# Product datasheet
## Characteristics

# 56172
residual current protection relay, VigiPacT RH99M, 30 mA to 30 A, 110/130 VAC 50/60 Hz, DIN rail mounting



## Main

| | |
|---|---|
| Range | VigiPacT |
| Device short name | RH99M |
| Product or component type | Residual current protection relay |
| Relay application | Protection relay |
| Mounting support | DIN rail |
| Earth-leakage protection class | Type A |
| Type of setting | Selector |
| Residual earth-leakage sensitity adjustment type | Adjustable 9 settings |
| Earth-leakage sensitivity | 0.03…30 A |
| Earth-leakage time delay | Instantaneous for 0.03 A<br>Adjustable 9 settings 0…4.5 s for 0.03…30 A |
| Current sensors compatibility | TOA earth leakage current sensor<br>A earth leakage current sensor<br>L earth leakage current sensor |
| [Ithe] conventional enclosed thermal current | 8 A |
| Minimum load | 10 mA at 12 V |
| [Us] rated supply voltage | 110...130 V AC 50/60 Hz 55...110 % |
| Power consumption in VA | 4 VA |
| Monitored distribution system | 1000 V - AC at 50/60 Hz (maximum)<br>1000 V - AC at 400 Hz (maximum) |
| Earthing system | TT<br>IT<br>TN-S |
| [Uimp] rated impulse withstand voltage | 8 kV |
| Reset | Manual reset |

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

## Complementary

| | |
|---|---|
| Test function | Remote test<br>Local |
| Monitoring | Electronics (continuous)<br>Power supply (continuous)<br>Relay/sensor link (continuous) |
| Type of measurement | Earth fault current internal measurement, range: 80...100 % |
| Tamperproof of settings | Protected by sealable cover |
| Connections - terminals | Auxiliary power supply: terminal block cable(s) 0.2…2.5 mm² flexible AWG 24...AWG 12<br>Auxiliary power supply: terminal block cable(s) 0.2…2.5 mm² rigid AWG 24...AWG 12<br>Auxiliary power supply: terminal block cable(s) 0.25…2.5 mm² flexible AWG 24...AWG 12<br>Fault: screw terminal cable(s) 0.2…2.5 mm² flexible AWG 24...AWG 12<br>Fault: screw terminal cable(s) 0.2…4 mm² rigid AWG 24...AWG 12<br>Fault: screw terminal cable(s) 0.25…2.5 mm² flexible AWG 24...AWG 12<br>Relay test and fault reset: screw terminal cable(s) 0.14…1 mm² flexible AWG 26...AWG 16<br>Relay test and fault reset: screw terminal cable(s) 0.14…1.5 mm² rigid AWG 26...AWG 16<br>Relay test and fault reset: screw terminal cable(s) 0.25…0.5 mm² flexible AWG 26...AWG 16<br>Sensor: screw terminal cable(s) 0.14…1 mm² flexible AWG 26...AWG 16<br>Sensor: screw terminal cable(s) 0.14…1.5 mm² rigid AWG 26...AWG 16<br>Sensor: screw terminal cable(s) 0.25…0.5 mm² flexible AWG 26...AWG 16<br>Voltage presence: screw terminal cable(s) 0.2…2.5 mm² flexible AWG 24...AWG 12<br>Voltage presence: screw terminal cable(s) 0.2…4 mm² rigid AWG 24...AWG 12<br>Voltage presence: screw terminal cable(s) 0.25…2.5 mm² flexible AWG 24...AWG 12 |
| Wire stripping length | Auxiliary power supply: 7 mm for top connection<br>Fault: 8 mm for bottom connection<br>Relay test and fault reset: 5 mm for bottom connection<br>Sensor: 5 mm for top connection<br>Voltage presence: 8 mm for bottom connection |
| Tightening torque | Auxiliary power supply: 0.6 N.m top<br>Fault: 0.6 N.m bottom<br>Relay test and fault reset: 0.25 N.m bottom<br>Sensor: 0.25 N.m top<br>Voltage presence: 0.6 N.m bottom |
| 9 mm pitches | 6 |
| Width | 54 mm |
| Height | 81 mm |
| Depth | 74 mm |
| Net weight | 0.3 kg |
| IP degree of protection | IP40 on front face: conforming to EN/IEC 60529<br>IP30 on side parts: conforming to EN/IEC 60529<br>IP20 on connection terminals: conforming to EN/IEC 60529 |
| IK degree of protection | IK07 conforming to EN 50102 |
| Mechanical robustness | Fire resistance conforming to IEC 60695-2-1<br>IK protection 2 joules: IK07 conforming to EN 50102<br>Vibrations 13.2...100 Hz: 0.7 g<br>Vibrations 2...13.2 Hz: +/- 1 mm |

## Environment

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|---|---|
| Overvoltage category | IV |
| Electrical shock protection class | Class II |
| Electromagnetic compatibility | Conducted and radiated emissions: , B, conforming to CISPR 11<br>Conducted radio-frequency immunity test: , 3, conforming to IEC 61000-4-6<br>Electrostatic discharge immunity test: , 4, conforming to IEC 61000-4-2<br>High-energy conducted susceptibility: , 4, conforming to IEC 61000-4-5<br>Low-energy conducted susceptibility: , 4, conforming to IEC 61000-4-4<br>Radiated susceptibility: , 3, conforming to IEC 61000-4-3 |
| Relative humidity | 95 % at 55 °C |
| Pollution degree | 3 conforming to IEC 60664-1 |
| Ambient air temperature for operation | -35…70 °C |
| Ambient air temperature for storage | -55…85 °C |

## Packing Units

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|---|---|
| Unit Type of Package 1 | PCE |
| Number of Units in Package 1 | 1 |
| Package 1 Weight | 276 g |
| Package 1 Height | 7.8 cm |
| Package 1 width | 9 cm |
| Package 1 Length | 9.3 cm |
| Unit Type of Package 2 | S03 |
| Number of Units in Package 2 | 36 |
| Package 2 Weight | 10.423 kg |
| Package 2 Height | 30 cm |
| Package 2 width | 30 cm |
| Package 2 Length | 40 cm |

## Offer Sustainability

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

## Contractual warranty

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