



## RGE-R

RGE-R, Residual current relay

Code: P122320040000

- > Módulos: 2
- > N° relays: 1
- >  $I_{\Delta n}$  (A): 0,03 ... 5 A
- > Power supply (Vac): 24...48 Vac | 24...125 Vdc
- > Delay: 0,02 ... 5 s (\*1)
- > Mounting: DIN rail

### Description

Electronic residual current protection relay, used to connect to the residual current transformers WG / WGC Series. These electronic relays offer a high reliability, with the option of a fixed or adjustable sensitivity and delay Type A relay with high frequency current filtering and high immunity. Monitoring of the true root mean square (TRMS).

- Assembly on **DIN rail 46277**
- Reduced size: 2 modules
- LED indicators:
  - Permanently lit leak indicator: LED Trigger relay
  - Flashing power LED and lit leak LED: detection of faults in the transformer's continuity
  - Flashing leak LED indicator:
    - Leak with a value under the value selected
    - 1 flash every 2s: 25 ... 50% of the leakage current
    - 1 flash every 1s: 50 ... 75%
    - 2 flashes every 1s: 75 ... <100%
    - Permanently: 100 %

### Application

The relays of the RGE series and the transformer of the WG / WGC series enable a full residual current protection for both single and three-phase lines. They guarantee maximum security and continuity of the electrical service, avoiding unwanted tripping.



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### Specifications

#### AC power supply

|                       |               |
|-----------------------|---------------|
| Installation category | CAT III 300 V |
| Consumption           | 3 VA          |
| Frequency             | 50/60 Hz      |
| Nominal voltage       | 24 ... 48 V~  |

#### DC power supply

|                 |                               |
|-----------------|-------------------------------|
| Consumption     | 2,5 W                         |
| Nominal voltage | 24 ... 125 Vdc ( $\pm 15\%$ ) |

#### Mechanical characteristics

|                                  |                   |
|----------------------------------|-------------------|
| Size (mm) width x height x depth | 35 x 85 x 68 (mm) |
| Envelope                         | Polycarbonate     |
| Fastening                        | DIN 46276         |
| Weight (kg)                      | 0,056             |

#### Environmental characteristics

|  |                |
|--|----------------|
| Protection class                         | IP 20          |
| Relative humidity (without condensation) | 5 ... 95 %     |
| Working temperature                      | -10 ... +50 °C |

#### Standards

|  |                          |
|--|--------------------------|
| Electrical safety, Maximum height (m)    | 2000                     |
| Electrical safety, Installation category | CAT III 300 V            |
| Standards                                | IEC 60755, IEC 60947-2-M |

#### Electrical safety

|            |   |
|------------|---|
| Insulation | Double-insulated electric shock protection class II (IEC 61010-1) |
|------------|---|

#### Digital relay outputs

|                            |         |
|----------------------------|---------|
| Maximum current            | 10 A ~  |
| Maximum power              | 2500 VA |
| Maximum switching capacity | 2500 VA |

#### Differential protection

|                                   |                          |
|-----------------------------------|--------------------------|
| Type                              | Type A ultra-immunised   |
| Sensitivity ( $I_{\Delta n}$ ), A | 0,03 ... 5 seleccionable |
| Delay time ( $t_{\Delta}$ )       | 0.02... 5 s (selectable) |



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### Protection

|                      |   |
|----------------------|---|
| LED indication       | Power supply voltage Earth leakage tripping External transformer disconnection Prealarm |
| Measure              | True root mean square (TRMS)  |
| Circuit breaker type | Contact or Circuit Breaker + trigger coil   |

### RGE-R

Residual current relay, type A, for WGC transformer, 2 modules with visual prealarm.

| CODE          | TYPE   | N° relays | I $\Delta$ n (A) |
|---------------|--------|-----------|------------------|
| P12A32.       | RGE-RL | 1         | 0,03 ... 5 A     |
| P122320040000 | RGE-R  | 1         | 0,03 ... 5 A     |

Requires a WGC residual current transformer To encode other parameters, such as the auxiliary power supply voltage, see the table at the end of the section



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### Dimensions



### Connections

