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Технические характеристики на автоматические зарядные устройства для свинцовых аккумуляторов CBS-031, CBS-061, CBS-010, CBA-030, CBA-060 КОМПАНИИ **ELCOS**

CBS-031 (3,5A) 12V

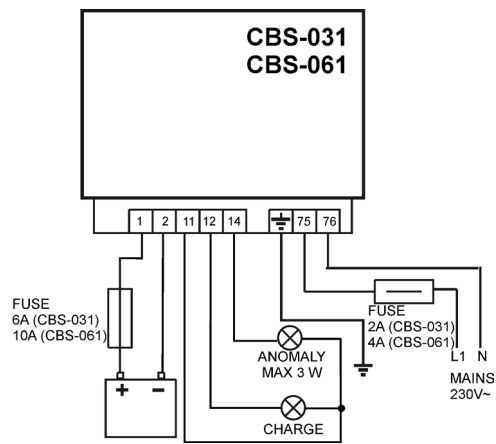
CBS-061 (6A) 12V

CBS-061 (6A) 24V



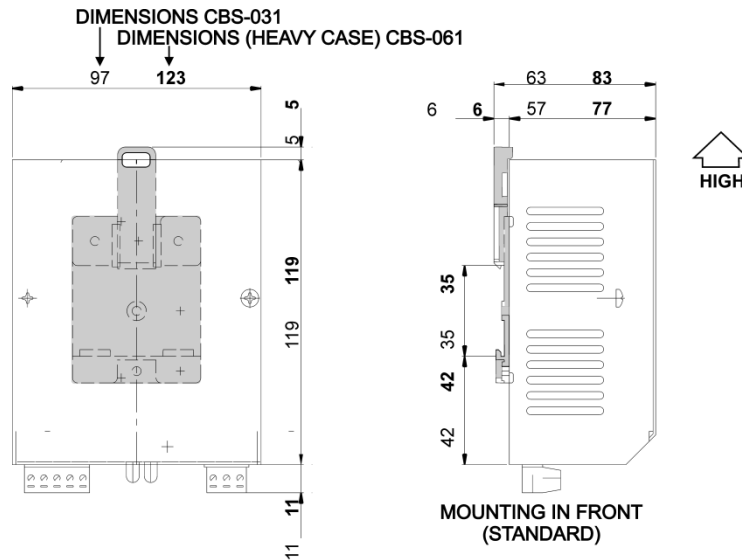
- COMPLIES WITH DIN 41773
- WITH RS485 SERIAL PORT BUILT INTO THE BATTERY CHARGER
- ALSO FOR FITTING WITH OMEGA BAR
- ENERGY SAVING

WIRING DIAGRAM



Devices must be provided for disconnection from the mains: for example, switches with contacts opening greater than 3 mm or supply cables and plugs which are also accessible after installation.

DIMENSIONS AND INSTALLATION



- During the charging phase the equipment heats up. One must therefore ensure that the natural flow of air is not obstructed by nearby objects.
- If the equipment is installed in a closed cabinet, holes or slits should be provided so that the heat can escape.

TECHNICAL SPECIFICATIONS

TECHNICAL SPECIFICATIONS			
	CBS-031 12V	CBS-061 12V	CBS-061 24V
Power supply			
From mains	85Vac ÷ 265Vac	185Vac ÷ 265Vac	
Frequency	50 /60 Hz		
Maximum current absorption	60W	110W	220W
Insulation class	1		
Efficiency at full charge	75%	88%	
Energy saving (power consumption with no charge)	1,5W	2W	
Battery voltage			
Output voltage	13.7Vdc	13.7Vdc	27.4Vdc
Rated charge current	3.5A	6A	
Self-consumption in a blackout	15mA	18mA	36mA
Output voltage 11	14Vdc	14Vdc	28Vdc
Rated charge current 11, 12 and 14	3W		
Minimum battery capacity	30Ah	60Ah	
Battery types for connection	Open lead acid, sealed lead acid, 6 cell gel		
Other			
Terminal board	8 pin screw type		
Protection class	IP 00		
Temperature limits	-10 ÷ 50°C		
Weight	350gr	600gr	700gr
Dimensions (LxHxW)	135 x 97 x 63mm	135 x 123 x 83mm	

