

# Product datasheet

Specifications



## Earth-leakage relay RH99M with manual reset - 0.03..30 A - 0..4.5 s - 240 V

56173

### 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 <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 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
[U <sub>imp</sub> ] 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 %

<b>Tamperproof of settings</b>	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>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
<b>Ambient air temperature for storage</b>	-55...85 °C
<b>Packing Units</b>	
<b>Unit Type of Package 1</b>	PCE
<b>Number of Units in Package 1</b>	1
<b>Package 1 Height</b>	8.5 cm
<b>Package 1 Width</b>	9.0 cm

Package 1 Length	7.6 cm
Package 1 Weight	276.0 g
Unit Type of Package 2	S03
Number of Units in Package 2	36
Package 2 Height	30.0 cm
Package 2 Width	30.0 cm
Package 2 Length	40.0 cm
Package 2 Weight	10.424 kg

## Offer Sustainability

Sustainable offer status	Green Premium product
REACH Regulation	<a href="#">REACH Declaration</a>
EU RoHS Directive	Compliant <a href="#">EU RoHS Declaration</a>
Mercury free	Yes
China RoHS Regulation	<a href="#">China RoHS declaration</a> Product out of China RoHS scope. Substance declaration for your information
RoHS exemption information	Yes
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
PVC free	Yes

## Contractual warranty

Warranty	12 months
----------	-----------

## Recommended replacement(s)