

## Product data sheet

### Characteristics

# 56507

Residual current protection relay, VigiPacT  
RH197P, 30mA-30A, 220/240VAC 50/60Hz,  
alarm 50%, front panel mounting



### Main

|                                                          |                                                                                                                                 |
|----------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------|
| Range                                                    | VigiPacT                                                                                                                        |
| Device short name                                        | RH197P                                                                                                                          |
| Product or component type                                | Residual current protection relay                                                                                               |
| Relay application                                        | Protection relay                                                                                                                |
| Mounting support                                         | Front panel                                                                                                                     |
| Earth-leakage protection class                           | Type A                                                                                                                          |
| Type of setting                                          | Selector                                                                                                                        |
| Residual earth-leakage sensitivity adjustment type       | Adjustable 19 settings                                                                                                          |
| Earth-leakage sensitivity                                | 0.03...30 A                                                                                                                     |
| Earth-leakage time delay                                 | Instantaneous for 0.03 A<br>Adjustable 7 settings 0...4.5 s for 0.03...30 A                                                     |
| Alarm threshold                                          | 50 %                                                                                                                            |
| Current sensors compatibility                            | VigiPacT TOA earth leakage current sensor<br>VigiPacT A earth leakage current sensor<br>VigiPacT L earth leakage current sensor |
| [I <sub>th</sub> ] conventional enclosed thermal current | 8 A                                                                                                                             |
| Minimum load                                             | 10 mA at 12 V                                                                                                                   |
| [U <sub>s</sub> ] rated supply voltage                   | 220...240 V AC 50/60 Hz 70...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                                          | IT<br>TT<br>TN-S                                                                                                                |
| [U <sub>imp</sub> ] rated impulse withstand voltage      | 8 kV                                                                                                                            |
| Reset                                                    | Manual reset<br>Automatic reset                                                                                                 |

### Complementary

|                             |                                                                                       |
|-----------------------------|---------------------------------------------------------------------------------------|
| Test function               | Local<br>Remote test                                                                  |
| Monitoring                  | Electronics (watchdog)<br>Power supply (continuous)<br>Relay/sensor link (continuous) |
| Signal contacts composition | 1 NO                                                                                  |
| Type of measurement         | Earth fault current internal measurement, range: 80...100 %                           |
| Refresh time                | 0.5 s                                                                                 |
| Tamperproof of settings     | Protected by sealable cover                                                           |

|                         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
|-------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 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 AWG 24...AWG 12</p> <p>Fault: terminal block cable(s) 0.2...2.5 mm<sup>2</sup> flexible AWG 24...AWG 12</p> <p>Fault: terminal block cable(s) 0.2...2.5 mm<sup>2</sup> rigid AWG 24...AWG 12</p> <p>Fault: terminal block cable(s) 0.25...2.5 mm<sup>2</sup> flexible AWG 24...AWG 12</p> <p>Relay test and fault reset: terminal block cable(s) 0.2...2.5 mm<sup>2</sup> flexible AWG 24...AWG 12</p> <p>Relay test and fault reset: terminal block cable(s) 0.2...2.5 mm<sup>2</sup> rigid AWG 24...AWG 12</p> <p>Relay test and fault reset: terminal block cable(s) 0.25...2.5 mm<sup>2</sup> flexible AWG 24...AWG 12</p> <p>Sensor: terminal block cable(s) 0.2...2.5 mm<sup>2</sup> flexible AWG 24...AWG 12</p> <p>Sensor: terminal block cable(s) 0.2...2.5 mm<sup>2</sup> rigid AWG 24...AWG 12</p> <p>Sensor: terminal block cable(s) 0.25...2.5 mm<sup>2</sup> flexible AWG 24...AWG 12</p> <p>Voltage presence: terminal block cable(s) 0.2...2.5 mm<sup>2</sup> flexible AWG 24...AWG 12</p> <p>Voltage presence: terminal block cable(s) 0.2...2.5 mm<sup>2</sup> rigid AWG 24...AWG 12</p> <p>Voltage presence: terminal block cable(s) 0.25...2.5 mm<sup>2</sup> flexible AWG 24...AWG 12</p> |
| Wire stripping length   | <p>Auxiliary power supply: 7 mm</p> <p>Fault: 7 mm</p> <p>Relay test and fault reset: 7 mm</p> <p>Sensor: 7 mm</p> <p>Voltage presence: 7 mm</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| Tightening torque       | <p>Auxiliary power supply: 0.6 N.m</p> <p>Fault: 0.6 N.m</p> <p>Relay test and fault reset: 0.6 N.m</p> <p>Sensor: 0.6 N.m</p> <p>Voltage presence: 0.6 N.m</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| Standards               | <p>EN/IEC 60947-2 Annex M</p> <p>EN/IEC 60755</p> <p>UL 1053</p> <p>CAN/CSA C22.2 No. 144</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| Width                   | 72 mm                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| Height                  | 72 mm                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| Depth                   | 92 mm                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| Cut-out dimensions      | 68 x 68 mm                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| Net weight              | 0.3 kg                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| IP degree of protection | <p>IP40 on front face: conforming to EN/IEC 60529</p> <p>IP30 on side parts: conforming to EN/IEC 60529</p> <p>IP20 on connection terminals: conforming to EN/IEC 60529</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| IK degree of protection | IK07 conforming to EN 50102                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| Mechanical robustness   | <p>Fire resistance conforming to IEC 60695-2-1</p> <p>IK protection 2 joules: IK07 conforming to EN 50102</p> <p>Vibrations 13.2...100 Hz: 0.7 g</p> <p>Vibrations 2...13.2 Hz: +/- 1 mm</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |

## Environment

|                                       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
|---------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Overvoltage category                  | IV                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| Electrical shock protection class     | Class II                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| 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> |
| Relative humidity                     | 95 % at 55 °C                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| Pollution degree                      | 3 conforming to IEC 60664-1                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| Ambient air temperature for operation | -25...55 °C                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| Ambient air temperature for storage   | -40...85 °C                                                                                                                                                                                                                                                                                                                                                                                                                                                      |

## Packing Units

|                              |          |
|------------------------------|----------|
| Unit Type of Package 1       | PCE      |
| Number of Units in Package 1 | 1        |
| Package 1 Height             | 10.5 cm  |
| Package 1 Width              | 8.5 cm   |
| Package 1 Length             | 9.0 cm   |
| Package 1 Weight             | 336.0 g  |
| Unit Type of Package 2       | S03      |
| Number of Units in Package 2 | 24       |
| Package 2 Height             | 30.0 cm  |
| Package 2 Width              | 30.0 cm  |
| Package 2 Length             | 40.0 cm  |
| Package 2 Weight             | 8.551 kg |

## Offer Sustainability

|                            |                                                                                                                                 |
|----------------------------|---------------------------------------------------------------------------------------------------------------------------------|
| Sustainable offer status   | Green Premium product                                                                                                           |
| REACH Regulation           |  <a href="#">REACH Declaration</a>             |
| EU RoHS Directive          | Compliant with Exemptions                                                                                                       |
| Mercury free               | Yes                                                                                                                             |
| China RoHS Regulation      |  <a href="#">China RoHS Declaration</a>        |
| RoHS exemption information |  <a href="#">Yes</a>                           |
| 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 |
|----------|-----------|