

Product data sheet

Characteristics

RM17JC00MW

Modular current control relay, 8 A, 1 CO,
overcurrent function, 250 V AC/DC



Main

Range of product	Harmony Control Relays
Relay type	Current control relay
Product or component 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 AC
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

Maximum switching voltage	250 V AC/DC
[Us] rated supply voltage	AC/DC
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
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 IEC 60715
Electrical durability	100000 cycles
Mechanical durability	30000000 cycles
Operating rate	<= 360 operations/hour full load
[Un] rated nominal voltage	24...240 V AC/DC 50/60 Hz, non self-powered
Contacts material	Cadmium free
Width	17.5 mm
Control type	Without test button
Net weight	0.13 kg



Environment

Immunity to microbreaks	10 ms
Electromagnetic compatibility	Emission standard for industrial environments conforming to IEC 61000-6-4 Emission standard for residential, commercial and light-industrial environments conforming to IEC 61000-6-3 Immunity for industrial environments conforming to NF EN/IEC 61000-6-2
Standards	IEC 60255-6
Product certifications	GL[RETURN]C-Tick[RETURN]GOST[RETURN]UL[RETURN]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

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

Offer Sustainability

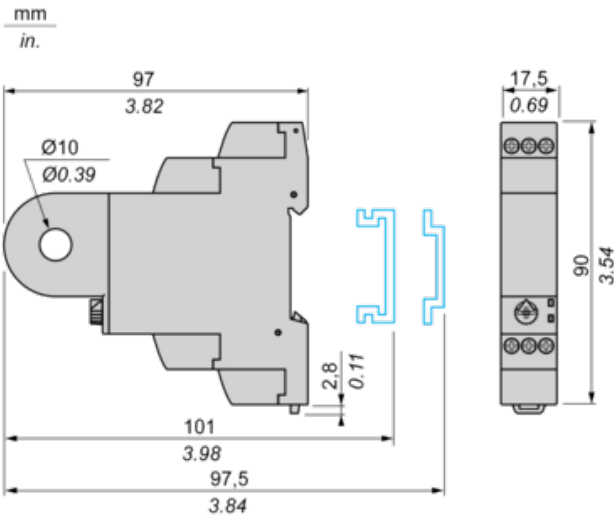
Sustainable offer status	Green Premium product
REACH Regulation	 REACH Declaration
EU RoHS Directive	Pro-active compliance (Product out of EU RoHS legal scope)
Mercury free	Yes
China RoHS Regulation	 China RoHS Declaration
RoHS exemption information	 Yes
Environmental Disclosure	 Product Environmental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

Warranty	18 months
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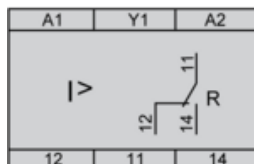
Current Control Relays

Dimensions and Mounting



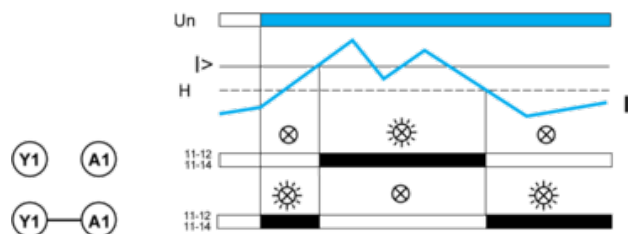
Current Control Relays

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.