

Product availability: Stock - Normally stocked in distribution facility



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 | Adjustable 1...20 s, 0 + 10 % on energisation T _i Adjustable 0.3...30 s, 0 + 10 % on crossing the threshold T _t |
| 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 | 0.15...1.5 A E1-M terminals 0.5...5 A E2-M terminals 1.5...15 A E3-M terminals 150 mA...15 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 |
| Maximum switching voltage | 250 V AC/DC |
| [Us] rated supply voltage | 24...240 V AC/DC, 50/60 Hz +/- 10 % |
| Supply voltage limits | 20.4...264 V AC/DC |
| Operating voltage tolerance | - 15 % + 10 % U _n |
| Power consumption in W | <= 0.6 W DC |
| Control circuit frequency | 40...70 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 | 5...50 % of threshold setting |
| 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 |

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| Threshold setting | 10...100 % |
| 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 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 0.5...1 x 4 mm ² - AWG 20...AWG 11, solid cable without cable end Screw terminals 2 x 0.5...2 x 2.5 mm ² - AWG 20...AWG 14, solid cable without cable end Screw terminals 1 x 0.2...1 x 2.5 mm ² - AWG 24...AWG 12, flexible cable with cable end Screw terminals 2 x 0.2...2 x 1.5 mm ² - AWG 24...AWG 16, flexible cable with cable end |
| Tightening torque | 5.31...8.85 lbf.in (0.6...1 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

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|---------------------------------------|--|
| 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 C-Tick GL GOST UL |
| Ambient air temperature for storage | -40...158 °F (-40...70 °C) |
| Ambient air temperature for operation | -4...122 °F (-20...50 °C) |
| Relative humidity | 95 % at 131 °F (55 °C) conforming to IEC 60068-2-30 |
| Vibration resistance | 0.35 mm (f = 5...57.6 Hz) conforming to IEC 60068-2-6 1 gn (f = 57.6...150 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

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|-----------------------|--|
| Category | 22380 - RELAYS-MEASUREMENT (RM17-RM35) |
| Discount Schedule | CP2 |
| GTIN | 00785901523321 |
| Nbr. of units in pkg. | 1 |
| Package weight(Lbs) | 0.31 |
| Returnability | Y |
| Country of origin | ID |

Offer Sustainability

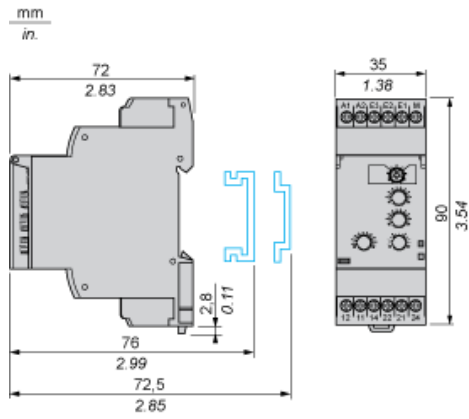
| | |
|----------------------------------|--|
| Sustainable offer status | Green Premium product |
| RoHS (date code: YYWW) | Compliant - since 0701 - Schneider Electric declaration of conformity Schneider Electric declaration of conformity |
| REACH | Reference not containing SVHC above the threshold |
| Product environmental profile | Available |
| Product end of life instructions | Available |
| California proposition 65 | WARNING: This product can expose you to chemicals including: |
| ----- Substance 1 | Lead and lead compounds, which is known to the State of California to cause cancer and birth defects or other reproductive harm. |
| ----- More information | For more information go to www.p65warnings.ca.gov |

Contractual warranty

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| Warranty period | 18 months |
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Current Control Relays

Dimensions and Mounting



Current Control Relays

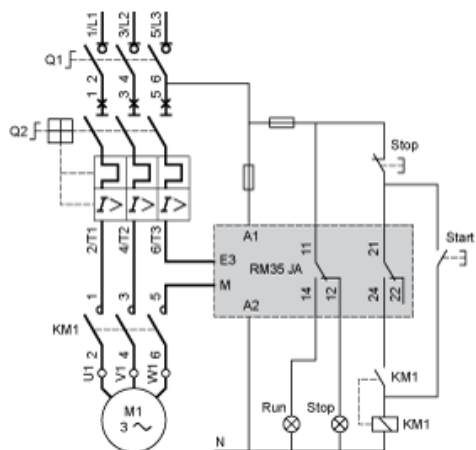
Wiring Diagram

| | | | | | |
|----|----|----|----|----|----|
| A1 | A2 | E3 | E2 | E1 | M |
| A1 | | | | | |
| A2 | | | | | |
| 12 | 11 | 14 | 22 | 21 | 24 |

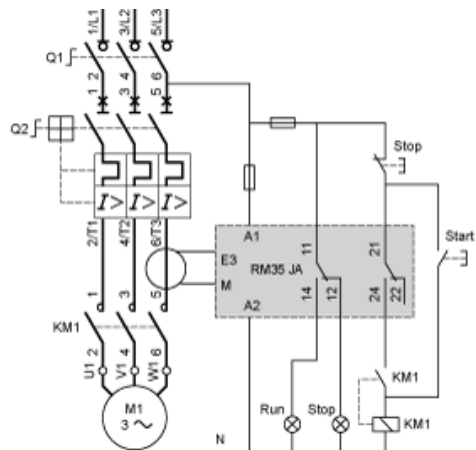
Application Schemes

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

Current measured ≤ 15 A



Current measured > 15 A



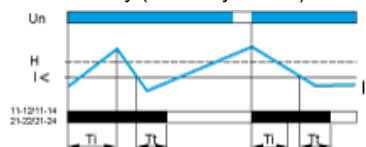
Function Diagrams

Undercurrent Detection

Without memory ("No Memory" mode)



With memory ("Memory" mode)

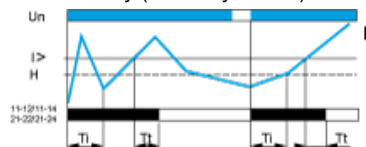


Overcurrent Detection

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.

Mouser Electronics

Authorized Distributor

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[RM35JA32MW](#)