

MajorBCD600 Watt DC Charger

The **MajorBCD600** has an all new single board design that incorporates state-of-the-art switchmode technology for unmatched efficiency and ultra-quiet operation.

Multiple stages of filtering reduce radiated or conducted noise to very low levels. The two-stage charging profile charges the batteries at a constant current equal to the maximum continuous output of the unit. When the battery voltages come up to the float voltage that the unit is set to, the current into the batteries will taper off as necessary to maintain the batteries at the float voltage.

The **MajorBCD600** can be left permanently connected without fear of overcharge or damage to the batteries. The adjustable float voltage feature allows the unit to be used for any type of battery including lead acid and gel cell.



Product Features

- **Adjustable Output Voltage**
 - ▶ For charging standard or deep cycle lead-acid, VRLA or Gel cell type battery
- **Audible & Visual Indicators**
 - ▶ For constant current, low input voltage, low output voltage & over-temperature
- **Extremely Rugged**
 - ▶ Well suited for marine and other demanding environments
- **High Tolerance**
 - ▶ For shock and vibration
- **Ultra-Quiet**
 - ▶ Low EMI operation
- **Protection**
 - ▶ Current limiting protection
 - ▶ Short circuit protection
 - ▶ Reverse input protection
 - ▶ Output over-voltage crowbar
 - ▶ Over temperature shutdown
- **Spark-Free Connection**
- **Can be left Permanently Connected**
- **Dry Contact Output Fail Relay**
- **Warranty**
 - ▶ 3 years parts and labour

Product Specifications

Mechanical & Environmental	
Operating Temperature Range	0 - 40°C @ Maximum Output
Humidity	0 - 95°C @ Relative Humidity (non-condensing) with optional conformal coating
Audible Noise	None Ødb @ 3 feet
Typical Service Life	>10 years (87,600 hours)
Isolation	Input-Case & Input-Output 1500 VDC; Output-Case 500 VDC
Dimensions (L x W x H)	9.1 x 7.8 x 4.3 in / 23.1 x 19.8 x 10.8 cm
Clearance	1 inch (2.5 cm) all around
Physical	Marine-grade aluminum material, Black anodize / powder epoxy coat finish; 18-8 stainless steel fastenings; 4 contact output terminals
Weight	4.0 lbs / 1.8 kg
Warranty	3 years
Safety	CSA/UL Pending

Model Selection Guide

Model	MajorBCD600-32-12	MajorBCD600-32-24
Input Volts	20 - 45	30 - 45
Input Amps	40	40
Output Volts	13.6 ± 0.5 VDC	27.2 ± 0.5 VDC
Charging Amps	50	38
Output Crowbar	16.0 ± 0.5 VDC	32.0 ± 1.0 VDC
Input Fuses	AGC 25 Amp x 2	AGC 25 Amp x 2
Output Fuses	AGC 30 Amp x 2	AGC 25 Amp x 2
Low Input Voltage Alarm	10.5 VDC	10.5 VDC
Battery Banks	1	1
Stages	2	2
Battery Size (Amp Hours)	200 - 300	150 - 230
Transient Response	< 1V for 15 Amp Surge	< 1V for 15 Amp Surge
Efficiency	> 85% @ Maximum Output	> 85% @ Maximum Output
Duty Cycle	Peak 20% for 10 min max; Continuous 100% for 24 hours/day	Peak 20% for 10 min max; Continuous 100% for 24 hours/day
Line Load Regulation	< ± 0.5%	< ± 0.5%