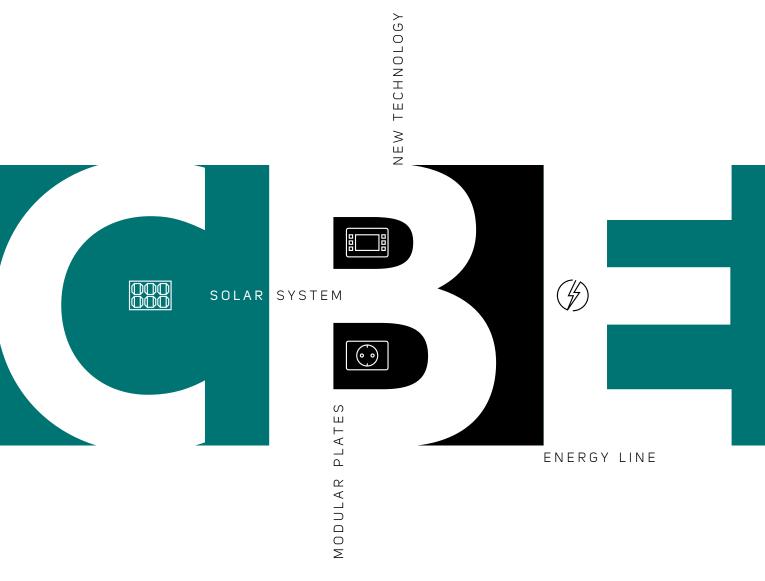
#### ELECTRONICS FOR CARAVANNING AND BOATING











CBE PHOTOV CBE SOLAR B ACCESSORIES



CONTROL PAN TEST PANELS GAS DETECTOR



SWITCHES SOCKETS ACCESSORIES FRAMES



BATTERY CHA REFRIGERATO 12V/230V INVE DIMMER BATTERY SEP/ "PROCAR" 12V "CBE" 12V ACC "CBE" 12V ACC "CBE" 230V AC



Technical specifications are subject to change without prior notice. The installation must be carried out by a qualified technician.



**≥CBE**<sup>•</sup>

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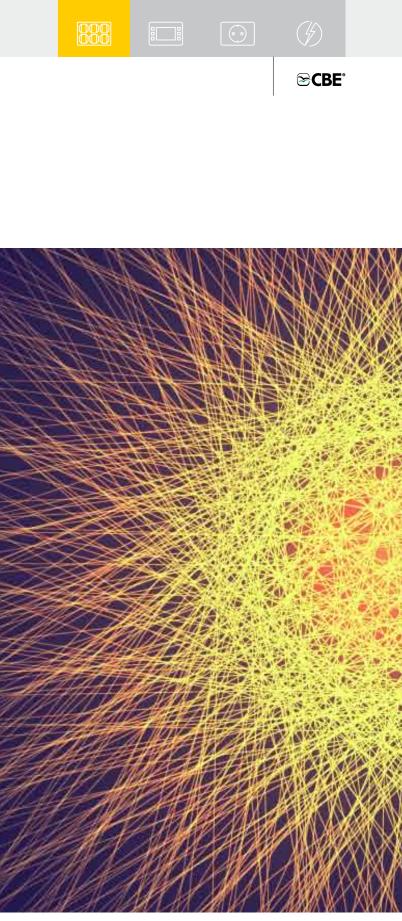
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### SOLAR SYSTEM

CBE PHOTOVOLTAIC MODULES ACCESSORIES CBE SOLAR BOOSTER SET



#### I

#### CBE PHOTOVOLTAIC MODULES

**CBE PHOTOVOLTAIC MODULES** are made of monocrystalline or polycrystalline silicon cells. The special non-reflecting treatment these cells are exposed to, stops the mirror effect of the sun-rays on the cells' surface and increases the efficiency of the modules. The tempered glass is a high performance shock resistant and weatherproof material. A white "Tedlar" sheet protects the rear of the module: it prevents any water or humidity infiltration and isolates the electrical contacts thus avoiding oxidation. The module's frame is made of anodized aluminium and the junction box installed on the rear of the module holds the by-pass diodes and the straight fitting necessary for the connection. CBE photovoltaic modules are manufactured using highly advanced technologies and comply with the Eu-Norms. Their declared power is covered by a 25 years warranty.

MF135

32

12 V

135 W

+-3%

20,1 V

8,8 A

16,3 V

8,28 A

1320 x 670 x 35

215946

POLYCRYSTALLINE

MF165

215902

36

12V

165W

+-3%

23,45V

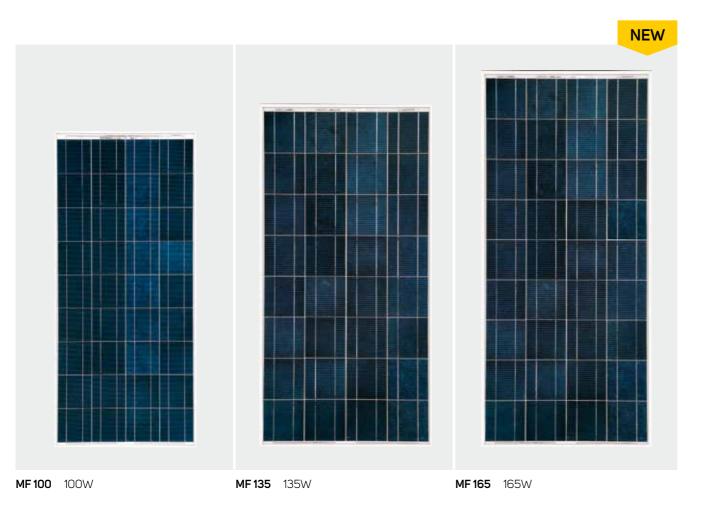
8,8A

19,4V 8,51A

12

1480 x 670 x 35

POLYCRYSTALLINE



MF100

215935

36

12 V

100 W

+-3%

22,95 V

5,85 A

18,40 V

5,43 A

7,8

1200 x 540 x 30

MONOCRYSTALLINE

#### CBE SOLAR BOOSTER SET

The new **CBE SOLAR BOOSTER SET**, consisting of the special MFB90 photovoltaic module and the PBS90 booster solar charge regulator, allows to fully exploit the current the 90W photovoltaic module can supply, enabling thus to obtain the best performance occupying less space.

The MFB90 photovoltaic module is made of 21 high quality cells and operates at a voltage of approximately 11V. Combined with the PBS90 solar charge regulator provided with a "booster"



PBS90

MODEL
SOLAR CHARGE REGULATOR
PHOTOVOLTAIC MODULE
TYPE
CELLS NUMBER
RATED VOLTAGE
MAX POWER
TOLERANCE
OPEN CIRCUIT VOLTAGE
SHORT CIRCUIT VOLTAGE
VOLTAGE AT MAX POWER
CURRENT AT MAX POWER
DIMENSIONS (mm)
WEIGHT (Kg)

MODEL

TYPE

PART-NR

CELLS NUMBER

RATED VOLTAGE

OPEN CIRCUIT VOLTAGE

SHORT CIRCUIT VOLTAGE

VOLTAGE AT MAX POWER

CURRENT AT MAX POWER

DIMENSIONS (mm)

WEIGHT (Kg)

MAX POWER

TOLERANCE



technology, namely equipped with a system that enables to boost the voltage and to control the current, its performance over a day can be compared to that of a 120W photovoltaic module. It is possible to connect the PT642 test panel (optional) to the new PBS90 booster solar charge regulator, in order to display the charging current and the battery voltage. The MFB90 photovoltaic module and the PBS90 solar charge regulator cannot be sold separately.



KIT 90 BOOSTER
PBS90 - 204290
MFB90 - 215941
POLYCRYSTALLINE
21
12 V
90W
+-3 %
13,28 V
8,08 A
11,80 V
7,62 A
1209 x 553 x 35
8,4

NEW

#### PRS150 AND PRS300 SOLAR CHARGE REGULATORS FOR 12V PHOTOVOLTAIC MODULES

The **PRS150** and **PRS300** solar charge regulators have been studied and manufactured in order to obtain the best possible performance of 12V photovoltaic modules.

PRS150 is suitable for photovoltaic solar modules up to max 150W. Its 2 LEDs show the current battery charging status and it is also designed to replace the PRS110 model.

PRS300 is suitable for photovoltaic modules up to 300W total power. It can be connected to the test panel PT642, which is necessary in order to check the charging current of the photovoltaic modules and the battery's voltage. PRS300 features three different charging lines (to be manually selected thanks to the commutator installed inside the solar charge regulator). There is also a battery desulphation function, which is automatically enabled only when the battery needs it. The four LEDs indicate that the solar charge regulator is ON, the current battery charging status and a wrong connection.





