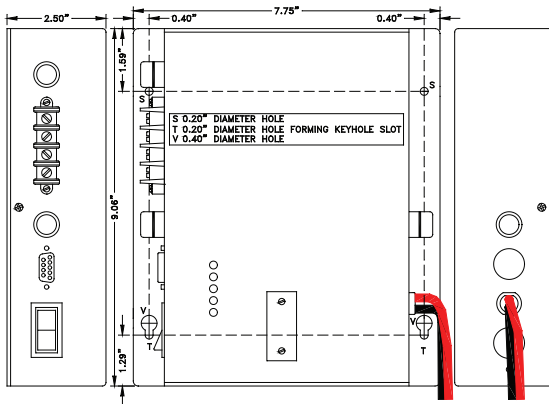




ANALYTIC SYSTEMS

Power Conversion Solutions

DC BATTERY CHARGER MODEL BCD305



Description

The BCD305 battery charger provides up to 300 watts to charge a 12V or 24V battery system (1 or 2 banks) 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 adjustable output voltage, 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.

Available options include a remote control and/or extra-wide temperature. We are confident that you will get many years of reliable service from this Battery charger.

Benefits

- Ultra-Quiet
- Power sensitive electronics without interference
- Rugged & Reliable
- Ensure years of safe and trouble free operation
- Fast & Accurate Charging

Design 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 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
- Optional portable features for automotive use
- 3 year parts and labour warranty

Applications

- Marine & other rugged environments
- Mobile Offices (TV and Radio Vans)
- Automotive / RV / Military
- 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 24V Battery System

An ISO9001 and AS9100 Registered Company Battery Chargers • Inverters • Power Supplies • Voltage Converters

8128 River Way, Delta B.C. V4G 1K5 Canada T. 604.946.9981 F. 604.946.9983 TF. 800.668.3884 (US/CANADA)

www.analyticsystems.com

DC BATTERY CHARGER

MODEL BCD305

Electrical (Input)

Model Number	BCD305-12-12	BCD305-12-24
Input Volts (DC)	10.5 – 14	10.5-28
Input Amps (max)	30	
Input Fuse (AGC)	20A x 2	
Noise on Input	< 10 mV	
Low Input Voltage Alarm	10.5V	

Electrical (Output)

Output Nominal (op)	12	24
Output Volts (DC)	13.6 ± 0.05	27.2 ± 0.05
Charging Current (Amps)	*26	*13
Output Adjustment	± 0.5	
Output Crowbar	Programmed O/P Volts x (1.3 ± 1%)	
Output Fuse (AGC)	30A x 2	
Output Ripple & Noise	< 10 mV	
Battery Banks	1 or 2	
Stages	2	
Battery Size (Amp Hours)*	104-156	52-78
Regulation (Line & Load)	< +/- 0.5%	
Duty Cycle	Continuous 100% for 24 hours per day	
Efficiency	> 85% @ Maximum Output	

Environment Specification

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% Relative Humidity (non-condensing) with optional conformal coating
Audible Noise	NONE 0db @ 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 Specification

Length	9.1 in / 23.1 cm
Width	7.8 in / 19.8 cm
Height	2.5 in / 6.4 cm
Material	Marine Grade Aluminium
Finish	Black Anodize
Fastenings	All 18-8 Stainless Steel
Weight	4.0 lb / 1.8 kg
Connections	Built to meet UL458 & CSA22.2.107.1
Warranty	3 years
Safety	Designed to meet CSA 22.2.107.1 & UL458

*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 26. For example, at 11 VDC in and 13.6 VDC out, the charging current = 11/13.6 x 26 = 21.0 amps

Note: Specifications are subject to change without notice.



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