



SOLAR SYSTEM

MODULAR PLATES

# ELECTRONICS FOR CARAVANNING

LITHIUM LINE

ENERGY LINE

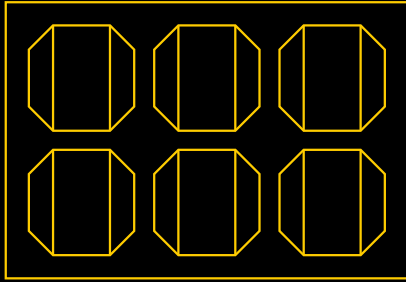
NEW TECHNOLOGY

Technical specifications are subject to change without prior notice.

The installation must be carried out by a qualified technician.



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# SOLAR SYSTEM



PHOTOVOLTAIC MODULES

ACCESSORIES

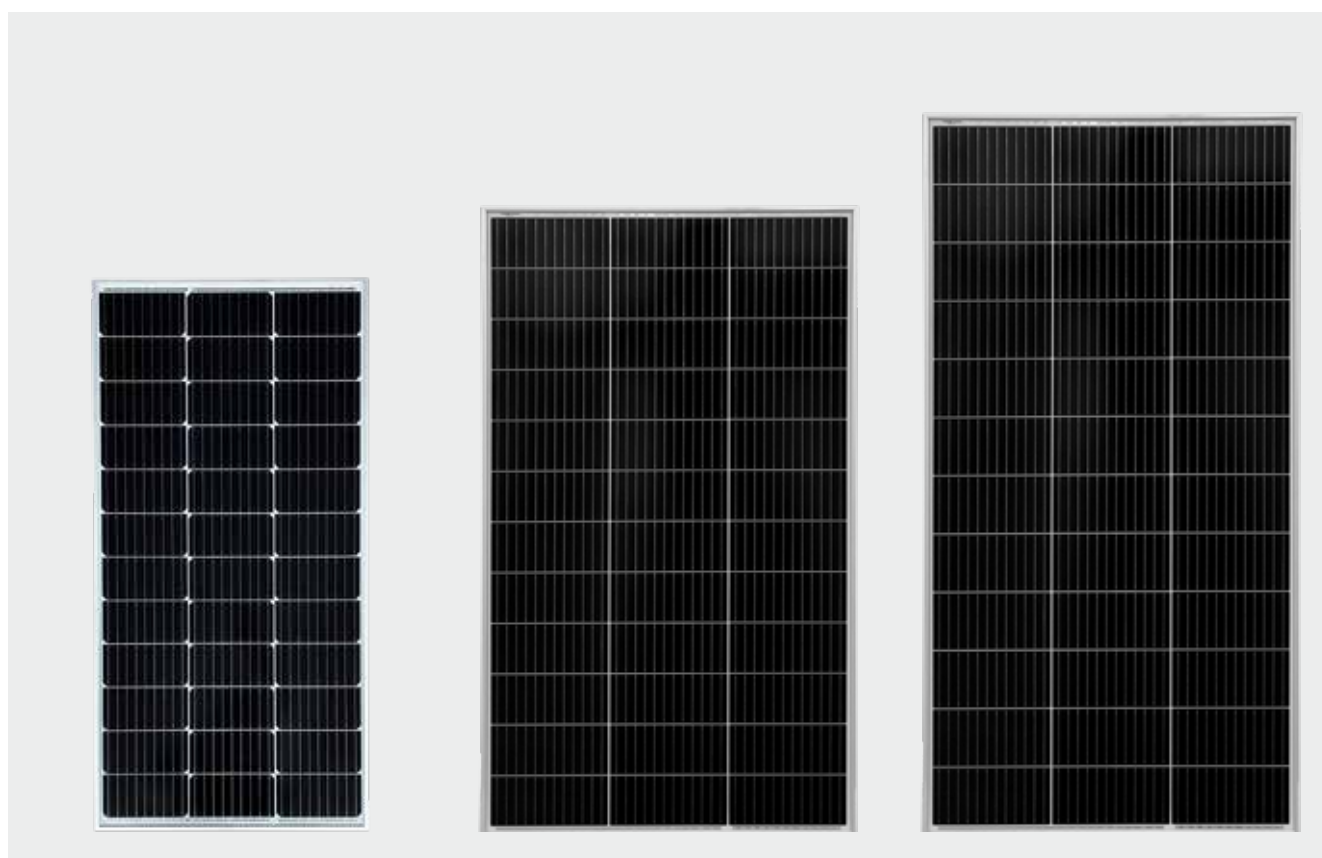




## | CBE PHOTOVOLTAIC MODULES STANDARD SERIES

**CBE PHOTOVOLTAIC MODULES** made with **PERC (Passivated Emitter and Rear Cell) solar cells** guarantee a higher level of conversion efficiency and, at the same time, additional technical advantages such as a lower temperature coefficient and, therefore, better performance. The high-quality anti-reflective coating of the cells and special glass make for a truly high-performance photovoltaic module. The high transmittance tempered glass is impact and weather resistant. The back of the module is protected by a sheet

of white Tedlar, preventing any infiltration of air and moisture, thus isolating the electrical contacts and avoiding any possibility of their oxidation. The module frame is made of anodised aluminium and the bypass diodes and cable glands needed for connection are housed in the junction box at the back. CBE photovoltaic modules are built using the most advanced technology in line with European standards and are covered by a 25-year warranty on the declared power.



**MF110** 110W

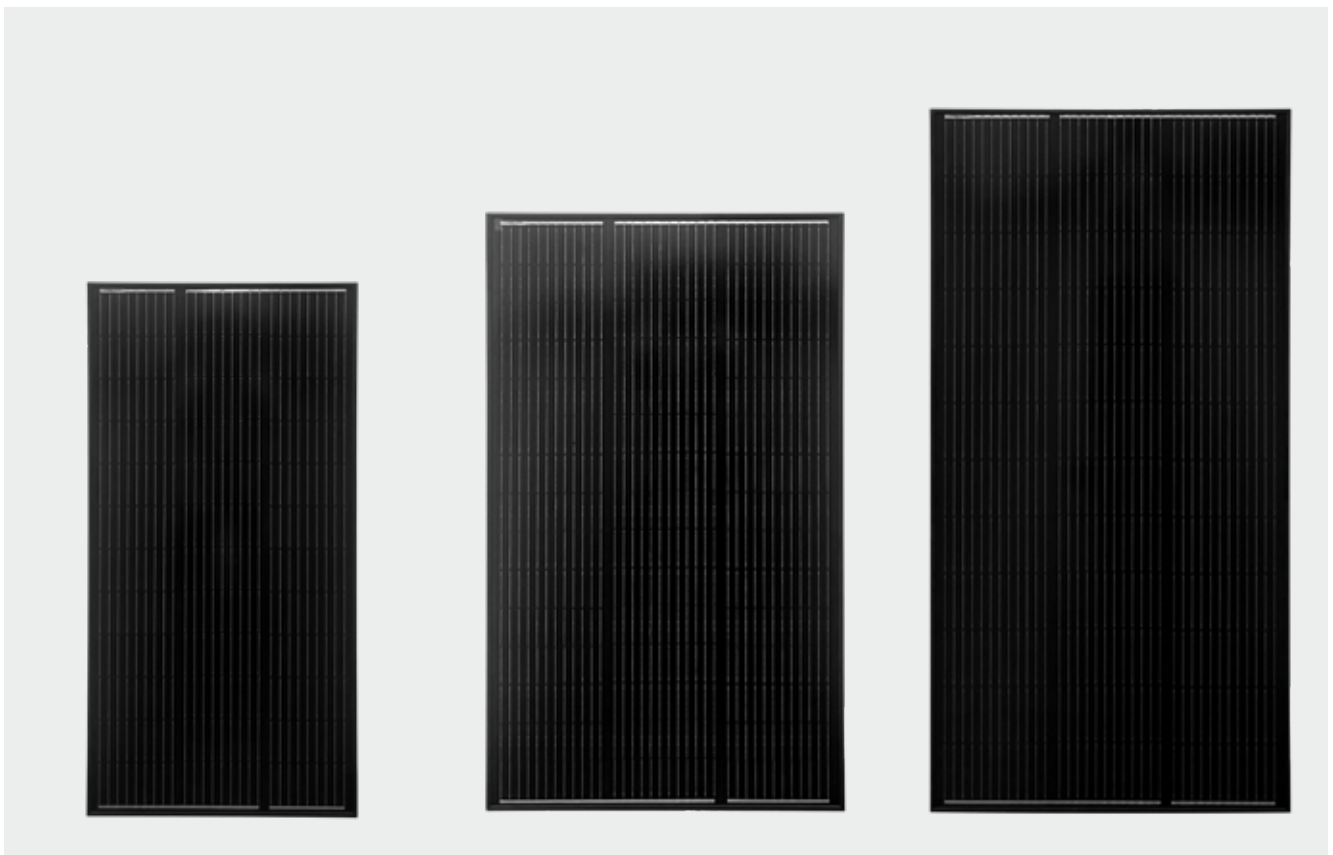
**MF145** 145W

**MF175** 175W

MODEL	MF110	MF145	MF175
<b>PART-NR</b>	<b>215981</b>	<b>215982</b>	<b>215983</b>
TYPE	PERC (Passivated Emitter and Rear Cell)	PERC (Passivated Emitter and Rear Cell)	PERC (Passivated Emitter and Rear Cell)
CELLS NUMBER	36	36	36
RATED VOLTAGE	12 V	12 V	12 V
MAX POWER	110 W	145 W	175 W
TOLERANCE	+3 %	+3 %	+3 %
OPEN CIRCUIT VOLTAGE	24,78 V	24,48V	24,9 V
SHORT CIRCUIT VOLTAGE	5,68 A	7,54A	9,06 A
VOLTAGE AT MAX POWER	20,78 V	20,52 V	20,61 V
CURRENT AT MAX POWER	5,33 A	7,07 A	8,53 A
DIMENSIONS (mm)	1062 x 530 x 30	1116 x 670 x 30	1320 x 670 x 30
WEIGHT (Kg)	6,2	8	9,5



