

# Product data sheet

Specifications



Residual current protection relay,  
VigiPacT RH99M, 30mA-30A,  
380/415VAC 50/60Hz, DIN rail  
mounting

56174

## 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
[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	TT IT TN-S
[Uimp] rated impulse withstand voltage	8 kV
Reset	Manual reset

## 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	Auxiliary power supply: terminal block cable(s) 0.2...2.5 mm² flexible AWG 24...AWG 12 Auxiliary power supply: terminal block cable(s) 0.2...2.5 mm² rigid AWG 24...AWG 12 Auxiliary power supply: terminal block cable(s) 0.25...2.5 mm² flexible AWG 24...AWG 12 Fault: screw terminal cable(s) 0.2...2.5 mm² flexible AWG 24...AWG 12 Fault: screw terminal cable(s) 0.2...4 mm² rigid AWG 24...AWG 12 Fault: screw terminal cable(s) 0.25...2.5 mm² flexible AWG 24...AWG 12 Relay test and fault reset: screw terminal cable(s) 0.14...1 mm² flexible AWG 26...AWG 16 Relay test and fault reset: screw terminal cable(s) 0.14...1.5 mm² rigid AWG 26...AWG 16 Relay test and fault reset: screw terminal cable(s) 0.25...0.5 mm² flexible AWG 26...AWG 16 Sensor: screw terminal cable(s) 0.14...1 mm² flexible AWG 26...AWG 16 Sensor: screw terminal cable(s) 0.14...1.5 mm² rigid AWG 26...AWG 16 Sensor: screw terminal cable(s) 0.25...0.5 mm² flexible AWG 26...AWG 16 Voltage presence: screw terminal cable(s) 0.2...2.5 mm² flexible AWG 24...AWG 12 Voltage presence: screw terminal cable(s) 0.2...4 mm² rigid AWG 24...AWG 12 Voltage presence: screw terminal cable(s) 0.25...2.5 mm² flexible AWG 24...AWG 12
Wire stripping length	Auxiliary power supply: 7 mm for top connection Fault: 8 mm for bottom connection Relay test and fault reset: 5 mm for bottom connection Sensor: 5 mm for top connection Voltage presence: 8 mm for bottom connection
Tightening torque	Auxiliary power supply: 0.6 N.m top Fault: 0.6 N.m bottom Relay test and fault reset: 0.25 N.m bottom Sensor: 0.25 N.m top Voltage presence: 0.6 N.m bottom
9 mm pitches	6
Width	54 mm
Height	81 mm
Depth	74 mm
Net weight	0.3 kg
IP degree of protection	IP40 on front face: conforming to EN/IEC 60529 IP30 on side parts: conforming to EN/IEC 60529 IP20 on connection terminals: conforming to EN/IEC 60529
IK degree of protection	IK07 conforming to EN 50102
Mechanical robustness	Fire resistance conforming to IEC 60695-2-1 IK protection 2 joules: IK07 conforming to EN 50102 Vibrations 13.2...100 Hz: 0.7 g Vibrations 2...13.2 Hz: +/- 1 mm
Environment	
Overvoltage category	IV
Electrical shock protection class	Class II
Electromagnetic compatibility	Conducted and radiated emissions: , B, conforming to CISPR 11 Conducted radio-frequency immunity test: , 3, conforming to IEC 61000-4-6 Electrostatic discharge immunity test: , 4, conforming to IEC 61000-4-2 High-energy conducted susceptibility: , 4, conforming to IEC 61000-4-5 Low-energy conducted susceptibility: , 4, conforming to IEC 61000-4-4 Radiated susceptibility: , 3, conforming to IEC 61000-4-3
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	275.000 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	10.388 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	<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
PVC free	Yes

### Contractual warranty

Warranty	18 months
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### Recommended replacement(s)