

## WG Series

**CBS-4** / CBS-4 C

Earth leakage monitoring and signaling unit of the external transformer of the WG / WGC Series



## Description

- Unit equivalent to 4 earth leakage protection networks. 4 independent programmable relays available
- Four inputs to connect the external toroidal transformers of the **WG**
- Superimmunized Type A relay with high frequency current filtering and high immunity. Monitoring in true root mean square (TRMS)
- Reduced size, with 3 modules
- 5 independent programmable outputs (4 earth leakage trip relays and 1 pre-alarm trip).

## Application

The **CBS-4** earth leakage unit associated to the transformers of the **WG / WGC** Series allows a smart earth leakage protection. Its design features guarantee maximum security and continuity of the electrical service, avoiding unwanted tripping.

Showing the value of the leak instantaneously on the display with the pre-alarm indications provides the information about the state of lines being protected, thus allowing the implementation of an adequate preventive maintenance approach.

In addition, version **CBS-4 C** with RS-485 communications is used with the PowerStudio *software*, which allows the centralised supervision of the system in real time, with a record log that can be analysed later on.

## Features

<b>Protection</b>	
No. of protections	4 Independent lines
Class	A superimmunized
Measurement	True root mean square (TRMS)
Sensitivity	0.03 A ... 30 A
Delay	Time defined: 0,02 ... 10 s Inverse curve: instantaneous or selective
Earth leakage transformer	External, TRANSFORMERS <b>WG/WGP</b>
Test and Reset	With built-in buttons, T & R
Associated circuit breaker	Contact or Circuit breaker + trigger coil
LED indicator	<ul style="list-style-type: none"> <li>• Power supply voltage</li> <li>• Leakage trip</li> <li>• Pre-alarm</li> <li>• Interlocked earth leakage self-reclosing</li> </ul>
Display View	<ul style="list-style-type: none"> <li>• Current trip (red display when triggered)</li> <li>• Instantaneous leak level indicator in each channel</li> <li>• Parameter programming</li> <li>• State of the self-reclosing- Disconnected external trans. indicator- Automatic self-reclosing enabled</li> </ul>
<b>Features</b>	
Auxiliary power supply	230 Vac (± 20 %) 50 ... 60 Hz
Output contacts	250 Vac, 5 A
Operating temperature	-10 ... +50 °C
<b>Construction features</b>	
Fixing	DIN Rail 46277 (EN 50022)
Dimensions	3 modules
Weight	236 g
Degree of protection	IP 20 Terminals, IP 41 back panel
<b>Standards</b>	
<b>IEC 60947-2, IEC 60755, IEC 62020, IEC 61008</b>	

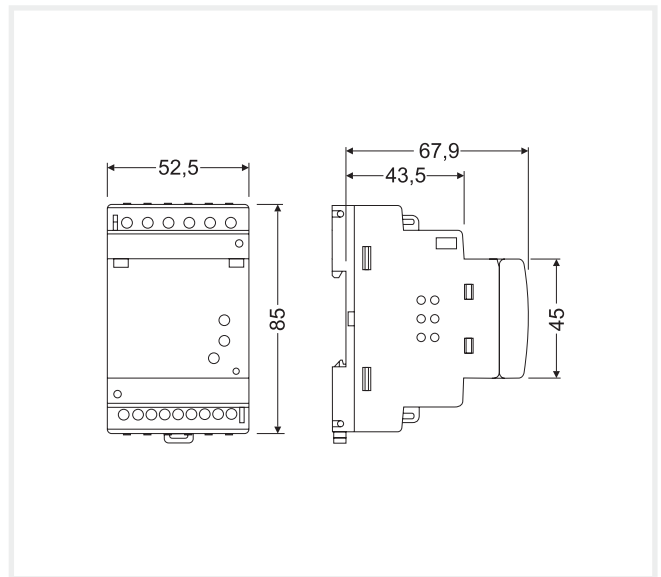
WG Series

### CBS-4 / CBS-4 C

Earth leakage monitoring and signaling unit of the external transformer of the WG / WGC Series



