



## CBS-4C

CBS-4C, Station with 4 programmable residual current relays, type A

Code: P12712.

- > Protocol: Modbus/RTU
- > Módulos: 3
- > Pre-alarm relay: Yes
- > Communications: RS-485
- > N° relays: 4
- >  $I_{\Delta n}$  (A): 0,03 ...30 A
- > Power supply (Vac): 230 Vac
- > Delay: 0,02 ... 10 s, INS, SEL
- > Mounting: DIN rail

### Description

- Unit equivalent to 4 residual current protection networks. Features 4 independent programmable relays.
- Four inputs for connecting the external toroidal transformers of the **WGC / WGS** series.
- Super-immunised type-A relay with high-frequency current filtering and high immunity. True root mean square (TRMS) measure
- Compact size: 3 modules
- Features 5 independent programmable outputs (4 residual current tripping relays and 1 prealarm relay).

### Application

The **CBS-4** multipoint residual current system associated with the **WGC / WGS** transformers offers smart residual current protection. Its design features guarantee maximum security and electrical service continuity, avoiding unwanted tripping. Viewing the instantaneous leakage value on the display, together with the prealarm indicators, makes it possible to obtain information on the status of lines to be protected, and to perform adequate preventive maintenance.

In addition, version **CBS-4 C** features RS-485 communications and, with the PowerStudio software, offers centralised supervision in real time, as well as keeping a log of historical data for future analysis.



## CBS-4C

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

Code: P12712.

### Specifications

#### AC power supply

Consumption	6 VA
Frequency	50/60 Hz
Nominal voltage	110 - 230 V~ ( $\pm 20\%$ )

#### Mechanical characteristics

Size (mm) width x height x depth	52.5 x 85 x 67.9 (mm)
Fastening	DIN rail
Weight (kg)	0,28

#### Environmental characteristics

Protection class	IP 20 (terminals), IP 41 (rear panel)
Relative humidity (without condensation)	5 ... 95 %
Ambient temperature	-40 ... +85 °C
Working temperature	-10 ... +50 °C

#### Characteristics solid state contact for pre-alarm

	Max. power consumption 230 Vac : 5 VA / Umax. 275 Vac
--	---

#### Varistor characteristics

Maximum voltage	275 Vca
-----------------	---------

#### External reset input for tripping

Type	Optocoupled
Maximum power	0,7 W
Maximum voltage	230 Vca

#### Standards

Electrical safety, Maximum height (m)	2000
Electrical safety, Installation category	CAT III 300V ca
Standards	IEC 60947, IEC 60755, IEC 62020, IEC 61008

#### Electrical safety

Insulation	Double-insulated electric shock protection class II (IEC 61010-1)
------------	---

#### Digital relay outputs

Nominal load in AC1	1500 VA
Nominal current	6 A ~



## CBS-4C

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

Code: P12712.

Nominal voltage	250 V ~
Maximum current	10 A ~
Mechanical life	10 x 10 <sup>6</sup>

### Differential protection

Type	Type A ultra-immunised
Sensitivity (I <sub>Δn</sub> ), A	0,03 ... 30
Delay time (t <sub>Δ</sub> )	Programmable: 0.02 ... 10s Inverse curve: Instantaneous or selective
Transformer	External, WG / WGC series

### Protection

LED indication	Power supply voltage Earth leakage tripping Prealarm
Measure	True root mean square (TRMS)
Circuit breaker type	Contact or Circuit Breaker + trigger coil

### Serial communication

Protocol	Modbus/RTU
Technology / Type	RS-485

### CBS-4

4 channels residual current relays, type A, 3 modules with display and programmable prealarm output.

