Product datasheet

Specifications



Modular 1-phase current control relay, 5 A, 2 CO, 0.15…15 A,, 24… 240 V AC/DC

Local distributor code:

389834926 RM35JA32MW

EAN Code: 3389119405225

Main

Range of product	Harmony Control Relays
Relay type	Current control relay
Product or component type	Current control relay
Relay name	RM35JA
Relay monitored parameters	Overcurrent or undercurrent detection
Control type	Without test button
Contacts type and composition	2 C/O

Complementary

[Us] rated supply voltage	24...240 V AC/DC 50/60 Hz, non self-powered
Supply voltage limits	20.4…264 V AC/DC
Maximum power consumption in VA	3.5 VA AC
Maximum power consumption in W	0.6 W DC
Measurement range	150 mA...15 A current AC/DC
Maximum measuring cycle	30 ms measurement cycle as true rms value
Hysteresis	5…50 % of threshold setting
Repeat accuracy	+/- 0.5 % for input and measurement circuit +/- 2 % for time delay
Measurement error	0.05 %/°C with temperature variation 1 by volt over the whole range with voltage variation
Time delay type	Adjustable 0.3...30 s, 0 + 10 % Tt- time delay upon fault Adjustable 1...20 s, 0 + 10 % Ti- inhibition time delay upon startup
Setting accuracy of time delay	10 %
Reset time	1500 ms time delay
Power on Delay	300 ms
Output contacts	2 C/O
nominal output current	5 A
Maximum switching voltage	250 V AC/DC
Switching capacity in VA	1250 VA
Minimum switching current	10 mA at 5 V DC
Maximum switching current	5 A AC/DC
Electrical durability	100000 cycles
Mechanical durability	30000000 cycles

Disclaimer: This documentation is not intended as a substitute for and is not to be used for determining suitability or reliability of these products for specific user applications

operating voltage tolerance	- 15 % + 10 % Un
Control circuit frequency	40...70 Hz +/- 10 %
Resistance across terminals	0.005 Ohm at E3-M terminals 0.015 Ohm at E2-M terminals 0.05 Ohm at E1-M terminals
Measurement accuracy	+/- 10 % of the full scale value
Threshold setting	10...100 %
Insulation	Between supply and measurement
Contacts material	Cadmium free

Environment

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 UL GOST C-Tick CSA
Marking	CE : EMC 89/336/EEC CE : 73/23/EEC
Ambient air temperature for storage	-40…70 °C -40…70 °C
Ambient air temperature for operation	-20…50 °C
Relative humidity	95 % at 55 °C conforming to IEC 60068-2-30
IP degree of protection	IP20 (terminals) conforming to IEC 60529 IP30 (casing) conforming to IEC 60529
Pollution degree	3 conforming to IEC 60664-1
Overvoltage category	III conforming to IEC 60664-1
Dielectric test voltage	2 kV, 1 min AC 50 Hz conforming to IEC 60255-5
Insulation resistance	> 500 MOhm at 500 V DC between supply and relay output conforming to IEC 60255-5
[Ui] rated insulation voltage	250 V conforming to IEC 60664-1
Operating position	Any position without derating
Connections - terminals	Screw terminals, 1 x 0.5...1 x 4 mm² (20 AWG...11 AWG) solid without cable end Screw terminals, 2 x 0.5...2 x 2.5 mm² (20 AWG...14 AWG) solid without cable end Screw terminals, 1 x 0.2...1 x 2.5 mm² (24 AWG...12 AWG) flexible with cable end Screw terminals, 2 x 0.2...2 x 1.5 mm² (24 AWG...16 AWG) flexible with cable end
Tightening torque	0.6…1 N.m conforming to IEC 60947-1
Housing material	Polycarbonate
Local signalling	LED (green) for power ON LED (yellow) for relay ON
Mounting support	35 mm symmetrical DIN rail conforming to IEC 60715
Reliability data	MTTFd = 296.8 years B10d = 270000
Height	90 mm 88.9 mm

Width	35 mm 35.6 mm
Depth	72 mm 71.1 mm
Net weight	0.13 kg 0.13 kg

Packing Units

Unit Type of Package 1	PCE
Number of Units in Package 1	1
Package 1 Height	4.500 cm
Package 1 Width	8.000 cm
Package 1 Length	9.500 cm
Package 1 Weight	136.000 g
Unit Type of Package 2	S03
Number of Units in Package 2	48
Package 2 Height	30.000 cm
Package 2 Width	30.000 cm
Package 2 Length	40.000 cm
Package 2 Weight	7.291 kg

Logistical informations

Country of origin	ID

Contractual warranty

Warranty (in months)	18

Environmental Data

Schneider Electric aims to achieve Net Zero status by 2050 through supply chain partnerships, lower impact materials, and circularity via our ongoing “Use Better, Use Longer, Use Again” campaign to extend product lifetimes and recyclability.

