



RGU-10C MT, Reclosing residual current relay

Code: P24652.

> Communications: RS-485 > IΔn (A): 0,03 ... 30 A > Delay: 0,02...10 s, INS, SEL > Nr. reclosures: Programmable

> Time betwen 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. Superimmunised 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
- o Instantaneous leakage current

Features two independent outputs:

- Trip relay
- o Interlocking relay for end of reclosing sequence

Other features:

- External input for remote-control functions (230 V~)
- o Automatic test of the connection and external transformer status
- o Optional RS-485 communication: type **RGU-10C MT**
- o 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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## 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)	0,236
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	
Туре	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 <sup>6</sup>
Differential protection	
Туре	Type A ultra-immunised
Sensitivity (I∆n), 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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#### Connections Dimensions