**PRS150** 204268

PRS300 204274

MODEL	PRS150	PRS300
PART-NR	204268	204274
RATED VOLTAGE	12V	12V
MAX POWER PHOTOVOLTAIC MODULES	150W	300W
NUMBER OF PHOTOVOLTAIC MODULES CONNECTIONS	1	2
AUTOMATIC SHUTDOWN	In absence of sunlight	In absence of sunlight
END-OF-CHARGE VOLTAGE	14,1V	14,1V (A) - 14,3V (B) - 14,7V (C)
FLOAT VOLTAGE	13,5V	13,5V (A) - 13,8V (8) - 13,8V (C)
NUMBER OF CHARGE LINES	1	3
BATTERY DESULPHATION	NO	YES
REVERSE CURRENT BLOCKING PROTECTION	Diode	Electronic
REVERSE POLARITY PROTECTION	YES	YES
TEST PANEL CONNECTION	NO	PT 642
DIMENSIONS (mm)	115 x 90 H37	115 x 90 H37

ACCESSORIES

#### NEW PRM330 MPPT SOLAR CHARGE REGULATOR FOR 12V AND 24V PHOTOVOLTAIC MODULES

The new PRM330 solar charge regulator is suitable for 12V photovoltaic modules up to 280W total power and for 24V photovoltaic modules up to 330W total power. It has been studied and manufactured with innovative electrical techniques and is designed to charge 12V batteries only. It features a MPPT system (Maximum Power Point Tracker), which constantly measures the current and voltage values, taking advantage in every situation of the maximum power supplied by the photovoltaic module.



**PRM330** 204284

# MODEL PART-NR BATTERY RATED VOLTAGE MAX POWER PHOTOVOLTAIC MODULES NUMBER OF PHOTOVOLTAIC MODULES CONNECTIONS AUTOMATIC SHUTDOWN END-OF-CHARGE VOLTAGE FLOAT VOLTAGE NUMBER OF CHARGE LINES BATTERY DESULPHATION REVERSE CURRENT BLOCKING PROTECTION REVERSE POLARITY PROTECTION TEST PANEL CONNECTION DIMENSIONS (mm)









Thanks to this technology, the performance can be up to 20% higher than the one offered by a traditional system.

PRM330 can be connected to the test panel PT642, which is necessary in order to check the charging current of the photovoltaic modules and the battery's voltage.



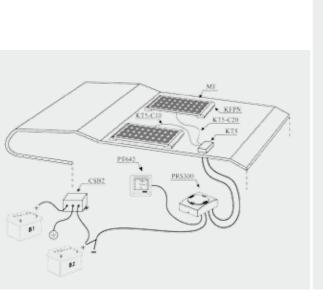


PRM330
204284
12V
280W (modules 12V) – 330W (modules 24V)
2
In absence of sunlight
14,1 V (A) - 14,3V (B) - 14,7V (C) - 14,5V (Li)
13,5V (A)- 13,8V (B) - 13,8V (C) – 13,5V (Li)
4
YES
Electronic
YES
PT 642
160 x 80 H40

ACCESSORIES

#### 

WIRING DIAGRAM





KFPN

#### NEW SOLAR PANEL FIXING KITS

The new KFPN fixing kits are made of anodized aluminum and feature an innovative and aerodynamic design. They have been studied specifically for motorhomes and caravans and are easy to install, as they do not require holes.

MODEL	PART-NR	DIMENSIONS (mm)	WEIGHT (Kg)
KFPN530	250410	530 x 60 x 50	0,45
KFPN670	250425	670 x 60 x 50	0,55

CSB2

CE

f∎]+-

- 8604

+ BLACK TT + -- BLUE (car

12V/4A

CBE

AVAILABLE ONLY AS A SPARE PART

**⊞CB** 

8888



**PT642/G** 204642 **PT642/M** 204643

12V TOUCH TEST PANEL for the control of battery voltage and current supplied by the solar panel. The kit includes a cable 1,5m long, a wall-fixing spacer and a "BMAC1C" frame. It works only with "PRS300", "PBS90" and "PRM330" solar charge regulators. This panel fits also the new "Modular Plates" range. Colours: /G Grey RAL 7015 /M Brown RAL 8016 Dimensions: 60 x 60mm



TEST PANEL for the control of battery

PT 542/G 204542 PT 542 / M 204543

Colours: /G Grey RAL 7015

Dimensions: 60 x 60mm

Plates" range.

**CSB2** 205025

#### CAR BATTERY AUTOMATIC RECHARG-

**ING DEVICE.** When the leisure battery voltage exceeds 13,6V (battery charger and/or solar panel are charging), the device allows to recharge the car battery (through the leisure battery). Charging current is set to max 4A, according to the batteries' condition. When the leisure battery voltage is lower than 12,5V, the car battery recharging system is deactivated. When the green LED is on, it means that the CSB-2 is ready to recharge the car battery if necessary. Dimensions: 80 x 50 x 50mm

ACCESSORIES





**KT1** 707200 1-EXIT ROOF DUCT (for KTR-G 12mm diameter sheath). For maximum roof thickness of 60mm. **KT5** 707050 5-EXITS ROOF DUCT for the wiring of photovoltaic modules, cameras or antennas. For maximum roof thickness of 60mm. Dimensions: 20 x 90 x 30mm





KTR-P 707130\* PG11 CABLE GLAND complete with nut & gasket. Suitable for Mod. "KT5" roof duct kit. Colour: grey.

KTR-F 707136\* FASTENER for 12mm diameter sheath. Colour: grey.





**KT1-10** 707210 1-EXIT ROOF DUCT provided with cable sheath L=1m and  $2 \times 6 \text{mm}^2 \text{L}=2 \text{m}$  cables.

KT1-20 707220 1-EXIT ROOF DUCT provided with cable sheath L=2m and  $2 \times 6 \text{ mm}^2 \text{ L}=3\text{m}$  cables.

**KT5-C10** 707051 KIT FOR "KT5" provided with cable sheath L=1m and 2 x 6 mm<sup>2</sup> 2m long cables. Provided with PG11 fittings and terminals for photovoltaic module connection.

**KT5-C20** 707052 KIT FOR "KT5" provided with sheath L=2m and  $2 \times 6 \text{ mm}^2$  3m long cables. Provided with PG11 fittings and terminals for photovoltaic module connection.

voltage and current supplied by the solar panel. The kit includes a cable 1,5 m long, a wall-fixing spacer and a "MAC1P" frame. It works only with "PRS240" regulator. This panel fits also the new "Modular /M Brown RAL 8016.









**KTR-G** 707134 CABLE SHEATH, diameter 12mm, weatherproof and UV resistant. L=50 m. Colour: grey.



#### KTR-R 707132\*

PG11 STRAIGHT FITTING for KTR-G 12mm diameter sheath complete with nut & gasket. Suitable for "KT5" roof duct kit. Colour grey.



# NEW TECHNOLOGY

CONTROL PANELS TE

TEST PANELS GAS DETECTORS

12





#### **≥CBE**<sup>•</sup>

#### SYSTEM PC380

Microprocessor controlled digital system with 4,8" GRAPHIC NEGATIVE LCD 12 COLOURS control panel.

#### Main functions:

- test car and service battery B1 and B2 condition (volt and graphic)
- test drinking water tank level (percentage and graphic)
- waste water tank alarm
- electronic battery separator
- control 3-way fridge protection fuses
- control car battery recharging
- save service battery function digital clock
- ▶ test internal and external temperature
- software update via USB
- "twilight" sensor

#### Control panel dimensions 190 x 130 mm

#### SYSTEM PC320

Microprocessor controlled digital system with 4,8" GRAPHIC LCD 12 COLOURS control panel.

#### Main functions:

- test car and service battery B1 and B2 condition (volt and graphic)
- test drinking water tank level (percentage and graphic)
- waste water tank alarm
- electronic battery separator
- control 3-way fridge
- protection fuses
- control car battery recharging
- save service battery function
- digital clock
- ▶ test internal and external temperature

#### Control panel dimensions 181 x 131 mm





THE SYSTEM	INCLUDES:	MODEL	PART-NR
CONTROL PAI	NEL	PC380	113800
12V DISTRIBU PROTECTION		DS300	209000
12V 16A SWIT	CHING BATTERY CHARGER	CB516-3	321517
	TER ELECTRONIC indicate the tank height e order)	SPE/	5120:::
SCREW PROE	ES FOR WASTE WATER TANK	SS/P	505000
CABLES KIT F	OR TANKPROBES L=6m	CCS200	709020
CABLE FOR C	ONTROL PANEL L=6m	CP973-6	709623
	SENSORS FOR INTERNAL AND MPERATURE (L=1,5m and L=5m)	CTIE-2	708661
50A FUSE + F	USE-HOLDER	R450	222551

THE SYSTEM INCLUDES:	MODEL	PART-NR
CONTROL PANEL	PC320	113200
12V DISTRIBUTION BOX, PROTECTION FUSES	DS300	209000
12V 16A SWITCHING BATTERY CHARGER	CB516-3	321517
DRINKING WATER ELECTRONIC TANKPROBE (indicate the tank height on the purchase order)	SPE/	5120:::
SCREW PROBES FOR WASTE WATER TANK	SS/P	505000
CABLES KIT FOR TANKPROBES L=6m	CCS200	709020
CABLE FOR CONTROL PANEL L=6m	CP973-6	709623
CABLE WITH SENSORS FOR INTERNAL AND EXTERNAL TEMPERATURE (L=1,5m and L=5m)	CTIE-2	708661
50A FUSE + FUSE-HOLDER	R450	222551

#### CONTROL PANELS

#### SYSTEM PC220

Microprocessor controlled digital system with 3" GRAPHIC LCD 12 COLOURS control panel.

