

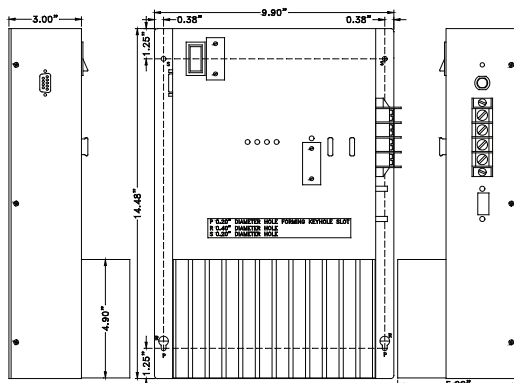
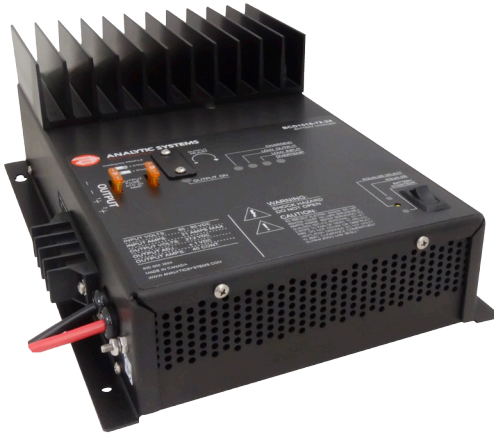


ANALYTIC SYSTEMS

Power Conversion Solutions

DC BATTERY CHARGER

MODEL BCD1015 SERIES



Description

The model BCD1015 DC Battery Charger charges 12V, 24V, or 48V battery banks (1 or 2 banks) from a 24, 36, 48 or 72 volt DC power source.

The reliable Current Mode switching design offers power and reliability in a compact package. The low ripple charging current 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 protection 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 19" or 23" Rack Mount configurations. We are confident that you will get many years of reliable service from this DC Battery Charger.

Benefits

- Compatible with a wide range of battery types
- Won't interfere with sensitive radio communication systems
- Rugged and reliable to ensure years of safe and trouble free operation
- Fast and accurate charging

Design Features

- Fully isolated design, input and output voltages are completely independent.
- Adjustable output voltage for charging standard or deep cycle lead-acid, VRLA or Gel cell type battery
- Temperature compensated charging profile with battery over temperature protection
- Extremely rugged and well suited for marine and other demanding environments
- High tolerance for shock and vibration
- Low EMI operation
- Can be left permanently connected
- Spark free connection to batteries
- 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 with automatic recovery
- Short circuit protection with automatic recovery
- Output over-voltage protection
- 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

DC BATTERY CHARGER | MODEL BCD 1015 SERIES

Electrical (Input)				
Nominal (ip)	24	36	48	72
Actual (Vac)	20-35	30 - 50	40-60	65-90
Input Amps (max)	66.7	45	34	21
Input Fuse (ATC)	40 x 2	30 x 2	20 x 2	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	60	40	20	
Absorption to Float	9 .0 Amps	6 .0 Amps	3.0 Amps	
Output Adjustment (Vdc)	± 1.0V			
Output Fuses (AGC)	40 x 2	40 x 2	25 x 2	
Battery Banks	1 or 2			
Battery Size (Amp Hrs.)	240-360	160-240	80-120	
Output Over Voltage Protection	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	> 82.6% @ Maximum Output			
Stages	2 or 3 (user selectable)			
Environment Specification				
Operating Temp. Range	-25° to +40°C @ maximum output. Derate Linearly 2.5% per °C from 40°C (Optional -40°C - +55°C extra wide temp. operation available)			
Humidity	0 - 95% Relative Humidity (non-condensing) with standard 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, Output-Case & Input-Output 1500VDC			
Mechanical Specification				
Length	14.5 in / 36.8 cm			
Width	9.9 in / 25.1 cm			
Height	5.0 in / 12.7 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	Input - Flying Leads; Output - Four position terminal Block			
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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An ISO9001 and AS9100 Registered Company Battery Chargers • Inverters • Power Supplies • Voltage Converters

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