AUTOMATIC BATTERY CHARGER FOR LEAD BATTERIES TYPE CBS-010



THREE CHARGING LEVELS

- **RAPID** WITH CURRENT CONTROL
- **INTERMEDIATE** } WITH VOLTAGE CONTROL
- **MAINTENANCE** }

- OMEGA BAR HOOK MOUNTING
OR WITH SCREWS.

OPERATION

Automatic charging takes place at three levels:

- Rapid charging with current control 1A until 13,4 V (26,8 V) are reached in the battery.
- Intermediate and maintenance charging with voltage control, until 13,5 V (27 V) are reached in the battery.
- Maintenance charging using a very low current value, but sufficient to maintain the voltage value at 13,5V (27 V).

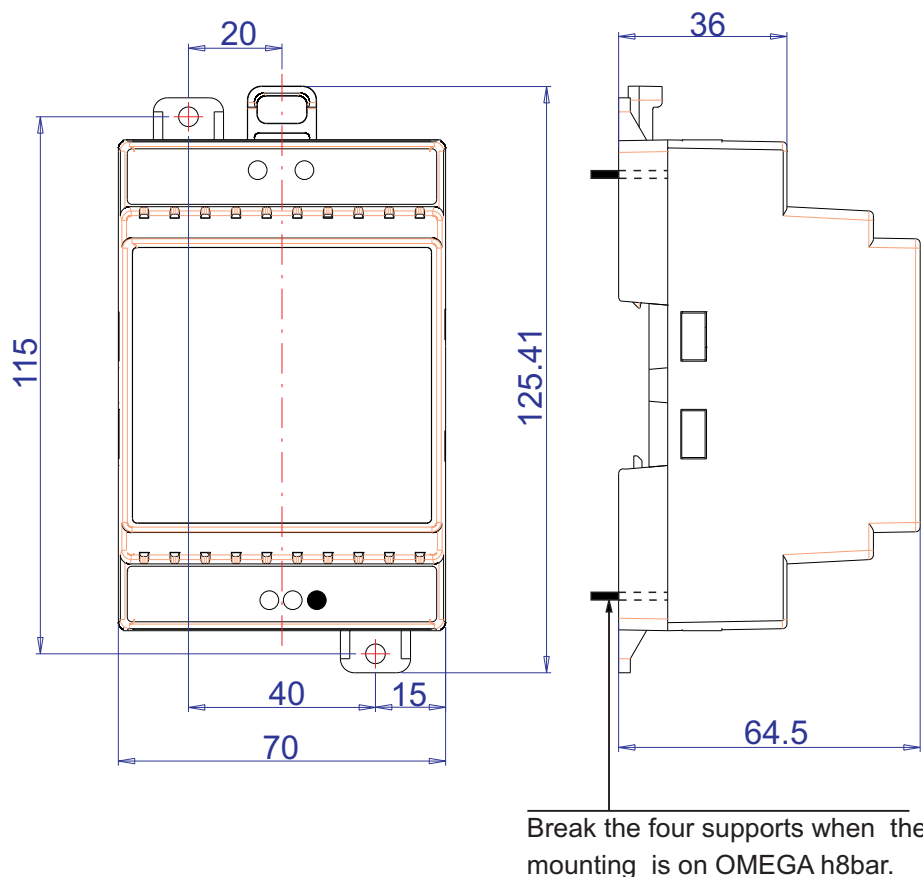
The **red warning indicator (LED)** is lit when the charge is normal.

The **red warning indicator (LED)** is off in mains failure mode.

