

# LV481002

Residual current protection relay, VigiPacT  
RHU, 30mA-30A, 110/130VAC 50/60Hz,  
communicating, front panel mounting



## Main

Range	VigiPacT
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	Keypad Modbus address
Residual earth-leakage sensitivity 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	VigiPacT TOA earth leakage current sensor[RETURN]VigiPacT A earth leakage current sensor[RETURN]VigiPacT L earth leakage current sensor
[Ithe] conventional enclosed thermal current	8 A
Minimum load	10 mA at 12 V
[Us] rated supply voltage	110...130 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 IT TN-S
[Uimp] rated impulse withstand voltage	8 kV
Reset	Remote reset

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## 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 mm <sup>2</sup> flexible AWG 22...AWG 12 Alarm circuit: terminal block cable(s) 0.2...2.5 mm <sup>2</sup> rigid AWG 22...AWG 12 Relay test and fault reset: terminal block cable(s) 0.2...2.5 mm <sup>2</sup> flexible AWG 22...AWG 12 Relay test and fault reset: terminal block cable(s) 0.2...2.5 mm <sup>2</sup> rigid AWG 22...AWG 12 Sensor: terminal block cable(s) 0.2...2.5 mm <sup>2</sup> flexible AWG 22...AWG 12 Sensor: terminal block cable(s) 0.2...2.5 mm <sup>2</sup> rigid AWG 22...AWG 12 Voltage presence: terminal block cable(s) 0.2...2.5 mm <sup>2</sup> flexible AWG 22...AWG 12 Voltage presence: terminal block cable(s) 0.2...2.5 mm <sup>2</sup> rigid AWG 22...AWG 12 Power supply: terminal block cable(s) 0.2...2.5 mm <sup>2</sup> flexible AWG 22...AWG 12 Power supply: terminal block cable(s) 0.2...2.5 mm <sup>2</sup> rigid AWG 22...AWG 12 Pre alarm: terminal block cable(s) 0.2...2.5 mm <sup>2</sup> flexible AWG 22...AWG 12 Pre alarm: terminal block cable(s) 0.2...2.5 mm <sup>2</sup> 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
Standards	EN/IEC 60947-2 Annex M EN/IEC 60755 UL 1053 CAN/CSA C22.2 No. 144
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 Height	8 cm
Package 1 Width	11 cm
Package 1 Length	16 cm
Package 1 Weight	464 g
Unit Type of Package 2	S03
Number of Units in Package 2	8
Package 2 Height	30 cm
Package 2 Width	30 cm
Package 2 Length	40 cm
Package 2 Weight	4.487 kg

## Offer Sustainability

Sustainable offer status	Green Premium product
REACH Regulation	 <a href="#">REACH Declaration</a>
EU RoHS Directive	Compliant with Exemptions
Mercury free	Yes
China RoHS Regulation	 <a href="#">China RoHS Declaration</a>
RoHS exemption information	 <a href="#">Yes</a>
Environmental Disclosure	 <a href="#">Product Environmental Profile</a>
Circularity Profile	 <a href="#">End Of Life Information</a>