## CBE PHOTOVOLTAIC MODULES BLACK SERIES



**MFB105** 105W

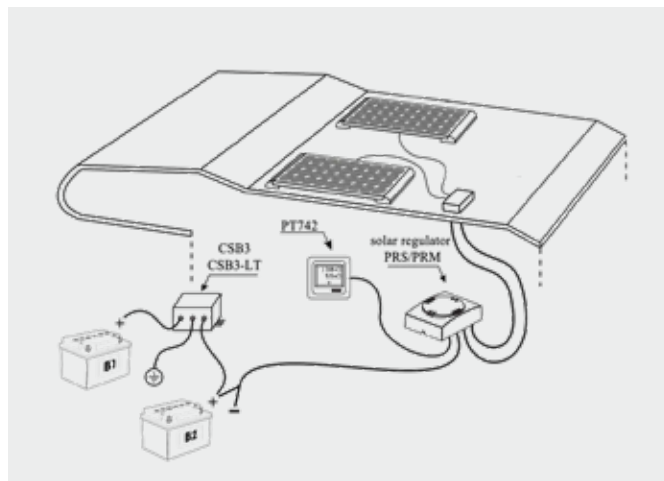
**MFB140** 140W

**MFB170** 170W

MODEL	MFB105	MFB140	MFB170
<b>PART-NR</b>	<b>215981B</b>	<b>215982B</b>	<b>215983B</b>
TYPE	PERC (Passivated Emitter and Rear Cell)	PERC (Passivated Emitter and Rear Cell)	PERC (Passivated Emitter and Rear Cell)
CELLS NUMBER	36	36	36
RATED VOLTAGE	12 V	12 V	12 V
MAX POWER	105 W	140 W	170 W
TOLERANCE	+3 %	+3 %	+3 %
OPEN CIRCUIT VOLTAGE	24,75 V	24,25V	24,86 V
SHORT CIRCUIT VOLTAGE	5,46 A	7,35 A	8,78 A
VOLTAGE AT MAX POWER	20,75 V	20,32 V	20,62 V
CURRENT AT MAX POWER	5,10 A	6,89 A	8,25 A
DIMENSIONS (mm)	1062 x 530 x 30	1116 x 670 x 30	1320 x 670 x 30
WEIGHT (Kg)	6,2	8	9,5



WIRING DIAGRAM



KFPN AND KFPB

SOLAR PANEL FIXING KITS

The KFPN and KFPB supports are made, respectively, in silver anodized aluminum and black 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)
KFPB530 (black)	250410B	530 x 60 x 50	0,45
KFPB670 (black)	250425B	670 x 60 x 50	0,55
KFPN530	250410	530 x 60 x 50	0,45
KFPN670	250425	670 x 60 x 50	0,55



CSB3 205025N

**CAR BATTERY AUTOMATIC RECHARGING DEVICE.** When the leisure battery voltage exceeds 13,6V (battery charger and/or photovoltaic modules 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-3 is ready to recharge the car battery if necessary. Dimensions: 80 x 50 x 50mm



CSB3-LT 205026N

**CAR BATTERY AUTOMATIC RECHARGING DEVICE** both for photovoltaic modules and for battery chargers, through the service battery. This device is suitable for operation with lithium service batteries and is installed close to the batteries, thus avoiding connecting the car battery to the solar charge regulator. It charges the car battery with a current from 0.1A to max 4A, depending on the battery status and giving priority to the service battery. When the green LED is on, it means that the CSB3-LT is ready to recharge the car battery if necessary. Dimensions: 80 x 50 x 50mm





## PRS150, PRS300 AND PRS350 SOLAR CHARGE REGULATORS FOR 12V PHOTOVOLTAIC MODULES

The solar charge regulators **PRS150**, **PRS300** and **PRS350** are compatible with 12V photovoltaic modules. Designed and developed with cutting-edge electronics, they offer high electrical performance and very low heat dissipation.

PRS150 is compatible with photovoltaic modules with a maximum power of 150W. It features two LEDs to indicate the battery charge and is also designed to replace the PRS110 model.

PRS300 and PRS350 are designed to connect photovoltaic modules with a total maximum power of 300W and 350W respectively and are ready for connection of the PT742 test panel, used to monitor photovoltaic module charge and battery voltage. PRS300 and PRS350 have separate charge lines that can be selected with a switch inside the controller. There is also a battery desulphation function that is automatically activated only when needed. The 4 LEDs indicate the battery charge, any incorrect electrical connections and the on/off status of the device.



**PRS150** 204268



**PRS300** 204274



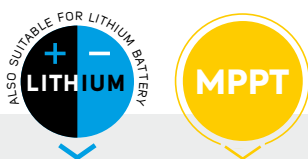
**PRS350** 204480

MODEL	PRS150	PRS300	PRS350
<b>PART-NR</b>	<b>204268</b>	<b>204274</b>	<b>204480</b>
RATED VOLTAGE	12V	12V	12V
MAXIMUM VOLTAGE OF THE PHOTOVOLTAIC MODULE IN OPEN CIRCUIT (V <sub>oc</sub> )	27V	27V	27V
MAX POWER PHOTOVOLTAIC MODULES	150W	300W	350W
MAXIMUM OUTPUT CURRENT	9A	17A	20A
NUMBER OF PHOTOVOLTAIC MODULES CONNECTIONS	1	2	2
END-OF-CHARGE VOLTAGE	14,1V	14,1V (A) - 14,3V (B) - 14,7V (C)	14,1V (A) - 14,3V (B) - 14,7V (C) - 14,5V (Li)
FLOAT VOLTAGE	13,5V	13,5V (A) - 13,8V (B) - 13,8V (C)	13,5V (A) - 13,8V (B) - 13,6V (C) - 13,5V (Li)
NUMBER OF CHARGE LINES	1	3	4
BATTERY DESULPHATION	NO	YES	YES (except the lithium charge line)
REVERSE CURRENT BLOCKING PROTECTION	Diode	Electronic	Electronic
REVERSE POLARITY PROTECTION	YES	YES	YES
TEST PANEL CONNECTION	NO	PT 742	PT 742
SELF-CONSUMPTION	0,01mA	0A (In the absence of sunlight, the regulator switches off completely)	0A (In the absence of sunlight, the regulator switches off completely)
AUTOMATIC SHUTDOWN	In absence of sunlight	In absence of sunlight	In absence of sunlight
DIMENSIONS (mm)	115 x 90 H37	115 x 90 H37	115 x 90 H37



## NEW PRM350 MPPT SOLAR CHARGE REGULATOR FOR PHOTOVOLTAIC MODULES

The PRM350 solar charge regulator can charge lead (liquid, gel and AGM) and lithium 12V batteries automatically controlling and limiting the energy supplied by the connected photovoltaic modules. It features a MPPT (Maximum Power Point Tracker) system that allows picking in every situation of the maximum power supplied by the photovoltaic module.



**PRM350** 204285

The PRM350 is suitable for operation with 32 to 72-cell photovoltaic modules up to a maximum power of 350W.

For optimal performance, you are advised to connect photovoltaic modules with a number of cells in series over 36, regardless the type of installation chosen.

MODEL	PRM350
<b>PART-NR</b>	<b>204285</b>
BATTERY RATED VOLTAGE	12V
MAXIMUM VOLTAGE OF THE PHOTO-VOLTAIC MODULE IN OPEN CIRCUIT (V <sub>oc</sub> )	45V
MAX POWER PHOTOVOLTAIC MODULES	300W (32÷40 modules) – 350W (41÷72 modules)
MAXIMUM OUTPUT CURRENT	25A
NUMBER OF PHOTOVOLTAIC MODULES CONNECTIONS	2
PERFORMANCE	>95%
END-OF-CHARGE VOLTAGE	14,1V (A) - 14,4V (B) - 14,7V (C) - 14,6V (Li)
FLOAT VOLTAGE	13,5V (A) - 13,8V (B) - 13,8V (C) - 13,8V (Li)
NUMBER OF CHARGE LINES	4
BATTERY DESULPHATION	Electronic
REVERSE CURRENT BLOCKING PROTECTION	YES
REVERSE POLARITY PROTECTION	YES
TEST PANEL CONNECTION	PT 742
SELF-CONSUMPTION	0A (In the absence of sunlight, the regulator switches off completely)
AUTOMATIC SHUTDOWN	in the absence of sunlight
DIMENSIONS (mm)	150 x 110 H48

## TEST PANELS FOR SOLAR CHARGE REGULATORS



**PT742 / GR** 204742

**12V TOUCH TEST PANEL** with OLED display 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 "PRS350", "PRS300", "PBS90" and "PRM350" solar charge regulators. This panel fits also the new "Modular Plates" range.

Colours: /GR Grey RAL 7021  
Dimensions: 60 x 60mm



**KT1** 707200

### 1-EXIT ROOF DUCT

(for KTR-G 12mm diameter sheath).  
For maximum roof thickness of 60mm.



**KT51** 707070  
**5-WAY KIT with 2 holes for PG11** for cable routing of photovoltaic modules, video cameras, antennas, etc. from the roof. Suitable for a maximum roof thickness of 60 mm.



**KT51-PG** 707071  
**5-WAY KIT complete with 2 x PG11 cable glands** for cable routing of photovoltaic modules, video cameras, antennas, etc. from the roof. Suitable for a maximum roof thickness of 60 mm.



**KT61** 707061  
**CABLE ENTRY GLAND with 2 holes for PG11** for cable routing of photovoltaic modules, video cameras, antennas, etc. from the roof. Suitable for routing bulky cables.



**KT61-PG** 707062  
**CABLE ENTRY GLAND** complete with 2 x PG11 cable glands for cable routing of photovoltaic modules, video cameras, antennas, etc. from the roof.



**KT6-PG** 707063  
**CABLE ENTRY GLAND** complete with PG16 cable gland for 2 cables with outer diameter 6mm<sup>2</sup>.



**KTR2-P** 707140  
**PG16 CABLE GLAND** suitable for 2 cables with outer diameter 6mm<sup>2</sup>.



**KTR-C** 707143  
**KIT WITH 2 QUICK CONNECTORS** to connect the latest series of CBE photovoltaic modules.



**KTR2-G** 707144  
**SHEATH** Ø 17mm, weatherproof and UV-resistant. 50 m roll, grey.



**KTR2-F** 707146  
**SHEATH FASTENER** for Ø 17mm sheath, grey.



**KT51-C50** 707073

**WIRING KIT FOR** latest series of CBE photovoltaic modules complete with UV-resistant cable, 2 x 4 mm<sup>2</sup>, length 5 metres, and "solar" type quick connectors.



**KT51K-C50** 707080

**KIT COMPLETE** with KT51-PG junction box and KT51-C50 cables.



**KT61K-C50** 707085

**KIT COMPLETE** with junction box, cable glands and 5m cables to connect 2 photovoltaic modules.



**KT6K-C50** 707090

**KIT COMPLETE** with KT6 - PG cable entry gland and KT51-C50 cables.



**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



**KT6 707060**  
**6-EXITS ROOF DUCT** for the wiring of photovoltaic modules, cameras or antennas. Suitable for thick cables. For maximum roof thickness of 60mm. Dimensions: 20 x 90 x 30mm.



**KT6-C 707060C**  
**CABLE ENTRY GLAND** for the wiring of photovoltaic modules, cameras or antennas. Suitable for thick cables.



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



**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.



**KTR-R 707132\***  
**PG11 STRAIGHT FITTING** for KTR-G 12mm diameter sheath complete with nut & gasket. Suitable for "KT5" roof duct kit. Colour: grey.



**KT1-10 707210**  
**1-EXIT ROOF DUCT** provided with cable sheath L=1m and 2 x 6mm<sup>2</sup> L=2m cables.

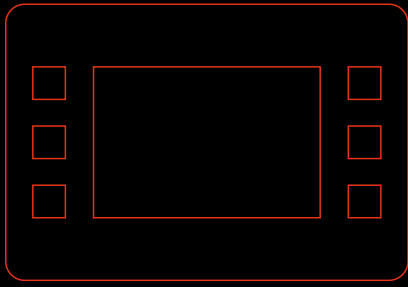
**KT1-20 707220**  
**1-EXIT ROOF DUCT** provided with cable sheath L=2m and 2 x 6 mm<sup>2</sup> L=3m cables.



