RM35JA31MW current control relay RM35-J - range 2..500 mA

Product availability : Stock - Normally stocked in distribution facility



Price* : 148.00 USD



Main

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Range of product	Zelio Control	
Product or component type	Modular measurement and control relays	
Relay type	Current control relay	
Relay name	RM35JA	
Relay monitored parameters	Overcurrent or undercurrent detection Overcurrent or undercurrent in window mode	
Time delay type	Adjustable 120 s, 0 + 10 % on energisation Ti Adjustable 0.330 s, 0 + 10 % on crossing the threshold Tt	
Switching capacity in VA	1250 VA	
Minimum switching current	10 mA at 5 V DC	
Maximum switching current	5 A AC	
Power consumption in VA	<= 3.5 VA AC	
Measurement range	10100 mA E2-M terminals 220 mA E1-M terminals 2500 mA current 50500 mA E3-M terminals	
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		
Reset time	1500 ms time delay	
Maximum switching voltage	250 V AC	
[Us] rated supply voltage	24240 V AC/DC, 50/60 Hz +/- 10 %	
Supply voltage limits	20.4264 V AC/DC	
Control circuit voltage limits	- 15 % + 10 % Un	

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Power consumption in W	<= 0.6 W DC
Control circuit frequency	4070 Hz +/- 10 %
Resistance across terminals	1 Ohm E2-M terminals 5 Ohm E1-M terminals 0.2 Ohm E3-M terminals
Output contacts	2 C/O
Nominal output current	5 A
Measuring cycle	<= 30 ms measurement cycle as true rms value
Hysteresis	550 % of threshold setting
Run-up delay at power-up	0.3 s
Measurement accuracy	+/- 10 % of the full scale value
Repeat accuracy	+/- 0.5 % input and measurement circuit +/- 2 % time delay
Measurement error	0.05 %/°C with temperature variation 1 by volt over the whole range with voltage variation
Polarity	No DC
Threshold setting	10100 %
Marking	CE : EMC 89/336/EEC CE : 73/23/EEC
Overvoltage category	III conforming to IEC 60664-1
Insulation resistance	 > 500 MOhm at 500 V DC between supply and relay output conforming to IEC 60255-5 > 500 MOhm at 500 V DC between measurement and relay output conforming to IEC 60664-1 > 1 MOhm at 500 V DC between supply and measurement conforming to IEC 60255-5 > 500 MOhm at 500 V DC between supply and relay output conforming to IEC 60664-1 > 500 MOhm at 500 V DC between measurement and relay output conforming to IEC 60255-5 > 500 MOhm at 500 V DC between measurement and relay output conforming to IEC 60255-5 > 1 MOhm at 500 V DC between supply and measurement conforming to IEC 60664-1
[Ui] rated insulation voltage	250 V conforming to IEC 60664-1
Operating position	Any position without derating
Connections - terminals	Screw terminals 1 x 0.51 x 4 mm ² - AWG 20AWG 11, solid cable without 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 0.21 x 2.5 mm ² - AWG 24AWG 12, flexible cable with cable end Screw terminals 2 x 0.22 x 1.5 mm ² - AWG 24AWG 16, flexible cable with cable end
Tightening torque	5.318.85 lbf.in (0.61 N.m) conforming to IEC 60947-1
Housing material	Self-extinguishing plastic
Local signalling	LED green power ON LED yellow relay ON
Mounting support	35 mm symmetrical DIN rail conforming to EN/IEC 60715
Electrical durability	100000 cycles
Mechanical durability	3000000 cycles
Operating rate	<= 360 operations/hour under full load
Safety reliability data	B10d = 270000 MTTFd = 296.8 years
Contacts material	Cadmium free
Width	1.38 in (35 mm)
Product weight	0.29 lb(US) (0.13 kg)

Environment

Immunity to microbreaks	50 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 GOST GL UL C-Tick
Ambient air temperature for storage	-40158 °F (-4070 °C)

Ambient air temperature for operation	-4122 °F (-2050 °C)
Relative humidity	95 % at 131 °F (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	15 gn 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 conforming to IEC 60255-5 2 kV AC 50 Hz, 1 min 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

Ordering and shipping details

Category	22380 - RELAYS-MEASUREMENT (RM17-RM35)
Discount Schedule	CP2
GTIN	00785901637547
Nbr. of units in pkg.	1
Package weight(Lbs)	0.31
Returnability	Y
Country of origin	ID

Offer Sustainability

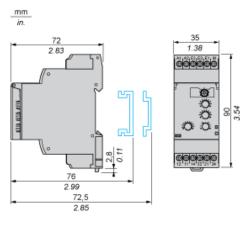
Green Premium product	
Compliant - since 0701 - Schneider Electric declaration of conformity	
Schneider Electric declaration of conformity	
Reference not containing SVHC above the threshold	
Reference not containing SVHC above the threshold	
Available	
Available	
	Compliant - since 0701 - Schneider Electric declaration of conformity Schneider Electric declaration of conformity Reference not containing SVHC above the threshold Reference not containing SVHC above the threshold Available

Contractual warranty

Warranty period 18 months

Current Control Relays

Dimensions and Mounting



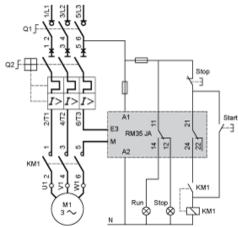
Current Control Relays

Wiring Diagram

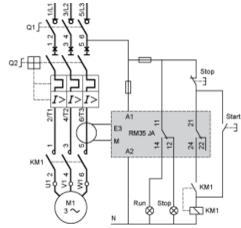
Application Schemes

Example: Detection of Jamming on a Crusher (Overcurrent Function)

Current measured ≤ 15 A



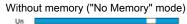
Current measured > 15 A

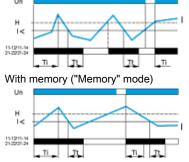


Technical Description

Function Diagrams

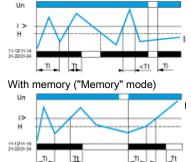
Undercurrent Detection





Overcurrent Detection

Without memory ("No Memory" mode)



Legend

Ti Starting inhibition time delay

Tt Time delay after crossing of threshold

- Un Supply voltage
- I Monitored current
- H Hysteresis
- I> Overcurrent threshold
- I< Undercurrent threshold

11-12/11-14, 21-22/21-24 Output relay connections

Relay status: black color = energized.

NOTE: In "Memory" mode, the relay opens when crossing of the threshold is detected and then stays in that position. The power supply voltage must be switched off to reset the product.