



RGE-R, Residual current relay

Code: P122320040000

> Módules: 2

> N° relays: 1

> I∆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).

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







Electronic residual current relay

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## **Specifications**

Installation category  Consumption  3 VA  Frequency 50/50 Hz  Nominal voltage  24 — 48 V-  DC power supply  Consumption 2,5 W Nominal voltage 24 — 125 Vdc (±15 %)  Mechanical characteristics  Size (mm) width x height x depth 35 x 85 x 68 (mm)  Envelope Polycurbonate Envelope Polycurbonate Envelope Polycurbonate Fastening ONI 46276  Weight (kg) 0,056  Environmental characteristics  Frotection class IP 20 Relative humidity (without condensation) 5 — 95 %  Working temperature 10 — +50 °C  Standards  Electrical safety, Maximum height (m) Electrical safety, Installation category Standards  Electrical safety Installation category  Standards  Electrical safety Insulation Double-insulated electric shock protection class II (EC 61010-1)  Digital relay outputs  Maximum power 2500 VA Maximum switching capacity 2500 VA  Maximum nower 2500 VA  Maximum switching capacity 75 speed author-immunised Delay time (10) 0,02 . 5 s (seetcable)  Sensitivity (1dn.), A 0,03 5 seleccionable Delay time (10) 0,02 5 s (seetcable)	AC power supply	
Frequency 50/60 Hz Nominal voltage 24 48 V-  DC power supply  Consumption 2.5 W Nominal voltage 24 125 Vidc (±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 Protection class Protection class Protection class Protection state Protection Standards Protection Protection Protection Standards Protection Protection Standards Protection Protectio	Installation category	CAT III 300 V
Nominal voltage 24 48 V-  Consumption 2.5 W Nominal voltage 24 125 Vdc (a15 %)  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 corrent 10 A - Maximum power 2500 VA Maximum switching capacity 5500 VA  Differential protection  Type Type A ultra-immunised Sensitivity (lán), A 0,03 5 seleccionable	Consumption	3 VA
DC power supply  Consumption 2,5 W Nominal voltage 24 125 Vdc (±15 %)  Mechanical characteristics  Size (mm) width x height x depth 35 x 85 x 68 (mm)  Envelope Polycarbonate Fastening DN 46276  Weight (kg) 0,056  Environmental characteristics  Protection class P 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 Electrical safety  Insulation Double-insulated electric shock protection class II (EC 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 (lún), A  0,03 5 seleccionable	Frequency	50/60 Hz
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Electrical safety, Maximum height (m)  Electrical safety, Installation category  Standards  Electrical safety  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  Differential protection  Type  Type A ultra-immunised  Sensitivity (IΔn), A  0,03 5 seleccionable	Working temperature	-10 +50 °C
Electrical safety, Installation category  Standards  Electrical safety  Insulation  Double-insulated electric shock protection class II (IEC 61010-1)  Digital relay outputs  Maximum current  Maximum power  2500 VA  Maximum switching capacity  Differential protection  Type  Type A ultra-immunised  Sensitivity (IΔn), A  0,03 5 seleccionable	Standards	
Electrical safety  Insulation  Double-insulated electric shock protection class II (IEC 61010-1)  Digital relay outputs  Maximum current  Maximum power  Maximum switching capacity  Differential protection  Type  Type A ultra-immunised  Sensitivity (I∆n), A  0,03 5 seleccionable	Electrical safety, Maximum height (m)	2000
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 (IΔn), A       0,03 5 seleccionable	Electrical safety, Installation category	CAT III 300 V
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∆n), A       0,03 5 seleccionable	Standards	IEC 60755, IEC 60947-2-M
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∆n), A     0,03 5 seleccionable	Electrical safety	
Maximum current       10 A ~         Maximum power       2500 VA         Maximum switching capacity       2500 VA         Differential protection         Type       Type A ultra-immunised         Sensitivity (IΔn), A       0,03 5 seleccionable	Insulation	Double-insulated electric shock protection class II (IEC 61010-1)
Maximum power     2500 VA       Maximum switching capacity     2500 VA       Differential protection       Type     Type A ultra-immunised       Sensitivity (IΔn), A     0,03 5 seleccionable	Digital relay outputs	
Maximum switching capacity     2500 VA       Differential protection       Type     Type A ultra-immunised       Sensitivity (IΔn), A     0,03 5 selectionable	Maximum current	10 A ~
Differential protection       Type     Type A ultra-immunised       Sensitivity (I∆n), A     0,03 5 seleccionable	Maximum power	2500 VA
Type Type A ultra-immunised Sensitivity (I∆n), A 0,03 5 selectionable	Maximum switching capacity	2500 VA
Sensitivity (I∆n), A 0,03 5 seleccionable	Differential protection	
	Туре	Type A ultra-immunised
Delay time ( $t\Delta$ ) 0.02 5 s (selectable)	Sensitivity (I∆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	Contactor or Circuit Breaker + trigger coil

#### RGE-R

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

CODE	TYPE	N° relays	IΔn (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