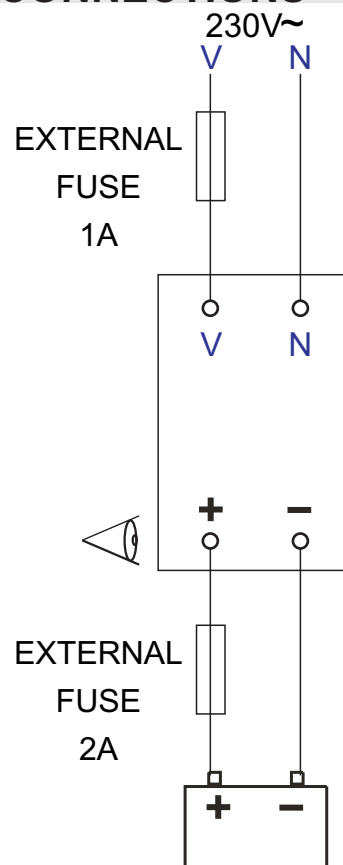
The **flashing red warning indicator (LED)** is on in maintenance mode.

Polarity inversion: **this condition causes the battery charger to break.**

DIMENSIONS



CONNECTIONS



WARNING DO NOT REVERSE THE POLARITY

THIS CONDITION CAUSES THE BATTERY CHARGER TO BREAK

- Devices must be provided for disconnection from the mains: for example, switches with contacts opening greater than 3 mm or supply cables and plugs which are also accessible after installation.
- During the charging phase the equipment heats up. One must therefore ensure that the natural flow of air is not obstructed by nearby objects.

TECHNICAL DATA

Battery voltage:	12V	24V
Power supply:	230V~ 185÷265V 50/60Hz	230V~ 185÷265V 50/60Hz
Nominal charge current:	1A	1A
Connectable battery:	6 cells lead/acid (minimum capacity 10 Ah)	12 cells lead/acid (minimum capacity 10 Ah)
Maximum absorbed power at 230V:	20W	40W
Full charging output:	70%	70%
Circuit loading in absence of mains supply:	12mA at 12V	6mA at 24V
Degree of protection:	IP00	IP00
Temperature range:	- 10 ÷ 50 °C	- 10 ÷ 50 °C
Weight:	75 g	

AUTOMATIC 6 A BATTERY CHARGERS FOR LEAD BATTERIES TYPE CBA-060



RAPID CHARGING WITH CURRENT CONTROL

INTERMEDIATE AND MAINTENANCE CHARGING,
WITH VOLTAGE CONTROL

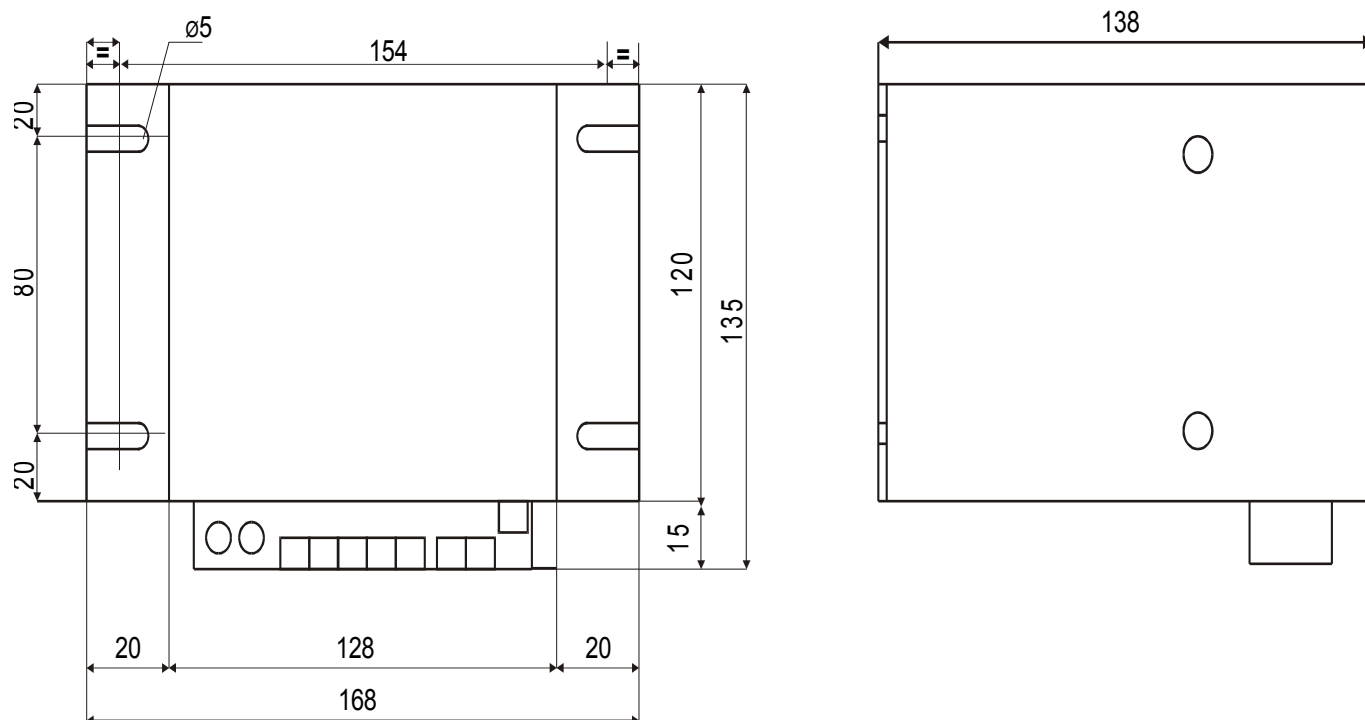
SELFPROTECTION AGAINST:

- SHORT CIRCUIT
- POLARITY INVERSION
- LOWERING (50%) OF THE BATTERY VOLTAGE

REMOTE REPETITION FOR INDICATOR LIGHTS

SUITABLE TO BE INSTALLED ALSO ON BOARD THE MACHINE

DIMENSIONS



TECHNICAL DATA

Battery voltage :	12 V	24 V
Power supply :	230 V ~ (207-253 V ~) 48-63 Hz	230 V ~ (207-253 V ~) 48-63 Hz
Nominal charge current :	6 A	6 A
Connectable battery :	6 cells lead/acid (min. capacity 60 Ah)	12 cells lead/acid (min. capacity 60 Ah)
Maximum absorbed power at 230V :	200 W	300 W
Full charging output	70 %	70 %
Circuit loading in absence of mains supply :	2 mA at 12V	3 mA at 24V
Max. ripple at the battery poles :	200 mV pp	400 mV pp
Max. load on outputs 11, 12 e 14 :	3 W	3 W
Typical voltage on output 11 :	16 V	30 V
Terminal board :	7 poles with screw	7 poles with screw
Degree of protection :	IP 20	IP 20
Temperature range :	-10 +50 °C	-10 +50 °C
Weight :	4400 g	5400 g

AUTOMATIC 3 A BATTERY CHARGER FOR LEAD BATTERIES TYPE CBA-030



RAPID CHARGING WITH CURRENT CONTROL

INTERMEDIATE AND MAINTENANCE CHARGING,
WITH VOLTAGE CONTROL

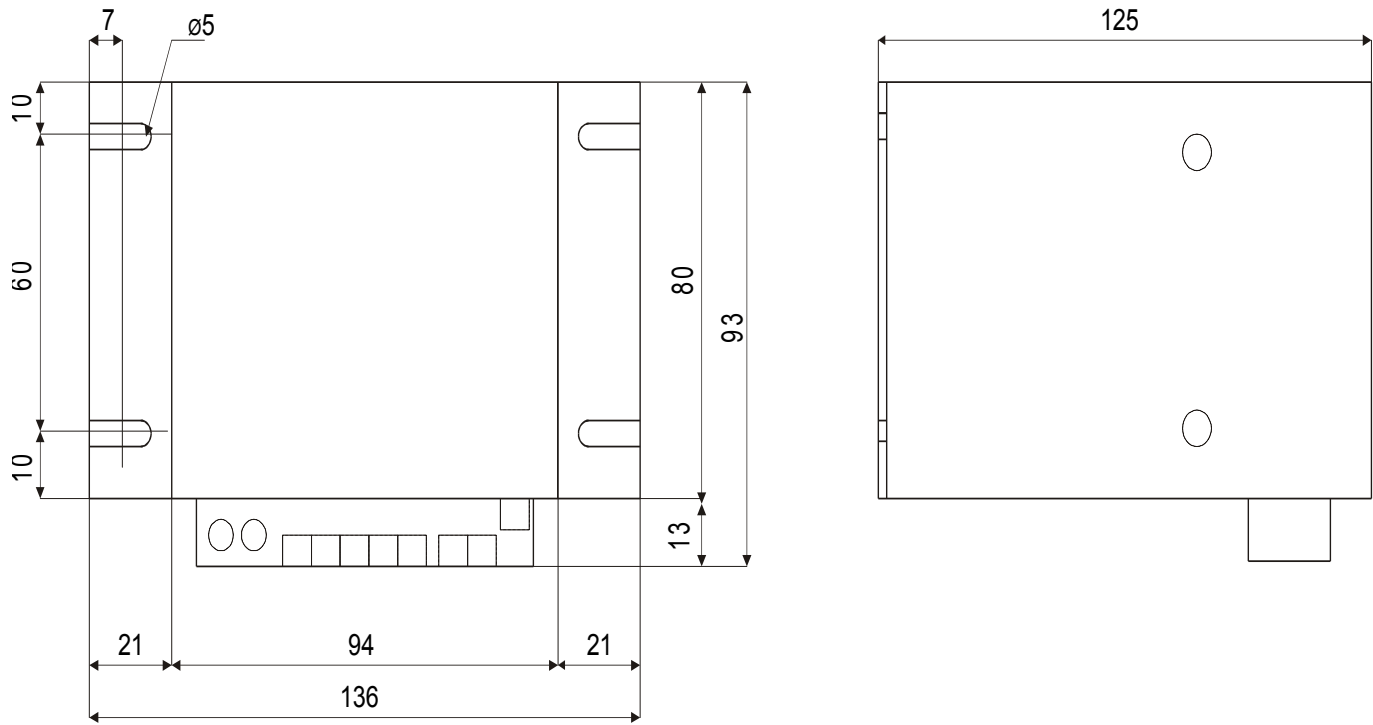
SELF-PROTECTION AGAINST:

- SHORT CIRCUIT
- POLARITY INVERSION
- LOWERING (50%) OF THE BATTERY VOLTAGE

REMOTE REPETITION FOR INDICATOR LIGHTS

SUITABLE TO BE INSTALLED ALSO ON BOARD THE MACHINE

DIMENSIONS



TECHNICAL DATA

Battery voltage:	12 V	24 V
Power supply:	230 V ~ (207-253 V ~) 48-63 Hz	230 V ~ (207-253 V ~) 48-63 Hz
Nominal charge current:	3 A	3 A
Connectable battery:	6 cells lead/acid (min. capacity 30 Ah)	12 cells lead/acid (min. capacity 30 Ah)
Maximum absorbed power at 230V:	105 W	114 W
Full charging output	42 %	63 %
Circuit loading in absence of mains supply:	16 mA at 12V	16 mA at 24V
Max. ripple at the battery poles:	5 mV pp	5 mV pp
Max. load on outputs 11, 12 e 14:	3 W	3 W
Typical voltage on output 11:	16 V	30 V
Terminal board:	7 poles with screw	7 poles with screw
Degree of protection:	IP 00	IP 00
Temperature range:	-10 +50 °C	-10 +50 °C
Weight:	2200 g	2400 g

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