



CBS-4C-RA

CBS-4C-RA, Central residual current protection

Code: P24912.

- > Communications: RS-485
- > N° relays: 4
- > $I_{\Delta n}$ (A): 0,03 ... 30 A
- > Delay: 0,02...10 s, INS, SEL
- > Nr. reclosures: Programmable
- > Breaking element: Contactor
- > Type of protection: Type A

Description

Unit equivalent to 4 residual current protection relays. 4 independent programmable relays available

4 inputs to connect the external toroidal transformers of the **WG / WGS / WGC**

Self-reclosing with programmable residual current trip in each channel

Superimmunized Type A relay with high frequency current filtering and high immunity. Monitoring in true root mean square (TRMS)

Reduced size: 3 modules

5 independent programmable outputs:

- 4 residual current trip outputs
- 1 end-of-reclosing-sequence interlocking output

Backlight display to show the information of the 4 channels:

- Adjustment values
- Instantaneous leakage current

Trip/external reset input

Automatic test of the connection and status of each external transformer

Optional RS-485 Communications: type **CBS-4C RA** and **CBS-4C RAL**

Assembly on DIN rail 46277 (**EN-50022**)

Optional assembly on 72 x 72 panel with accessory **M5ZZF1**.

Application

CBS-4 RA or CBS-4 RAL allow an intelligent residual current protection, with greatly reduced dimensions. A contactor is available per channel, enabling the automatic reclosure after a trip, thus offering the most adequate solution for public lighting, cash machines, refrigeration chambers, traffic lights, etc. In addition, version CBS-4 C, with RS-485 communications, is used with the Power Studio software and it adds the centralised supervision in real-time, as well as a record log that can be analysed later on.



CBS-4C-RA

Multipoint residual current system for measurement and signalling with external transformer of the WGS / WGS series

Code: P24912.

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) |
| Envelope | Polycarbonate V0 |
| Fastening | DIN (IEC 60715) |
| Weight (kg) | 0,28 |

Environmental characteristics

| | |
|--|--|
| Protection class | IP 41 (front), IP 20 (side and rear cover) |
| Relative humidity (without condensation) | 5 ... 95 % |
| Storage temperature | -20 ... +55 °C |
| Working temperature | -10 ... +50 °C |

Varistor characteristics

| | |
|-----------------|--------|
| Maximum voltage | 275 V~ |
|-----------------|--------|

External reset input for tripping

| | |
|-----------------|--------------|
| Type | Optocoupled |
| Maximum power | 0,7 W |
| Maximum voltage | 230 V~ ±20 % |

Standards

| | |
|---------------------------------------|---------------------------------------|
| Electrical safety, Maximum height (m) | 2000 |
| Standards | IEC 60947-2-M, IEC 62020, IEC 61008-1 |

User interface

| | |
|--------------|--------|
| LED | 2 |
| Keyboard | 7 keys |
| Display type | LCD |

Digital relay outputs

| | |
|---------------------|---------|
| Nominal load in AC1 | 1500 VA |
| Nominal current | 6 A ~ |
| Nominal voltage | 230 V ~ |



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Multipoint residual current system for measurement and signalling with external transformer of the WGS / WGS series

Code: P24912.

| | |
|-----------------------------------|--|
| Maximum current | 10 A ~ |
| Differential protection | |
| Type | Type A ultra-immunised |
| Sensitivity ($I_{\Delta n}$), A | 0,03 ... 30 |
| Delay time (t Δ) | Programmable: 0.02 ... 10s Inverse curve: Instantaneous or selective |
| Transformer | External, WG (WG/WGS/WGC) series |
| Protection | |
| Measure | True root mean square (TRMS) |
| Circuit breaker type | Contactors |
| Serial communication | |
| Protocol | Modbus/RTU |
| Technology / Type | RS-485 |

CBS4-RA

Central protection and residual current reclosing with WGC external transformer

| CODE | TYPE | $I_{\Delta n}$ (A) | Breaking element |
|---------|-----------|--------------------|------------------|
| P24911. | CBS-4 RA | 0,03 ... 30 A | Contactors |
| P24912. | CBS-4C-RA | 0,03 ... 30 A | Contactors |

Requires an residual current transformer, WGC type (not included). The breaking element to be associated must be a contactor not included.
To encode other parameters, see the table at the end of the section



CBS-4C-RA

Multipoint residual current system for measurement and signalling with external transformer of the WGS / WGS series

Code: P24912.

Dimensions



Connections