#### Main functions:

- test car and service battery B1 and B2 condition (volt and graphic)
- test drinking water tank level (percentage and graphic)
- waste water tank alarm
- electronic battery separator
- control 3-way fridge
- protection fuses
- control car battery recharging
- save service battery function
- digital clock
- test internal and external temperature
- Control panel dimensions 181 x 131 mm



THE SYSTE	M INCLUDES:	MODEL	PART-NR
CONTROL F	ANEL	PC220	112200
12V DISTRIE PROTECTIO	BUTION BOX, IN FUSES	DS300	209000
12V 16A SW	ITCHING BATTERY CHARGER	CB516-3	321517
	VATER ELECTRONIC E (indicate the tank height ase order)	SPE/	5120:::
SCREW PR	OBES FOR WASTE WATER TANK	SS/P	505000
CABLES KIT	FOR TANKPROBES L=6m	CCS200	709020
CABLE FOR	CONTROL PANEL L=6m	CP973-6	709623
	H SENSORS FOR INTERNAL AND TEMPERATURE (L=1,5m and L=5m)	CTIE-2	708661
50A FUSE +	+ FUSE-HOLDER	R450	222551











#### SYSTEM PC210

Microprocessor controlled digital system with 2,9" GRAPHIC LCD 12 COLOURS control panel.

#### Main functions:

- touch capacitive buttons
- test car and service battery B1 and B2 condition (volt and graphic)
- test drinking water tank level (percentage and graphic)
- waste water tank alarm
- electronic battery separator
- control 3-way fridge
- protection fuses
- control car battery recharging
- save service battery function
- ▶ test internal and external temperature

Control panel dimensions 170 x 80 mm



THE SYSTEM INCLUDES:	MODEL	PART-NR
CONTROL PANEL	PC210	112100
12V DISTRIBUTION BOX, PROTECTION FUSES	DS300	209000
12V 16A SWITCHING BATTERY CHARGER	CB516-3	321517
DRINKING WATER ELECTRONIC TANKPROBE (indicate the tank height on the purchase order)	SPE/	5120:::
SCREW PROBES FOR WASTE WATER TANK	SS/P	505000
CABLES KIT FOR TANKPROBES L=6m	CCS200	709020
CABLE FOR CONTROL PANEL L=6m	CP973-6	709623
CABLE WITH SENSORS FOR INTERNAL AND EXTERNAL TEMPERATURE (L=1,5m and L=5m)	CTIE-2	708661
50A FUSE + FUSE-HOLDER	R450	222551

#### SYSTEM PC180

Microprocessor controlled digital system with LED control panel.

#### Main functions:

- test car and service battery B1 and B2 condition
- test drinking water tank level
- waste water tank alarm
- electronic battery separator control 3-way fridge
- protection fuses
- control car battery recharging save service battery function
- "twilight" sensor

#### Control panel dimensions 190 x 130 mm

#### SYSTEM PC110

Microprocessor controlled digital system with LED control panel.

#### Main functions:

- test car and service battery B1 and B2 condition
- test drinking water tank level
- waste water tank alarm
- electronic battery separator
- control 3-way fridge
- protection fuses
- control car battery recharging
- save service battery function

#### Control panel dimensions 170 x 80 mm

#### SYSTEM PC100

Microprocessor controlled digital system with LED control panel.

#### Main functions:

- test car and service battery B1 and B2 condition
- test drinking water tank level
- waste water tank alarm
- electronic battery separator
- control 3-way fridge
- protection fuses
- control car battery recharging
- save service battery function
- Control panel dimensions 192 x 78 mm



	Contraction of the local division of the loc
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PART-NR	MODEL	THE SYSTEM INCLUDES:
111800	PC180	CONTROL PANEL
209000	DS300	12V DISTRIBUTION BOX, PROTECTION FUSES
321517	CB516-3	12V 16A SWITCHING BATTERY CHARGER
505140	SP5/40	DRINKING WATER TANKPROBE
505000	SS/P	SCREW PROBES FOR WASTE WATER TANK
709160	CCS910	CABLES KIT FOR TANKPROBES L=6m
709623	CP973-6	CABLE FOR CONTROL PANEL L=6m
222551	R450	50A FUSE + FUSE-HOLDER

THE SYSTEM INCLUDES:	MODEL	PART-NR
CONTROL PANEL	PC110	111100
12V DISTRIBUTION BOX, PROTECTION FUSES	DS300	209000
12V 16A SWITCHING BATTERY CHARGER	CB516-3	321517
DRINKING WATER TANKPROBE	SP5/40	505140
SCREW PROBES FOR WASTE WATER TANK	SS/P	505000
CABLES KIT FOR TANKPROBES L=6m	CCS910	709160
CABLE FOR CONTROL PANEL L=6m	CP973-6	709623
50A FUSE + FUSE-HOLDER	R450	222551



THE SYSTEM INCLUDES:	MODEL	PART-NR
CONTROL PANEL	PC100	111000
12V DISTRIBUTION BOX, PROTECTION FUSES	DS300	209000
12V 16A SWITCHING BATTERY CHARGER	CB516-3	321517
DRINKING WATER TANKPROBE	SP5/40	505140
SCREW PROBES FOR WASTE WATER TANK	SS/P	505000
CABLES KIT FOR TANKPROBES L=6m	CCS910	709160
CABLE FOR CONTROL PANEL L=6m	CP973-6	709623
50A FUSE + FUSE-HOLDER	R450	222551











#### SYSTEM C860

Microprocessor controlled digital system with LED control panel.

#### Main functions:

- test car and service battery B1 and B2 condition
- test drinking water tank level
- waste water tank alarm
- electronic battery separator
- control 3-way fridge
- protection fuses

#### Control panel dimensions 281 x 75 mm



THE SYSTEM INCLUDES:	MODEL	PART-NR
CONTROL PANEL	C860	108610
12V 16A SWITCHING BATTERY CHARGER	CB516-3	321517
ELECTRONIC BATTERY SEPARATOR	CSB40/S	402740
DRINKING WATER TANKPROBE	SP5/40	505040
SCREW PROBES FOR WASTE WATER TANK	SS/P	505000
CABLES KIT FOR TANKPROBES L=6m	CCS860	708060
50A FUSE + FUSE-HOLDER	R450	222551

#### **≥CBE**<sup>°</sup>

#### PARTS INCLUDED IN THE PC210 - PC220 - PC320 - PC380 COMPLETE SYSTEMS







**SPE /** ... DRINKING WATER ELECTRONIC TANKPROBE



CCS200 CABLES KIT FOR TANKPROBES L=6m



CTIE-2 CABLE WITH SENSORS FOR INTERNAL AND EXTERNAL TEMPERATURE (L=1,5m and L=5m)



**CB516-3** 12V 16A SWITCHING BATTERY CHARGER



SS/P SCREW PROBES FOR WASTE WATER TANK



CP973-6 CABLE FOR CONTROL PANEL L=6m



**R450** 50A FUSE + FUSE-HOLDER

#### PARTS INCLUDED IN THE PC100 - PC110 - PC180 COMPLETE SYSTEMS



**DS300** 12V DISTRIBUTION BOX, PROTECTION FUSES



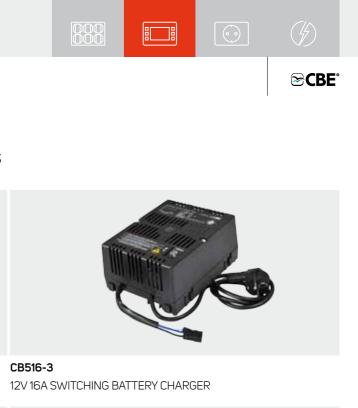
SP5/40 DRINKING WATER TANKPROBE



CCS910 CABLES KIT FOR TANKPROBES L=6m



**R450** 50A FUSE + FUSE-HOLDER





#### SS/P SCREW PROBES FOR WASTE WATER TANK



CP973-6 CABLE FOR CONTROL PANEL L=6m **TEST PANELS** 



#### MTB/G 212892

MTB/M 212893

#### 12V LED BATTERY VOLTAGE TEST PANEL

The kit includes "BMAC1C" frame and "MAD" spacer. This panel fits also the "Modular Plates" range.

Dimensions: 60 x 60 mm.



MT214/G 212898

MT214/M 212895

12V LED TEST PANEL for one drinking water tank and one waste water tank. This panel fits also the "Modular Plates" range. The kit includes 2 cables L=4m, tankprobe "SP5/40", waste water tank screws "SS/P"

and "BMAC1C" frame.

#### Dimensions: 60 x 60 mm



MTT/G 270572 MTT/M 270576

12V LED TEST PANEL for one drinking water tank. This panel fits also the "Modular Plates" range. The kit includes 1 cable L=4m, tankprobe "SP5/40", "BMAC1C" frame and "MAD" spacer.

Dimensions: 60 x 60 mm.

COLOURS: ... / G (Grey RAL 7015) ... / M (Brown RAL 8016)



MTTR/G 270573 MTTR/M 270577

12V LED TEST PANEL for one waste water tank. This panel fits also the "Modular Plates" range. The kit includes 1 cable L=4m, tankprobe "SP5/40", "BMAC1C" frame and "MAD" spacer.

Dimensions: 60 x 60 mm.



#### PT638/G 204638 PT638/M 204639

12V TOUCH TEST PANEL to test the external and internal temperature. **The kit includes** sensor for external temperature L=3m, sensor for internal temperature L=1,5m, "BMAC1C" frame and a wall-fixing spacer. This panel fits also the "Modular Plates" range.

12V Power supply. Dimensions: 60 x 60mm



PT622/G 204662

PT622/M 204663 12V TOUCH TEST PANEL to test 2 water tanks' level in percentage. The kit includes 2 cables L=4m, "BMAC1C" frame and a wall-fixing spacer. This panel fits also the "Modular Plates" range. NB: electronic tankprobe mod. "SPE" must be ordered separately.

12V Power supply. Dimensions: 60 x 60mm



The kit includes a shunt ±130A , cable L=5m, "BMAC1C" frame and a wall-fixing spacer.

This panel fits also the "Modular Plates" range.

12V Power supply. Dimensions: 60 x 60mm



#### PT632/G 204632 PT632/M 204633

 $\ensuremath{\texttt{12V}}\xspace{\texttt{TOUCH}}\xspace{\texttt{TEST}}\xspace{\texttt{PANEL}}$  to test two 12V batteries' voltage The kit includes "BMAC1C" frame and a wall-fixing spacer. This panel fits also the "Modular Plates" range.

12V Power supply. Dimensions: 60 x 60mm



BMTG/G 232800 BTMG/M 232801

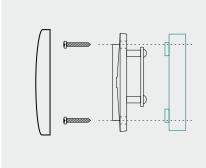
#### 12V LPG AND SOPORIFIC GAS DETECTOR

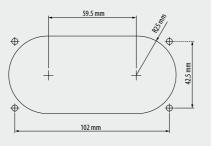
The acoustic alarm detects the gas concentration in time to prevent poisoning accidents and before one tenth of the minimum level to cause an explosion is reached. The sensor can be set in accordance with the use and the install position. The detector is tested and calibrated using LPG and soporific gas. Average sensor life is about 10 years. Built-in fixing or wall-fixing with spacer.

The kit includes a "BMAC2" frame. This panel fits also the "BERKER INTEGRO" range.

12V Power supply. Dimensions: 119 x 60 mm Sensor consumption: 75mA Acoustic power (beeper): 85 dB max at 1 meter distance

#### INSTALLATION

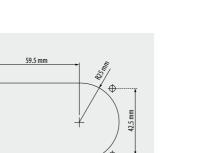




Wall-fixing with spacer

Built-in fixing

COLOURS: .../ G (Grey RAL 7021) .../ M (Brown RAL 8017)





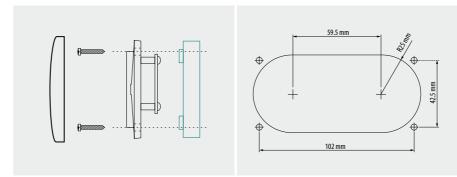


**BMTCO/G** 232802 BMTCO/M 232803

#### 12V CARBON MONOXIDE DETECTOR

The acoustic alarm detects the gas concentration in time to prevent poisoning accidents. Carbon monoxide is a toxic gas produced by incomplete fossil fuel combustion or when combustion takes place in a room where oxygen concentration is very low. The detector is tested and calibrated using carbon monoxide. Average sensor life is about 10 years. Built-in fixing or wall-fixing with spacer.

#### INSTALLATION



Wall-fixing with spacer

Built-in fixing

COLOURS: .../ G (Grey RAL 7021) .../ M (Brown RAL 8017)













The kit includes a "BMAC2" frame. This panel fits also the "BERKER INTEGRO" range.

12V Power supply. Dimensions: 119 x 60 mm Sensor consumption: 15mA Acoustic power (beeper): 85 dB max at 1 meter distance



## MODULAR PLATES

SWITCHES SOCKETS ACCESSORIES FRAMES









**≥CBE**°



SWITCHES

#### **≥CBE**°



MCN / ... SWITCH



MC12P / ... 12V SWITCH + LED



2000000		
COLOUR	BLISTER	BOX *
/ G	212855	270132
/ M	212856	270136
/ B	-	270130

-

270134



MC12N / ... 12V SWITCH + LED

COLOUR	BLISTER	BOX *
/ G	212994	272052
/ M	212995	272056
/ B	-	-
/ GC	-	272054

SWITCHES



MCD2N / ... DOUBLE TWO-WAY SWITCH

MCPL/ ... PUMP SWITCH + LIGHT SWITCH

COLOUR	BLISTER	BOX *	
/ G	212839	272082	
/ M	212840	272086	
/ B	-	272080	
/ GC	-	272084	

COLOUR	BLISTER	BOX *
/ G	212862	270482
/ M	-	-
/ B	-	-
/ GC	-	-



BLISTER

212872

212873

212874

-

BOX \*

270142

270146

270140

270144

MC2N / ... DOUBLE SWITCH

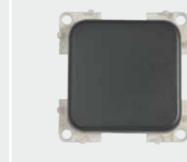
COLOUR

... / G

... / M

... / B

... / GC



MCD / ... TWO-WAY SWITCH

C	COLOUR	BLISTER	BOX *
	./G	212869	270152
	./M	212870	270156
	./B	212871	270150
	. / GC	-	270154



MCD1N / ... TWO-WAY SWITCH

COLOUR	BLISTER	BOX *
/ G	212814	272062
/ M	212815	272066
/ B	-	-
/ GC	-	-





MCGD5 / ... **3 POSITION STEP PUSH-BUTTON** STEP PUSH-BUTTON +

COLOUR	BLISTER	BOX *
/ G	212812	270272
/ M	212813	270276
/ B	-	270270
/ GC	-	270274

COLOUR ... / G ... / M ... / B ... / GC

COLOURS:

MCG5 / ...

... / G (Grey RAL 7015)

... / M (Brown RAL 8016)

... / B (White RAL 9010)

... / GC (Light Grey RAL 7035)

\* Minimum order 10 pieces or multiples of 10

COLOURS:

- ... / G (Grey RAL 7015)
- ... / M (Brown RAL 8016)
- ... / B (White RAL 9010) ... / GC (Light Grey RAL 7035)
- \* Minimum order 10 pieces or multiples of 10
  - 26









MCP / ... PUSH-BUTTON

COLOUR	BLISTER	BOX *
/ G	212990	270161
/ M	212991	270165
/ B	-	270160
/ GC	-	270163



#### 12/24V LIGHT TWO-WAY SWITCH

LISTER	BOX *
212837	272112
212838	272116
-	-
-	-

SOCKETS

#### **≥CBE**°



MP12 / ... STANDARD 12V SOCKET



MP12TV / ... STANDARD 12V SOCKET + TV



MP12TVS / ... STANDARD 12V SOCKET + TV + SAT

COLOUR	BLISTER	BOX *	CC
/ G	212822	270302	/
/ M	212823	270306	/
/ B	212821	270300	/
/ GC	-	-	/

COLOUR	BLISTER	BOX *
/ G	212826	270322
/ M	212827	270326
/ B	-	270320
/ GC	-	270324

COLOUR	BLISTER	BOX *
/ G	212828	270332
/ M	212829	270336
/ B	-	270330
/ GC	-	270334





MP12ATV / ... 12V LIGHTER TYPE SOCKET + TV

MP12ATVS / ... 12V LIGHTER TYPE SOCKET + TV + SAT

COLOUR	BLISTER	BOX *	C
/ G	212843	270212	
/ M	212844	270216	
/ B	-	270210	
/ GC	-	270214	

COLOUR ... / G ... / M ... / B ... / GC



BLISTER

212790

212791

212792

-

MP12A / ... 12V LIGHTER TYPE SOCKET



MP12AC / ... 12V LIGHTER TYPE SOCKET + COVER

BOX *	COLOUR	BLISTER	BOX *
270172	/ G	212907	270182
270176	/ M	212908	270186
270170	/ B	212909	270180
270174	/ GC	-	270184



