

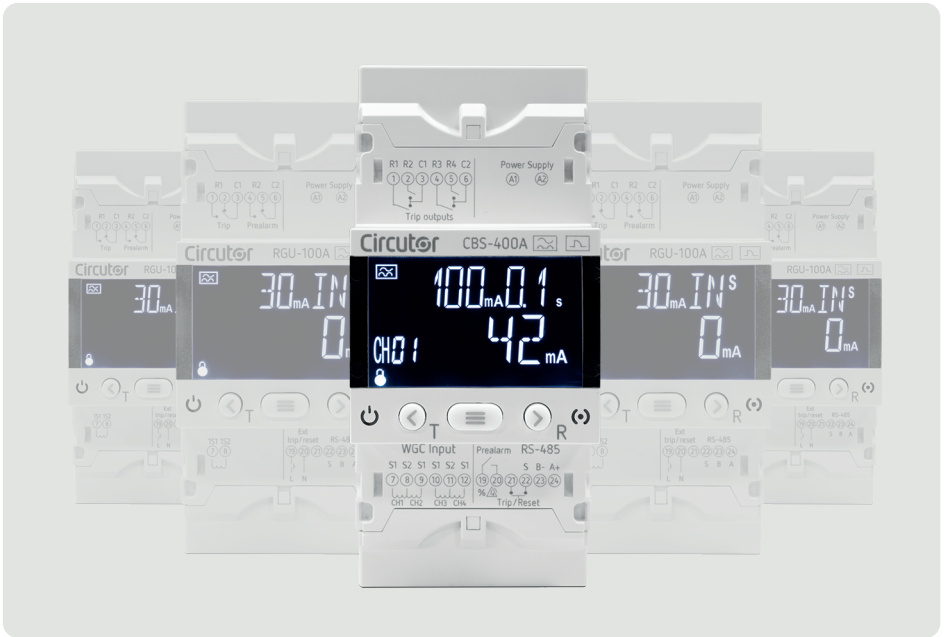


PROTECTION & CONTROL

CBS-40A / CBS-400A

Type A monitoring & RCD
protection relay with 4 channels

Maximum protection, minimum space.



The correct installation of residual current protection devices provides protection to both people and to the loads in the installation. These solutions ensure service continuity in your installation, avoiding decreases in productivity rates and economic losses due to service outages.

The **CBS-40A** and **CBS-400A** switchboards are the perfect solutions for protecting up to 4 loads or circuits, completely independently, guaranteeing the best service continuity thanks to all the features offered by the ultra-immunized system.

This solution is ideal for protection panels where there is more than one load or line to be protected, offering a reduction in both size and cost. Ideal for preventive maintenance, with local or remote display, and offering high immunity against transients and harmonics.

CBS-40A / CBS-400A

Type-A monitoring and RCD protection relay with 4 channels

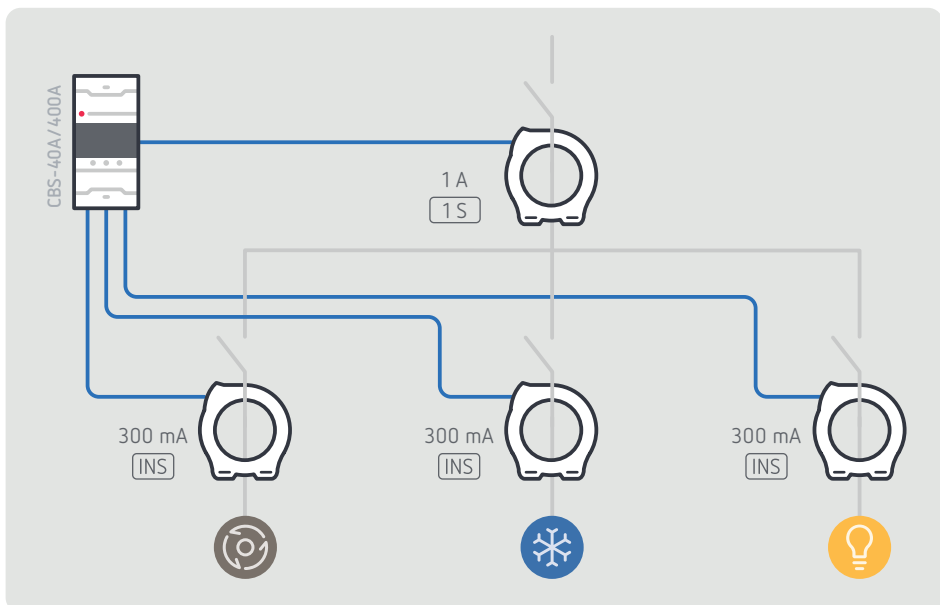
CBS-40A / CBS-400A are electronic relays for protecting and monitoring differential currents with 4 fully independent channels (IEC 60947-2 An. M), compatible with the toroidal devices of the **WGC series**.

Versatility

Wide range of sensitivities, from 30 mA to 30 A, and adjustable delays from INS (instantaneous) to 5 s. A relay can be installed anywhere in the system, from the load itself or in a distribution panel, from the load itself or in a distribution panel, or even in the header.

- 👁️ Real-time display of residual current
- 👁️ Display of the residual current that tripped it
- 🔧 Preventive maintenance with alarms
- ⚡ Greater immunity to harmonic frequencies
- 📱 Saves space in the panel.

Sample Installation



The most comprehensive protection

Avoid spurious trips with the ultraimmunized system



Trip margin between 85%-100% of the sensitivity range.

