RGU-100B

RGU-100B, Residual current monitoring relay, type B

Code: P11961.

> Protocol: Modbus/RTU
> Módules: 3
> Pre-alarm relay: Yes
> Communications: RS-485
> N° relays: 1
> IΔn (A): 0,03 ... 3 A
> Power supply (Vac): 230 Vac
> Delay: 0,1 ... 5 s, INS, SEL
> Mounting: DIN rail

Description

The residual current current intensity monitoring and protection relay (**IEC 62020**), compatible with the **WGB** series, for type B loads (**IEC 60755**).

High-performance relay with the following main features and functions:

- Electronic relay with relay output.
- Measures in alternating, continuous or mixed current (Type B according to **IEC 60755**).
- It measures and displays the current intensity through the connection to the **WGB**-series residual current transformer.
- Fully programmable with display showing instantaneous leakage current in real time on a high-contrast backlight display (display turns red when the relay trips).
- Integrated RS-485 (Modbus) communications.
- Pre-alarm relay.
- Event log.
- Remote control input.

Application

Residual current protection or monitoring of single-phase or three-phase electrical loads in alternating current with continuous components, with frequencies up to 1 kHz, such as:

- Variable speed drives.
- UPS
- Photovoltaic Installations.
- Electric Vehicle Charging.
- Active Filters.

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Specifications

AC power supply

Installation category	CAT III 300 V
Consumption	9 VA
Frequency	50 / 60 Hz
Nominal voltage	230 V~

Mechanical characteristics

Size (mm) width x height x depth	52.5 x 118 x 74 (mm)
Envelope	Self-extinguishing V0 plastic
Weight (kg)	0,188

Environmental characteristics

Protection class	IP 30, IP 40 (Vorderseite)
Relative humidity (without condensation)	5 ... 95 %
Storage temperature	-20 ... +70 °C
Working temperature	-10 ... +50 °C

Digital inputs

Input impedance	2 kΩ
Type	Potential-free contact

Standards

Electrical safety, Maximum height (m)	2000
Standards	IEC 60947-2-M, Measurement conditions for type B waveforms specified in IEC 60755, UNE-EN 60068-2-1, UNE-EN60068-2-2, UNE-EN 60068-2-78

User interface

LED	2
Keyboard	3 keys
Display type	LCD (negative)

Digital relay outputs

Quantity	1
Maximum current	6 A
Maximum open contact voltage	230 V ~
Electrical life	60×10^3 (250 V ~ / 5A)
Mechanical life	10×10^6
Maximum switching capacity	1500 VA

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Digital transistor outputs

Type	Optocoupled
Maximum current	0.1 A
Maximum voltage	230 V ~

Differential protection

Type	Type B
Sensitivity (IΔn), A	0,03 ... 3
Delay time (tΔ)	INS - [S]-0.1-0.2-0.3-0.4-0.5-0.8-1-3-5 s
Transformer	External, WGB series (not included)

Serial communication

Protocol	Modbus/RTU
Technology / Type	RS-485

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CODE	TYPE	IΔn (A)	N° relays	Pre-alarm relay	Módules	Mounting	Delay	Communications	Protocol	Power supply
P11961.	RGU-100B	0,03 ... 3 A	1	Yes	3	DIN rail	0,1 ... 5 s, INS, SEL	RS-485	Modbus/RTU	230 Vac

Associated with WGB-type residual current transformers

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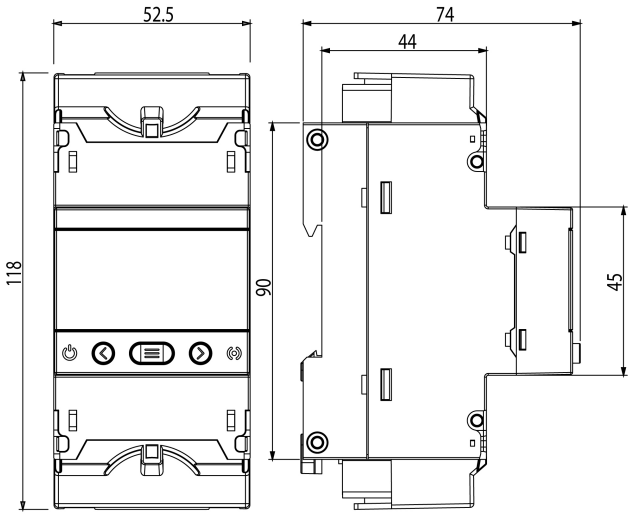
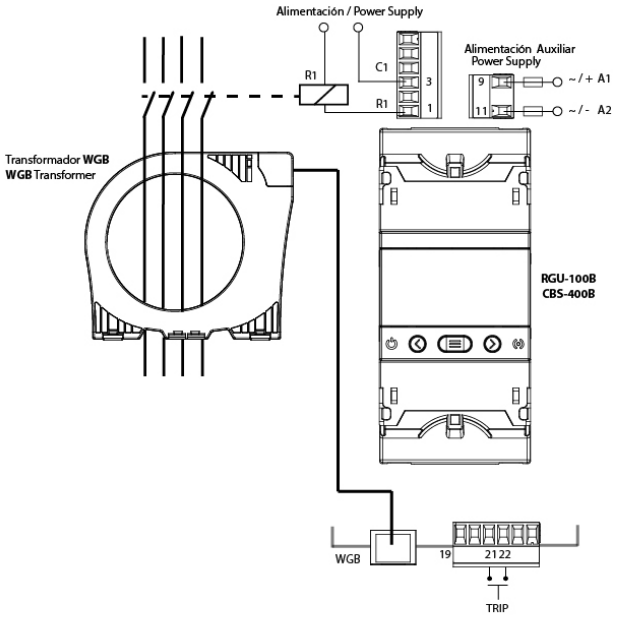
Dimensions



Connections



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