



RGU-100A

RGU-100A, Residual current relay for WGC Transformer, ultraimmunized type A, 3 modules and screen

Code: P11A71.

- > Módulos: 3
- > Communications: RS-485
- > Protocol: Modbus/RTU
- > Pre-alarm relay: Yes
- > N° relays: 2
- > I Δ n (A): 0,03 ...30 A
- > Power supply: 110 ... 230 Vac
- > Delay: 0,1... 5 s, INS, SEL
- > Mounting: DIN rail

Description

The **RGU-100A** is a type-A ultraimmunized earth leakage protection and monitoring relay that is compatible with the earth leakage transformers in the WGC range.

The device measures, calculates and displays the true RMS value of the residual current by using a residual current input from an external measurement toroidal transformer in the WGC series.

The **RGU-100A** can be used to program and adjust all the parameters required to obtain complete protection and control of the installation.

Main characteristics:

- True root mean square value
- RCM & MRCD on one device
- Keypad locking of programming menu
- RGB backlit display
- Ultra-immunized type A RCD
- Immunity to transients
- Filtering of the highest order high frequencies
- Trip adjustment between 80 and 100% I Δ n
- Inverse curve
- RS-485 communications

Application

The **RGU-100A** offers smart residual current protection.

Thanks to its design characteristics, this device provides the most complete type-A protection to ensure the safety of people and continuity of supply in electrical installations.

Its ultraimmunized system guarantees that a trip will only occur when it is absolutely necessary, avoiding financial losses due to unwanted trips.

Being able to view the instantaneous leakage value on the display, together with the pre-alarm indications, provides information on the status of the lines they protect so that proper preventive maintenance can be done.

In addition, the RGU-100A version with RS-485 communications, in conjunction with PowerStudio software, adds centralized real-time monitoring and logging for later analysis.



RGU-100A

Electronic differential relay compatible with WGC series external transformer

Code: P11A71.

Specifications

AC power supply

| | |
|-----------------------|-----------------|
| Installation category | CAT III 300 V |
| Consumption | 6.5 VA |
| Frequency | 50 ... 60 Hz |
| Nominal voltage | 110 ... 230 V ~ |

Mechanical characteristics

| | |
|----------------------------------|------------------------------|
| Size (mm) width x height x depth | 52,5 x 118 x 74 (mm) |
| Envelope | Sel-extinguishing V0 plastic |
| Fastening | DIN rail |
| Weight (kg) | 0,186 |

Environmental characteristics

| | |
|--|----------------------------------|
| Protection class | IP 30 (terminals), IP 40 (front) |
| Relative humidity (without condensation) | 5 ... 95 % |
| Storage temperature | -20 ... +70 °C |
| Working temperature | -10 ... +60 °C |

External reset input for tripping

| | |
|------|-----------------|
| Type | 110 ... 230 V ~ |
|------|-----------------|

Standards

| | |
|--|---|
| Electrical safety, Maximum height (m) | 2000 |
| Electrical safety, Contamination level/class | 2 |
| Standards | IEC 60947-2-M, IEC 62020-1, UNE-EN 60068-2-1, UNE-EN 60068-2-2, UNE-EN 60068-2-78 |

User interface

| | |
|--------------|-----------------------|
| LED | 2 |
| Keyboard | 3 keys |
| Display type | LCD custom (negative) |

Digital relay outputs

| | |
|-----------------------------------|----------------------|
| Quantity | 2 |
| Maximum current | 6 A ~ |
| Maximum open contact voltage | 230 V ~ ± 15 % |
| Electrical life (at maximum load) | 60 X 10 ³ |
| Mechanical life | 10 x 10 ⁶ |



RGU-100A

Electronic differential relay compatible with WGC series external transformer

Code: P11A71.

Maximum switching capacity 1500 VA

Differential protection

| | |
|-----------------------------------|---|
| Type | Type A ultra-immunised |
| Sensitivity ($I_{\Delta n}$), A | 0.03 - 0.1 - 0.2 - 0.3 - 0.5 - 0.75 - 1 - 1.5 - 2 - 3 - 5 - 10 - 30 A |
| Delay time (t_{Δ}) | INS - [S]-0.1-0.2-0.3-0.4-0.5-0.8-1-3-5 s |
| Transformer | External, WGC series |

Serial communication

| | |
|-------------------|------------|
| Protocol | Modbus/RTU |
| Technology / Type | RS-485 |

RGU-100A

Residual current relay, type A, for ultra-immunised WGC Transformer, 3 modules with display and programmable pre-alarm output.

| CODE | TYPE | $I_{\Delta n}$ (A) | N° relays | Pre-alarm relay | Módulos | Mounting | Delay | Communications | Protocol | Power supply |
|--------------------------|----------------------|--------------------|-----------|-----------------|---------|----------|----------------------|----------------|------------|-----------------|
| Possibility UL on demand | | | | | | | | | | |
| P11A71. | RGU-100A0,03 ...30 A | | 2 | Yes | 3 | DIN rail | 0,1... 5 s, INS, SEL | RS-485 | Modbus RTU | 110 ... 230 Vac |

For supply voltages other than 230 Vac, please consult us.



RGU-100A

Electronic differential relay compatible with WGC series external transformer

Code: P11A71.

Dimensions



Connections

