



Main

Range of product	Zelio Control
Product or component type	Modular measurement and control relays
Relay type	Current control relay
Relay name	RM17JC
Relay monitored parameters	Overcurrent detection
Switching capacity in VA	1250 VA
Minimum switching current	10 mA at 5 V DC
Power consumption in VA	<= 3 VA
Measurement range	2...20 A current
Electrical connection	1 conductor cable 0.2...2.5 mm ² AWG24...AWG12 flexible cable with cable end conforming to IEC 60947-1 1 conductor cable 0.5...4 mm ² AWG20...AWG11 solid cable without cable end conforming to IEC 60947-1 2 conductors cable 0.2...1.5 mm ² AWG24...AWG16 flexible cable with cable end conforming to IEC 60947-1 2 conductors cable 0.5...2.5 mm ² AWG20...AWG14 solid cable without cable end conforming to IEC 60947-1
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

Complementary

Maximum switching voltage	250 V AC/DC
[Us] rated supply voltage	24...240 V AC/DC
Supply voltage limits	20.4...264 V AC/DC
Operating voltage tolerance	- 15 % + 10 % Un
Power consumption in W	<= 1 W
Control circuit frequency	40...70 Hz sinusoidal
Supply frequency	50/60 Hz +/- 10 %
Width	17.5 mm
Output contacts	1 C/O
Nominal output current	5 A
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

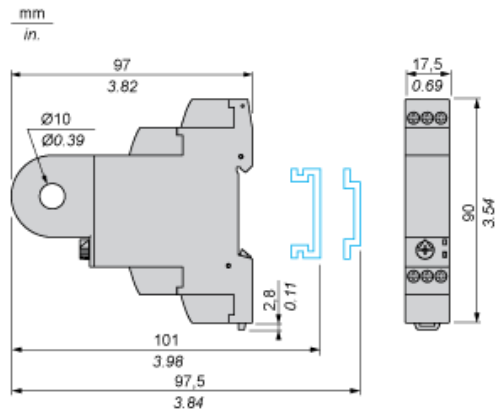
Threshold setting	10...100 %
Input current	100000 mA permanent at 25 °C 300000 mA non repetitive < 3 s at 25 °C
Marking	CE : 73/23/EEC CE : EMC 89/336/EEC
Overvoltage category	III conforming to IEC 60664-1
Insulation resistance	> 500 MOhm at 500 V DC conforming to IEC 60255-5 > 500 MOhm at 500 V DC conforming to IEC 60664-1
[Ui] rated insulation voltage	400 V conforming to IEC 60664-1
Supply measurement isolation	Yes
Operating position	Any position without derating
Tightening torque	0.6...1 N.m conforming to IEC 60947-1
Housing material	Self-extinguishing plastic
Status LED	1 LED green for power ON 1 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 under full load
Contacts material	Cadmium - free
Product weight	0.13 kg

Environment

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	CSA C-Tick GL GOST UL
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/IEC 60255-21-1 1 gn (f = 57.6...150 Hz) conforming to IEC 60068-2-6/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, 1 min
Non-dissipating shock wave	4 kV
RoHS EUR status	Compliant
RoHS EUR conformity date	0701

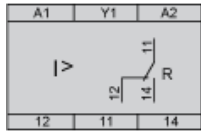
Current Control Relays

Dimensions and Mounting



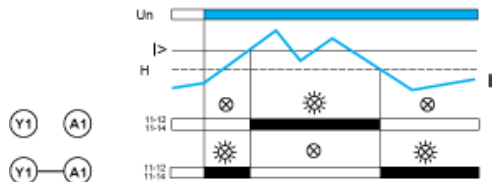
Current Control Relays

Wiring Diagram



Function Diagram

Control of Overcurrent



Un Supply voltage

I Monitored current

H Hysteresis

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

11-12/14, relay connections (refer to Connections and Schema)

21-22/21-24

Relay status: black color = energized.

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