CODE	TYPE	I <sub>Δn</sub> (A)	N° relays	Pre-alarm relay	Módulos	Mounting	Delay	Communications	Protocol	Power supply	Usefull diam.(mm)	N° Input channels	Poles	In (A)
<b>Possibility UL on demand</b>														
P11A70.	RGU-10A	0,03 ...30 A	2	Yes	3	DIN rail	0,1... 5 s, INS, SEL	-	-	110 ... 230 Vac				
P11A71.	RGU-100A	0,03 ...30 A	2	Yes	3	DIN rail	0,1... 5 s, INS, SEL	RS-485	Modbus RTU	110 ... 230 Vac				
P11944.	RGU-10C	0,03 ...30 A	1	Yes	3	DIN rail	0,02 ... 10 s, INS, SEL	RS-485	Modbus/RTU	230 Vac				
P11A61.	RGU2	0,03 ... 5 A	1											
P12A32.	RGE-RL	0,03 ... 5 A	1											
P122320040000	RGE-R	0,03 ... 5 A	1											
P12204.	RG1M - 0,03	0,03 A	1											
P12214.	RG1M - 0,3	0,3 A	1											
P12711.	CBS-4	0,03 ...30 A	4											
P12712.	CBS-4C	0,03 ...30 A	4											
P12A70.	CBS-40A	0,03 ... 30 A	4	Yes	3					110 ... 230 V~				
P12A71.	CBS-400A	0,03 ... 30 A	4	Yes	3			RS-485	Modbus/RTU	110 ... 230 V~				
P14035.	WRU-10	0,03 ... 3 A   0,03 ...30 A	1								28			
P14036.	WRU-10-HS	0,01 ... 0,5 A	1								28			
<b>Relay mounted at 90°. It allows to reduce the mounting space</b>														
P16021.	WGBU-90-35	0,03 ... 3 A									35			
P16022.	WGBU-90-70	0,03 ... 3 A									70			
P16023.	WGBU-90-105	0,03 ... 3 A									105			



## CBS-4C

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

Code: P12712.

CODE	TYPE	I <sub>Δn</sub> (A)	N° relays	Pre-alarm relay	Módulos	Mounting	Delay	Communications	Protocol	Power supply	Useful diam.(mm)	N° Input channels	Poles	In (A)
P16024.	WGBU-90-140	0,03 ... 3 A									140			
P16025.	WGBU-90-210	0,03 ... 3 A									210			
P16011.	WGBU-35	0,03 ... 3 A									35			
P16012.	WGBU-70	0,03 ... 3 A									70			
P16013.	WGBU-105	0,03 ... 3 A									105			
P16014.	WGBU-140	0,03 ... 3 A									140			
P16015.	WGBU-210	0,03 ... 3 A									210			
P12B01.	CBS-1600A		2	Yes	6			RS-485	Modbus/RTU	230 V ~ (± 15%)		16 (A)		
<b>RGMD Series, type A - 2 poles</b>														
P13231.	RGMD-2-16-30												2	16 A
P13251.	RGMD-2-25-30												2	25 A
P13261.	RGMD-2-32-30												2	32 A
P13271.	RGMD-2-40-30												2	40 A
P13291.	RGMD-2-63-30												2	63 A
P13233.	RGMD-2-16-300												2	16 A
P13253.	RGMD-2-25-300												2	25 A
P13263.	RGMD-2-32-300												2	32 A
P13273.	RGMD-2-40-300												2	40 A
P13293.	RGMD-2-63-300												2	63 A
<b>RGMD Series, type A - 4 poles</b>														
P13431.	RGMD-4-16-30												4	16 A
P13451.	RGMD-4-25-30												4	25 A
P13461.	RGMD-4-32-30												4	32 A
P13471.	RGMD-4-40-30												4	40 A
P13491.	RGMD-4-63-30												4	63 A
P13433.	RGMD-4-16-300												4	16 A
P13453.	RGMD-4-25-300												4	25 A
P13463.	RGMD-4-32-300												4	32 A
P13473.	RGMD-4-40-300												4	40 A
P13493.	RGMD-4-63-300												4	63 A
P10181.	WGC-20-SC										20			
P10182.	WGC-30-SC										30			
P10131.	WGS-20										20			
P10132.	WGS-30										30			
P10151.	WGC-25										25			
P10152.	WGC-35										35			
P10153.	WGC-55										55			
P10154.	WGC-80										80			
P10155.	WGC-110										115			
P10156.	WGC-140										140			
P10157.	WGC-180										180			
P10158.	WGC-220x105										220 x 105			
P10159.	WGC-350x150										350 x 150			
P10160.	WGC-500x200										500 x 200			
P11121.	TP58 WGC	acc. relay > 0,3A									80 x 50			
P11131.	TP88 WGC	acc. relay > 0,3A									80 x 80			
P11141.	TP812 WGC	acc. relay > 0,3A									120 x 80			
P11151.	TP816 WGC	acc. relay > 0,3A									160 x 80			

For supply voltages other than 230 Vac, please consult us.



## CBS-4C

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

Code: P12712.

### Dimensions



### Connections

