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 sensitity 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	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
[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

Disclaimer: This documentation is not intended as a substitute for and is not to be used for determining suitability or reliability of these products for specific user applications

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
Standards	EN/IEC 60947-2 Annex M EN/IEC 60755 UL 1053 CAN/CSA C22.2 No. 144
Width	54 mm
Height	81 mm
Depth	74 mm
Product 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	8.5 cm
Package 1 Width	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

Contractual warranty

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	**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**

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

