

Earth leakage protection and self-reclosing

Earth leakage station + contactor + external transformer

# CBS-4 RA / RAL

Earth leakage relay station WG / WGC Series



## Description

- Unit equivalent to 4 earth leakage protection relays. 4 independent programmable relays available
- 4 inputs to connect the external toroidal transformers of the **WG / WGS / WGC**
- Self-reclosing with programmable earth leakage 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 earth leakage 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**.

## Features

Protection	Earth Leakage
Class	A superimmunized
Measurement	True root mean square (TRMS)
Sensitivity $I_{\Delta n}$	0.03 A ... 30 A
Delay	Programmable: 0.20 ms ... 10 s Inverse curve: instantaneous or selective
Earth leakage transformer	External, <b>WG Series (WG / WGS / WGC)</b>
Test and Reset	With built-in button
Associated circuit breaker	Contactors
$I_n$ and no. of poles	Defined by the contactor used
Reclosure	Earth Leakage
No. of reclosures	Programmable
Time between reclosures	Programmable
Partial counter reset time	Programmable
Features	
Auxiliary power supply	230 Vac ( $\pm 20\%$ ) 50 ... 60 Hz
Contacts with 4 earth leakage outputs	250 Vac, 5 A
Operating temperature	-10 ... +50 °C
Construction features	
Fixing	DIN rail
Dimensions	3 modules
Weight	236 g
Degree of protection	IP 20 Terminals, IP 41 back panel
Standards	
IEC 61008-1, IEC 755, IEC 255-5	

## Application

**CBS-4 RA** or **CBS-4 RAL** allow an intelligent earth leakage protection, with greatly reduced dimensions. A contactor is available per channel, enabling the automatic reclosure after a

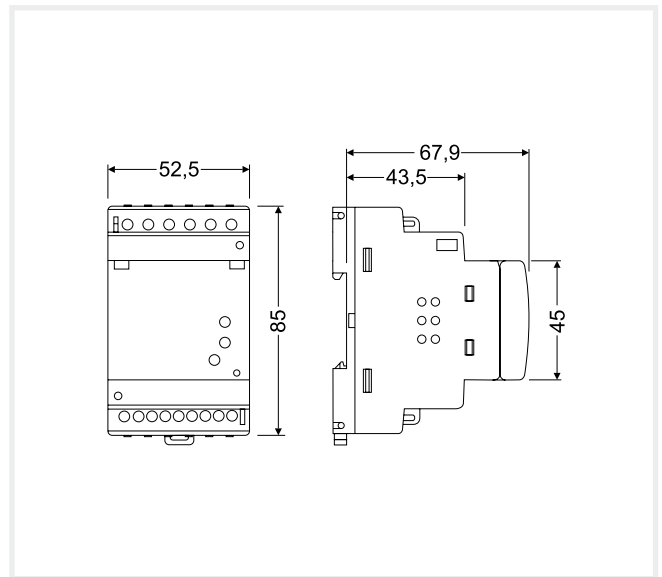
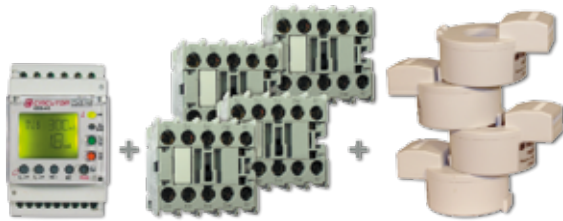
trip, thus offering the most adequate solution for public lighting, cash machines, refrigeration chambers, traffic lights, etc. In addition, version **CBS-4 C**, with RS-485 communications,

is used with the **PowerStudio** software and it adds the centralised supervision in real-time, as well as a record log that can be analysed later on.

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Dimensions

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 Earth leakage relay unit WG / WGC Series



References

Size	Communications	No. of Relays	No. of reclosures	Type	Code
3 modules	-	4 / NO	Programmable	<b>CBS-4 RA</b>	<b>P24911</b>
3 modules	RS-485	4 / NO	Programmable	<b>CBS-4 C RA</b>	<b>P24912</b>
3 modules	-	4 / NC	Programmable	<b>CBS-4 RAL</b>	<b>P24A11</b>
3 modules	RS-485	4 / NC	Programmable	<b>CBS-4 C RAL</b>	<b>P24A12</b>

Connections

