

INSTRUCTIONS FOR USE

Battery Combiner BC-12V/100A



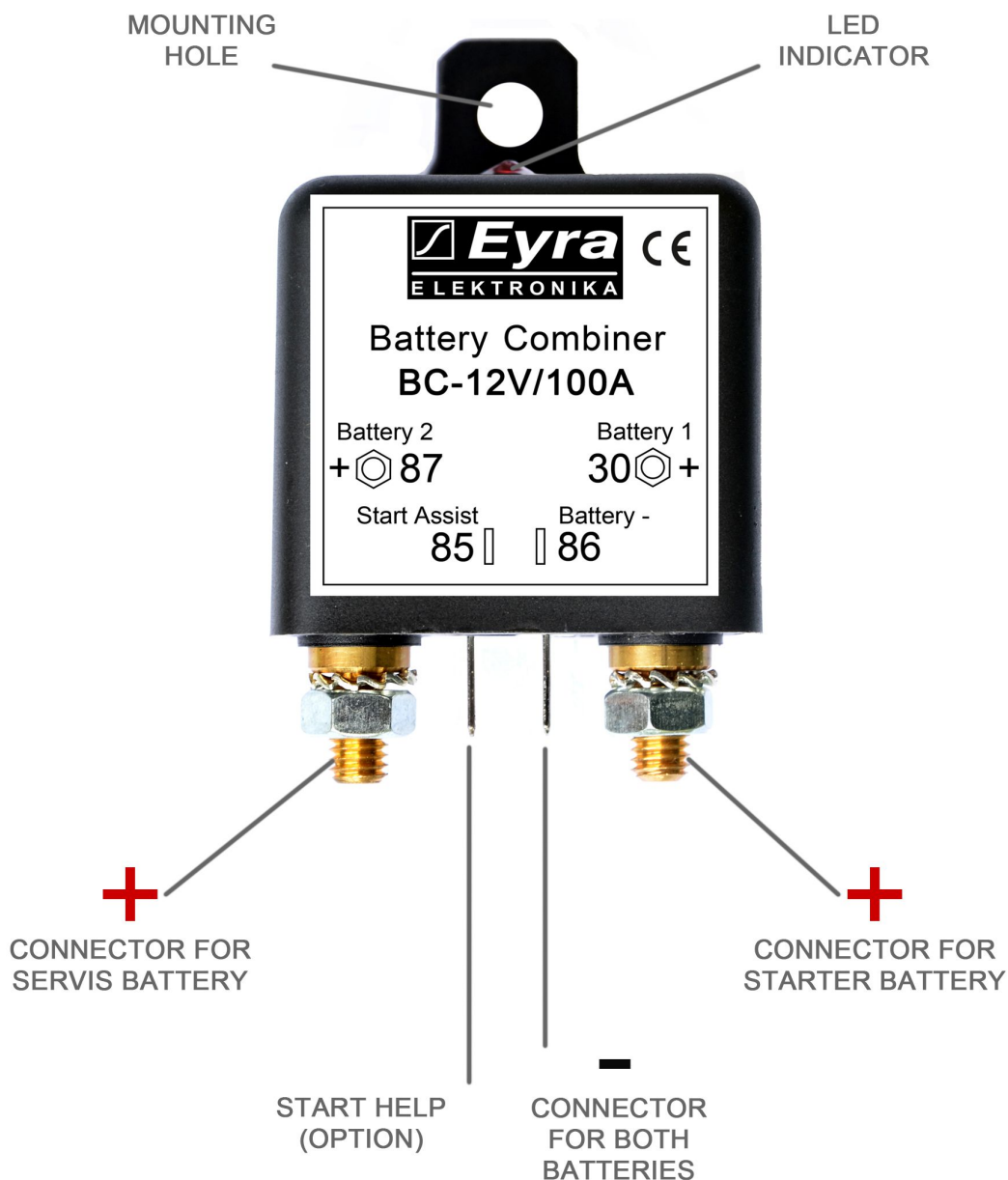
BASICS

Battery Combiner BC-12V / 100A is an automatic system for charging two batteries at the same time, on boats and motorhomes.

CHARACTERISTICS

- **BC-12V / 100A protects starter batteries from discharge.**
- **It contains a power relay that has almost no voltage drops even at very high currents, and is controlled by a microcontroller.**
- **The microcontroller accurately measures the voltages of both batteries, the rate of rise and fall of the voltage during charging / discharging, and connects / disconnects both batteries accordingly.**
- **Since there is no voltage drop, it is a better choice than a diode insulator.**
- **Reliable operation.**