A residual current relay can trip above 50% of its rating (IEC 60947-2-M). Ultraimmunized devices trip at a minimum of 85%, **only acting when necessary.**



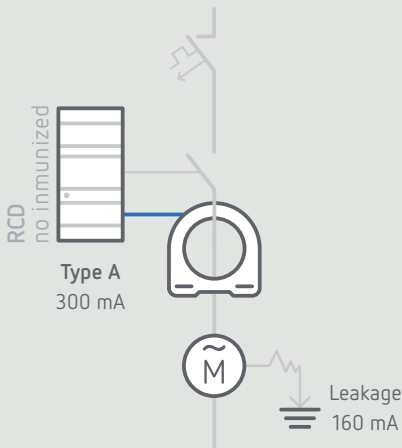
Filtering of high-frequency leaks.

Filters the leakage current with frequencies above 50/60 Hz to **avoid trips caused by harmonics.**

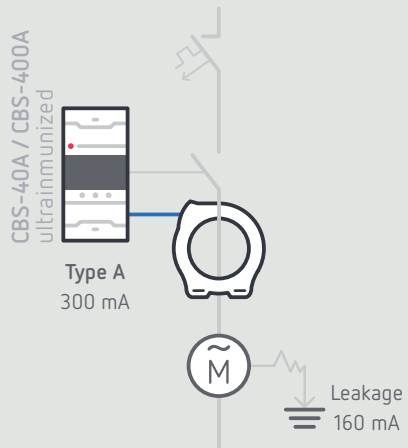


More immunity to grid transients up to 3 kA for 8/20 μ s pulses.

Avoids unexpected trips in the event of weather or transitory phenomena caused by the distribution grid.



It can trip!

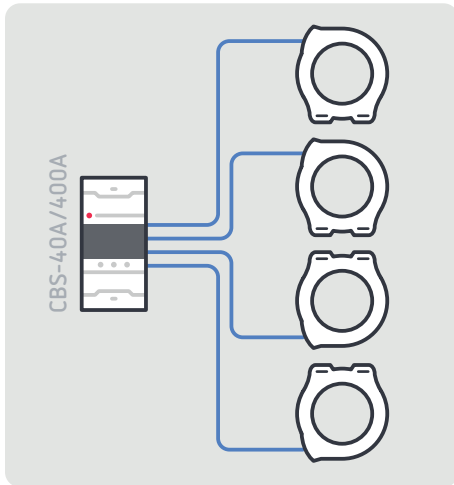


Does not trip until 250 mA
(85% of its sensitivity)

Real-time display and monitoring

Real-time leakage monitoring to keep track of the current. The display is backlit in red when it trips, making it easier to identify the line containing the fault.

The operational mode of the device is easy to identify thanks to the multi-coloured backlit display.

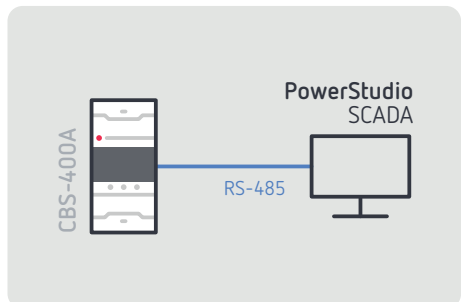


Saves space in the electrical panel

It allows programming and recording events independently, with WGC transformers for each channel.

Monitor your leaks with the CBS-400A

The CBS-400A has an RS-485 channel to communicate with your Scada system via the Modbus RTU protocol. Remotely view the leakage current in your RCD to get ahead of any problem, creating alarms before the device trips to avoid indirect costs due to tripping lines or loads.



Use cases for ultraimmunized protection

The CBS-40A / CBS-400A relays are the most complete type-A protection to guarantee the safety of people and ensure continuity of supply in electrical installations.

Its ultra-immunized system guarantees that a trip will only occur when it is absolutely necessary, avoiding financial losses due to unwanted trips.



Compatible transformers



WGC Closed core



TP-WGC Split core

Technical specifications

Protection and monitoring	Type	A (ultraimmunized)
	Sensitivity range $I_{\Delta n}$	0.03... 30 A
	t_{Δ} delay	INS, SEL, 0,1...5 s
	Transformer type	External, WGC series, TP-WGC
	Remote signalling	Pre-alarm, alarm
Characteristics specifications	Auxiliary power supply	110...230 VAC \pm 15% (50/60 Hz)
	Consumption	6.5 VA
	Installation category	Cat III 300V
2 Relay Outputs	Relay 1	Pre-alarm
	Relay 2	Alarm
	Maximum voltage	230 VAC
	Maximum current	6 A
	Maximum switching power	1500 VA
Digital input	Type	Voltage-free
	Insulation	3 kV
Communications (only CBS-400A)	Protocol	Modbus/RTU
	Fieldbus	RS-485
Mechanical Characteristics	Attachment	DIN 46277 (EN 50022) rail or Panel with accessory
	Dimensions	52.5 x 118 x 74 mm (3 modules)
	Protection rating	IP 30 terminals, Front IP 40
	Enclosure	Self-extinguishing V0 plastic
Standards	IEC 60947-2-M	

References

Type	Code	$I_{\Delta n}$	Delay	Power Supply	Communications
CBS-40A	P12A70.	0.03 ... 30 A	INS, SEL , ... 5 s	110... 230 VAC	-
CBS-400A	P12A71.	0.03 ... 30 A	INS, SEL , ... 5 s	110... 230 VAC	Modbus RTU / RS-485

Compatible transformers

Compatible transformers for type A residual current protection: **WGC** and **TP-WGC**.

View codes at: www.circutor.com

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