

# Product datasheet

Specifications



residual current protection relay,  
Vigirex RH10M, 250 mA, 380/415  
VAC 50/60 Hz, DIN rail mounting

56144

! Discontinued

## Main

Range	Vigirex
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 sensitivity adjustment type	Fixed
Earth-leakage sensitivity	0.25 A
Earth-leakage time delay	Instantaneous
Current sensors compatibility	Vigirex TOA earth leakage current sensor Vigirex A earth leakage current sensor Vigirex 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) 1000 V - AC at 400 Hz (maximum)
Earthing system	TN-S TT IT
[Uimp] 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

<b>Connections - terminals</b>	<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: screw terminal cable(s) 0.2...2.5 mm<sup>2</sup> flexible AWG 24...AWG 12</p> <p>Fault: screw terminal cable(s) 0.2...4 mm<sup>2</sup> rigid AWG 24...AWG 12</p> <p>Fault: screw terminal cable(s) 0.25...2.5 mm<sup>2</sup> flexible AWG 24...AWG 12</p> <p>Relay test and fault reset: screw terminal cable(s) 0.14...1 mm<sup>2</sup> flexible AWG 26...AWG 16</p> <p>Relay test and fault reset: screw terminal cable(s) 0.14...1.5 mm<sup>2</sup> rigid AWG 26...AWG 16</p> <p>Relay test and fault reset: screw terminal cable(s) 0.25...0.5 mm<sup>2</sup> flexible AWG 26...AWG 16</p> <p>Sensor: screw terminal cable(s) 0.14...1 mm<sup>2</sup> flexible AWG 26...AWG 16</p> <p>Sensor: screw terminal cable(s) 0.14...1.5 mm<sup>2</sup> rigid AWG 26...AWG 16</p> <p>Sensor: screw terminal cable(s) 0.25...0.5 mm<sup>2</sup> flexible AWG 26...AWG 16</p> <p>Voltage presence: screw terminal cable(s) 0.2...2.5 mm<sup>2</sup> flexible AWG 24...AWG 12</p> <p>Voltage presence: screw terminal cable(s) 0.2...4 mm<sup>2</sup> rigid AWG 24...AWG 12</p> <p>Voltage presence: screw terminal cable(s) 0.25...2.5 mm<sup>2</sup> flexible AWG 24...AWG 12</p>
<b>Wire stripping length</b>	<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>
<b>Tightening torque</b>	<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>
<b>9 mm pitches</b>	6
<b>Standards</b>	<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>
<b>Width</b>	54 mm
<b>Height</b>	81 mm
<b>Depth</b>	74 mm
<b>Product weight</b>	0.3 kg
<b>IP degree of protection</b>	<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>
<b>IK degree of protection</b>	IK07 conforming to EN 50102
<b>Mechanical robustness</b>	<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>
<b>Environment</b>	
<b>Overvoltage category</b>	IV
<b>Electrical shock protection class</b>	Class II
<b>Electromagnetic compatibility</b>	<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>
<b>Relative humidity</b>	95 % at 55 °C
<b>Pollution degree</b>	3 conforming to IEC 60664-1
<b>Ambient air temperature for operation</b>	-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

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Number of Units in Package 1 1

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## Contractual warranty

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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	68 kg CO2 eq.
Carbon footprint of the manufacturing phase [A1 to A3]	25 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]	0.5 kg CO2 eq.

### Use Longer




#### Lifetime extension

Repair	No
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### Use Again



#### Repack and remanufacture

WEEE Label	 The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins
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