming to IEC 60068-2-6 1 gn (f= 57.6150 Hz) conforming to IEC 60255-21-1 |

| Shock resistance | 5 gn conforming to IEC 60068-2-27 |
|----------------------------|--|
| IP degree of protection | IP20 (terminals) conforming to IEC 60529 IP30 (casing) conforming to IEC 60529 |
| Pollution degree | 3 conforming to IEC 60664-1 |
| Dielectric test voltage | 2 kV, 1 min AC 50 Hz conforming to IEC 60255-5 2 kV, 1 min AC 50 Hz conforming to IEC 60664-1 |
| Non-dissipating shock wave | 4 kV conforming to IEC 60255-5 4 kV conforming to IEC 60664-1 4 kV conforming to IEC 61000-4-5 |

Packing Units

| PCE |
|----------|
| 1 |
| 86 g |
| 2.8 cm |
| 7.8 cm |
| 9.7 cm |
| S02 |
| 48 |
| 4.568 kg |
| 15 cm |
| 30 cm |
| 40 cm |
| |

Offer Sustainability

| Sustainable offer status | Green Premium product |
|----------------------------|---|
| REACh Regulation | REACh Declaration |
| 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 |
| 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 |

Contractual warranty

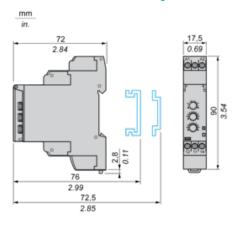
| Contractical Warranty | |
|-----------------------|-----------|
| Warranty | 18 months |

Product data sheet RM17UBE15

Dimensions Drawings

Single-Phase and DC Voltage Control Relays

Dimensions and Mounting



Product data sheet Connections and Schema

RM17UBE15

Single-Phase and DC Voltage Control Relays

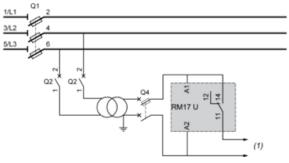
Wiring Diagram



Product data sheet Connections and Schema

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Application Scheme



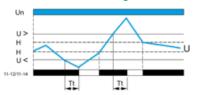
(1) To sensitive loads

Product data sheet Technical Description

RM17UBE15

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.