OVERVIEW



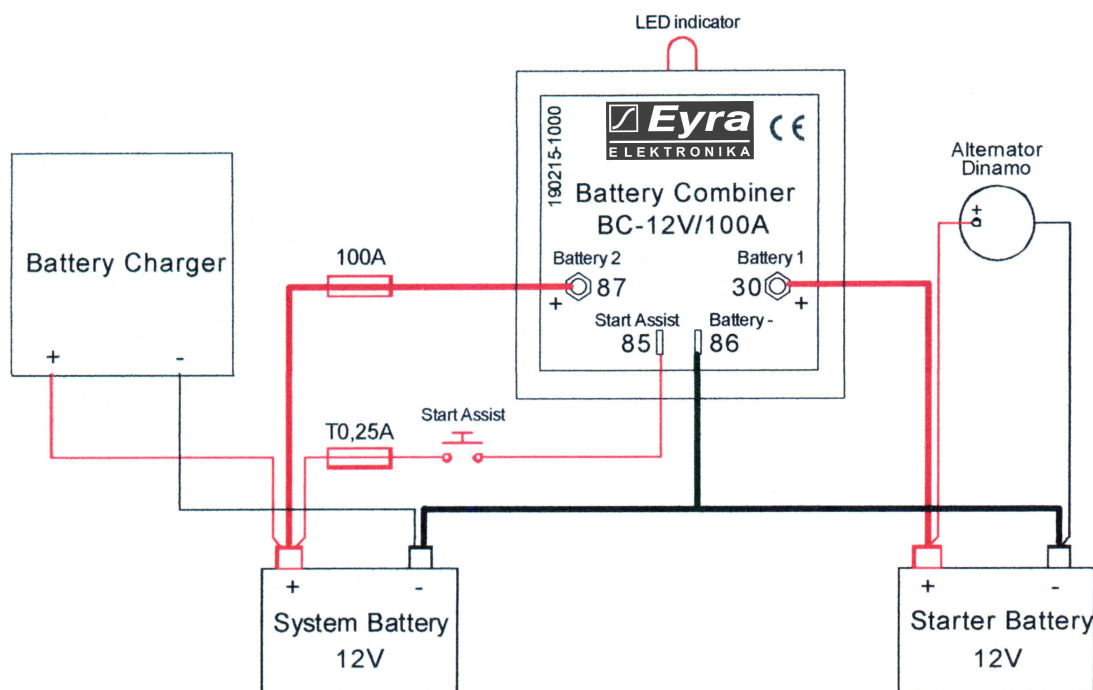
DESCRIPTION OF OPERATION

- Battery Combiner BC-12V / 100A is used to protect the starting battery from discharge under a voltage of 12.7V (+ - 2%).
- The BC-12V / 100A connect the +30 and +87 connectors when the voltage reaches 13.2V (+ - 2%) at one of the +30 or +87 connectors.
- The BC-12V / 100A disconnect the +30 and +87 connectors when the voltage on the batteries drops below 12,7V (+- 5%).
- Due to short-term voltage fluctuations on the batteries (motor start, etc.) below 12.7V, a 5-s delay on and off is installed.
- The upper limit of the battery charging voltage is regulated by the Alternator regulator or external charger and is 14.4V for a 12V battery.

- The BC-12V / 100A disconnects the connection between +30 and +87 if the battery voltage exceeds 16V.
- The connection +30 and +87 connectors is indicated by a lit red LED indicator on the device cover.
- After switching on the relay, the holding voltage of the relay drops to 8V ... 9V, which prevents overheating of the relay winding.

INSTRUCTIONS FOR CONNECTING

- Connect plus poles of both batteries with the appropriate cross-section of the red wire to the M6 terminal contacts +30 and +87.
- Connect minus poles of both batteries to terminal 86 (faston 6.3) with a black wire of cross-section 0.25 to 1mm².
- In emergencies, both batteries can be connected, if we connect +12V to terminal 85 (faston 6.3) and a red wire with a cross-section of 0.25 to 1 mm² via an additional button.



TEHNICAL DATA

- continuous current:	100A
- input voltage:	12V
- battery type:	12V
- connect voltage:	above 13.2V on one of the batteries (full battery)
- disconnect voltage:	below 12.7V on one of the batteries
- disconnect voltage:	above 16V on batteries (error)
- battery's connect status:	red LED indicator
- on / off delay:	5 sec
- protect:	IP54
- dimension:	47mm, 80mm, 47mm
- weight:	100g

WARNING!

- Only a professionally qualified person should connect the device.
- BC-12V/100A is designed for indoor use (do not expose it to rain).
- On device only connect 12V battery.

SERVICE AND GUARANTEE

Eyra elektronika d.o.o.
Gabrje pri Stični 45
SI-1295 Ivančna Gorica
Slovenija

Tel.++386 (0)1 7869-037 Fax++386 (0)1 7869-038
e-mail: info@eyra-elektronika.si <http://www.eyra-elektronika.si>

GUARANTEE STATEMENT

Guarantee conditions:

1. The guarantee is valid for 24 months from the date of sale.
2. The guarantee repairs are carried out exclusively by an authorized service center.
3. The guarantee applies only to the charger, and not to any other device connected to this module.
4. The guarantee and liability does not include any fees, postal costs, damages and any costs related to the failure of this device.
5. The guarantee does not apply to batteries, mechanical damage or lightning strikes.
6. The guarantee does not apply if the device was mounted or used in violation of the instructions.
7. The guarantee does not apply if an unauthorized person interferes with the device.
8. If, during the guarantee period the device is not repaired within 45 days from the date of receipt in our service center, we are obliged to replace it with a new one.
9. The guarantee period shall be extended for the period of repair.
10. The original invoice must be submitted for the enforcement of the guarantee.

seller :

company:

.....

name and surname of the seller:

.....

signature of the seller:

.....

date of sale:

.....

stamp:

