

the BCM1230 & BCM2415 BATTERY CHARGER

The battery charging characteristic comprises three stages as follows:

1. BULK CHARGE (RED LED on)

The charger delivers a closely controlled current to the battery. During this phase, about 75% of capacity is restored.

2. EQUALISATION PHASE (AMBER LED on)

The charger slowly reduces the current to maintain the battery at the 'boost' voltage. This brings the battery to about 98% charge without excessive gassing.

3. FLOATING (GREEN LED on)

The battery voltage is allowed to drop to the 'float' voltage. The current from the charger is automatically adjusted to supply any loads connected to the battery and maintain the battery in the fully charged state.

This 3-stage charging system re-charges the battery both quickly and safely. The charging cycle starts automatically on application of the mains supply.

INSTALLATION

The charger must be firmly secured to a vertical surface in a ventilated compartment away from extremes of temperature and close to the batteries. These chargers are fan cooled and there must be at least 10cm. clearance in front of and around the unit. The front ventilation grilles must not be obstructed to avoid over-heating.

The battery must be connected to the charger BEFORE any connection is made to the AC mains supply. The battery to charger connections must be made with cable of appropriate cross-sectional area – we would recommend at least 6 square mm. Three positive connections (+) and one negative connection (-) are provided. The battery voltage is sensed on the "+M" terminal, therefore if only one battery is connected to the charger then its positive connection should be made to "+M" and the others ignored. The cables should be secured with cable clips to prevent movement and possible chafing.

The AC input connection to the charger should be made via a circuit breaker of 10 amp rating on the main control panel. The earth wire MUST be connected to the system safety earth.

IMPORTANT

The installation of this battery charger is straightforward, but it must be remembered that the AC mains input voltage is dangerous and that lead-acid batteries store large amounts of energy which could cause a fire hazard if short-circuited. If you are in any doubt at all, have the charger installed by a competent electrician.

- SPECIFICATION -

INPUT VOLTAGE RANGE

180V to 270V AC 47 to 63Hz

EFFICIENCY

over 75% at 230V input

OUTPUT VOLTAGE & CURRENT

BCM1230

float voltage 13.8V
boost voltage 14.4V
output current 30A

BCM2415

float voltage 27.6V
boost voltage 28.8V
output current 15A

SIZE

170wide x 220high x 65deep mm

MAXIMUM AMBIENT TEMPERATURE

fully rated from -10C to +45C

PROTECTION

extensive protection facilities are built into the BCM chargers for optimum reliability. These include protection against short-circuit, output over-voltage and excessive temperature.

the BCM range of battery chargers
are designed and manufactured in the

U.K.