

## MajorBCD605 Series Watt DC Charger

The **MajorBCD605** has an all new single board design that incorporates state-of-the-art switchmode technology for unmatched efficiency and ultra-quiet operation.

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	
<b>Operating Temperature Range</b>	0 - 40°C @ Maximum Output; Derate Linearly 2.5% per °C from 40°C
<b>Humidity</b>	0 - 95°C @ Relative Humidity (non-condensing) with optional conformal coating
<b>Audible Noise</b>	None Ødb @ 3 feet
<b>Typical Service Life</b>	>10 years (87,600 hours)
<b>Isolation</b>	Any Input or Output to Case 500 VDC; Input to Output Common Negative
<b>Dimensions (L x W x H)</b>	9.1 x 7.8 x 2.5 in / 23.1 x 19.8 x 6.4 cm
<b>Clearance</b>	1 inch (2.5 cm) all around
<b>Physical</b>	Marine-grade aluminum material, Black anodize / powder epoxy coat finish; 18-8 stainless steel fastenings; 4 contact output terminals
<b>Weight</b>	4.0 lbs / 1.8 kg
<b>Warranty</b>	3 years
<b>Safety</b>	CSA/UL Pending

## Model Selection Guide

Model	MajorBCD605-12-12	MajorBCD605-12-24
<b>Input Volts</b>	10.5 - 14	10.5 - 28
<b>Input Amps</b>	50	350
<b>Output Volts</b>	13.6 ± 0.5 VDC	27.2 ± 0.5 VDC
<b>Charging Amps</b>	42	21
<b>Output Crowbar</b>	16.0 ± 0.5 VDC	32.0 ± 1.0 VDC
<b>Input Fuses</b>	AGC 30 Amp x 2	AGC 30 Amp x 2
<b>Output Fuses</b>	AGC 25 Amp x 2	AGC 25 Amp x 2
<b>Low Input Voltage Alarm</b>	10.5 VDC	10.5 VDC
<b>Low Output Voltage Alarm</b>	Programmed Output Voltage -2.5 VDC	Programmed Output Voltage -2.5 VDC
<b>Battery Banks</b>	1	1
<b>Stages</b>	2	2
<b>Battery Size (Amp Hours)</b>	168 - 252	84 - 126
<b>Transient Response</b>	< 1V for 15 Amp Surge	< 1V for 15 Amp Surge
<b>Efficiency</b>	> 85% @ Maximum Output	> 85% @ Maximum Output
<b>Duty Cycle</b>	Peak 20% for 10 min max; Continuous 100% for 24 hours/day	Peak 20% for 10 min max; Continuous 100% for 24 hours/day
<b>Line Load Regulation</b>	< ± 0.5%	< ± 0.5%