Product data sheet Characteristics

RM35JA32MW

current control relay RM35-J - range 0.15..1.5 A

Product availability: Stock - Normally stocked in distribution facility



Price*: 177.00 USD



Main

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	
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/DC	
Power consumption in VA	<= 3.5 VA AC	
Measurement range	0.151.5 A E1-M terminals 0.55 A E2-M terminals 1.515 A E3-M terminals 150 mA15 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	

Complementary

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Reset time	1500 ms time delay	<u>»</u> . 2
Maximum switching voltage	250 V AC/DC	
[Us] rated supply voltage	24240 V AC/DC, 50/60 Hz +/- 10 %	u
Supply voltage limits	20.4264 V AC/DC	ة. 5-
Control circuit voltage limits	- 15 % + 10 % Un	- i
Power consumption in W	<= 0.6 W DC	

Control circuit frequency	4070 Hz +/- 10 %	
Resistance across terminals	0.005 Ohm E3-M terminals 0.015 Ohm E2-M terminals 0.05 Ohm E1-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 > 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 mm² - AWG 20AWG 11, solid cable without cable end Screw terminals 2 x 0.52 x 2.5 mm² - AWG 20AWG 14, solid cable without cable end Screw terminals 1 x 0.21 x 2.5 mm² - AWG 24AWG 12, flexible cable with cable end Screw terminals 2 x 0.22 x 1.5 mm² - 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	30000000 cycles	
Operating rate	<= 360 operations/hour under full load	
Safety reliability data	MTTFd = 296.8 years B10d = 270000	
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	C-Tick GL GOST UL CSA	
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

321

Offer Sustainability

Sustainable offer status	Green Premium product	
RoHS (date code: YYWW)	Compliant - since 0701 - Schneider Electric declaration of conformity	
	Schneider Electric declaration of conformity	
REACh	Reference not containing SVHC above the threshold	
	Reference not containing SVHC above the threshold	
Product environmental profile	Available	
Product end of life instructions	Available	

Contractual warranty

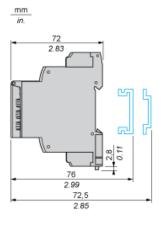
Contractal Warranty		
Warranty period	18 months	

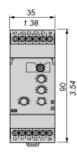
Product data sheet Dimensions Drawings

RM35JA32MW

Current Control Relays

Dimensions and Mounting



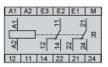


Product data sheet Connections and Schema

RM35JA32MW

Current Control Relays

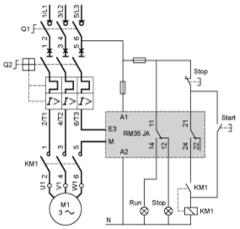
Wiring Diagram



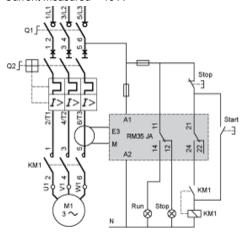
Application Schemes

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

Current measured ≤ 15 A



Current measured > 15 A



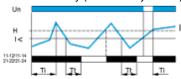
Product data sheet Technical Description

RM35JA32MW

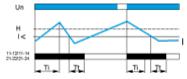
Function Diagrams

Undercurrent Detection

Without memory ("No Memory" mode)



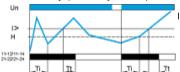
With memory ("Memory" mode)



Overcurrent Detection

Without memory ("No Memory" mode)

With memory ("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.