Product data sheet
Characteristics

LV481003
Earth-leakage relay RHU - 0.03..30 A - 0..5 s - 240 V

Main

Range	Vigirex
Device short name	RHU
Product or component type	Residual current protection relay
Relay application	Monitoring relay Protection relay
Mounting support	Front panel
Earth-leakage protection class	Type A
Type of setting	Modbus address Keypad
Residual earth-leakage sensitity adjustment type	Adjustable
Earth-leakage sensitivity	0.03…1 A, adjustable in step of 0.001 A 1…30 A, adjustable in step of 0.1 A
Earth-leakage time delay	Instantaneous for 0.03 A Adjustable 0…4.5 s for 0.03…30 A adjustable in step of 10 ms
Threshold setting	0.015...1 A adjustable in step of 0.001 A pre-alarm 1...30 A adjustable in step of 0.1 A pre-alarm 0.03...1 A adjustable in step of 0.001 A alarm 1...30 A adjustable in step of 0.1 A alarm
Current sensors compatibility	TOA earth leakage current sensor A earth leakage current sensor 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 70...110 %
Power consumption in VA	8 VA
Monitored distribution system	1000 V - AC at 50/60 Hz (maximum) 1000 V - AC at 400 Hz (maximum)
Earthing system	TT TN-S IT
Reset	Remote reset

Complementary

Test function	Remote test Remote test (via communication) Local
Signal contacts composition	1 C/O alarm fail-safe 1 NO pre-alarm fail-safe
Type of measurement	Earth fault current internal measurement, range: 20...200 %, accuracy: +/- 20 %
Refresh time	0.5 s
Communication service	Modbus slave
Tamperproof of settings	Protected by access code

Connections - terminals	Alarm circuit: terminal block cable(s) 0.2…2.5 mm² flexible AWG 22...AWG 12 Alarm circuit: terminal block cable(s) 0.2…2.5 mm² rigid AWG 22...AWG 12 Relay test and fault reset: terminal block cable(s) 0.2…2.5 mm² flexible AWG 22...AWG 12 Relay test and fault reset: terminal block cable(s) 0.2…2.5 mm² rigid AWG 22...AWG 12 Sensor: terminal block cable(s) 0.2…2.5 mm² flexible AWG 22...AWG 12 Sensor: terminal block cable(s) 0.2…2.5 mm² rigid AWG 22...AWG 12 Voltage presence: terminal block cable(s) 0.2…2.5 mm² flexible AWG 22...AWG 12 Voltage presence: terminal block cable(s) 0.2…2.5 mm² rigid AWG 22...AWG 12 Power supply: terminal block cable(s) 0.2…2.5 mm² flexible AWG 22...AWG 12 Power supply: terminal block cable(s) 0.2…2.5 mm² rigid AWG 22...AWG 12 Pre alarm: terminal block cable(s) 0.2…2.5 mm² flexible AWG 22...AWG 12 Pre alarm: terminal block cable(s) 0.2…2.5 mm² rigid AWG 22...AWG 12
Wire stripping length	Alarm circuit: 6 mm Relay test and fault reset: 6 mm Sensor: 6 mm Voltage presence: 6 mm Power supply: 6 mm Pre alarm: 6 mm
Tightening torque	Alarm circuit: 0.5 N.m Relay test and fault reset: 0.5 N.m Sensor: 0.5 N.m Voltage presence: 0.5 N.m Power supply: 0.5 N.m Pre alarm: 0.5 N.m
Width	72 mm
Height	72 mm
Depth	117 mm
Cut-out dimensions	68 x 68 mm
Net weight	0.3 kg
IP degree of protection	IP40 front face: conforming to IEC 60529 IP30 other parts: conforming to IEC 60529 IP20 connection: conforming to IEC 60529
IK degree of protection	IK07 conforming to EN 50102
Mechanical robustness	Vibrations 13.2...100 Hz: 0.7 g Vibrations 2...13.2 Hz: +/- 1 mm

Environment

Environmental characteristic	Exposure to damp heat not in service conforming to IEC 60068-2-30 Exposure to damp heat in service conforming to IEC 60068-2-56 Salt mist conforming to IEC 60068-2-52
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	-25…55 °C
Ambient air temperature for storage	-40…85 °C

Packing Units

Unit Type of Package 1	PCE
Number of Units in Package 1	1
Package 1 Weight	430 g
Package 1 Height	8.5 cm
Package 1 width	11 cm
Package 1 Length	15.5 cm

Offer Sustainability

Sustainable offer status	Green Premium product
REACh Regulation	REACh Declaration
EU RoHS Directive	Compliant EU RoHS Declaration
Mercury free	Yes
RoHS exemption information	Yes
China RoHS Regulation	China RoHS Declaration
Environmental Disclosure	Product Environmental Profile
Circularity Profile	End Of Life Information
WEEE	The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins