



PDS Design Solutions Limited

*Toroidal Transformers / DC-DC Converters / AC-DC PSU / Mains Adapters / Medical approved PSU /
DC-AC Inverters / Battery Chargers and UPS's*

CBC-870-29 Battery Charger

Installation & Operating Instructions



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1. Specification

Input Voltage	230Vac
Input Frequency	47 - 63Hz
Input Current	Typically 5A
Output	29Vdc \pm 2%
Output Current limit	27.5A
Ripple & Noise	150mV pk-pk
Typical Efficiency	86%
Setup Time	1.5s
Rise Time	50ms
Hold Up time	15ms

2. Mounting

The CBC-870-29 Charger is designed to be mounted on a wall or stood on a bench top with the indication LEDs facing forward, and the input and output terminals on the right hand side.

To aid wall mounting each unit is supplied with four brackets. To fit, remove the rubber bung from each corner on the rear side and attach the brackets.

The fans on the left and the right sides of the unit should not be obstructed

3. Environment

The CBC-870-29 Charger is designed to be used indoors, at normal room temperature, and in a dry dust free environment. The internal power module has thermocouples on it's heatsink and output choke to protect against over-temperature and the CBC enclosure also has an internal thermostat to protect the power module against over-temperature in the unlikely event of a cooling fan failure

4. Maintenance

The CBC charger is maintenance free but its advisable to periodically check the fans to make sure that they are free from dust / obstacles and that air can flow freely



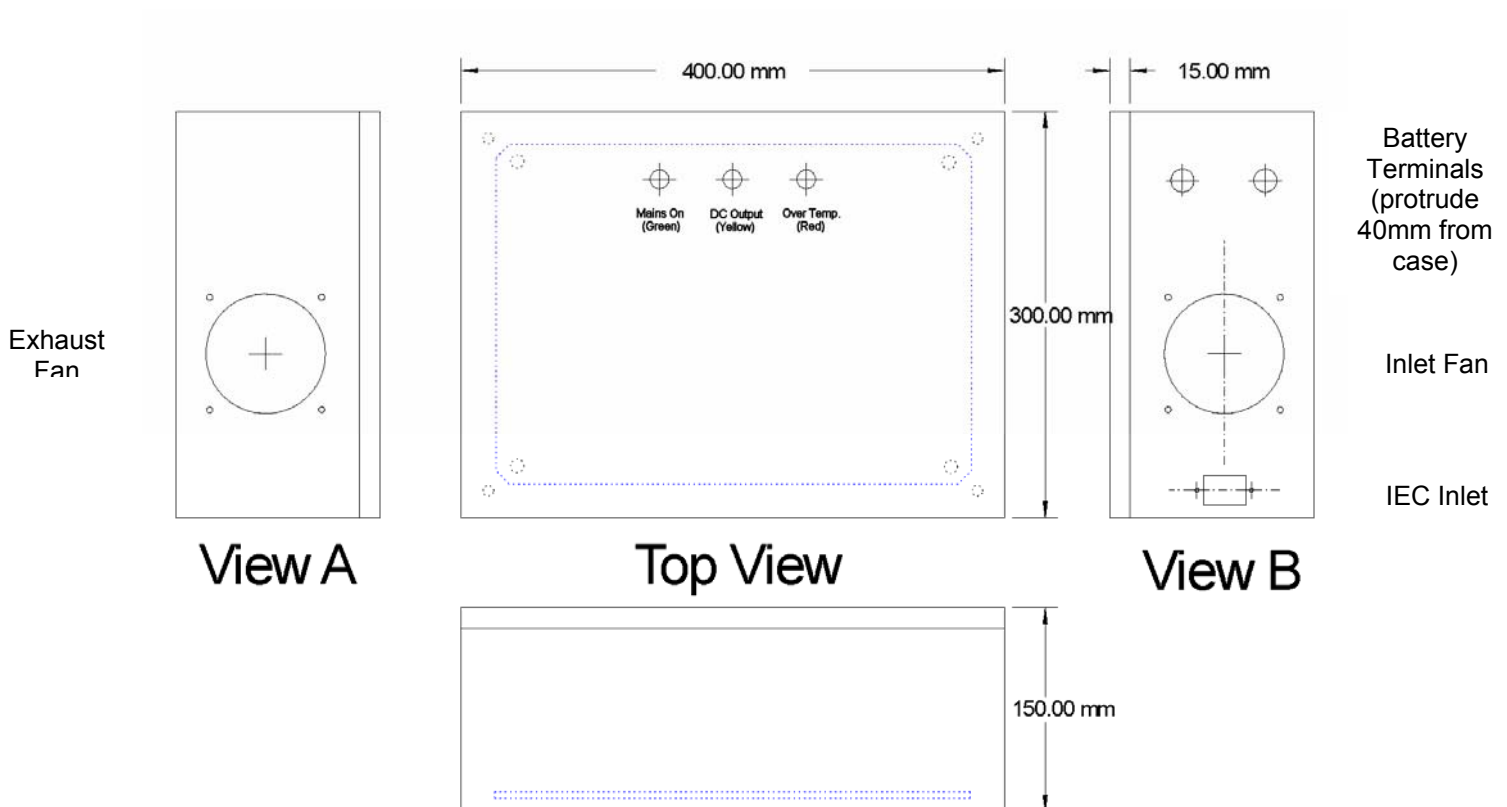
5. Input Connection

230Vac connection via IEC mains lead

6. Output Connection

Connection via black (negative) & red (positive) 100A rated screw terminals suitable for 8mm forks

7. Mechanical Drawings





8. Indication LEDs

Mains On (Green) – AC Input present

DC Output (Yellow) – DC Output present

Over Temperature (Red) – Unit has cut out due to high temperature

9. Fault Finding

Green LED not lit

- Check supply at source.
- Check IEC lead and fuse in moulded plug.

Red LED Lit

- Check that there is nothing obstructing cooling fans on both sides of the unit
- Check operation of Inlet & Exhaust cooling fans
- Allow unit to cool and it should restart once temperature has reduced

Green LED Lit but Yellow and Red LEDs not Lit

- Possible short circuit at load
- Possible loose connection or power supply failure