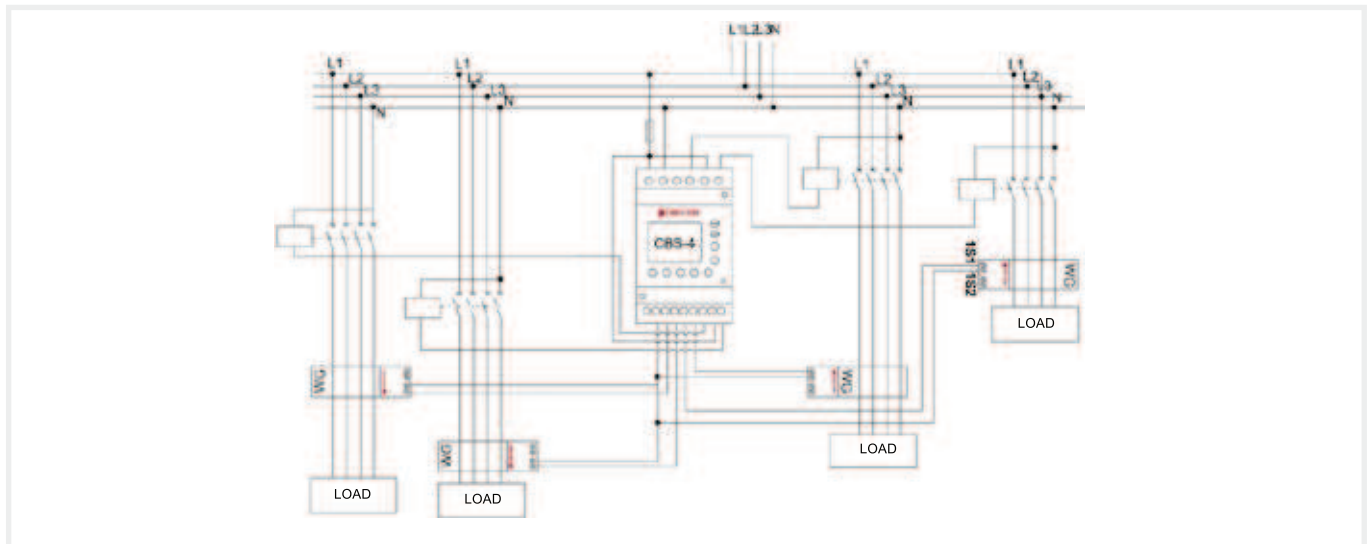
#### Dimensions



#### References

Size	Communications	No. of Relays	$I_n$ (A)	Type	Code
3 modules	-	4	0.03 ... 30 s	<b>CBS-4</b>	<b>P12711</b>
3 modules	RS-485	4	0.03 ... 30 s	<b>CBS-4 C</b>	<b>P12712</b>

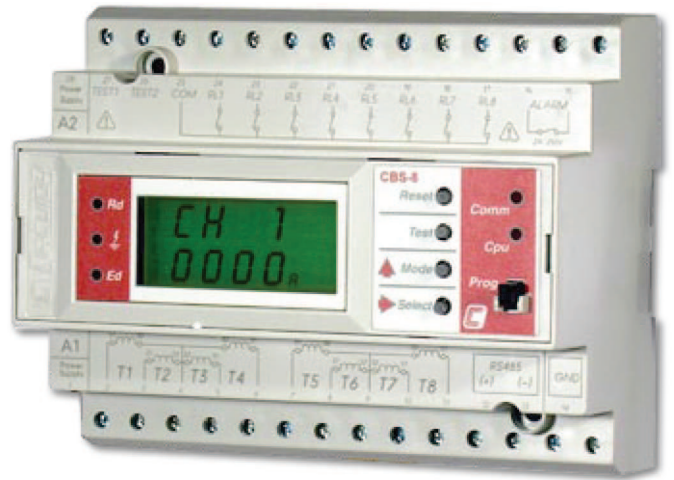
#### Connections



WG Series

# CBS-8

Earth leakage monitoring and signaling unit of the external transformer of the WG / WGP Series



## Description

- Unit equivalent to 8 earth leakage protection networks. 8 independent programmable relays available
- 8 inputs to connect the external toroidal transformers of the **WG / WGP**
- Superimmunized Type A relay with high frequency current filtering and high immunity. Monitoring in true root mean square (TRMS)
- Size adapted for 8 modules
- 9 independent programmable outputs (8 earth leakage trip relays and 1 pre-alarm trip).

