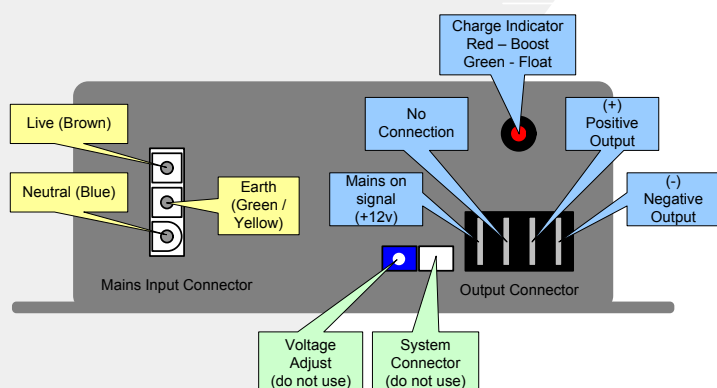


Electrical Connections



Safety

Please observe the warnings on the charger label, which are also shown below for reference.

Under heavy loads the charger case may become hot. ALWAYS ensure the ventilation holes have a clear flow of air.

Do not place combustible materials against / adjacent to the charger.

The charger has an input voltage selection switch (concealed under a sticker) at the opposite end to the electrical connections. This switch should NEVER be changed from 230V unless the charger is to be used in the USA on 115V. Failure to observe this warning will cause irreparable damage to the charger, which is not covered by the warranty.

WARNINGS

- Explosive gases may be present near the battery when charging.
- Prevent flames and sparks.
- Provide adequate ventilation during charging
- Disconnect the supply before making or breaking the connections to the battery
- Caution! Surface may be hot under operation
- Short circuit protection
- Reverse Polarity Protection
- Over temperature protection
- Suitable for Lead-Acid Batteries (see note opposite)

Specification

Input: 230V AC 50Hz 3A

Output: 13.6 to 14.4V DC 300W

Dimensions: 240 x 135 x 48mm (excluding connectors)

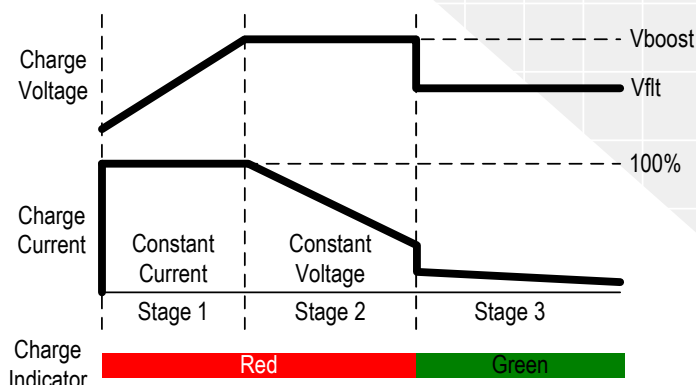
Weight: 1.18 Kg

Mating Input Connector: JST L-Connector plug with pins

Mating Output Connector: Molex HNF plug

Approvals: IEC 60335-2-29:2003, IEC 60335-1:2001

Charger Operation



During stage 1 the battery voltage is increased gradually while the current is limited to start the charging process and protect the battery. At stage 2 the voltage rises to 14.4V (Vboost) to deliver the bulk charge to the battery. When the battery is charged, the voltage is decreased at stage 3 to 13.6V (Vflt) to deliver a float charge to maintain the battery in the fully charged state. The charger can be left switched on continuously as required.

The battery charger / power converter can also provide power to the leisure equipment when the mains supply is connected. This module supplies DC to the leisure equipment up to a maximum of 25 Amps (300 Watts), therefore the available power is distributed between the leisure load and the battery, under these conditions the charge indicator will show Red.

System / Connections

The charger is configured to work with standard lead acid leisure batteries, and in most cases is also compatible with the latest range of Absorbed Glass Matt (AGM) batteries. Before fitting non-standard batteries please check that the charging profile described above is suitable for the type of battery by referring to the battery documentation or battery manufacturer. The recommended battery capacity is 85 to 220Ah.

Some vehicle installations can cater for two leisure batteries connected in parallel. In these cases it is recommended that two identical batteries are used.

The battery feed should be fitted with an inline fuse between the battery and the electrical harness, and the maximum rating of this fuse is 20A per battery. If a single battery is fitted, this fuse may be increased to 40A.

The output of the charger should be fused at 25A maximum as close to the charger output as possible.

In all cases the harness design / cable sizes should be chosen to match the charger output and system ratings.