

# Product datasheet

Specifications



## residual current protection relay, Vigirex RH21M, 30 mA or 300 mA, 380/415 VAC 50/60 Hz, DIN rail mounting

Local distributor code:  
399357228 56164

EAN Code: 3303430561644

### Main

|                                                    |                                                                                                                                 |
|----------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------|
| Range                                              | VigiPacT                                                                                                                        |
| Device short name                                  | RH21M                                                                                                                           |
| 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 sensitivity adjustment type | Adjustable 2 settings                                                                                                           |
| Earth-leakage sensitivity                          | 0.03 A<br>0.3 A                                                                                                                 |
| Earth-leakage time delay                           | Instantaneous for 0.03 A<br>Instantaneous for 0.3 A<br>Fixed 0.06 s for 0.3 A                                                   |
| 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                          | 380...415 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>TN-S<br>IT                                                                                                                |
| [Uimp] rated impulse withstand voltage             | 8 kV                                                                                                                            |
| Reset                                              | Manual reset                                                                                                                    |

### Complementary

|                         |                                                                                         |
|-------------------------|-----------------------------------------------------------------------------------------|
| 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

|                         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
|-------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 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

|                                       |                                                                                                                                                                                                                                                                                                                                                                                                                                       |
|---------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 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

|                              |        |
|------------------------------|--------|
| Unit Type of Package 1       | PCE    |
| Number of Units in Package 1 | 1      |
| Package 1 Height             | 8.1 cm |
| Package 1 Width              | 7.4 cm |
| Package 1 Length             | 5.4 cm |
| Package 1 Weight             | 351 g  |

## Logistical informations

|                   |    |
|-------------------|----|
| Country of origin | FR |
|-------------------|----|

## 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                       | 73 kg CO2 eq.                                 |
| Carbon footprint of the manufacturing phase [A1 to A3] | 29 kg CO2 eq.                                 |
| Carbon footprint of the distribution phase [A4]        | 0 kg CO2 eq.                                  |
| Carbon footprint of the installation phase [A5]        | 0.1 kg CO2 eq.                                |
| Carbon footprint of the use phase [B2, B3, B4, B6]     | 43 kg CO2 eq.                                 |
| Carbon footprint of the end-of-life phase [C1 to C4]   | 0.6 kg CO2 eq.                                |
| Environmental Disclosure                               | <a href="#">Product Environmental Profile</a> |

## Use Better



### Materials and Substances

|                                        |                                                                                        |
|----------------------------------------|----------------------------------------------------------------------------------------|
| Packaging made with recycled cardboard | Yes                                                                                    |
| Packaging without single use plastic   | No                                                                                     |
| SCIP Number                            | 6659807e-6714-4297-b423-3681ec25edb7                                                   |
| EU RoHS Directive                      | <a href="#">Compliant By Exemption</a>                                                 |
| REACH Regulation                       | <a href="#">Reference contains Substances of Very High Concern above the threshold</a> |
| Halogen-free status                    | Product contains halogen above thresholds                                              |
| PVC free                               | Yes                                                                                    |

## Use Longer



### Lifetime extension

|        |    |
|--------|----|
| Repair | No |
|--------|----|

## Use Again



### Repack and remanufacture

|                                 |                                                                                                                                                                                                                 |
|---------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Recyclability potential, in %   | 10                                                                                                                                                                                                              |
| End of life manual availability | <a href="#">End of Life Information</a>                                                                                                                                                                         |
| Take-back                       | No                                                                                                                                                                                                              |
| WEEE Label                      |  The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins |