



RGU-10C MT

RGU-10C MT, Reclosing residual current relay

Code: P24652.

- > Communications: RS-485
- > $I_{\Delta n}$ (A): 0,03 ... 30 A
- > Delay: 0,02...10 s, INS, SEL
- > Nr. reclosures: Programmable
- > Time between reclosures: Programmable
- > Breaking element: RECmaxMP | MT-FDE

Description

Electronic residual current protection relay of the **WGC** series connected to the external toroidal transformers of the **WG** / **WGS** / **WGC** series. It is connected to a motorized circuit breaker of the MT series or similar, as a circuit breaker. The self-reclosing can be programmed by residual current and/or circuit breaker trip. Super-immunised type-A relay with high-frequency current filtering and high immunity. True root mean square (TRMS) measure.

The backlit display shows the following information:

- Adjustment values
- Instantaneous leakage current

Features two independent outputs:

- Trip relay
- Interlocking relay for end of reclosing sequence

Other features:

- External input for remote-control functions (230 V~)
- Automatic test of the connection and external transformer status
- Optional RS-485 communication: type **RGU-10C MT**
- Compact size: 3 modules
- Assembly on **DIN 46277** rail (**EN-50022**).

Application

The **RGU-10 MT** relays associated with the transformers of the **WGC** series enable smart residual current protection. These are used jointly with an MV or similar circuit breaker to enable self-reclosing after a trip (circuit breaker and residual current reclosing), offering a very good solution for street lights, ATMs, refrigerating chambers, etc. Their design features guarantee maximum security and electrical service continuity, avoiding unwanted tripping.



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Electronic residual current relay

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Specifications

AC power supply

| | |
|-----------------|-----------------|
| Consumption | 6 VA |
| Frequency | 50/60 Hz |
| Nominal voltage | 230 V~ (± 20 %) |

Mechanical characteristics

| | |
|----------------------------------|-----------------------|
| Size (mm) width x height x depth | 52.5 x 85 x 67.9 (mm) |
| Fastening | DIN rail |
| Weight (kg) | 0,24 |

Environmental characteristics

| | |
|--|----------------------------------|
| Protection class | IP 20 (terminals), IP 41 (front) |
| Relative humidity (without condensation) | 5 ... 95 % |
| Ambient temperature | -40 ... +85 °C |
| Working temperature | -10 ... +50 °C |

External reset input for tripping

| | |
|------|-------------------------------|
| Type | Non-optocoupled, voltage-free |
|------|-------------------------------|

Standards

| | |
|---------------------------------------|------------------------|
| Electrical safety, Maximum height (m) | 2000 |
| Standards | IEC 61008-1, IEC 60755 |

User interface

| | |
|--------------|-------------|
| Display type | Backlit LCD |
|--------------|-------------|

Digital relay outputs

| | |
|--------------------|----------------------|
| Nominal load in AC | 2500 VA |
| Nominal current | 6 A ~ |
| Nominal voltage | 230 V ~ |
| Maximum current | 10 A ~ |
| Mechanical life | 10 x 10 ⁶ |

Differential protection

| | |
|----------------------|--|
| Type | Type A ultra-immunised |
| Sensitivity (IΔn), A | 0,03 ... 3 / 5-10-30 (Setup) |
| Delay time (tΔ) | 0.02 ... 10 s - Inverse curve: SEL/INS |
| Transformer | External, WG / WGS series |



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Protection

| | |
|----------------------|---|
| Circuit breaker type | Motorised circuit breaker (with and without coil) |
|----------------------|---|

Serial communication

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

RGU-10 MT

Reclosing residual current relay for motorized circuit breakers

| CODE | TYPE | IΔn (A) | Breaking element |
|---------|------------|---------------|-------------------|
| P24642. | RGU-10 MT | 0,03 ... 30 A | RECmaxMP MT-FDE |
| P24652. | RGU-10C MT | 0,03 ... 30 A | RECmaxMP MT-FDE |

The delay is cancelled in all relays with a sensitivity adjustment of 0.03 A, IEC 60947-2, annex M
INS, SEL trip curves, according to IEC 61008-1, for trigger coils with a trip time <0.02 s
Requires a WGS/WGC residual current transformer (not included).
To operate with RECmax MP (in<63 A), with MT-TSD (in>63 A)



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Dimensions



Connections

