

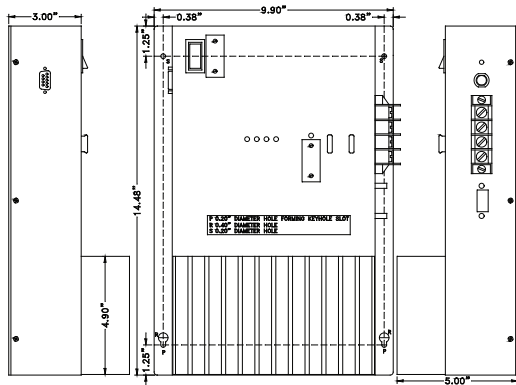


ANALYTIC SYSTEMS

Power Conversion Solutions

DC BATTERY CHARGER

MODEL BCD1000 SERIES



Description

The model BCD1000 Battery Charger charges either 12V, 24V or 48V batteries from a 110, 220 or 300VDC power source. Other battery voltages up to 72 volts are also available by special order.

The all-new Current Mode switching design offers increased power and reliability in a compact package. Extra input and output filtering reduce EMI to extremely low levels. Reliability features include an input fuse, thermal shutdown, current limiting, reverse battery hookup protection, output short circuit shutdown with automatic recovery and an equalize charge mode. The output voltage is easily adjusted 1.0 volts above or below the standard output voltage to accommodate special charging requirements.

Optional features include a Digital Volt/Ammeter, Remote Control Panel, and/or 19" Rackmounting. We are confident that you will get many years of reliable service from this DC Battery Charger.

Benefits

- Ultra-quiet
- Power sensitive electronics without interference
- Rugged and reliable to ensure years of safe and trouble free operation
- Fast and accurate charging

Design Features

- Fully Isolated Design
- Adjustable output voltage for charging standard or deep cycle lead-acid, VRLA or Gel cell type battery
- Transient Voltage Suppressor
- Extremely rugged and well suited for marine and other demanding environments
- High tolerance for shock and vibration
- Ultra-quiet low EMI operation
- Can be left permanently connected
- Spark free connection
- User selectable 2 or 3 stage charging profile
- Audible and visual indicators for output overload, low input voltage, low output voltage and over-temperature
- Over-temperature shutdown
- Short circuit protection
- Output over-voltage crowbar
- Inrush Current Limiting with solid state bypass
- Dry contact output fail relay
- Three years parts and labour warranty

Applications

- Marine & other Rugged Environments
- Electric Utilities and Substations
- Manufacturing Plants
- Steel Mills
- Military Applications (COTS)
- Industrial Controls
- OEM Applications
- Solar / Alternative Power Systems
- Fuel Cells
- Charge any DC/DC System

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

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www.analiticsystems.com

DC BATTERY CHARGER | MODEL BCD1000 SERIES

Electrical (Input)			
Nominal (ip)	110	250	300
Actual (Vac)	100-140	230-280	280-360
Input Amps (max)	14.8	6.5	5.3
Input Fuse (MDA)	15	7	6
Noise on Input	< 50mV		
Electrical (Output)			
Output Nominal (op)	12	24	48
Output Volts (DC)	13.6 ± 0.05	27.2 ± 0.05	54.4 ± 0.05
Absorption Voltage (Vdc)	14.4	28.8	57.6
Charging Amps	60	40	20
Absorption to Float	9.0 Amps	6.0 Amps	3.0 Amps
Output Adjustment (Vdc)	± 1.0V		
Output Fuses (ATC)	40 x 2	40 x 2	25 x 2
Battery Banks	1 or 2 (3 Bank Option Available)		
Battery Size (Amp Hrs.)	240-360	160-240	80-120
Output Crowbar	16.0 ± 0.5V	32.0 ± 1.0V	63.9 ± 2.0V
Output Ripple & Noise	< 50 mV		
Regulation (Line & Load)	< +/- 0.5%		
Temperature Comp.	-30 mV/°C	-60 mV/°C	-120 mV/°C
Duty Cycle	Continuous 100% for 24 hours per day		
Efficiency	> 80% @ Maximum Output		
Stages	2 or 3 (user selectable)		
Environment Specification			
Operating Temp. Range	-25°C to +40°C @ maximum output Derate Linearly 2.5% per °C from 40°C (Optional -40°C - +55°C extra wide temp. operation avail.)		
Humidity	0 - 95% Relative Humidity (non-condensing) with optional conformal coating		
Audible Noise	NONE Ødb @ 3 ft (34.5 dB when fan operating)		
Typical Service Life	> 10 yrs. (87,600 hrs)		
Isolation	Input-Case & Input-Output 1500VDC Output-Case 500VDC (1500V @ 48V Output)		
Mechanical Specification			
Length	14.5 in / 36.8 cm		
Width	9.9 in / 25.1 cm		
Height	5.5 in / 14.0 cm		
Clearance	1 inch (2.5 cm) all around		
Material	Marine Grade Aluminium		
Finish	Black Anodize / Powder Epoxy Coat		
Fastenings	All 18-8 Stainless Steel		
Weight	12.0 lb / 5.5 kg		
Connections	Four contact output terminals		
Warranty	3 years		
Safety	Designed to meet CSA 22.2.107.1 & UL458		

Note: Specifications are subject to change without notice.



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