

Product datasheet

Specifications



Residual current monitoring relay, VigiPacT RH99M, 30mA-30A, 220/240VAC 50/60Hz, DIN rail mounting

56193

Main

Range	VigiPacT
Device short name	RH99M
Product or component type	Monitoring relay
Relay application	Monitoring relay
Mounting support	DIN rail
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
Threshold setting	0.03...30 A alarm
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	220...240 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	TT TN-S
[U _{imp}] rated impulse withstand voltage	8 kV

Complementary

Test function	Local Remote test
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 with ferrule 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 with ferrule 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 with ferrule 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 with ferrule 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 with ferrule AWG 24...AWG 12</p>
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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>
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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>
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9 mm pitches	6
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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>
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Width	54 mm
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Height	81 mm
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Depth	74 mm
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Product weight	0.3 kg
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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>
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IK degree of protection	IK07 conforming to EN 50102
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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>
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Environment

Overvoltage category	IV
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Electrical shock protection class	Class II
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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>
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Relative humidity	95 % at 55 °C
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Pollution degree	3 conforming to IEC 60664-1
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Ambient air temperature for operation	-35...70 °C
Ambient air temperature for storage	-55...85 °C

Packing Units

Unit Type of Package 1	PCE
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Number of Units in Package 1	1
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Package 1 Height	7.800 cm
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Package 1 Width	8.600 cm
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Package 1 Length	9.200 cm
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Package 1 Weight	263.400 g
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Unit Type of Package 2	S03
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Number of Units in Package 2	36
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Package 2 Height	30.000 cm
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Package 2 Width	30.000 cm
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Package 2 Length	40.000 cm
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Package 2 Weight	9.882 kg
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Contractual warranty

Warranty (in months)	18
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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	66 kg CO2 eq.
Carbon footprint of the manufacturing phase [A1 to A3]	23 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.
Environmental Disclosure	Product Environmental Profile

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	Compliant By Exemption
REACH Regulation	Reference contains Substances of Very High Concern above the threshold
Halogen-free status	Product contains halogen above thresholds
PVC free	Yes

Use Longer



Lifetime extension

Repair	No
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Use Again



Repack and remanufacture

Recyclability potential, in %	10
End of life manual availability	End of Life Information
Take-back	Nej
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

