

BCD800 Series DC Battery Charger



A product of:



Benefits

- Ultra-Quiet
- Convection cooled, no noisy fan
- Weatherproof
- Vibration Resistant
- Power sensitive electronics without interference
- Rugged & Reliable
- Ensure years of safe and trouble free operation
- Fast & Accurate Charging

Applications

- Designed for Transport Vehicle HVAC Systems (day cab configuration)
- Marine & other Rugged Environments
- Mobile Offices (TV and Radio Vans)
- Electric Utilities and Substations
- Base Station Power (Radio & Telecommunications)
- Industrial Controls
- Field Work / Construction Sites
- Solar / Alternative Power Systems
- Emergency Backup Power (UPS)
- Charge any 12 or 24V Battery System

Battery Chargers

BCD800 Series

Description

The BCD800 battery charger provides up to 800 watts to charge a 12V or 24V battery system (1 bank) from a 12V source. Both the 12V source and the batteries under charge must share a common ground.

This all-new single board design 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.

Extra features include audible and visual indicators for low input voltage, low output voltage and over temperature.

Safety features include reverse input protection, over-temperature shutdown, current limiting, short circuit protection with automatic recovery, input undervoltage shutdown, reverse battery protection and output overvoltage crowbar.

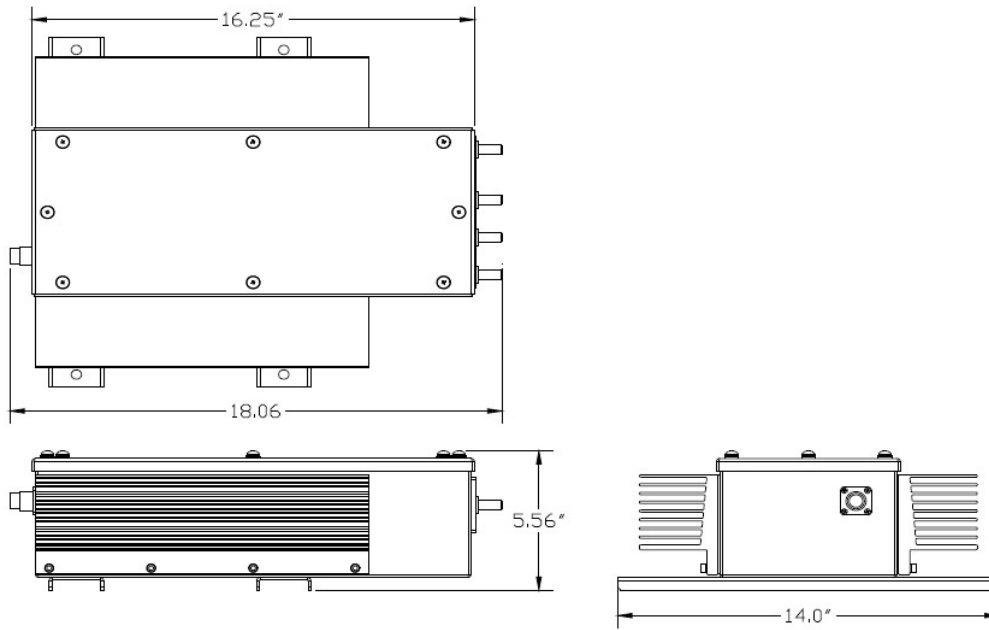
There is an optional 60 amp current limit override available for straight through operation as well.

An optional remote control is also available. We are confident that you will get many years of reliable service from this Battery charger.

Features

- 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 and well suited for marine and other demanding environments
- High tolerance for shock and vibration
- Ultra-quiet low EMI operation
- Current limiting protection
- Short circuit protection
- Reverse input protection
- Output over-voltage crowbar
- Dry contact output fail relay
- Over-temperature shutdown
- Spark-free connection
- Wide-Temperature operation Available
- Conformal coating and/or harsh environment ruggedization available
- 3 year parts and labour warranty

Mechanical Diagram



Dimensions are in Inch

Specifications (Specifications Subject to Change Without Notice)

Electrical (Input)

Model Number	BCD800-12-12	BCD800-12-24
Input Volts (DC)	10.5 – 14	10.5 – 28
Input Amps (max)	60	
Input Fuse (AGC)	40A x 2	
Noise on Input	< 50 mV	
Low Input Voltage Alarm	10.5V	

Electrical (Output)

	12	24
Output Nominal (op)	12	24
Output Volts (DC)	13.6 ± 0.05	27.2 ± 0.05
Charging Amps	◆ 60 cont.	◆ 30 cont.
Output Crowbar	16.0 ± 0.5V	32.0 ± 1.0V
Output Fuse (AGC)	40A x 2	25A x 2
Output Ripple & Noise	< 50 mV	
Battery Banks	1	
Stages	2	
Battery Size (Amp Hours)	160-240	80-120
Regulation (Line & Load)	< +/- 0.5%	
Duty Cycle	Continuous 100% for 24 hours per day	
Efficiency	> 90% @ Maximum Output	

◆ The actual charging rate depends upon the input/output voltage ratio. To obtain the charging capability at any given input voltage, use the following formula:

Charging Current = Input Volts/Output Volts x 60

For example, at 11 VDC in and 13.6 VDC out, the charging current = 11.5/13.6 x 60 = 50.7 amps

Environmental Specifications

Operating Temp. Range	-25° to +40°C @ maximum output Derate Linearly 2.5% per °C from 40°C (Optional -40°C extra wide-temp. operation avail.)
Humidity	0 - 95°C Relative Humidity (non-condensing) with optional conformal coating
Protection	IP 67
Audible Noise	NONE Ødb @ 3 ft
Typical Service Life	> 10 yrs. (87,600 hrs)
Isolation	Any Input or Output to Case 500 VDC Input to Output – Common Negative

Mechanical Specifications

Length	41.3 cm / (45.9 cm overall)
Width	35.6 cm
Height	14.2 cm
Material	Steel
Finish	Black Chromate/ Powder Epoxy Coat
Fastenings	All 18-8 Stainless Steel
Weight	13.4 kg
Connections	4-3/8" Threaded steel studs
Warranty	3 years

Available from:

RIPEnergy[®]

The power conversion company

RIPEnergy AG
Talstrasse 2
CH-8702 Zollikon
Switzerland

Ph +41-(0)43-818 53 85
Fax +41-(0)43-818 53 87
www.ripenergy.ch