MP12ACS / ... 12V WATERTIGHT LIGHTER TYPE SOCKET

COLOUR	BLISTER	BOX *
/ G	212917	270202
/ M	212918	270206
/ B	-	-
/ GC	-	-





MP2USB / ... 5V/1A + 5V/2,1A DOUBLE USB CHARGING SOCKET (12V INPUT)

MPTV / ... TV SOCKET

COLOUR	BLISTER	BOX *
/ G	212921	270652
/ M	212929	270656
/ B	-	-
/ GC	-	-

COLOUR	BLISTER	BOX *
/ G	212849	270402
/ M	212850	270406
/ B	-	270400
/ GC	-	270404

COLOURS:

... / G (Grey RAL 7015)

... / M (Brown RAL 8016)

... / B (White RAL 9010)

... / GC (Light Grey RAL 7035)

\* Minimum order 10 pieces or multiples of 10

COLOURS:

COLOUR

... / G

... / M

... / B

... / GC

- ... / G (Grey RAL 7015)
- ... / M (Brown RAL 8016)
- ... / B (White RAL 9010)
- ... / GC (Light Grey RAL 7035) \* Minimum order 10 pieces or multiples of 10

SOCKETS





**≥CBE**<sup>•</sup>







MPUSB / ... 5V/3A USB CHARGHING SOCKET (12V INPUT)

COLOUR	BLISTER	BOX *
/ G	212922	270642
/ M	212923	270646
/ B	-	-
/ GC	-	-



MPTVS / ... TV SOCKET + SAT

COLOUR	BLISTER	BOX *
/ G	212852	270412
/ M	212853	270416
/ B	-	270410
/ GC	-	270414

SOCKETS

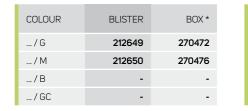
#### **≥CBE**°



MPRCA6 / ... 6 RCA SOCKETS MODULE



MPRCA3TVS / ... 3 RCA + TV + SAT SOCKETS MODULE



COLOUR	BLISTER	BOX *
/ G	212919	270612
/ M	212920	270616
/ B	-	-
/ GC	-	-



MP22D / ... 230V SCHUKO SOCKET WITH COVER AND BACK PROTECTION BOX

COLOUR	BLISTER	BOX *
/ G	212880	270362
/ M	212881	270366
/ B	212882	270360
/ GC	-	270364





MCR / ... 12V ELECTRONIC DIMMER FOR LIGHTS AND FANS (MAX 3A) MPF4 / ... 4 FUSES MODULE

COLOUR	BLISTER	BOX *
/ G	212808	270502
/ M	212809	270506
/ B	-	270500
/ GC	-	270504

COLOUR	BLISTER	BOX *
/ G	212841	270492
/ M	-	-
/ B	-	-
/ GC	-	-



MP22I / ... 230V ITALIAN SOCKET WITH COVER AND BACK PROTECTION BOX

_		
COLOUR	BLISTER	BOX *
/ G	212858	270392
/ M	212859	270396
/ B	-	270390
/ GC	-	270394

COLOURS:

- ... / G (Grey RAL 7015)
- ... / M (Brown RAL 8016)
- ... / B (White RAL 9010) ... / GC (Light Grey RAL 7035)
- \* Minimum order 10 pieces or multiples of 10

#### MP22B / ...

230V BRITISH STANDARD SOCKET WITH BACK PROTECTION BOX

COLOUR	BLISTER	BOX *
/ G	-	270342
/ M	-	270346
/ B	-	-
/ GC	-	-





**MP** / ... BLIND PLATE

#### MAD / ... SPACER FOR WALL-FIXING 60 x 60 x 10mm

C

COLOUR	BLISTER	BOX *
/ G	212700	273072
/ M	212701	273076
/ B	-	-
/ GC	-	-

OLOUR	BLISTER	BOX *
/ G	212697	270602
/ M	212698	270606
/ B	212699	270600
/ GC	-	270604

COLOURS:

- ... / G (Grey RAL 7015)
- ... / M (Brown RAL 8016)
- ... / B (White RAL 9010)
- ... / GC (Light Grey RAL 7035)
- \* Minimum order 10 pieces or multiples of 10





**≥CBE**°



MCB / ... STEP BUZZER MODULE

COLOUR	BLISTER	BOX *
/ G	212804	270512
/ M	-	-
/ B	-	-
/ GC	-	-





MAP / ... COVER

COLOUR	BLISTER	BOX *
/ G	212668	-
/ M	212667	-
/ B	212669	-
/ GC	-	-

ACCESSORIES

#### **≥CBE**°



**MAS 45** 212676 BACK PROTECTION BOX Ø45 L=48mm



**MAS 50** 212677 BACK PROTECTION BOX Ø50 L=34mm

MAS 50R 212675 BACK PROTECTION BOX Ø45 L=22mm



 MCAP5
 212640

 TV CONNECTOR Ø0,5 (10 pcs)

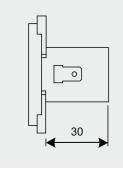
 MCAP6
 212644

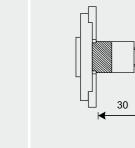
 TV CONNECTOR Ø0,6 (10 pcs)

 MCAP7
 212648

 TV CONNECTOR Ø0,7 (10 pcs)

#### DIMENSIONS (mm)





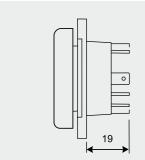
MP12A / MP12ATV

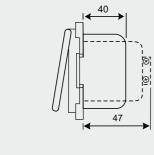
MP12 / MP12TV

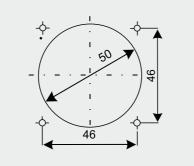


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MPTV





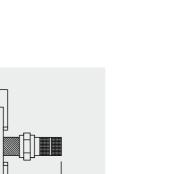


MCG / MC12

MP22I

COLOURS:

- ... / G (Grey RAL 7015)
- ... / M (Brown RAL 8016)
- ... / B (White RAL 9010)
- ... / GC (Light Grey RAL 7035)
- \* Minimum order 10 pieces or multiples of 10



30

◄



#### MAC1P / ... 1 MODULE FRAME 60 x 60mm

FRAMES

COLOUR	BLISTER	BOX *
/ G	212681	270702
/ M	212670	270706
/ B	212672	270700
/ GC	-	270704



MAC1PS / ... 1 MODULE FRAME "SOFTLINE" 64 x 60mm

COLOUR	BLISTER	BOX *
/ G	212602	270712
/ M	212606	270716

COLOURS:

- ... / G (Grey RAL 7015)
- ... / M (Brown RAL 8016)

... / B (White RAL 9010)

... / GC (Light Grey RAL 7035)

\* Minimum order 10 pieces or multiples of 10



#### MAC2P / ...

2 MODULE FRAME 113 x 60mm

COLOUR	BLISTER	BOX *
/ G	212660	270722
/ M	212678	270726
/ B	212696	270720
/ GC		270724



#### MAC2PS / ...

2 MODULE FRAME "SOFTLINE" 116 x 60mm

COLOUR	BLISTER	BOX *
/ G	212612	270732
/ M	212616	270736

FRAMES





COLOUR	BLISTER	BOX *
/ G	215030	270012
/ M	215031	270016
/ B	-	270010
/ GC		270014



#### MAC2 / ... 2 MODULE CBE FRAME

139 x 78 mm

COLOUR	BLISTER	BOX *
/ G	215040	270032
/ M	215041	270036
/ B	-	270030
/ GC	-	270034



MATINL / ... 1 MODULE SUPPORT FRAME

COLOUR	BLISTER	BOX *
/ G	215302	270802
/ M	215306	270806

COLOURS:

- ... / G (Grey RAL 7015)
- ... / M (Brown RAL 8016)
- ... / B (White RAL 9010) ... / GC (Light Grey RAL 7035)
- \* Minimum order 10 pieces or multiples of 10



MAC1NL / ... 1 MODULE FRAME 86 x 78 mm Requires support frame MAT1NL

COLOUR	BLISTER	BOX *
/ G	215322	270822
/ M	215326	270826

FRAMES



MAT2NL / ... 2 MODULE SUPPORT FRAME

COLOUR	BLISTER	BOX *
/ G	215342	270842
/ M	215346	270846



MAT3NL / ... 3 MODULE SUPPORT FRAME

COLOUR	BLISTER	BOX *
/ G	215382	270882
/ M	215386	270886

COLOURS:

- ... / G (Grey RAL 7015)
- ... / M (Brown RAL 8016)

... / B (White RAL 9010)

... / GC (Light Grey RAL 7035)

\* Minimum order 10 pieces or multiples of 10



#### MAC2NL / ...

2 MODULE FRAME 139 x 78 mm Requires support frame MAT2NL

COLOUR	BLISTER	BOX *
/ G	215362	270862
/ M	215366	270866



#### MAC3NL / ...

3 MODULE FRAME 192 x 78 mm Requires support frame MAT3NL

COLOUR	BLISTER	BOX *
/ G	215402	270902
/ M	215406	270906

# ENERGY LINE

**BATTERY CHARGERS REFRIGERATOR FANS** 12V/230V INVERTERS

DIMMER **PROCAR 12V ACCESSORIES**  CBE 230V ACCESSORIES

CBE 12V ACCESSORIES









BATTERY CHARGERS

#### **≥CBE**<sup>•</sup>

#### | "CB500-3" SWITCHING BATTERY CHARGERS

CB516-3, CB520-3 and CB522-3 battery chargers can charge automatically lead-acid, lead-gel and AGM batteries with innovative charging lines. They are protected against overheating and the 12V outputs are protected against short circuits and polarity inversion.

CB516-3, CB520-3 and CB522-3 are furthermore designed to replace the CB516, CB520 and CB522 models.

The high frequency switching technology gives excellent performance with limited weight and dimensions.

#### Charging process for 12V batteries:

- Desulphation when switching on the battery charger, only if needed, the battery is charged at 15,2V until the current exceeds 2A or for a maximum of 2 hours.
- Bulk battery charging with maximum current until the end-of-charge voltage is reached.
- Note: the end-of-charge voltage is reached only if the battery is efficient. Absorption – battery charging at constant end-of-charge voltage for the
- time defined by the charging line, with a progressive current reduction until the charging is completed.
- Float Maintenance charging at constant voltage for a maximum time of 15 hours. A high load leads to phase Bulk starting again.
- Stand-by The battery charger stops supplying power. It will switch over to the Refresh phase when the battery voltage goes under 13V.
- Refresh The battery is charged at the Bulk voltage for a maximum time of 1h; this phase is designed to compensate for the battery self-discharge.
   Once completed, the charging starts again from the Float phase.



NEW



#### CB522-3

MODEL	CB516-3	CB520-3	CB522-3
PART-NR	321517	321521	321523
TECHNICAL DATA			
NOMINAL INPUT VOLTAGE	230Vac± 10%	230Vac±10%	230Vac± 10%
FREQUENCY	50Hz÷60Hz	50Hz÷60Hz	50Hz÷60Hz
MAX POWER	250W	300W	320W
PROTECTION FUSE	3,15A (glass 5 x 20)	3, 15A (glass 5 x 20)	T 3,15A (glass 5x20)
ON/OFF SAFETY SWITCH	230V	230V	230V
OUTPUT TECHNICAL DATA			
BULK VOLTAGE (V)	14,1Vdc (A) - 14,4Vdc (B) - 14,7Vdc (C)	14,1Vdc (A) - 14,4Vdc (B) - 14,7Vdc (C)	14,1Vdc (A) - 14,4Vdc (B) - 14,7Vdc (C)
FLOAT VOLTAGE (V)	13,5Vdc (A) - 13,8Vdc (B) - 13,8Vdc (C)	13,5Vdc (A) - 13,8Vdc (B) - 13,8Vdc (C)	13,5Vdc (A) - 13,8Vdc (B) - 13,8Vdc (C)
MAX CURRENT	16A	20A	22A
CHARGING LINE	IUoU	IUoU	IUoU
BATTERY TYPE SELECTOR	3 positions (A - B - C)	3 positions (A - B - C)	3 positions (A - B - C)
SHORT-CIRCUIT AND POLARITY INVERSION PROTECTION	25A (blade)	30A (blade)	30A (blade)
THERMAL PROTECTION	YES	YES	YES
SIGNAL AC POWER SUPPLY (S)	12V; 50 mA	12V; 50 mA	12V; 50 mA
GENERAL TECHNICAL DATA			
EFFICIENCY	86%	86%	86 %
ROOM TEMPERATURE	0 ÷ 50°	0 ÷ 50°	0 - +40 °C
VENTILATION	Gradual automatic regulation	Gradual automatic regulation	Gradual automatic regulation
PROTECTION DEGREE	IP 30	IP 30	IP 30
MAINS CONNECTION	Schuko plug	Schuko plug	Schuko plug
BATTERY CONNECTION	6,3 terminals	"M6" screw	"M6" screw
CASE	Nylon + fiber glass self-extinguishing	Nylon + fiber glass self-extinguishing	Nylon + fiber glass self-extinguishing
DIMENSIONS (MM)	180 x 140 x 85H	180 x 140 x 85 H	180 x 190 x 85H
WEIGHT	1 Kg	1 Kg	1,2kg
COLOUR	Graphite black	Graphite black	Graphite black

**BATTERY CHARGERS** 

#### | "CB500-LT" SWITCHING BATTERY CHARGER

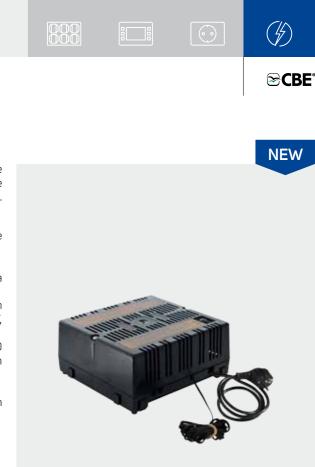
The new CB522-LT switch-mode battery charger has been designed for the charge of 12V lithium batteries only. It is protected against overtemperature and the 12V outputs are protected against short circuit and polarity inversion.

#### Charging process for 12V lithium batteries:

- Bulk battery charging with maximum current until the end-of-charge voltage is reached.
- Note: the end-of-charge voltage is reached only if the battery is efficient.
- Absorption battery charging at constant end-of-charge voltage for a maximum time of 1h (or 30 minutes with I<5A).</li>
- Float Maintenance charging at a constant 13,5V voltage for a maximum time of 240 hours. If a high load lowers the battery voltage under 12,7V, the Bulk phase starts again.
- Refresh The battery is charged at 14,5V for a maximum time of 30 minutes (or until I<5A). Once completed, the charging starts again from the Float phase.</li>

The high frequency switching technology allows high performances with small dimensions and limited weight.

MODEL
PART-NR
TECHNICAL DATA
NOMINAL INPUT VOLTAGE
FREQUENCY
MAX POWER
PROTECTION FUSE
ON/OFF SAFETY SWITCH
OUTPUT TECHNICAL DATA
BULK VOLTAGE (V)
FLOAT VOLTAGE (V)
MAX CURRENT
CHARGING LINE
BATTERY TYPE SELECTOR
SHORT-CIRCUIT AND POLARITY INVERSION PROTECTION
THERMAL PROTECTION
SIGNAL AC POWER SUPPLY (S)
GENERAL TECHNICAL DATA
EFFICIENCY
ROOM TEMPERATURE
VENTILATION
PROTECTION DEGREE
MAINS CONNECTION
BATTERY CONNECTION
CASE
DIMENSIONS (MM)
WEIGHT
COLOUR



#### CB522-LT

CB522-LT
321623
230Vac± 10%
50÷60 Hz
320W
3,15A (glass 5 x 20)
230V
14,5V
13,5V
22A
IUoU
NO
30A (blade)
YES
12V; 50 mA
86%
0 - +40 °C
Gradual automatic regulation
IP 30
Schuko plug
"M6" screw
Nylon + fiber glass self-extinguishing
180 x 190 x 85H
1,2kg
Graphite black

#### **≥CBE**<sup>•</sup>

#### **CB500**" SWITCHING BATTERY CHARGERS

The "CB500" switching battery charger can charge automatically lead-acid and lead-gel batteries. It is protected against overheating and the 12V outputs are protected against short circuits and polarity inversion. The high frequency switching technology gives excellent performance with limited weight and dimensions.

#### Charging process for 12V batteries:

- Maximum current battery charging until the end-of-charge voltage is reached. NOTE: the end-of-charge voltage can be reached only if the battery is fully efficient.
- When the end-of-charge voltage is reached the battery charger continues to work at constant voltage for 90 minutes (lead-acid batteries) or 8 hours (lead-gel batteries).
- Maintenance charging at constant voltage, 13,8 V (lead-gel batteries) or 13,5 V (lead-acid batteries).
- After 10 hours of maintenance the battery charger switches to the Standby phase and charges again only if the battery voltage is lower than 13V.

#### Charging process for 24V batteries:

- Maximum current battery charging until the end-of-charge voltage is reached. NOTE: the end-of-charge voltage can be reached only if the battery is fully efficient.
- When the end-of-charge voltage is reached the battery charger continues to work at constant voltage for 90 minutes (lead-acid batteries) or 8 hours (lead-gel batteries).
- Maintenance charging at constant voltage, 27,6 V (lead-gel batteries) or 27,0 V (lead-acid batteries).
- After 10 hours of maintenance the battery charger switches to the Stand-by phase and charges again only if the battery voltage is lower than 26 V.

MODEL	CB510	CB516/24
PART-NR	311511	311519
TECHNICAL DATA		
NOMINAL INPUT VOLTAGE	230Vac± 10%	230Vac± 10%
FREQUENCY	50Hz÷60Hz	50Hz÷60Hz
MAX POWER	150W	250W
PROTECTION FUSE	2A (glass 5 x 20)	2A (glass 5 x 20)
ON/OFF SAFETY SWITCH	230V	230V
OUTPUT TECHNICAL DATA		
MAX VOLTAGE (V)	14,3Vdc (Lead-Gel) - 14,1Vdc (Lead-Acid)	28,6Vdc (Lead-Gel) - 28,2Vdc (Lead-Acid)
MAINTENANCE VOLTAGE (V)	13,8Vdc (Lead-Gel) - 13,5Vdc (Lead-Acid)	27,6Vdc (Lead-Gel) - 27,0Vdc (Lead-Acid)
MAX CURRENT	10A	8A
CHARGING LINE	IUoU	IUoU
BATTERY TYPE SELECTOR	Lead-Acid / Gel	Lead-Acid / Gel
SHORT-CIRCUIT AND POLARITY INVERSION PROTECTED	15A (blade)	15A (blade)
THERMAL PROTECTION	YES	YES
SIGNAL AC POWER SUPPLY (S)	12V; 50mA	NO
GENERAL TECHNICAL DATA		
EFFICIENCY	86%	86%
ROOM TEMPERATURE	0 ÷ 50°	0 ÷ 50°
VENTILATION	NO	Gradual automatic regulation
PROTECTION DEGREE	IP 30	IP 30
MAINS CONNECTION	Schuko plug	Schuko plug
BATTERY CONNECTION	6,3 terminals	6,3 terminals
CASE	Nylon + fiber glass self-extinguishing	Nylon + fiber glass self-extinguishing
DIMENSIONS (mm)	180 x 140 x 85H	180 x 1 40 x 85 H
WEIGHT	1 Kg	1 Kg
COLOUR	Anthracite grey	Anthracite grey



#### **CONTROL PANEL**

An electronic circuit allows the setting of fans to automatic or manual. It also sets the fans' speed depending on the temperature: the fridge will always work optimally and will be able to maintain the optimum temperature. A trimmer allows you to choose the temperature you want the fans to start at. An LED shows the functions. Supplied with spacer for wall-fixing installation. It fits the "Modular Plates" range (only model MCV).



MCV CONTROL PANEL (SPARE PART)



P292 CONTROL PANEL (SPARE PART)

MODEL	PART-NR DESCRIPTION		FANS DIM. (mm)	CONTROL PANEL DIMENSIONS (mm)
MCV - 2	200312	2 FANS + BROWN CONTROL PANEL	250 x 100 x 28	60 x 60
P292 - 2	2 - 2 200322 2 FANS + GREY CONTROL PANEL		250 x 100 x 28	92 x 42
SPARE PARTS				
MCV	212864	BROWN CONTROL PANEL		60 x 60
P292	200293	GREY CONTROL PANEL		92 x 42

CB510 CB516/24











#### **FANS**

The system consists of two silent and energy saving fans, an electronic sensor, a metal support, a 1,5m long cable: easy and quick to install.



MCV-2 2 FANS + CONTROL PANEL, BROWN



#### P292-2 2 FANS + CONTROL PANEL, GREY

#### ENERGY LINE ►

12V/230V INVERTERS

#### **≥CBE**<sup>•</sup>

#### 12V/230V INVERTERS

- Modified sine wave
- Overvoltage 15V protection, undervoltage 10V protection
- Overload protection
- Thermal protection
- ▶ Input 10V to 15V

- ▶ Output 230V 50Hz-60Hz Smart cooling fan
- Noiseless working
- Remote on/off switch (optional)









AK300

AK150

MODEL	PART-NR	PEAK POWER (W)	CONT. POWER (W)	DIMENSIONS (mm)	WEIGHT (Kg)
AK150	215272	300	150	122 x 77 x 70	0,55
AK300	215274	600	300	165 x 88 x 74	0,9
AK600	215276	1500	600	213 x 200 x 70	2,0
AKIOOO	215278	2400	1000	320 x 210 x 85	3,3
AK1700	215279	3000	1500	458 x 210 x 85	5,5

#### **I** REMOTE SWITCH FOR INVERTER

Remote on/off switch for power Inverter AK line. An LED light indicates power on or off. The kit includes:

Cable L=3,5m

Frame



FOR AK300 - AK600R MCI/G 215270 MCI/M 215271 This panel fits also the "Modular Plates" range. Dimensions 60 x 60mm. Colours: /G Grey RAL 7015 /M Brown RAL 8016



FOR AK1000 - AK1700 MCI2/G 215268 MCI2/M 215269 This panel fits also the "Modular Plates"

range. Dimensions 60 x 60mm. Colours: /G Grey RAL 7015 /M Brown RAL 8016



FOR AK300 - AK600 BMCI/GR 235062 BMCI/MA 235066 This panel fits also the "Berker" range. Dimensions: 60 x 60mm. Colours: /G Grey RAL 7021

/M Brown RAL 8017

#### 12V/230V PURE SINE INVERTERS

- Pure sine wave
- Overvoltage 15V protection, undervoltage 10V protection Overload protection



AKP600

MODEL	PART-NR	PEAK POWER (W)	CONT. POWER (W)	DIMENSIONS (mm)	WEIGHT (Kg)
AKP300	215275	500	300	210 x 147 x 66	1,4
AKP600	215277	1000	600	335 x 236 x 83	3,0
AKP1500	215281	3000	1500	415 x 283 x 100	5,8

#### DIMMER 12V



DLS-200 402200

#### DIMMER - LIGHT BRIGHTNESS ADJUSTER

The light brightness adjuster DLS-200 is an electronic device which allows the brightness of the motorhome's internal lights to be varied (resistive incandescent, LED and halogen lights). It can be connected to one or more push buttons installed in the vehicle. By pressing once, lights can be switched on and off while continual pressing varies the light's brightness. The DLS-200 can manage up to 8 different light channels up to 200W maximum power.



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 Thermal protection Input 10V to 15V • Output 230V 50Hz-60Hz



#### AKP300

Technical Specs:

- Power supply / nominal voltage 12V cc
- Maximum power 200W
- Up to 8 dimmed light channels (parallelable)
- PWM (pulse-width modulation) outputs
- Short-circuit and overheating protection
- Dimensions (mm): 102 x 60 x 30
- Weight (Kg): 0,1

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#### **BATTERY SEPARATORS**

NEW





**CSB40-S** 402740

Automatic battery separator. Relay for batteries parallel and for 3-way fridge. Fuses: fridge, aux, lights. Dimensions: 130 x 80 x 40 mm

#### **CSB40-SP** 402744

Same as CSB4O-S with additionally an integrated car battery recharging device (max 2A). Dimensions: 130 x 80 x 40 mm.

#### **CSB96-P** 402965

Same as CSB40-SP but with "ignition" power supply (instead of "D+" power supply). Dimensions: 130 x 80 x 40 mm

#### CBE ASSISTANCE KIT BRIEFCASE



CBE ASSISTANCE KIT BRIEFCASE 900059

Specific components and tools for assistance on CBE products. Content: connectors, terminals, terminals extraction tools (LOK, MINIFIT, MICROFIT), connection cables, electronic tank probes simulators, temperature sensors.



Automatic battery separator ("ignition" power supply). Functions: 70A parallel relay with engine running Dimensions: 105 x 85 x 42mm





R419/90 212743\*\* 002743\* 12V universal plug 90° + LED R419/S 212755\*\* 002767\*





**R419** 212754\*\* 002754\* 12V universal plug + 8A fuse R511/V 212748\*\* 002748\*

R419/L 212742\*\* 002742\* 12V movable socket Ø12

12V universal plug + 8A fuse + LED





R511 222750\*\* 002750\* 12V socket Ø12

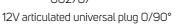
**R512** 222749\*\* 002749\* 12V socket Ø12 with cover

\* Minimum order 10 pieces or multiples of 10 \*\* Blister





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**R412** 212751\*\* 002751\* 12V plug Ø12





**R513** 222747\*\* 002747\* 12V wall-fixing socket Ø12 with cover



R414 212766\*\* 002762AA\* 12V wall-fixing cigarette lighter socket  $\emptyset$ 21

#### ENERGY LINE

"PROCAR" 12V ACCESSORIES

#### 



R414/I 212767\*\* 002761AA\* 12V built-in cigarette lighter socket Ø21 with cover



R417 212763\*\* 002763\* Adapter 12V plug Ø12 / 12V cigarette lighter socket Ø21, cable L=0,25m



R417/R 212936\*\* 002763R\* Adapter 12V Plug Ø12 / 12V cigarette lighter socket Ø21



Adapter 12V articulated universal plug /

12V cigarette lighter socket Ø21,



R417/2S 212937\*\*

cable L=4m

**R510/2** 212744\*\* 002795\* 12V cigarette lighter socket Ø21, cable L=1,8m



R418/2 212796\*\* 002796\* Adapter 12V universal plug / 2 x 12V cigarette lighter sockets Ø21



R418/2R 212768\*\* 002762BA\* Adapter 12V universal plug / 2 x 12V cigarette lighter sockets Ø21



