

Product datasheet

Specifications



residual current protection relay,
Vigirex RH99M, 30 mA to 30 A,
12/24 VAC 50/60 Hz, 12/48 VDC,
DIN rail mounting

Local distributor code:

399357480

56170

EAN Code: 3303430561705

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 sensitivity adjustment type	Adjustable 9 settings
Earth-leakage sensitivity	0.03...30 A
Earth-leakage time delay	Instantaneous for 0.03 A Adjustable 9 settings 0...4.5 s for 0.03...30 A
Current sensors compatibility	VigiPacT TOA earth leakage current sensor VigiPacT A earth leakage current sensor VigiPacT L earth leakage current sensor
[I _{th}] conventional enclosed thermal current	8 A
Minimum load	10 mA at 12 V
[U _s] rated supply voltage	12...24 V AC 50/60 Hz 55...120 % 12...48 V DC 55...120 %
Power consumption in VA	4 VA
Monitored distribution system	1000 V - AC at 50/60 Hz (maximum) 1000 V - AC at 400 Hz (maximum)
Earthing system	TN-S IT TT
[U _{imp}] rated impulse withstand voltage	8 kV
Reset	Manual reset

Complementary

Test function	Remote test Local
Monitoring	Electronics (continuous) Power supply (continuous) Relay/sensor link (continuous)
Type of measurement	Earth fault current internal measurement, range: 80...100 %
Tamperproof of settings	Protected by sealable cover

Connections - terminals	<p>Auxiliary power supply: terminal block cable(s) 0.2...2.5 mm² flexible AWG 24...AWG 12</p> <p>Auxiliary power supply: terminal block cable(s) 0.2...2.5 mm² rigid AWG 24...AWG 12</p> <p>Auxiliary power supply: terminal block cable(s) 0.25...2.5 mm² flexible AWG 24...AWG 12</p> <p>Fault: screw terminal cable(s) 0.2...2.5 mm² flexible AWG 24...AWG 12</p> <p>Fault: screw terminal cable(s) 0.2...4 mm² rigid AWG 24...AWG 12</p> <p>Fault: screw terminal cable(s) 0.25...2.5 mm² flexible AWG 24...AWG 12</p> <p>Relay test and fault reset: screw terminal cable(s) 0.14...1 mm² flexible AWG 26...AWG 16</p> <p>Relay test and fault reset: screw terminal cable(s) 0.14...1.5 mm² rigid AWG 26...AWG 16</p> <p>Relay test and fault reset: screw terminal cable(s) 0.25...0.5 mm² flexible AWG 26...AWG 16</p> <p>Sensor: screw terminal cable(s) 0.14...1 mm² flexible AWG 26...AWG 16</p> <p>Sensor: screw terminal cable(s) 0.14...1.5 mm² rigid AWG 26...AWG 16</p> <p>Sensor: screw terminal cable(s) 0.25...0.5 mm² flexible AWG 26...AWG 16</p> <p>Voltage presence: screw terminal cable(s) 0.2...2.5 mm² flexible AWG 24...AWG 12</p> <p>Voltage presence: screw terminal cable(s) 0.2...4 mm² rigid AWG 24...AWG 12</p> <p>Voltage presence: screw terminal cable(s) 0.25...2.5 mm² flexible 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>
9 mm pitches	6
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	54 mm
Height	81 mm
Depth	74 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	-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 8.500 cm

Package 1 Width 9.000 cm

Package 1 Length 7.600 cm

Package 1 Weight 182.000 g

Unit Type of Package 2 S03

Number of Units in Package 2 36

Package 2 Height 30.000 cm

Package 2 Width 30.000 cm

Package 2 Length 40.000 cm

Package 2 Weight 7.040 kg

Logistical informations

Country of origin FR

Contractual warranty

Warranty 18 months



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 58

Environmental Disclosure [Product Environmental Profile](#)

Use Better

Materials and Substances

Packaging made with recycled cardboard Yes

Packaging without single use plastic No

[EU RoHS Directive](#) Compliant with Exemptions

SCIP Number 6659807e-6714-4297-b423-3681ec25edb7

REACH Regulation [REACH Declaration](#)

Halogen-free status Product contains halogen above thresholds

PVC free Yes

Use Again

Repack and remanufacture

Recyclability potential, in % 10

End of life manual availability [End of Life Information](#)

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

Technical Illustration

Assembly's dimensions

