

MajorBCD305 Watt DC Charger

The **MajorBCD305** battery charger is capable of charging up to two independent banks of batteries at 12 VDC or 24 VDC. Multiple stages of filtering reduce radiated or conducted noise to very low levels.

Applications include charging the compulsory battery on vessel's over 20 meters, temporarily brightening 12 volt headlights or work lights, increasing voltage into an automotive or marine ignition system for hotter spark and/or prevention of failures due to voltage drop during engine start, stabilizing 12V and 24 VDC power systems in marine, automotive or aeronautical environments and more.



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; Derate Linearly 2.5% per °C from 40°C
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	Any Input or Output to Case 500 VDC; Input to Output Common Negative
Dimensions (L x W x H)	9.1 x 7.8 x 2.5 in / 23.1 x 19.8 x 6.4 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	MajorBCD305-12-12	MajorBCD305-12-24
Input Volts	10.5 - 14	10.5 - 28
Input Amps	30	30
Output Volts	13.6 ± 0.5 VDC	27.2 ± 0.5 VDC
Charging Amps	26	13
Output Crowbar	16.0 ± 0.5 VDC	32.0 ± 1.0 VDC
Input Fuses	AGC 20 Amp x 2	AGC 20 Amp x 2
Output Fuses	AGC 30 Amp	AGC 30 Amp
Low Input Voltage Alarm	Programmed Output Voltage -2.5 VDC	Programmed Output Voltage -2.5 VDC
Battery Banks	1	1
Stages	2	2
Battery Size (Amp Hours)	104 - 156	52 - 78
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%