**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 x 6 mm<sup>2</sup> 3m long cables. Provided with PG11 fittings and terminals for photovoltaic module connection.

\* Minimum order 10 pieces or multiples of 10



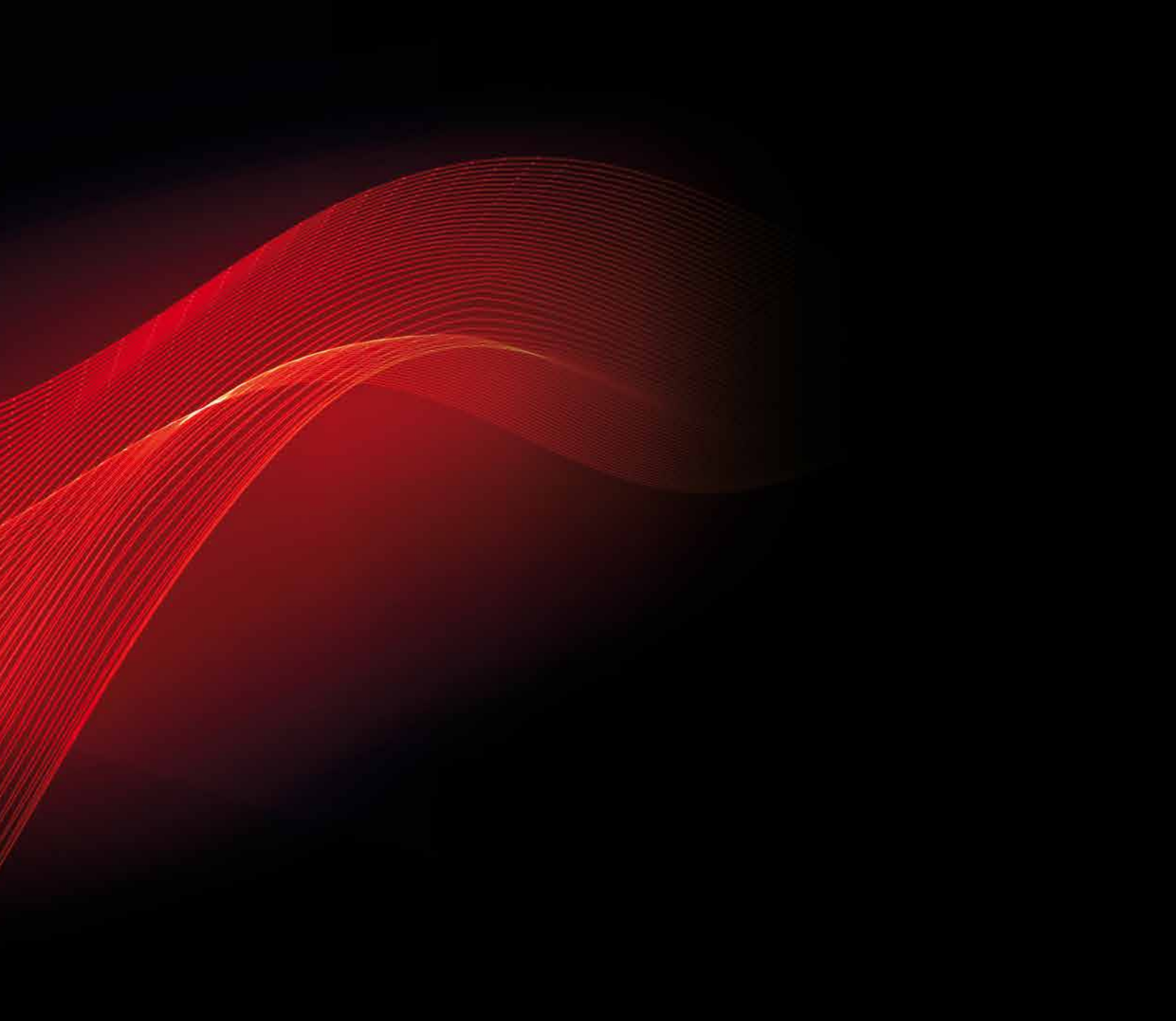
# NEW TECHNOLOGY



CONTROL PANELS

TEST PANELS

GAS DETECTORS







### 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 PC260

Microprocessor controlled digital system with 3,2" GRAPHIC NEGATIVE LCD 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
- ▶ "Twilight" sensor

**Control panel dimensions 180 x 125 mm**



THE SYSTEM INCLUDES:	MODEL	PART-NR
CONTROL PANEL	PC380	<b>113800</b>
12V DISTRIBUTION BOX, PROTECTION FUSES	DS300	<b>209000</b>
12V 16A SWITCHING BATTERY CHARGER	CB516-3	<b>321517</b>
DRINKING WATER ELECTRONIC TANK PROBE (indicate the tank height on the purchase order)	SPE/ ...	<b>5120:::</b>
SCREW PROBES FOR WASTE WATER TANK	SS/P	<b>505000</b>
CABLES KIT FOR TANK PROBES L=6m	CCS200	<b>709020</b>
CABLE FOR CONTROL PANEL L=6m	CP973-6	<b>709623</b>
CABLE WITH SENSORS FOR INTERNAL AND EXTERNAL TEMPERATURE (L=1,5m and L=5m)	CTIE-2	<b>708661</b>
50A FUSE + FUSE-HOLDER	R450	<b>222551</b>

THE SYSTEM INCLUDES:	MODEL	PART-NR
CONTROL PANEL	PC260	<b>112600</b>
12V DISTRIBUTION BOX, PROTECTION FUSES	DS300	<b>209000</b>
12V 16A SWITCHING BATTERY CHARGER	CB516-3	<b>321517</b>
DRINKING WATER ELECTRONIC TANK PROBE (indicate the tank height on the purchase order)	SPE/ ...	<b>5120:::</b>
SCREW PROBES FOR WASTE WATER TANK	SS/P	<b>505000</b>
CABLES KIT FOR TANK PROBES L=6m	CCS200	<b>709020</b>
CABLE FOR CONTROL PANEL L=6m	CP973-6	<b>709623</b>
CABLE WITH SENSORS FOR INTERNAL AND EXTERNAL TEMPERATURE (L=1,5m and L=5m)	CTIE-2	<b>708661</b>
50A FUSE + FUSE-HOLDER	R450	<b>222551</b>





## 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**



## 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**



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

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



**| PC160**

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
- ▶ Car battery charger
- ▶ Save service battery function
- ▶ Regulation of screen luminosity

**Control panel dimensions 180 x 125 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**



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

THE SYSTEM INCLUDES:	MODEL	PART-NR
CONTROL PANEL	PC160	<b>111600</b>
12V DISTRIBUTION BOX, PROTECTION FUSES	DS300	<b>209000</b>
12V 16A SWITCHING BATTERY CHARGER	CB516-3	<b>321517</b>
DRINKING WATER TANKPROBE	SP5/40	<b>505140</b>
SCREW PROBES FOR WASTE WATER TANK	SS/P	<b>505000</b>
CABLES KIT FOR TANKPROBES L=6m	CCS910	<b>709160</b>
CABLE FOR CONTROL PANEL L=6m	CP973-6	<b>709623</b>
50A FUSE + FUSE-HOLDER	R450	<b>222551</b>



**PARTS INCLUDED IN THE  
PC210 - PC220 – PC260 – PC380 COMPLETE SYSTEMS**



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



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



**SPE / ...**  
DRINKING WATER ELECTRONIC TANK PROBE



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



**CCS200**  
CABLES KIT FOR TANK PROBES L=6m



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



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



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

**PARTS INCLUDED IN THE  
PC110 – PC180 COMPLETE SYSTEMS**



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



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



**SP5/40**  
DRINKING WATER TANK PROBE



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



**CCS910**  
CABLES KIT FOR TANK PROBES L=6m



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



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



### | SYSYEM NE273

Microprocessor controlled digital system with 7" GRAPHIC COLOURS control panel.

**Main functions:**

- ▶ LED Control Panel with 3 digit visualization
- ▶ 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
- ▶ Regulation of screen luminosity

**Control panel dimensions 195 x 129 mm**



NE273  
CONTROL PANEL

THE SYSYEM INCLUDES	MODEL	PART-NR
CONTROL PANEL	NE273	<b>1347.273.03</b>
12V DISTRIBUTION BOX, PROTECTION 13 FUSES	NE356	<b>1347.356.01</b>
DRINKING WATER TANK PROBE S1-S2	SSP	<b>1347.000.04</b>
WASTE WATER TANK PROBE R1-R2	SSR	<b>000.400.32</b>
CABLE KIT FOR TANK PROBES S1=6MT R1=6MT	CSS	<b>000.404.66</b>
CABLE FOR CONTROL PANEL L=8m	CPC	<b>000.400.70</b>
CABLE FOR EXTERNAL TEMPERATURE L=4m	CTE	<b>006385AGE</b>

### | SYSYEM NE334

Microprocessor controlled digital system with 7" GRAPHIC COLOURS control panel.

**Main functions:**

- ▶ LED Control Panel with 3 digit visualization
- ▶ 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
- ▶ Regulation of screen luminosity

**Control panel dimensions 170 x 103 mm**



NE334  
CONTROL PANEL

THE SYSYEM INCLUDES	MODEL	PART-NR
CONTROL PANEL	NE334	<b>1347.334.01</b>
12V DISTRIBUTION BOX, PROTECTION 13 FUSES	NE356	<b>1347.356.01</b>
DRINKING WATER TANKPROBE S1-S2	SSP	<b>1347.000.04</b>
WASTE WATER TANKPROBE R1-R2	SSR	<b>000.400.32</b>
CABLE KIT FOR TANKPROBES S1=6MT R1=6MT	CSS	<b>000.404.66</b>
CABLE FOR CONTROL PANEL L=8m	CPC	<b>000.400.70</b>
CABLE FOR EXTERNAL TEMPERATURE L=4m	CTE	<b>006385AGE</b>



## SYSEYEM NE333

Microprocessor controlled digital system with 7" GRAPHIC COLOURS control panel.

### Main functions:

- ▶ LED Control Panel with 3 digit visualization
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- ▶ 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
- ▶ Regulation of screen luminosity

**Control panel dimensions 114 x 84 mm**



THE SYSEYEM INCLUDES	MODEL	PART-NR
CONTROL PANEL	NE333	<b>1347.333.01</b>
12V DISTRIBUTION BOX, PROTECTION 13 FUSES	NE356	<b>1347.356.01</b>
DRINKING WATER TANK PROBE S1-S2	SST/75	<b>1347.000.04</b>
WASTE WATER TANK PROBE R1-R2	SSR	<b>000.400.32</b>
CABLE KIT FOR TANK PROBES S1=6MT R1=6MT	CSS	<b>000.404.66</b>
CABLE FOR CONTROL PANEL L=8m	CPC700	<b>000.400.70</b>
CABLE FOR EXTERNAL TEMPERATURE L=4m	CTE	<b>006385AGE</b>

NE333  
CONTROL PANEL

## PARTS INCLUDED IN THE NE273 – NE 333 – NE 334 COMPLETE SYSTEMS



**NE356**  
12V DISTRIBUTION BOX, PROTECTION 13 FUSES



**SST/75**  
DRINKING WATER TANK PROBE S1-S2



**SSR**  
WASTE WATER TANK PROBE R1-R2



**CSS**  
CABLE KIT FOR TANK PROBES S1=6MT R1=6MT



**CPC700**  
CABLE FOR CONTROL PANEL L=8m



**CTE**  
CABLE FOR EXTERNAL TEMPERATURE L=4m



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, tank probe "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, tank probe "SP5/40", "BMAC1C" frame and "MAD" spacer.

Dimensions: 60 x 60 mm.



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, tank probe "SP5/40", "BMAC1C" frame and "MAD" spacer.

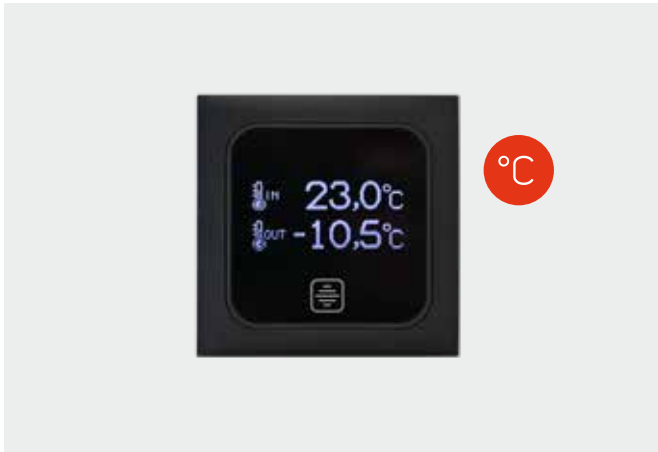
Dimensions: 60 x 60 mm.

COLOURS:

... / G (Grey RAL 7015)

... / M (Brown RAL 8016)



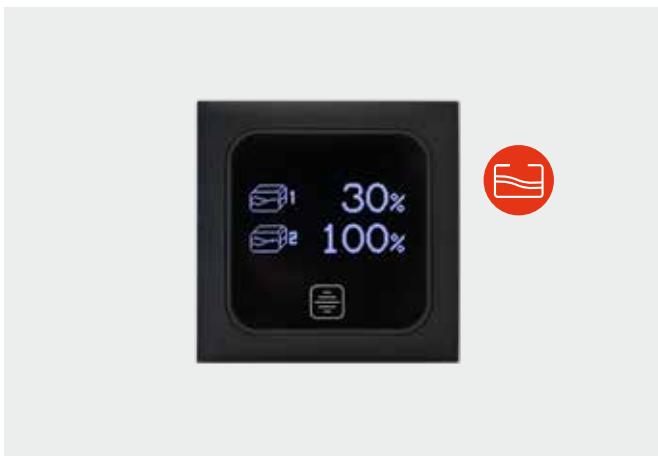


PT738 / GR 204738

**12V TOUCH TEST PANEL** with OLED display 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**



PT722 / GR 204762

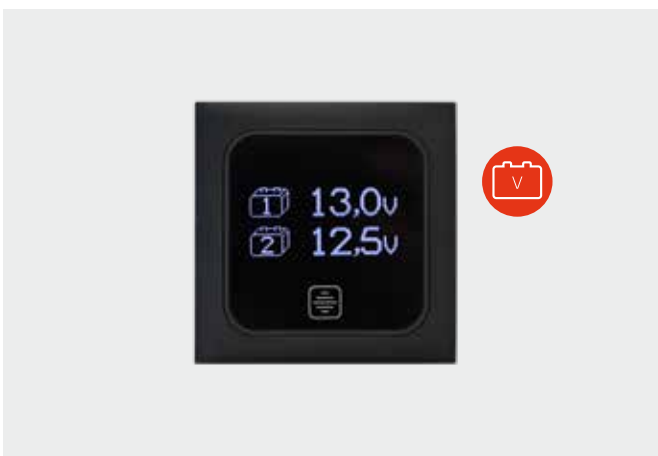
**12V TOUCH TEST PANEL** with OLED display to test 2 water tanks' level in percentage.

**The kit includes** 2 cables L=4m, "BMAC1C" frame and a wall-fixing spacer.

This panel fits also the "Modular Plates" range.

**NB: electronic tank probe mod. "SPE" must be ordered separately.**

**12V Power supply. Dimensions: 60 x 60mm**



PT732 / GR 204732

**12V TOUCH TEST PANEL** with OLED display 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**

COLORE:

... / GR (anthracite grey RAL 7021)



PT752 / GR 204752

**12V TOUCH TEST PANEL** with OLED display to test the voltage of a 12V battery and the discharge or the charge of the battery from -130A to +130A.

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

**12V Power supply. Dimensions: 60 x 60mm**



PT750 / NE363 204750

**DIGITAL TOUCH TEST PANEL** with OLED display showing the charge status (%) of lithium and conventional batteries.

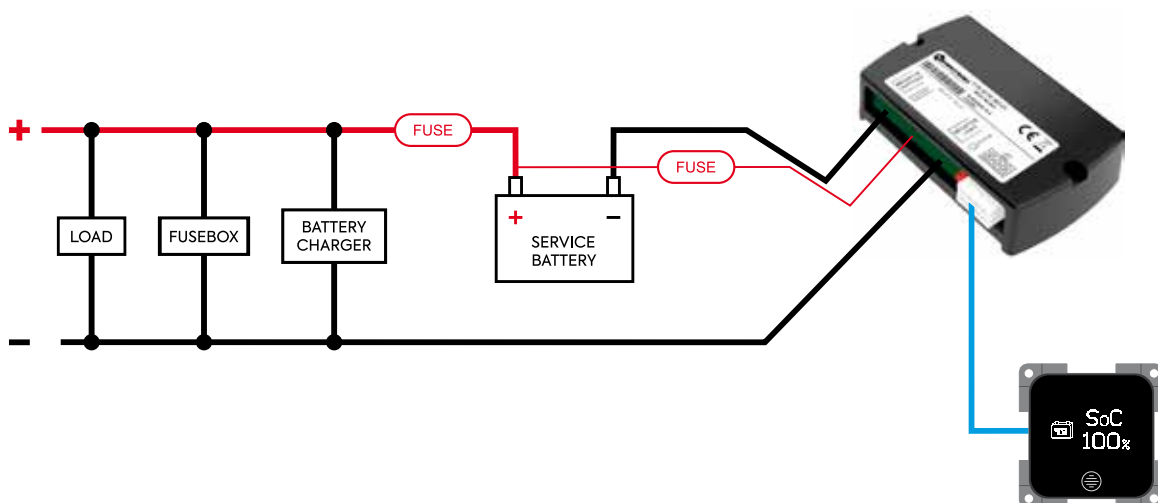
Displays State of Charge (SoC), battery voltage and current -150A + 150A.

With minimum brightness adjustment.

Complete with shunt and cable L =5m.

Built-in or wall-mounted version with supplied spacer; complete with Berker "BMAC1C" frame including the possibility for combination with "Modular Plates" and "Modular Plates Berker" series.

**12V power supply. DIM 60 x 60 mm**





**BMTG / GR** 232800  
**BMTG / MA** 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**



**BMTCO / GR** 232802  
**BMTCO / MA** 232803

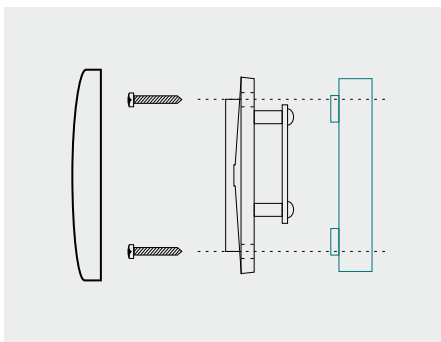
**12V CARBON MONOXIDE DETECTOR**

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.

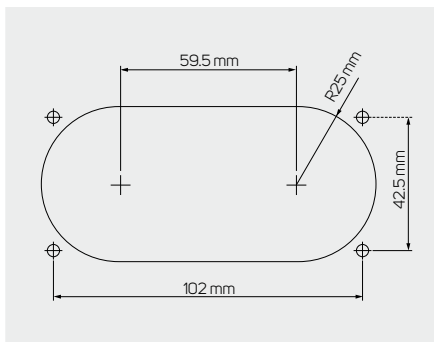
The kit includes a "BMAC2" frame.  
 This panel fits also the "BERKER INTEGRO" range.

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

**| INSTALLATION**

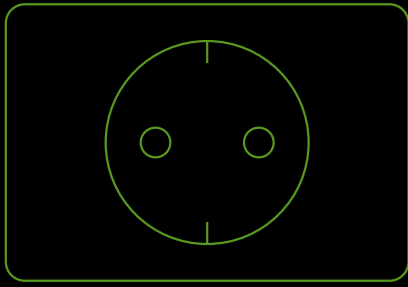


Wall mounting with spacer



Recessed mounting

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



# MODULAR PLATES



SWITCHES

SOCKETS

ACCESSORIES

FRAMES





**MCN / ...**  
SWITCH

COLOUR	BLISTER	BOX *
... / G	212866	270122
... / M	212867	270126
... / B	212868	270120
... / GC	-	270124



**MC12P / ...**  
12V SWITCH + LED

COLOUR	BLISTER	BOX *
... / G	212855	270132
... / M	212856	270136
... / B	-	270130
... / GC	-	270134



**MC12N / ...**  
12V SWITCH + LED

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



**MC2N / ...**  
DOUBLE SWITCH

COLOUR	BLISTER	BOX *
... / G	212872	270142
... / M	212873	270146
... / B	212874	270140
... / GC	-	270144



**MCD / ...**  
TWO-WAY SWITCH

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	-	-

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



**MCD2N / ...**  
DOUBLE TWO-WAY SWITCH

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



**MCPL / ...**  
PUMP SWITCH + LIGHT SWITCH

COLOUR	BLISTER	BOX *
... / G	<b>212862</b>	<b>270482</b>
... / M	-	-
... / B	-	-
... / GC	-	-



**MCP / ...**  
PUSH-BUTTON

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



**MCGU / ...**  
3 POSITION STEP PUSH-BUTTON

COLOUR	BLISTER	BOX *
... / G	<b>212834</b>	<b>270292</b>
... / M	-	-
... / B	-	-
... / GC	-	-



**MCG5 / ...**  
3 POSITION STEP PUSH-BUTTON

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



**MCGD5 / ...**  
STEP PUSH-BUTTON +  
12/24V LIGHT TWO-WAY SWITCH

COLOUR	BLISTER	BOX *
... / G	<b>212837</b>	<b>272112</b>
... / M	<b>212838</b>	<b>272116</b>
... / B	-	-
... / GC	-	-

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



**MP12 / ...**  
STANDARD 12V SOCKET

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



**MP12TV / ...**  
STANDARD 12V SOCKET + TV

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



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

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



**MP12A / ...**  
12V LIGHTER TYPE SOCKET

COLOUR	BLISTER	BOX *
... / G	212790	270172
... / M	212791	270176
... / B	212792	270170
... / GC	-	270174



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

COLOUR	BLISTER	BOX *
... / G	212907	270182
... / M	212908	270186
... / B	212909	270180
... / GC	-	270184



**MP12ACS / ...**  
12V WATERTIGHT LIGHTER TYPE SOCKET

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

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





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

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



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

COLOUR	BLISTER	BOX *
... / G	212846	270232
... / M	212847	270236
... / B	-	270230
... / GC	-	270234



**MPTVS / ...**  
TV SOCKET + SAT

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



**MPUSB / ...**  
5V/3A USB-A CHARGING SOCKET  
(12V INPUT)

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



**MP2USB / ...**  
5V/1A + 5V/2.1A DOUBLE USB-A  
CHARGING SOCKET (12V INPUT)

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



**MP2USBC / ...**  
5V/3A USB-A + 5V/3A USB-C  
DOUBLE CHARGING SOCKET  
(INPUT 12V)

COLOUR	BLISTER	BOX *
... / G	212931	270662
... / M	212932	270666
... / B	-	-
... / GC	-	-

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



**MPTV / ...**  
TV SOCKET



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



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

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

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

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



**MP221 / ...**  
230V ITALIAN SOCKET WITH COVER  
AND BACK PROTECTION BOX



**MP22B / ...**  
230V BRITISH STANDARD SOCKET WITH  
BACK PROTECTION BOX



**MCR / ...**  
12V ELECTRONIC DIMMER FOR LIGHTS  
AND FANS (MAX 3A)

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

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

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

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



**MPF4 / ...**  
4 FUSES MODULE

COLOUR	BLISTER	BOX *
... / G	<b>212841</b>	<b>270492</b>
... / M	-	-
... / B	-	-
... / GC	-	-



**MCB / ...**  
STEP BUZZER MODULE

COLOUR	BLISTER	BOX *
... / G	<b>212804</b>	<b>270512</b>
... / M	-	-
... / B	-	-
... / GC	-	-



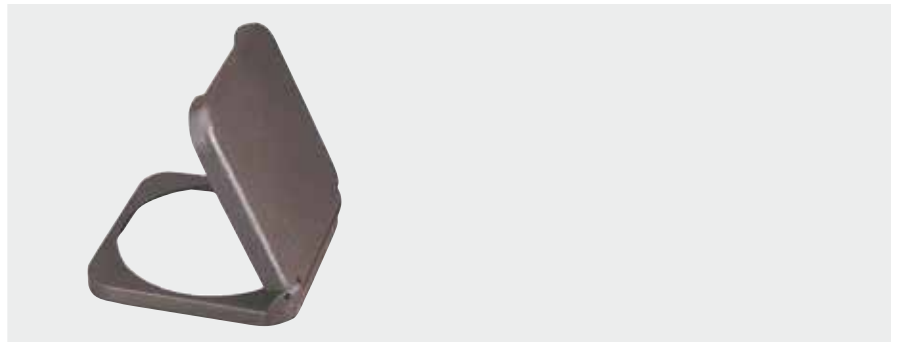
**MP / ...**  
BLIND PLATE

COLOUR	BLISTER	BOX *
... / G	<b>212700</b>	<b>273072</b>
... / M	<b>212701</b>	<b>273076</b>
... / B	-	-
... / GC	-	-



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

COLOUR	BLISTER	BOX *
... / G	<b>212697</b>	<b>270602</b>
... / M	<b>212698</b>	<b>270606</b>
... / B	<b>212699</b>	<b>270600</b>
... / GC	-	<b>270604</b>



**MAP / ...**  
COVER

COLOUR	BLISTER	BOX *
... / G	<b>212668</b>	-
... / M	<b>212667</b>	-
... / B	<b>212669</b>	-
... / GC	-	-

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

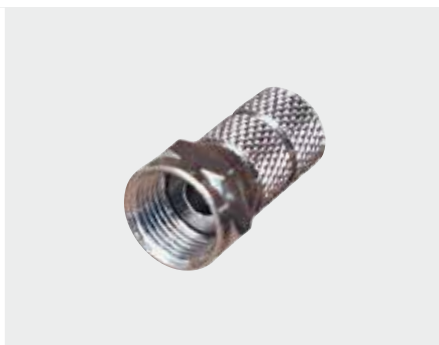


**MAS 45** 212676  
BACK PROTECTION BOX  
Ø45 L=48mm



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

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

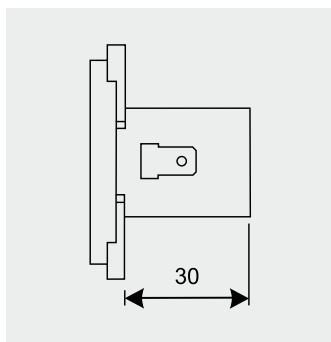


**MCAP5** 212640  
TV CONNECTOR Ø0,5 (10 pcs)

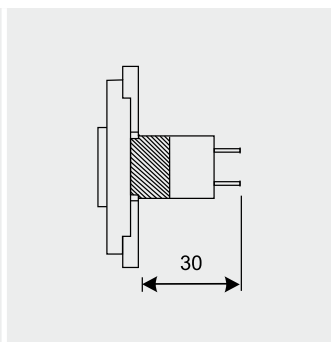
**MCAP6** 212644  
TV CONNECTOR Ø0,6 (10 pcs)

**MCAP7** 212648  
TV CONNECTOR Ø0,7 (10 pcs)

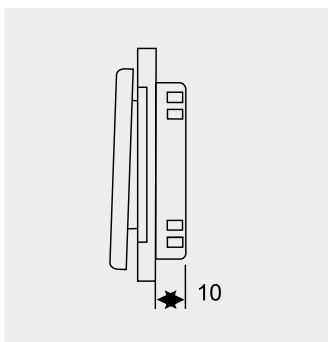
**DIMENSIONS (mm)**



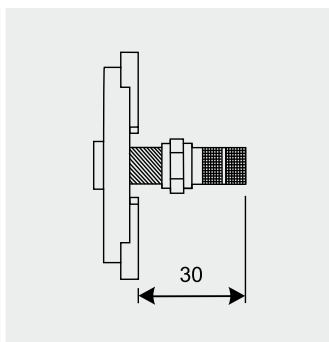
**MP12A / MP12ATV**



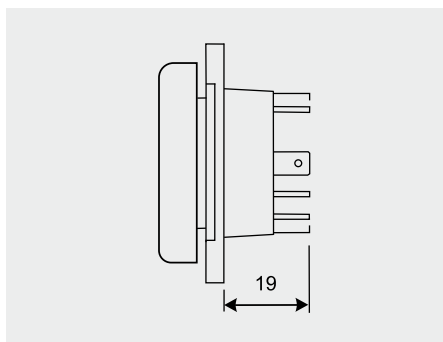
**MP12 / MP12TV**



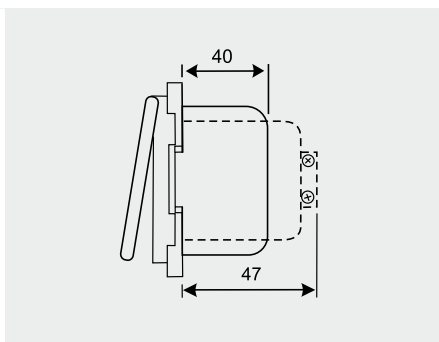
**MCN / MC12P / MCR**



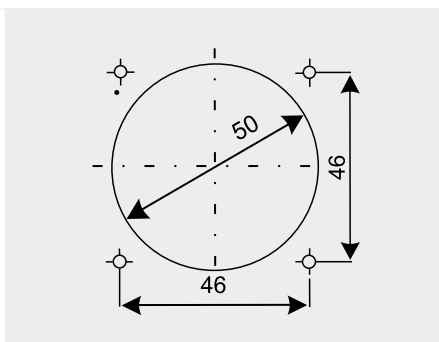
**MPTV**



**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



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

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

**MAC2P / ...**  
2 MODULE FRAME  
113 x 60mm

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



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

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

**MAC2PS / ...**  
2 MODULE FRAME "SOFTLINE"  
116 x 60mm

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

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



**MAC1 / ...**  
1 MODULE CBE FRAME  
86 x 78 mm

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

**NEW**



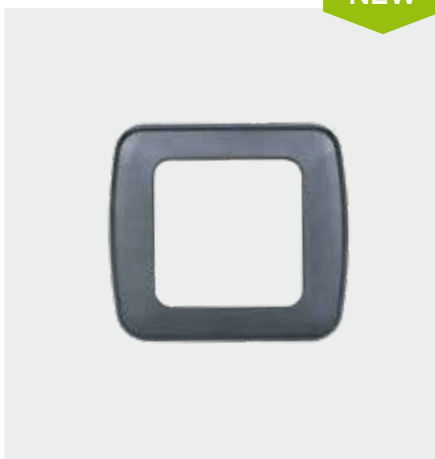
**MAT1NL / ...**  
1 MODULE SUPPORT FRAME

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



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

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



**MAC1FL / ...**  
1 FLAT MODULE FRAME  
86 x 78mm  
Requires support frame MAT1NL

COLOUR	BLISTER	BOX*
... / G	215412	271010GR
... / M	215416	271010MA

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



NEW



**MAT2NL / ...**  
2 MODULE SUPPORT FRAME

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



**MAC2NL / ...**  
2 MODULE FRAME  
139 x 78 mm  
Requires support frame MAT2NL

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



**MAC2FL / ...**  
2 FLAT MODULE FRAMES  
139 x 78mm  
Requires support frame MAT2NL

COLOUR	BLISTER	BOX*
... / G	215422	271020GR
... / M	215426	271020MA

NEW



**MAT3NL / ...**  
3 MODULE SUPPORT FRAME

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



**MAC3NL / ...**  
3 MODULE FRAME  
192 x 78 mm  
Requires support frame MAT3NL

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



**MAC3FL / ...**  
3 FLAT MODULE FRAMES  
192 x 78mm  
Requires support frame MAT3NL

COLOUR	BLISTER	BOX*
... / G	215432	271030GR
... / M	215436	271030MA

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



NEW



MCN3 / ...  
SWITCH

COLOUR	BLISTER	BOX *
... / N	212342	271142

NEW



MC2N3 / ...  
DOUBLE SWITCH

COLOUR	BLISTER	BOX *
... / N	212352	271152

NEW



MC12P3 / ...  
12V SWITCH + LED

COLOUR	BLISTER	BOX *
... / N	212362	271162

NEW



MCG53 / ...  
3 POSITION STEP PUSH-BUTTON

COLOUR	BLISTER	BOX *
... / N	212332	271132

NEW



MP12A3 / ...  
12V LIGHTER TYPE SOCKET + COVER

COLOUR	BLISTER	BOX *
... / N	212302	271102

NEW



MP22D3 / ...  
230V SCHUCKO SOCKET WITH COVER  
AND BACK PROTECTION BOX

COLOUR	BLISTER	BOX *
... / N	212312	271112

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





**NEW**



**MP22B3 / ...**  
230V BRITISH STANDARD SOCKET WITH  
BACK PROTECTION BOX

COLOUR	BLISTER	BOX *
... / N	212322	271122

**NEW**

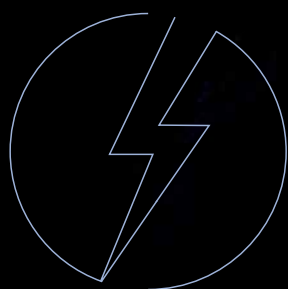


MODEL	DESCRIPTION	COLOUR	SIZE	BLISTER	BOX *
MAC1P3/...	<b>1 MODULE FRAME</b>	.../N	60 x 60 mm	212552	270752
MAC2P3/...	<b>2 MODULE FRAME</b>	.../N	119,5 x 60 mm	212562	270762
MAC3P3/...	<b>3 MODULE FRAME</b>	.../N	179 x 60 mm	212572	270772

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



# ENERGY LINE

BATTERY CHARGERS

DIMMER

CBE ACCESSORIES 12V

BATTERY DUO SYSTEM

PROCAR ACCESSORIES 12V



CBE ACCESSORIES 230V

REFRIGERATOR FANS

INVERTER



## “CB500-3” SWITCHING BATTERY CHARGERS

CB510-3, 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, CB516-3, CB520-3 and CB522-3 are furthermore designed to replace the CB510, 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.



**CB510-3  
CB516-3  
CB520-3**



**CB522-3**

MODEL	CB510-3	CB516-3	CB520-3	CB522-3
<b>PART-NR</b>	<b>321511</b>	<b>321517</b>	<b>321521</b>	<b>321523</b>
<b>TECHNICAL DATA</b>				
NOMINAL INPUT VOLTAGE	230Vac± 10%	230Vac± 10%	230Vac± 10%	230Vac± 10%
FREQUENCY	50Hz±60Hz	50Hz±60Hz	50Hz±60Hz	50Hz±60Hz
MAX POWER	150W	250W	300W	320W
PROTECTION FUSE	3,15A (glass 5 x 20)	3,15A (glass 5 x 20)	3, 15A (glass 5 x 20)	T 3,15A (glass 5x20)
ON/OFF SAFETY SWITCH	230V	230V	230V	230V
<b>OUTPUT TECHNICAL DATA</b>				
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)	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)	13,5Vdc (A) - 13,8Vdc (B) - 13,8Vdc (C)
MAX CURRENT	10A continuous	16A continuous	20A continuous	22A continuous
CHARGING LINE	IUoU	IUoU	IUoU	IUoU
BATTERY TYPE SELECTOR	3 positions (A - B - C)	3 positions (A - B - C)	3 positions (A - B - C)	3 positions (A - B - C)
SHORT-CIRCUIT AND POLARITY INVERSION PROTECTION	15A (blade)	25A (blade)	30A (blade)	30A (blade)
THERMAL PROTECTION	YES	YES	YES	YES
SIGNAL AC POWER SUPPLY (S)	12V; 50 mA	12V; 50 mA	12V; 50 mA	12V; 50 mA
<b>GENERAL TECHNICAL DATA</b>				
EFFICIENCY	86%	86%	86%	86%
ROOM TEMPERATURE	0 ÷ 50°	0 ÷ 50°	0 ÷ 50°	0 ÷ 40°
VENTILATION	NO	Gradual automatic regulation	Gradual automatic regulation	Gradual automatic regulation
PROTECTION DEGREE	IP 30	IP 30	IP 30	IP 30
MAINS CONNECTION	Schuko plug	Schuko plug	Schuko plug	Schuko plug
BATTERY CONNECTION	6,3 terminals	6,3 terminals	“M6” screw	“M6” screw
CASE	Nylon + fiber glass self-extinguishing	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 85H	180 x 140 x 85 H	180 x 190 x 85H
WEIGHT	1 Kg	1 Kg	1 Kg	1,2kg
COLOUR	Graphite black	Graphite black	Graphite black	Graphite black



## “CB522-LT” SWITCHING BATTERY CHARGERS

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).
- ▶ 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.

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



CB522-LT

MODEL	CB522-LT
PART-NR	321623
<b>TECHNICAL DATA</b>	
NOMINAL INPUT VOLTAGE	230Vac± 10%
FREQUENCY	50÷60 Hz
MAX POWER	320W
PROTECTION FUSE	3,15A (glass 5 x 20)
ON/OFF SAFETY SWITCH	230V
<b>OUTPUT TECHNICAL DATA</b>	
BULK VOLTAGE (V)	14,5V
FLOAT VOLTAGE (V)	13,5V
MAX CURRENT	22A continuous
CHARGING LINE	I <sub>UoU</sub>
BATTERY TYPE SELECTOR	No
SHORT-CIRCUIT AND POLARITY INVERSION PROTECTION	30A (blade)
THERMAL PROTECTION	YES
SIGNAL AC POWER SUPPLY (S)	12V; 50 mA
<b>GENERAL TECHNICAL DATA</b>	
EFFICIENCY	86 %
ROOM TEMPERATURE	0 ÷ 40°
VENTILATION	Forced, variable automatic regulation
PROTECTION DEGREE	IP 30
MAINS CONNECTION	Schuko plug
BATTERY CONNECTION	“M6” screw
CASE	Nylon + fiber glass self-extinguishing
DIMENSIONS (MM)	180 x 190 x 85H
WEIGHT	1,2kg
COLOUR	Graphite black





## | NE287 SWITCHING BATTERY CHARGERS

The NE287 is a battery charger for lead, gel, AGM and lithium batteries. The batteries must have a nominal voltage of 12V and capacity suitable for the battery charger current (check compatibility of the maximum charging current with the technical data sheet for the battery to be connected). The NE287 also work as a power supply unit.

### Operation

#### Power supply mode:

NE287 operates as a power supply unit when there is a 230V mains supply and there is no service battery installed or connected. In this mode output voltage is fixed at 13,8V with maximum current of 17A (230W max) or 21A (290W max). In this mode, the green LED flashes.

#### Battery charger mode:

If there is a service battery and it is powered by the main supply, NE287 operates as a battery charger. Use the dip switches to choose the charging algorithm according to the type of the battery. At switch on, the green LED flashes to indicate which algorithm is selected via dip switches. The battery charger uses a combination of Constant Current and Constant Voltage. This makes it possible to significantly reduce charging time and prevents permanent damage to the batteries, even if the charger is permanently connected to the mains 230V.

When battery charging is activated the power supply immediately provides the necessary current, so that the battery does not discharge (this is true if the current absorbed by the load is lower than the maximum current

available from the battery charger, otherwise the battery will discharge in any case with current equal to the difference ( $I_{LOAD} - I_{BATTERY\ CHARGER}$ ).

It is possible to connect a temperature probe to battery charger (to be placed on the battery), to adapt the charging algorithm selected at the temperature of the battery.



NE287-17A  
NE287-21A

MODEL	NE287-17A	NE287-21A
<b>PART-NR</b>	<b>4215.287.01</b>	<b>4215.287.02</b>
<b>TECHNICAL DATA</b>		
NOMINAL INPUT VOLTAGE	230Vac± 10%	230Vac± 10%
FREQUENCY	50Hz+60 Hz	50Hz+60Hz
MAX POWER	250W	300W
PROTECTION FUSE	4A	4A
<b>OUTPUT TECHNICAL DATA</b>		
MAX CURRENT	17A continuous	21A continuous
SHORT-CIRCUIT PROTECTION	YES	YES
OVER-LOAD PROTECTION	YES	YES
OVER VOLTAGE PROTECTION	YES	YES
OVER TEMPERATURE PROTECTION	YES	YES
OVER TEMPERATURE BATTERY PROTECTION	YES (optional with NTC sensor)	YES (optional with NTC sensor)
THERMAL PROTECTION	YES	YES
BATTERY TYPE SELECTOR	Dip-switch 4 position	Dip-switch 4 position
CHARGING LINE	I <sub>UoU</sub> - AGM / I <sub>UoU</sub> - GEL / I <sub>UoU</sub> -Pb / I <sub>UoU</sub> -LiFePO4	I <sub>UoU</sub> - AGM / I <sub>UoU</sub> - GEL / I <sub>UoU</sub> -Pb / I <sub>UoU</sub> -LiFePO4
SIGNAL AC POWER SUPPLY (S)	12V (MAX 5mA)	12V (MAX 5mA)
<b>GENERAL TECHNICAL DATA</b>		
EFFICIENCY	86 %	86%
ROOM TEMPERATURE	0 ÷ 50°	0 ÷ 50°
VENTILATION	NO	YES
PROTECTION DEGREE	IP 20	IP 20
MAINS CONNECTION	3 poles IEC EN60320 C14	3 poles IEC EN60320 C14
BATTERY CONNECTION	"M5" screw	"M5" screw
DIMENSIONS (mm)	167x170x73mm	167x170x73mm
WEIGHT	1,5kg	1,5 Kg
COLOUR	Black	Black



## NE325 DC-DC POWER CONVERTER

The DC/DC converter NE325 is suitable for recharging the service battery with the alternator.

The alternators of Euro 6 engines often provide a charge voltage that is too low and therefore a DC/DC converter is required to charge the service battery with the vehicle is running. In the case of lithium batteries, which have very low internal resistance, the DC/DC is instead necessary to limit the charging current of the alternator and therefore to protect the system from overheating or damage. The DC/DC converter works only when the vehicle is running and this is achieved by the enabling input (Enable DC/DC) connected to the vehicle ignition

### Operation

#### Power supply mode:

The NE325 operates as a power supply unit if the output is not connected to the battery when it is turned on. In this mode the green LED flashes and the output voltage is fixed at 13.8V.

#### Battery charger mode:

The NE325 operates as a battery charger if the output is connected to the battery when it is turned on (if the algorithm for lithium batteries has been selected, the DC/DC operates as a battery charger even if it does not detect the battery when it is turned on). Use the dip switches to choose the charging algorithm according to the type of battery. At switch on, the green LED flashes to indicate which algorithm is selected via dip switches. The DC/DC uses a combination of Constant Current and Constant Voltage. This makes it possible to significantly reduce charging time and prevents permanent damage to the batteries.

When a load is activated, the DC/DC immediately provides the necessary current, so that the battery does not discharge (this is true if the load current is lower than the maximum current available from the battery charger, otherwise the battery will discharge in any case with current equal to the difference ( $I_{LOAD} - I_{DC/DC}$ ). It is possible to connect a temperature probe to the DC/DC (to be placed on the battery), to adapt the charging algorithm selected to the temperature of the battery.



**DC/DC CONVERTER**

**NE325-25A**  
**NE325-40A**

MODEL	NE325-25A	NE325-40A
<b>PART-NR</b>	<b>4215.325.01</b>	<b>4215.325.02</b>
<b>TECHNICAL DATA</b>		
NOMINAL INPUT VOLTAGE	11Vdc - 15Vdc	11Vdc - 15Vdc
MAXIMUM CURRENT INPUT	37A @11V	48A @11V
PROTECTION FUSE	30A on the negative pole	30A on the negative pole
<b>OUTPUT TECHNICAL DATA</b>		
MAX CURRENT	25A continuous	40A continuous
SHORT-CIRCUIT PROTECTION	YES	YES
OVER-LOAD PROTECTION	YES	YES
OVER VOLTAGE PROTECTION	YES	YES
OVER TEMPERATURE PROTECTION	YES	YES
OVER TEMPERATURE BATTERY PROTECTION	YES (optional with NTC sensor)	YES (optional with NTC sensor)
BATTERY TYPE SELECTOR	Dip-switch 4 position	Dip-switch 4 position
CHARGING LINE	IuOu - AGM / IuOu - GEL / IuOu -Pb / IuOu -LiFePO4	IuOu - AGM / IuOu - GEL / IuOu -Pb / IuOu -LiFePO4
INPUT D+ SIGNAL	12V	12V
<b>GENERAL TECHNICAL DATA</b>		
EFFICIENCY	90 %	90 %
ROOM TEMPERATURE	0 ÷ 50°	0 ÷ 50°
VENTILATION	NO	YES
PROTECTION DEGREE	IP 20	IP 20
MAINS CONNECTION	"M5" screw	"M5" screw
BATTERY CONNECTION	"M5" screw	"M5" screw
DIMENSIONS (mm)	167x170x73mm	167x170x73mm
WEIGHT	1,3 kg	1,3 Kg
COLOUR	Black	Black



## PURE SINE WAVE INVERTERS 12V/230V – ERP SERIES

The new “ERP” series inverters, with pure sine wave output, specifically designed for use on campers and cars, stand out for their high performance, construction quality, maximum safety and reliability.

### Main features and functions:

- ▶ Pure sine wave output, to maximize the efficiency of the powered devices and recommended especially for sensitive 230V users, such as audio and video equipment, laptops, satellite systems, devices and household appliances equipped with an electric motor, etc.

- ▶ 4 models with power from 300 to 2000W.
- ▶ Complete with USB Type-A port.
- ▶ Reduced size and weight thanks to HF technology.
- ▶ High quality and robust construction with aluminium alloy casing.
- ▶ Electrical insulation between 12Vdc input and 230Vac output.
- ▶ “Smart” load and temperature controlled cooling fan.
- ▶ Protection against overload, short circuit, over temperature, high / low voltage, reverse polarity.
- ▶ Predisposition for the connection of the remote control panel.



ERP300

ERP600

ERP1500

INVERTER	ERP300	ERP600	ERP1500
<b>PART-NR</b>	<b>215475</b>	<b>215477</b>	<b>215481</b>
<b>TECHNICAL DATA</b>			
NO-LOAD OUTPUT VOLTAGE	230Vac± 10V	230Vac± 10V	230Vac± 10V
LOAD OUTPUT VOLTAGE	210÷240Vac	210÷240Vac	210÷240Vac
FREQUENCY	50HZ	50HZ	50HZ
PEAK POWER	600W	1200W	3000W
CONTINUOUS POWER	300W	600W	1500W
OUTPUT WAVE	Pure sine wave (THD < 5%)	Pure sine wave (THD < 5%)	Pure sine wave (THD < 5%)
SHORT-CIRCUIT PROTECTION	YES	YES	YES
OVER-LOAD PROTECTION	360÷400W	650÷750W	1550÷1800W
<b>INPUT TECHNICAL DATA</b>			
OPERATING VOLTAGE RANGE	11÷15Vdc	11÷15Vdc	11÷15Vdc
NO-LOAD CURRENT	≤ 0.8A	≤ 1.0A	≤ 1.3A
INPUT LOW-VOLTAGE ALARM	10.5Vdc	10.5Vdc	10.5Vdc
INPUT LOW-VOLTAGE SHUT DOWN	9.5Vdc	9.5Vdc	9.5Vdc
INPUT OVER-VOLTAGE SHUT DOWN	16Vdc	16Vdc	16Vdc
DC INPUT REVERSE POLARITY	YES (fuse)	YES (fuse)	YES (fuse)
<b>GENERAL TECHNICAL DATA</b>			
EFFICIENCY	≥ 85%	≥ 85%	≥ 85%
VENTILATION	Forced, variable automatic regulation	Forced, variable automatic regulation	Forced, variable automatic regulation
ROOM TEMPERATURE	-15°÷+25°C; 60°C @40% power load	-15°÷+25°C; 60°C @40% power load	-15°÷+25°C; 60°C @40% power load
OVER TEMPERATURE PROTECTION	YES	YES	YES
230V CONNECTION	Schuko socket	Schuko socket	Schuko socket
BATTERY CONNECTION	Clamps	Clamps	Clamps
USB OUTPUT	1x USB type A	1x USB type A	2x USB type A
REMOTE SWITCH	MCI3 (optional)	MCI3 (optional)	MCI3 (optional)
DIMENSIONS (mm)	236 x 171 x 74H	272 x 171 x 74H	375 x 210 x 100H
WEIGHT	1,4Kg	1,75Kg	3,9Kg
IVT FUNCTION INCLUDED	No	No	No





## IVT Function included



### ERP2000-IVT

INVERTER	ERP2000-IVT
<b>PART-NR</b>	<b>215483</b>
<b>TECHNICAL DATA</b>	
NO-LOAD OUTPUT VOLTAGE	230Vac± 10V
LOAD OUTPUT VOLTAGE	210÷240Vac
FREQUENCY	50Hz
PEAK POWER	4000W
CONTINUOUS POWER	2000W
OUTPUT WAVE	Pure sine wave (THD < 3%)
SHORT-CIRCUIT PROTECTION	YES
OVER-LOAD PROTECTION	2050÷2250W
<b>INPUT TECHNICAL DATA</b>	
OPERATING VOLTAGE RANGE	11÷15Vdc
NO-LOAD CURRENT	≤ 1.6A
INPUT LOW-VOLTAGE ALARM	10.5Vdc
INPUT LOW-VOLTAGE SHUT DOWN	9.5Vdc
INPUT OVER-VOLTAGE SHUT DOWN	16Vdc
DC INPUT REVERSE POLARITY	YES (fuse)
<b>INPUT TECHNICAL DATA «MAINS MODE»</b>	
OPERATING VOLTAGE RANGE	230Vac± 10%
FREQUENCY	50HZ
INPUT PROTECTION	Fuse 15A
AC SWITCH (INVERTER/MAINS MODE)	≤ 100ms
<b>GENERAL TECHNICAL DATA</b>	
EFFICIENCY	≥ 85%
VENTILATION	Forced, variable automatic regulation
ROOM TEMPERATURE	-15°+25°C; 60°C @40% power load
OVER TEMPERATURE PROTECTION	YES
230V CONNECTION	2x Schuko socket
BATTERY CONNECTION	Clamps
USB OUTPUT	2x USB type A
REMOTE SWITCH	MCI3 (optional)
DIMENSIONS (mm)	458 x 287 x 142H
WEIGHT	7,6 Kg
IVT FUNCTION INCLUDED	YES

## MODIFIED SINE WAVE INVERTERS 12V/230V – ER SERIES

The new “ER” series inverters, with modified sine wave output, designed specifically for use on campers and cars, are characterized by high construction quality together with maximum safety and reliability.

### Main features and functions:

- ▶ Modified sine wave output, suitable for simpler 230V users.
- ▶ 4 models with power from 300 to 1500W.
- ▶ Complete with USB Type-A port (except for the ER300 model).
- ▶ Reduced size and weight thanks to HF technology.
- ▶ High quality and robust construction with aluminium alloy casing.
- ▶ Electrical insulation between 12Vdc input and 230Vac output.
- ▶ “Smart” load and temperature controlled cooling fan.
- ▶ Protection against overload, short circuit, over temperature, high / low voltage, reverse polarity.
- ▶ Predisposition for the connection of the remote control panel.



ER300



ER600



ER1000



ER1500

INVERTER	ER300	ER600
<b>PART-NR</b>	<b>215474</b>	<b>215476</b>
<b>TECHNICAL DATA</b>		
NO-LOAD OUTPUT VOLTAGE	230Vac± 10V	230Vac± 10V
LOAD OUTPUT VOLTAGE	210÷240Vac	210÷240Vac
FREQUENCY	50Hz	50Hz
PEAK POWER	600W	1200W
CONTINUOUS POWER	300W	600W
OUTPUT WAVE	Modified sine wave (square)	Modified sine wave (square)
SHORT-CIRCUIT PROTECTION	YES	YES
OVER-LOAD PROTECTION	360÷460W	660÷760W
<b>INPUT TECHNICAL DATA</b>		
OPERATING VOLTAGE RANGE	11÷15Vdc	11÷15Vdc
NO-LOAD CURRENT	≤ 0.45A	≤ 0.4A
INPUT LOW-VOLTAGE ALARM	10.5Vdc	10.5Vdc
INPUT LOW-VOLTAGE SHUT DOWN	9.5Vdc	9.5Vdc
INPUT OVER-VOLTAGE SHUT DOWN	16Vdc	16Vdc
DC INPUT REVERSE POLARITY	YES (fuse)	YES (fuse)
<b>GENERAL TECHNICAL DATA</b>		
EFFICIENCY	≥ 85%	≥ 85%
VENTILATION	Forced, variable automatic regulation	Forced, variable automatic regulation
ROOM TEMPERATURE	-15°÷+25°C; 60°C @40% power load	-15°÷+25°C; 60°C @40% power load
OVER TEMPERATURE PROTECTION	YES	YES
230V CONNECTION	Schuko socket	Schuko socket
BATTERY CONNECTION	Clamps	Clamps
USB OUTPUT	NO	1x USB type A
REMOTE SWITCH	MCI3 (optional)	MCI3 (optional)
DIMENSIONS (mm)	178 x 103 x 59H	228 x 103 x 59H
WEIGHT	0,75Kg	1,35Kg



INVERTER	ER1000	ER1500
<b>PART-NR</b>	<b>215478</b>	<b>215480</b>
<b>TECHNICAL DATA</b>		
NO-LOAD OUTPUT VOLTAGE	230Vac± 10V	230Vac± 10V
LOAD OUTPUT VOLTAGE	210+240Vac	210+240Vac
FREQUENCY	50Hz	50Hz
PEAK POWER	2000W	3000W
CONTINUOUS POWER	1000W	1500W
OUTPUT WAVE	Modified sine wave (square)	Modified sine wave (square)
SHORT-CIRCUIT PROTECTION	YES	YES
OVER-LOAD PROTECTION	1100+1350W	1800+2000W
<b>INPUT TECHNICAL DATA</b>		
OPERATING VOLTAGE RANGE	11+15Vdc	11+15Vdc
NO-LOAD CURRENT	≤ 0.4A	≤ 0.4A
INPUT LOW-VOLTAGE ALARM	10.5Vdc	10.5Vdc
INPUT LOW-VOLTAGE SHUT DOWN	9.5Vdc	9.5Vdc
INPUT OVER-VOLTAGE SHUT DOWN	15.5Vdc	15.5Vdc
DC INPUT REVERSE POLARITY	YES (fuse)	YES (fuse)
<b>GENERAL TECHNICAL DATA</b>		
EFFICIENCY	≥ 85%	≥ 85%
VENTILATION	Forced, variable automatic regulation	Forced, variable automatic regulation
ROOM TEMPERATURE	-15°+25°C; 60°C @40% power load	-15°+25°C; 60°C @40% power load
OVER TEMPERATURE PROTECTION	YES	YES
230V CONNECTION	Schuko socket	Schuko socket
BATTERY CONNECTION	Clamps	Clamps
USB OUTPUT	1x USB type A	1x USB type A
REMOTE SWITCH	MCI3 (optional)	MCI3 (optional)
DIMENSIONS (mm)	242 x 165 x 69H	267 x 165 x 69H
WEIGHT	1,85Kg	2,25Kg

## REMOTE CONTROL PANELS FOR “ERP” AND “ER” SERIES INVERTERS

Remote control panels for “ERP” and “ER” inverters, equipped with LED to show inverter status (on / off) and complete with:

- ▶ Cable L=6m
- ▶ Frame

### MCI3 / G 215470

### MCI3 / M 215471

Built-in version, complete with “BMAC1C” Berker frame, fitting the “Modular Plates” and the “Modular Plates Berker” range. Dimensions 60 x 60 mm.

Colours: /G Grey RAL 7015.  
/M Brown RAL 8016.



## | DIMMER 12 V

### DIMMER – LIGHT BRIGHTNESS ADJUSTER

The light brightness adjuster DLS200 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 DLS200 can manage up to 8 different light channels up to 200W maximum power.

### 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



DLS200 402200

## | 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.



## 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).

## 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**  
CONTROL PANEL (SPARE PART)



**MCV-2**  
2 FANS + CONTROL PANEL, BROWN



**P292**  
CONTROL PANEL (SPARE PART)



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

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



## AUTOMATIC SWITCH FOR SERVICE BATTERIES



**BDS180** 402180

The **DUO-SYSTEM BATTERY** is an electronic device with integrated microprocessor able to intelligently manage two 12 V service batteries, both during charging (with alternator, battery charger and photovoltaic modules) and during discharging.

### Using the BDS180 has several advantages:

- ▶ management of battery charge and discharge separately and alternately
- ▶ possibility of connecting two batteries of different capacities and different ages
- ▶ control of the functionality of each individual battery and, in case of faulty battery, isolation of the same with light signalling (yellow LED on the BDS180)
- ▶ "save battery" function, which disconnects the batteries when a safety voltage is reached to avoid irreversible damage
- ▶ possibility of electrically disconnecting both service batteries (in case of prolonged periods of inactivity) using the switch located on the device or via a remote switch
- ▶ management of high currents (charge and discharge) up to a maximum of 90A with peaks of 120A for each battery
- ▶ possibility of connecting utilities with consumption up to a maximum of 180A
- ▶ possibility of connecting a control panel (MC-180) for selecting the operating mode of the equipment (automatic/manual)
- ▶ possibility of connecting to mobile devices via the APP "REMOTE CONTROL BDS180"

Dimensions (mm): 150 x 110 / h 48

Colour: black

## CONTROL PANEL FOR DUO-SYSTEM 180 BATTERY



**MC-180 / G** 215255

**MC-180 / M** 215256

Remote control panel for selecting the operating mode of the BDS 180.

**MANUAL:** the user can choose which battery to use, both during charging and discharging.

**AUTOMATIC:** the service batteries are charged or discharged automatically according to the microprocessor algorithm integrated in the "BDS180".

The panel is equipped with LEDs for view of the battery used and for signalling a possible faulty battery.

The package includes the connection cable to the "BDS180" L=6 m and the frame "BMAC1".

The panel can be combined with the "MODULAR PLATES BERKER" series.

Recessed version - dimensions (mm): 60 x 60 Colours: grey RAL 7021 or brown RAL 8017

## APP - REMOTE CONTROL BDS180

The "REMOTE CONTROL BDS180" APP for mobile devices has been specially developed to manage and extend the functions of the BDS180. The connection between the BDS180 and mobile devices is via WI-FI and has a limited range around the vehicle.

### The "REMOTE CONTROL BDS180" APP allows you to:

- select the operation mode of the BDS180 (automatic/manual)
- view graphically and in volts the voltage of the two batteries
- view real-time charging and discharging of the current
- view the remaining autonomy of the battery in use
- view the number of charge and discharge cycles of the two batteries
- view the signal of the intervention of the "save battery" function
- view the battery health status
- receive information about any abnormalities in the batteries
- view the manual of the BDS180
- update the BDS180 firmware





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



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



**R419** 212754\*\*  
002754\*  
12V universal plug + 8A fuse  
**R419/L** 212742\*\*  
002742\*  
12V universal plug + 8A fuse + LED



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



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



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



**R414** 212766\*\*  
002762AA\*  
12V wall-fixing cigarette lighter socket Ø21



**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

\* Minimum order 10 pieces or multiples of 10

\*\* Blister





**R417/2F** 212797\*\*  
002797\*

Adapter 12V universal plug /  
12V cigarette lighter socket Ø21,  
flexible cable L=0,6-3m



**R510/2** 212744\*\*  
002795\*

12V cigarette lighter socket Ø21,  
cable L=1,8m



**R510/P** 212745\*\*  
002768\*

12V cigarette lighter socket Ø21 + clamps,  
cable L=1m



**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)



**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



**R550/UU** 212930\*\*  
002767DP\*

5V 2 x 2,5A double USB charging socket  
(12V input)

\* ordine minimo 10 pezzi o multipli di 10

\*\* confezione in blister





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



**R420/S** 222570\*\*  
Watertight fuse-holder + 10A fuse



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



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



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



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



**R444** 212478\*\*  
4 ways fuse-holder with cover

**R446** 212479\*\*  
6 ways fuse-holder with cover



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



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

Blade fuses 10 pcs

\* Minimum order 10 pieces or multiples of 10

\*\* Blister



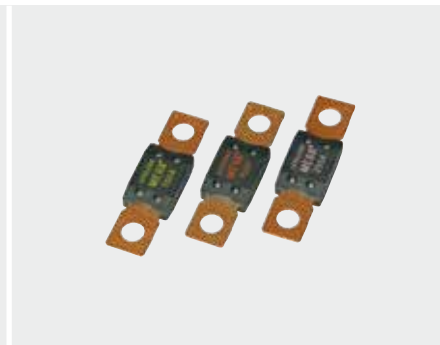
**R461/...** 221003 (3A)\*\*  
221005 (5A)\*\*  
221007 (7,5A)\*\*  
221010 (10A)\*\*  
221015 (15A)\*\*  
221020 (20A)\*\*  
221025 (25A)\*\*  
221030 (30A)\*\*

"Minival" blade fuses – 10pcs



**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



**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



**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

\* Minimum order 10 pieces or multiples of 10

\*\* Blister



**R290** 223467\*\*  
003467 (without ring terminals)\*  
Battery isolator switch 100A / 500A  
(10 sec)



**R295** 223468\*\*  
003467A (without ring terminals)\*  
Battery isolator switch 150A / 1200A  
(5 sec)



**R295/P** 223469\*\*  
Battery isolator switch 150A / 1200A  
with knob and display (5 sec)



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



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



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



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

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



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



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



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



**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



**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

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



NEW



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



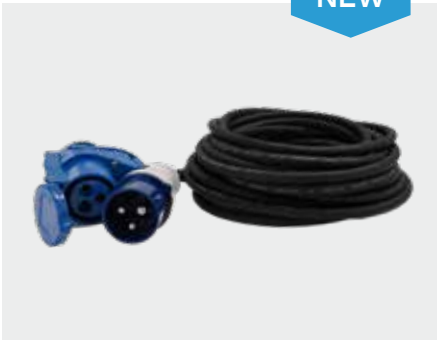
**R425/S** 212957\*\*  
230V Extension cable H07RN-F, 3 x 2,5 mm<sup>2</sup> 25m, CEE plug / CEE socket + schuko socket



CODE	MODEL	DESCRIPTION
212956	R425A	EXTENSION CABLE CEE/CEE 25m 3x1.5mm <sup>2</sup> H07RN-F
212956B	R425B	EXTENSION CABLE CEE/CEE 10m 3x1.5mm <sup>2</sup> H07RN-F

All extensions come with a bag

NEW



CODE	MODEL	DESCRIPTION
212958	R425A/S	EXTENSION CABLE CEE/CEE +SHUKO 25m 3x1.5mm <sup>2</sup> H07RN-F
212958B	R425B/S	EXTENSION CABLE CEE/CEE +SHUKO 10m 3x1.5mm <sup>2</sup> H07RN-F

All extensions come with a bag



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



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



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



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



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

\* Minimum order 10 pieces or multiples of 10

\*\* Blister



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



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



**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



**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



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

\* Minimum order 10 pieces or multiples of 10

\*\* Blister



**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



230V built-in male CEE plug, 105 x 110mm, white

MODEL	COLOUR	BLISTER	BOX*
R430	WHITE	212730	002730
R430/GR	ANTHRACITE GREY	212730AN	002730AN



230V built-in male CEE plug, 100 x 160mm, white

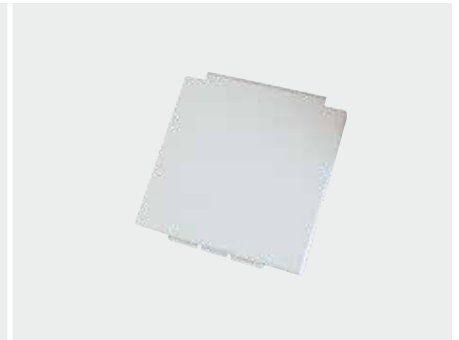
MODEL	BLISTER
R431	212725

Replacement lid

MODEL	BLISTER
R431/C	212727



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



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



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



230V built-in male CEE plug with magnetic locking, 105 x 105mm

MODEL	COLOUR	BOX*
R430M	BIANCO	002730M
R430M/N	NERO	002730ML



**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





# LITHIUM LINE

 LITHIUM LINE PRODUCTS







NEW PRM350 MPPT SOLAR CHARGE REGULATOR  
FOR PHOTOVOLTAIC MODULES

**PRM350**

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PRS350

**PRS350**

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CAR BATTERY AUTOMATIC RECHARGING DEVICE

**CSB3-LT**

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PT750 \ NE363

**PT750 \ NE363**

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"CB522-LT" SWITCHING BATTERY CHARGER

**CB522-LT**

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NE287 SWITCHING BATTERY CHARGER

**NE287**

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NE325 DC-DC POWER CONVERTER

**NE325 DC /DC CONVERTER**

page 45











TECHNICAL QUESTIONS  
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