

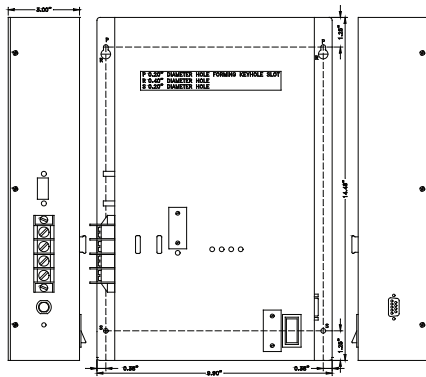


ANALYTIC SYSTEMS

Power Conversion Solutions

DC BATTERY CHARGER

MODEL BCD610 SERIES



Description

The model BCD610 DC Battery Charger charges either 12V, 24V or 48V batteries from a 110, 220 or 300VDC power source. Other battery voltages up to 360 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 equalize charging cycle. 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, 3-Bank Charging, a Remote Control Panel, and/or a second Battery Temperature Sensor. 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 & visual indicators for output overload, low input voltage, low output voltage & 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 year 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

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

www.analiticsystems.com

DC BATTERY CHARGER | MODEL BCD610 SERIES

Electrical (Input)

Nominal (ip)	110	250	300
Actual (Vac)	100-140	230-280	280-360
Input Amps (max)	8.2	3.6	2.9
Input Fuse (MDA)	10	4	3
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	14.4	28.8	57.6
Charging Amps	40	22	11
Absorption to Float	6.0 Amps	3.3 Amps	1.65 Amps
Output Adjustment (Vdc)	± 1.0V		
Output Fuses (ATC)	40 x 2	30 x 2	15 x 2
Battery Banks	1 or 2 (3 Bank Option Available)		
Battery Size (Amp Hrs.)	160 - 240	88 - 132	44 - 66
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	> 75% @ 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 - +50°C extra wide temp. operation avail.)
Humidity	0 - 95% Relative Humidity (non-condensing) with optional conformal coating
Audible Noise	NONE Ødb @ 3 ft
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	3.0 in / 7.6 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	7.6 lb / 3.3 kg
Connections	Four contact output terminals
Warranty	Three years parts and labour
Safety	Designed to meet CSA 22.2.107.1 & UL458

Note: Specifications are subject to change without notice.



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