## Application

The **CBS-8** earth leakage station associated to the transformers of the **WG / WGP** Series allows an smart earth leakage protection. Its design features guarantee maximum security and continuity of the electrical service, avoiding unwanted tripping.

Showing the value of the leak instantaneously on the display with the pre-alarm indications provides the information about the state of lines being protected, thus allowing the implementation of an adequate preventive maintenance approach.

In addition, RS-485 communications are used with the **Power Studio** software, which allows the centralised supervision of the system in real time, with a record log that can be analysed later on.

## Features

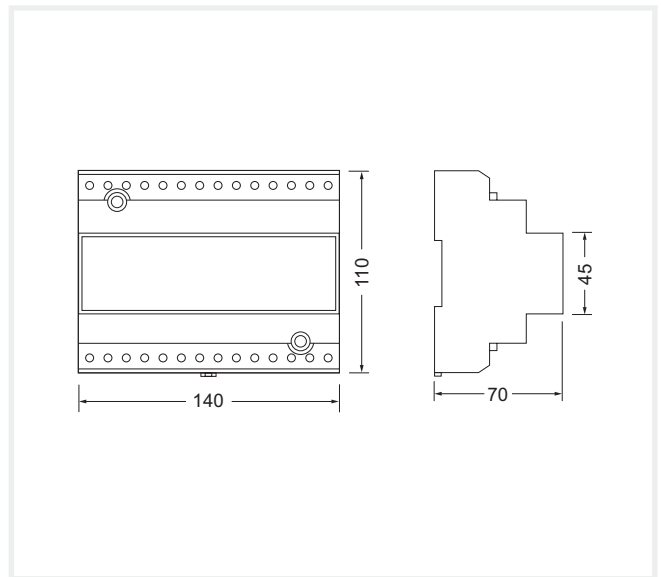
Protection	
No. of protections	8 Independent lines
Class	A superimmunized
Measurement	True root mean square (TRMS)
Sensitivity	0.03 A ... 6.3 A external transformers <b>WG / WGS</b> 0.03 A ... 63 A external transformers <b>WGP/WGSP</b>
Delay	Time defined: 0.02 ... 10 s Inverse curve: instantaneous or selective
Earth leakage transformer	External, TRANSFORMERS <b>WG / WGP</b>
Test and Reset	With built-in buttons, T & R
Associated circuit breaker	Contact or Circuit breaker + trigger coil
Self-reclosing	
No. of reclosures	0 Programming option ... 10
Time between reclosures	0 Programming option ... 900 s
Partial counter reset time	Double the reclosing time
LED indicator	<ul style="list-style-type: none"> <li>• Power supply voltage</li> <li>• Leakage trip</li> <li>• Pre-alarm</li> <li>• Interlocked earth leakage reclosing</li> <li>• Automatic self-reclosing enabled</li> </ul>
Display View	<ul style="list-style-type: none"> <li>• Instantaneous leak level indicator in each channel</li> <li>• Parameter programming</li> <li>• Self-reclosing status</li> </ul>
Features	
Auxiliary power supply	230 Vac (± 20 %) 50 ... 60 Hz
Output contacts	250 Vac, 5 A
Operating temperature	-10 ... +50 °C
Construction features	
Fixing	DIN Rail 46277 (EN 50022)
Dimensions	8 modules
Weight	609 g
Degree of protection	IP 20 Terminals, IP 41 back panel
Standards	
IEC 60947-2, IEC 60755, IEC 62020, IEC 61008	

WG Series

**CBS-8**

Earth leakage monitoring and signaling unit of the external transformer of the WG / WGP Series

Dimensions



References

Size	Communications	No. of Relays	$I_n$ (A)	Type	Code
8 modules	RS-485	8	0.03 ... 63 A	CBS-8 (*)	P12811

(\*) In the case of the 0.3 ... 63 A scale, use earth leakage transformers of the WGP / WGSP

Connections

