# Product datasheet

Specifications

Green Premium™

# Residual current protection relay, VigiPacT RH10M, 50mA, 110/130VAC 50/60Hz, DIN rail mounting

56121

Discontinued on: Apr 10, 2022

Discontinued

## Main

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|---|---|
| **Range** | VigiPacT |
| **Device Short Name** | RH10M |
| **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** | None |
| **Residual Earth-Leakage Sensitity Adjustment Type** | Fixed |
| **Earth-Leakage Sensitivity** | 0.05 A |
| **Earth-Leakage Time Delay** | Instantaneous |
| **Current Sensors Compatibility** | VigiPacT TOA earth leakage current sensor<br>VigiPacT A earth leakage current sensor<br>VigiPacT 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** | TN-S<br>TT<br>IT |
| **[Uimp] Rated Impulse Withstand Voltage** | 8 kV |
| **Reset** | Manual reset |

## Complementary

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|---|---|
| **Test Function** | Local<br>Remote test |
| **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 |

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

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|---|---|
| **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 |
| **Standards** | EN/IEC 60947-2 Annex M<br>EN/IEC 60755<br>UL 1053<br>CAN/CSA C22.2 No. 144 |
| **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 |

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|---|---|
| **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 |

## Contractual warranty

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| **Warranty** | 18 months |

## Sustainability

**Green Premium™ label** is Schneider Electric's commitment to delivering products with best-in-class environmental performance. Green Premium promises compliance with the latest regulations, transparency on environmental impacts, as well as circular and low-$CO_2$ products.

**Guide to assessing product sustainability** is a white paper that clarifies global eco-label standards and how to interpret environmental declarations.

Learn more about Green Premium >

Guide to assess a product's sustainability >

RoHS/REACh

## Well-being performance

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|---|---|
| Mercury Free | |
| Rohs Exemption Information | Yes |
| Pvc Free | |

## Certifications & Standards

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| **Eu Rohs Directive** | Compliant<br>EU RoHS Declaration |
| **China Rohs Regulation** | China RoHS declaration<br>Product out of China RoHS scope. Substance declaration for your information |
| **Weee** | The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins |