Product data sheet Characteristics

RM17JC00MW

current control relay RM17-J - range: 2..20 A



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 cur- rent	10 mA at 5 V DC
Power consumption in VA	<= 3 VA
Measurement range	220 A current
Utilisation category	DC-14 conforming to IEC 60947-5-1 DC-13 conforming to IEC 60947-5-1 DC-12 conforming to IEC 60947-5-1 AC-15 conforming to IEC 60947-5-1 AC-14 conforming to IEC 60947-5-1 AC-13 conforming to IEC 60947-5-1 AC-12 conforming to IEC 60947-5-1

Complementary

Complementary		
Maximum switching voltage	250 V AC/DC	
[Us] rated supply voltage	24240 V AC/DC, 50/60 Hz +/- 10 %	
Supply voltage limits	20.4264 V AC/DC	
Operating voltage tolerance	- 15 % + 10 % Un	
Power consumption in W	<= 1 W	
Control circuit frequency	4070 Hz sinusoidal	
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	< 1 % over the whole range with voltage variation +/- 0.05 %/°C with temperature variation	
Response time	< 200 ms in the event of a fault	
Polarity	Yes DC	
Threshold setting	10100 %	
Input current	300000 mA non repetitive < 3 s at 25 °C 100000 mA permanent 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 60664-1 > 500 MOhm at 500 V DC conforming to IEC 60255-5	
[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 2 x 0.22 x 1.5 mm² - AWG 24AWG 16, flexible cable with cable end	
	Screw terminals 1 x 0.21 x 2.5 mm ² - AWG 24AWG 12, flexible cable with cable end	
	Screw terminals 2 x 0.52 x 2.5 mm ² - AWG 20AWG 14, solid cable without cable end	
	Screw terminals 1 x 0.51 x 4 mm ² - AWG 20AWG 11, solid cable without cable end	
Tightening torque	0.61 N.m conforming to IEC 60947-1	
Housing material	Self-extinguishing plastic	
Local signalling	LED yellow for relay ON	
	LED green for power 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	
Width	17.5 mm	
Product weight	0.13 kg	

Environment

Immunity to microbreaks	10 ms
Electromagnetic compatibility	Immunity for industrial environments conforming to NF EN/IEC 61000-6-2 Emission standard for residential, commercial and light-industrial environments conforming to EN/IEC 61000-6-3 Emission standard for industrial environments conforming to EN/IEC 61000-6-4
Standards	EN/IEC 60255-6
Product certifications	CSA C-Tick GL GOST UL
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	1 gn (f = 57.6150 Hz) conforming to IEC 60255-21-1 0.35 mm (f = 557.6 Hz) conforming to IEC 60068-2-6
Shock resistance	15 gn for 11 ms conforming to IEC 60255-21-1
IP degree of protection	IP30 (casing) conforming to IEC 60529 IP20 (terminals) 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

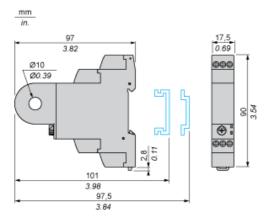


Product data sheet Dimensions Drawings

RM17JC00MW

Current Control Relays

Dimensions and Mounting

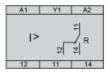


Product data sheet Connections and Schema

RM17JC00MW

Current Control Relays

Wiring Diagram

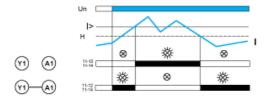


Product data sheet Technical Description

RM17JC00MW

Function Diagram

Control of Overcurrent



Legend

Un 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.