Environmental Data explained >

How we assess product sustainability >

Environmental footprint

Total lifecycle Carbon footprint	**58 kg CO2 eq.**
Carbon footprint of the manufacturing phase [A1 to A3]	**3 kg CO2 eq.**
Carbon footprint of the distribution phase [A4]	**0 kg CO2 eq.**
Carbon footprint of the installation phase [A5]	**0 kg CO2 eq.**
Carbon footprint of the use phase [B2, B3, B4, B6]	**55 kg CO2 eq.**
Carbon footprint of the end-of-life phase [C1 to C4]	**0.1 kg CO2 eq.**
Environmental Disclosure	Product Environmental Profile

Use Better

Materials and Substances

Packaging made with recycled cardboard	**Yes**
Packaging without single use plastic	**Yes**
SCIP Number	**5e3fdf99-611b-4d07-ad17-6eba84ab488b**
EU RoHS Directive	Compliant By Exemption
REACh Regulation	Reference contains Substances of Very High Concern above the threshold

Use Again

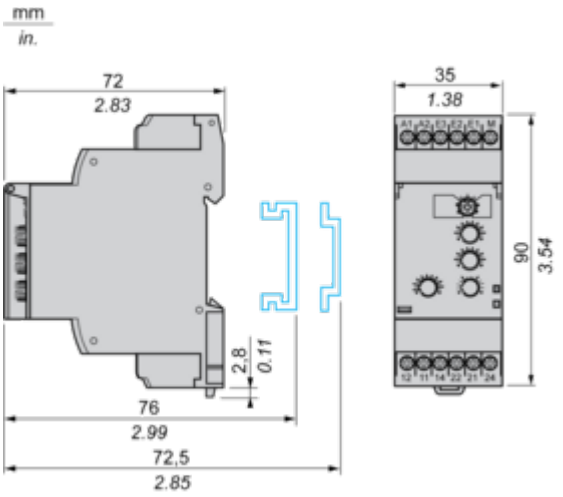
Repack and remanufacture

Recyclability potential, in %	**8**
End of life manual availability	End of Life Information
Take-back	**No**

Dimensions Drawings

Current Control Relays

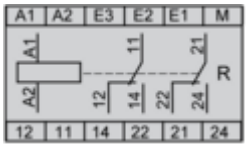
Dimensions and Mounting



Connections and Schema

Current Control Relays

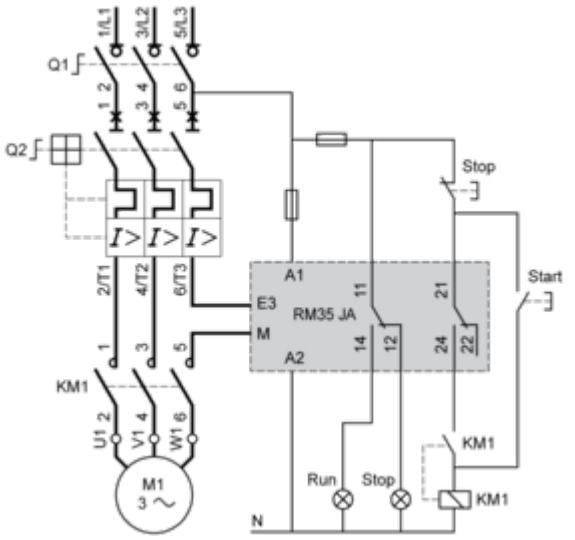
Wiring Diagram



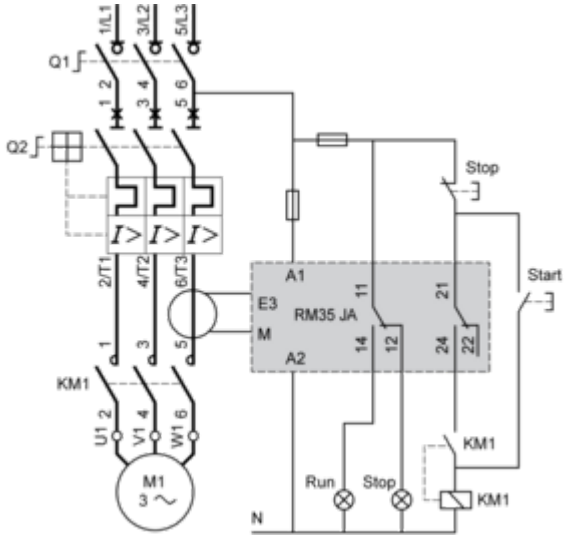
Application Schemes

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

Current measured ≤ 15 A



Current measured > 15 A

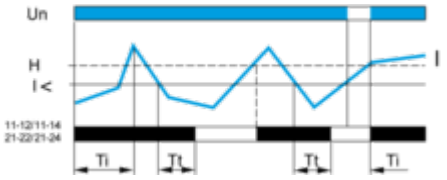


Technical Description

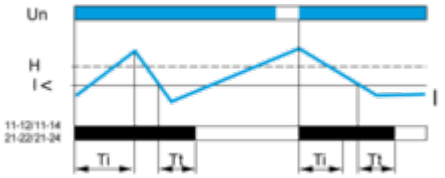
Function Diagrams

Undercurrent Detection

Without memory ("No Memory" mode)

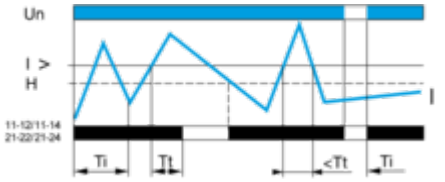


With memory ("Memory" mode)

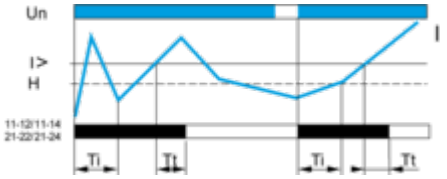


Overcurrent Detection

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.

Image of product / Alternate images

Alternative





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