R418/3 212765\*\* 002762CA\* Adapter 12V universal plug / 3 x 12V cigarette lighter sockets Ø21, cable L=2m





R555/8 212756\*\* 002767E\* Adapter 12V universal plug/ pin 2,5 x 5,5 (8A)

**R555/2** 212757\*\* 002767F\* Adapter 12V universal plug/ pin 2,1 x 5,5 (2A)



R416/2 212949\*\*

Adapter 12V universal plug / 12V socket Ø12, cable L=2m



R417/2 212938\*\* 002798\* Adapter 12V universal plug / 12V cigarette lighter socket Ø21, cable L=4m



R417/2F 212797\*\* 002797\* Adapter 12V universal plug / 12V cigarette lighter socket Ø21, flexible cable L=0,6-3m





R550 / MI 212928\*\* 002767G\* 5V 2A micro USB charger L=1,8m (12V/24V input)

R419/U 212758\*\* 002758\* Adapter 12V articulated universal plug/ 5V 2 x 2,5A double USB charging socket

\* Minimum order 10 pieces or multiples of 10 \*\* Blister

#### \* Minimum order 10 pieces or multiples of 10 \*\* Blister

**R510/P** 212745\*\* 002768\* 12V cigarette lighter socket  $\emptyset$ 21 + clamps, cable L=1m



**R550/MU** 212926\*\* 002767C\* 5V 2A mini USB charger L=1,5m (12V/24V input)



**R550/U** 212925\*\* 002767B\* 5V 1A USB charging socket L=1,5m (12V input)

"PROCAR" 12V ACCESSORIES



**R550/UP** 212935\*\* 002767BP\* 5V 3A USB charging socket L=1m (12V input)



R550/UI 212927\*\* 002767H\* 5V 3A USB charging socket (12V input)



**R418/3U** 212769\*\* 002762DA\* Adapter 12V universal plug / 2 12V cigarette lighter sockets Ø21 + 5V 3A USB charging socket, cable L=1,5m





**R420** 222410\*\* Fuse-holder + 10A fuse

**R420/S** 222570\*\*

002767DP\* 5V 2 x 2,5A double USB charging socket

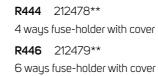




R421 222510\*\* Built-in fuse-holder + 10A fuse

**R457/50** 222567\*\* "Maxi" fuse-holder + 50A fuse + terminals





R459/... 222569\*\* 002571A\* "Megaval" fuse-holder

\* Minimum order 10 pieces or multiples of 10 \*\* Blister

**R550/UU** 212930\*\* (12V input)

\* Minimum order 10 pieces or multiples of 10 \*\* Blister





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Watertight fuse-holder + 10A fuse

R420/C 222572\*\* Modular fuse-holder



**R450** 222551\*\* 222550 (no ring terminals)\* 50A fuse-holder + strip fuse + 2 ring terminals





**R460/...** 222003 (3A)\*\* 222005 (5A)\*\* 222007 (7,5A)\*\* 222010 (10A)\*\* 222015 (15A)\*\* 222020 (20A)\*\* 222025 (25A)\*\* 222030 (30A)\*\* 222040 (40A)\*\*

Blade fuses 10 pcs

"CBE" 12V ACCESSORIES

#### **≥CBE**<sup>•</sup>

R461/... 221003 (3A)\*\* 221005 (5A)\*\* 221007 (7,5A)\*\* 221010 (10A)\*\* 221015 (15A)\*\* 221020 (20A)\*\* 221025 (25A)\*\* 221030 (30A)\*\*



R466/... 222053 (30A)\*\* 222055 (50A)\*\* 222058 (80A)\*\* Strip fuses – 10pcs

**R468**/... 222100 (100A)\*\* 222125 (125A)\*\*

222150 (150A)\*\* 222200 (200A)\*\* 222250 (250A)\*\* "Megaval" blade fuses – 2pcs

"Minival" blade fuses – 10pcs



**R470/...** 222063 (30A)\*\* 222065 (50A)\*\* "Maxi" blade fuses - 2pcs

**R480/...** 222087 (70A)\*\*

222088 (80A)\*\* 222089 (125A)\*\* "Midival" blade fuses – 2pcs



R228 222965\*\* 12V 70A relay



R290/C 223466\*\* Spare key for R290 Battery isolator switch

R295/C 223470\*\* Spare key for R295 Battery isolator switch

R237 212620\*\* 12V red luminous switch



R200 222920\*\* MTA branch knot 3 x M8



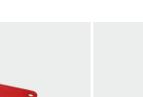
R225 222960\*\* Relay single pole double throw with diode 40/30A



**R331** 223461\*\* Battery terminals with cover

003467 (without ring terminals)\*

Battery isolator switch 100A / 500A





**R295** 223468\*\*

(5 sec)

\* Minimum order 10 pieces or multiples of 10 \*\* Blister

**R290** 223467\*\*

(10 sec)

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nout rina termi		R295/P		9** 150.4 /	1200	٨

003467A (without ring terminals)\* Battery isolator switch 150A / 1200A

Battery isolator switch 150A / 1200A with knob and display (5 sec)





**R295/R** 003467C Battery isolator switch 300A/1000A (5 sec)

#### ENERGY LINE

"CBE" 12V ACCESSORIES CARAVAN PLUGS AND SOCKETS

**≥CBE**<sup>•</sup>



**R407** 212740\*\* 002740\* Caravan plug 7 pins



R408 212770\*\* 002770\* Caravan plug 13 pins



**R507** 222739\*\* 002739\* Caravan socket 7 pins







**R425** 212955\*\* 230V Extension cable H07RN-F, 3 x 2,5 mm<sup>2</sup> 25m, CEE plug / CEE socket

R425/S 212957\*\* 230V Extension cable H07RN-F, 3 x 2,5 mm<sup>2</sup> 25m, CEE plug / CEE socket + schuko socket



R409/R 212776\*\* 002772A\* Adapter 7 pins plug / 13 pins socket



R410/R 212775\*\* 002773A\* Adapter 13 pins plug / 7 pins socket



R508 212771\*\* 002771\* Caravan socket 13 pins





R422 212712\*\* 002712\* 230V CEE male plug

**R540** 212735\*\* 002735\* 230V schuko socket



**R409** 212772\*\* 002772\* Adapter 7 pins plug / 13 pins socket with cable L=1m



**R411** 212774\*\* 002774\* Adapter 13 pins plug / 7 pins socket L=1m





R428 212720\*\* 002720\* Adapter 90° schuko plug / 230V CEE blue socket

R428/I 212719\*\* 002719\* Adapter 90° italian plug / 230V CEE blue socket

\* Minimum order 10 pieces or multiples of 10 \*\* Blister

\* Minimum order 10 pieces or multiples of 10 \*\* Blister









**R522** 212713\*\* 002713\* 230V CEE female socket



R440 212733\*\* 002733\* 230V schuko plug





**R424** 212945\*\* Adapter 230V schuko plug / 230V CEE socket, cable L=0,3m

"CBE" 230V ACCESSORIES

#### **≥CBE**<sup>•</sup>

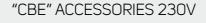
R429 212721\*\* 002721\* Adapter schuko plug / 230V CEE blue socket



**R523** 212714\*\* 002714\* 230V blue CEE socket 90° + schuko socket



**R441** 212710\*\* 002710\* 230V watertight schuko plug in black rubber







R430 212730\*\* 002730\* 230V built-in male CEE plug, 105 x 110mm, white

**R431** 212725\*\* 230V built-in male CEE plug, 100 x 160mm, white



**R541** 212711\*\* 002711\* 230V watertight schuko socket in black rubber



R426/B 212723\*\* 002723\*\* Adapter 230V CEE plug / schuko socket



**R427** 212941\*\* Adapter 230V CEE plug / french standard socket





R430/C 212729\*\* Spare cover for R430 plug, 105 x 110mm, white

R431/C 212727\*\* Spare cover for R431 plug, 100 x 160 mm, white



**DS100** 203640 230V 13A magneto-thermal switch (MCB) with 2 protected poles, dimensions 138 x 180 x 85mm. Colour: Light Grey

**DS120** 203690 230V 13A magneto-thermal switch (RCD) with 2 protected poles, dimensions 138 x 180 x 85mm. Colour: Light Grey



**DS-SR** 203635 230V 25A relay net-generator changeover



R430M 002730M\* 230V built-in male CEE plug with magnetic locking, 105 x 105mm



**R435** 212760\*\* 002760\* 230V built in external socket + 12V socket + TV + SAT, 105 x 110 mm, white

\* Minimum order 10 pieces or multiples of 10 \*\* Blister

\* Minimum order 10 pieces or multiples of 10 \*\* Blister







R432 002932AB\* 230V built-in "ROSI" CEE plug, 110 x 160mm, white



**R432/C** 212724\*\* Spare cover for R432 plug, 110 x 160 mm, white

TECHNICAL QUESTIONS: assistance@cbe.it



