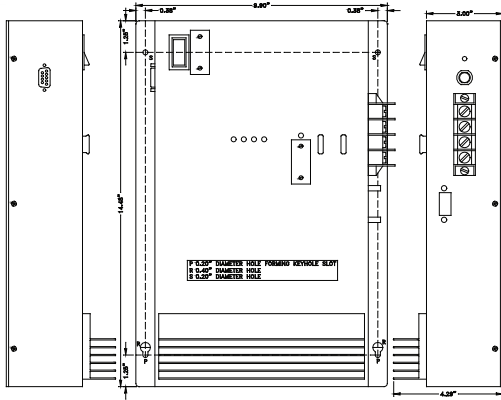


ANALYTIC SYSTEMS

Power Conversion Solutions

DC BATTERY CHARGER

MODEL BCD615 SERIES



Description

The model BCD615 Battery Charger charges either 12V, 24V or 48V batteries from a 24V, 48V or 72VDC power source. Other battery voltages up to 56 volts are also available by special order.

The all-new Current Mode switching design offers increased power and reliability in a compact package. The low ripple charging profile and standard equalize cycle greatly increases the lifetime of expensive battery systems. 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 and output short circuit shutdown with automatic recovery.

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 & 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

- Telecom Power Plants
- Electric Utilities and Substations
- Marine & other Rugged Environments
- 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.analysystems.com

DC BATTERY CHARGER

MODEL BCD615 SERIES

Electrical (Input)

Nominal (ip)	24	48	72
Actual (Vdc)	20-35	40-60	65-90
Input Amps (max)	37.9	19.4	12.1
Input Fuse (ATC)	15 x 3	25 x 1	25 x 1
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	40	20	10
Absorption to Float	6.0 Amps	3.0 Amps	1.5 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	80 - 120	40 - 60
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 - +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 (500V @ 24V I/P) Output-Case 500VDC (1500VDC @ 48V O/P)

Mechanical Specification

Length	14.5 in / 36.8 cm
Width	9.9 in / 25.1 cm
Height	4.3 in / 11.0 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	7.6 lb / 3.3 kg
Connections	Four contact output terminals
Warranty	Three years parts and labor
Safety	Designed to meet CSA 22.2.107.1 & UL458

Note: Specifications are subject to change without notice.



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