

Product data sheet

Characteristics

RM17JC00MW

Harmony Control Relays, Modular current control relay, 5A, 1CO, overcurrent function, 250V AC DC



Main

| | |
|---------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Range of product | Harmony Control Relays |
| Product or component type | Current control relay |
| Relay type | Current control relay |
| Relay name | RM17JC |
| Relay monitored parameters | Overcurrent detection |
| Time delay | Without |
| Switching capacity in VA | 1250 VA |
| Minimum switching current | 10 mA at 5 V DC |
| Maximum power consumption in VA | 3 VA |
| Measurement range | 2...20 A current |
| 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

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|--------------------------------|-----------------------------------------------------------------------------------------------|
| Maximum switching voltage | 250 V AC/DC |
| [Us] rated supply voltage | 24...240 V AC/DC 50/60 Hz +/- 10 % |
| Supply voltage limits | 20.4...264 V AC/DC |
| Operating voltage tolerance | - 15 % + 10 % Un |
| Maximum power consumption in W | 1 W |
| Control circuit frequency | 40...70 Hz sinusoidal |
| Output contacts | 1 C/O |
| Nominal output current | 5 A |
| Maximum measuring cycle | 30 ms measurement cycle as true rms value |
| Hysteresis | 15 % fixed of threshold setting |
| Delay at power up | 0.5 s |
| Measurement accuracy | +/- 10 % of the full scale value |
| Repeat accuracy | +/- 0.5 % for input and measurement circuit |
| Measurement error | +/- 0.05 %/°C with temperature variation < 1 % over the whole range with voltage variation |
| Response time | < 200 ms (in the event of a fault) |
| Polarity | Yes DC |
| Threshold setting | 10...100 % |
| Input current | 100000 mA permanent at 25 °C 300000 mA non repetitive < 3 s at 25 °C |

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| Marking | CE : 73/23/EEC CE : EMC 89/336/EEC |
| 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 | 400 V conforming to IEC 60664-1 |
| Insulation | Between supply and measurement |
| Operating position | Any position without derating |
| Connections - terminals | Screw terminals, 1 x 0.5...1 x 4 mm ² (AWG 20...AWG 11) solid without cable end Screw terminals, 2 x 0.5...2 x 2.5 mm ² (AWG 20...AWG 14) solid without cable end Screw terminals, 1 x 0.2...1 x 2.5 mm ² (AWG 24...AWG 12) flexible with cable end Screw terminals, 2 x 0.2...2 x 1.5 mm ² (AWG 24...AWG 16) flexible with cable end |
| Tightening torque | 0.6...1 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 |
| Contacts material | Cadmium free |
| Width | 17.5 mm |
| Net weight | 0.13 kg |

Environment

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|---------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Immunity to microbreaks | 10 ms |
| 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 | GL C-Tick GOST UL CSA |
| Ambient air temperature for storage | -40...70 °C |
| Ambient air temperature for operation | -20...50 °C |
| Relative humidity | 95 % at 55 °C conforming to IEC 60068-2-30 |
| Vibration resistance | 0.35 mm (f= 5...57.6 Hz) conforming to IEC 60068-2-6 1 gn (f= 57.6...150 Hz) conforming to IEC 60255-21-1 |
| Shock resistance | 15 gn for 11 ms conforming to IEC 60255-21-1 |
| 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 AC 50 Hz |
| Non-dissipating shock wave | 4 kV |

Packing Units

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|------------------------------|-----------|
| Unit Type of Package 1 | PCE |
| Number of Units in Package 1 | 1 |
| Package 1 Height | 2.800 cm |
| Package 1 Width | 9.700 cm |
| Package 1 Length | 10.400 cm |
| Package 1 Weight | 123.000 g |
| Unit Type of Package 2 | S02 |
| Number of Units in Package 2 | 32 |
| Package 2 Height | 15.000 cm |

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|------------------|-----------|
| Package 2 Width | 30.000 cm |
| Package 2 Length | 40.000 cm |
| Package 2 Weight | 4.380 kg |

Offer Sustainability

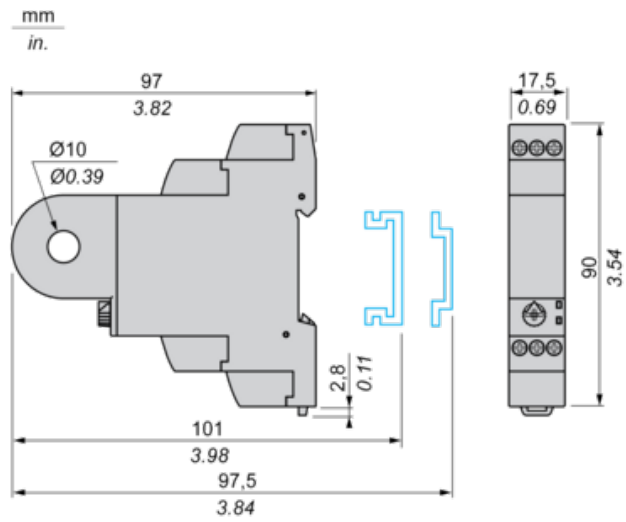
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|----------------------------|-----------------------------------------------------------------------------------------------------------------------------|
| Sustainable offer status | Green Premium product |
| REACH Regulation | REACH Declaration |
| EU RoHS Directive | Pro-active compliance (Product out of EU RoHS legal scope) EU RoHS Declaration |
| Mercury free | Yes |
| China RoHS Regulation | China RoHS Declaration |
| RoHS exemption information | Yes |
| 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 |

Contractual warranty

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| Warranty | 18 months |
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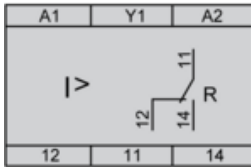
Current Control Relays

Dimensions and Mounting



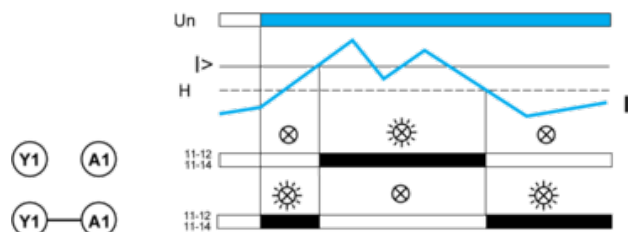
Current Control Relays

Wiring Diagram



Function Diagram

Control of Overcurrent



Legend

U_n Supply voltage

I Monitored current

H Hysteresis

$I >$ Overcurrent threshold (set by means of a potentiometer)

11-12/11-14, 21-22/21-24 Output relay connections (refer to Connections and Schema)

Relay status: black color = energized.

NOTE: When terminal Y1 is linked to A1 (+), the output is reversed.