



Main

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|---------------------------|------------------------------------------------------------------------------------------|
| Range                     | Vigirex                                                                                  |
| Range of product          | Vigirex                                                                                  |
| Device short name         | RH99M                                                                                    |
| Product or component type | Residual current protection relay                                                        |
| Range compatibility       | Vigirex RH TOA earth leakage current sensor<br>Vigirex RH A earth leakage current sensor |
| Relay application         | Monitoring relay                                                                         |

Complementary

|                                                   |                                                                                                                    |
|---------------------------------------------------|--------------------------------------------------------------------------------------------------------------------|
| Earthing system                                   | TN-S<br>TT                                                                                                         |
| [Us] rated supply voltage                         | 110...130 V AC 50/60 Hz 55...110 %                                                                                 |
| Power consumption in VA                           | 4 VA                                                                                                               |
| Type of measurement                               | Earth fault current internal measurement, range: 80...100 %                                                        |
| Threshold setting                                 | 0.03...30 A alarm                                                                                                  |
| Residual earth-leakage time delay adjustment type | Adjustable 9 settings 0.1...30 A 0...4.5 s<br>Instantaneous 0.03...30 A                                            |
| Test function                                     | Local<br>Remote test                                                                                               |
| Monitoring                                        | Electronics (continuous)<br>Power supply (continuous)<br>Relay/sensor link (continuous)                            |
| [Ithe] conventional enclosed thermal current      | 8 A                                                                                                                |
| Minimum load                                      | 10 mA at 12 V                                                                                                      |
| Product weight                                    | 0.3 kg                                                                                                             |
| Mechanical robustness                             | Fire resistance conforming to IEC 60695-2-1<br>Vibrations 13.2...100 Hz: 0.7 g<br>Vibrations 2...13.2 Hz: +/- 1 mm |

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| Earth-leakage protection class | Class A si<br>Class AC                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| Overvoltage category           | IV                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| Tamperproof of settings        | Protected by sealable cover                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| Mounting support               | DIN rail                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| Height                         | 97 mm                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| Width                          | 54 mm                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| Depth                          | 74 mm                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| 9 mm pitches                   | 6                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| Connections - terminals        | <p>Auxiliary power supply: terminal block cable(s) 0.2...2.5 mm<sup>2</sup> flexible AWG 24...AWG 12</p> <p>Auxiliary power supply: terminal block cable(s) 0.2...2.5 mm<sup>2</sup> rigid AWG 24...AWG 12</p> <p>Auxiliary power supply: terminal block cable(s) 0.25...2.5 mm<sup>2</sup> flexible with ferrule AWG 24...AWG 12</p> <p>Fault: screw terminal cable(s) 0.2...2.5 mm<sup>2</sup> flexible AWG 24...AWG 12</p> <p>Fault: screw terminal cable(s) 0.2...4 mm<sup>2</sup> rigid AWG 24...AWG 12</p> <p>Fault: screw terminal cable(s) 0.25...2.5 mm<sup>2</sup> flexible with ferrule AWG 24...AWG 12</p> <p>Relay test and fault reset: screw terminal cable(s) 0.14...1 mm<sup>2</sup> flexible AWG 26...AWG 16</p> <p>Relay test and fault reset: screw terminal cable(s) 0.14...1.5 mm<sup>2</sup> rigid AWG 26...AWG 16</p> <p>Relay test and fault reset: screw terminal cable(s) 0.25...0.5 mm<sup>2</sup> flexible with ferrule AWG 26...AWG 16</p> <p>Sensor: screw terminal cable(s) 0.14...1 mm<sup>2</sup> flexible AWG 26...AWG 16</p> <p>Sensor: screw terminal cable(s) 0.14...1.5 mm<sup>2</sup> rigid AWG 26...AWG 16</p> <p>Sensor: screw terminal cable(s) 0.25...0.5 mm<sup>2</sup> flexible with ferrule AWG 26...AWG 16</p> <p>Voltage presence: screw terminal cable(s) 0.2...2.5 mm<sup>2</sup> flexible AWG 24...AWG 12</p> <p>Voltage presence: screw terminal cable(s) 0.2...4 mm<sup>2</sup> rigid AWG 24...AWG 12</p> <p>Voltage presence: screw terminal cable(s) 0.25...2.5 mm<sup>2</sup> flexible with ferrule AWG 24...AWG 12</p> |
| Wire stripping length          | <p>Auxiliary power supply: 7 mm for top connection</p> <p>Fault: 8 mm for bottom connection</p> <p>Relay test and fault reset: 5 mm for bottom connection</p> <p>Sensor: 5 mm for top connection</p> <p>Voltage presence: 8 mm for bottom connection</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| Tightening torque              | <p>Auxiliary power supply: 0.6 N.m top</p> <p>Fault: 0.6 N.m bottom</p> <p>Relay test and fault reset: 0.25 N.m bottom</p> <p>Sensor: 0.25 N.m top</p> <p>Voltage presence: 0.6 N.m bottom</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |

## Environment

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| Ambient air temperature for operation | -35...70 °C                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| Ambient air temperature for storage   | -55...85 °C                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| Electromagnetic compatibility         | <p>Conducted and radiated emissions: , B, conforming to CISPR 11</p> <p>Conducted radio-frequency immunity test: , 3, conforming to IEC 61000-4-6</p> <p>Electrostatic discharge immunity test: , 4, conforming to IEC 61000-4-2</p> <p>High-energy conducted susceptibility: , 4, conforming to IEC 61000-4-5</p> <p>Low-energy conducted susceptibility: , 4, conforming to IEC 61000-4-4</p> <p>Radiated susceptibility: , 3, conforming to IEC 61000-4-3</p> |
| Electrical shock protection class     | Class II                                                                                                                                                                                                                                                                                                                                                                                                                                                         |

## Offer Sustainability

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|----------------------------|-----------------------------------------------------------------------------------------------------------------------------|
| Sustainable offer status   | Green Premium product                                                                                                       |
| REACH Regulation           | <a href="#">REACH Declaration</a>                                                                                           |
| EU RoHS Directive          | Compliant<br><a href="#">EU RoHS Declaration</a>                                                                            |
| Mercury free               | Yes                                                                                                                         |
| RoHS exemption information | <a href="#">Yes</a>                                                                                                         |
| China RoHS Regulation      | <a href="#">China RoHS declaration</a><br>Product out of China RoHS scope. Substance declaration for your information       |
| Environmental Disclosure   | <a href="#">Product Environmental Profile</a>                                                                               |
| Circularity Profile        | <a href="#">End of Life Information</a>                                                                                     |
| WEEE                       | The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins |

Contractual warranty

|          |           |
|----------|-----------|
| Warranty | 18 months |
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