

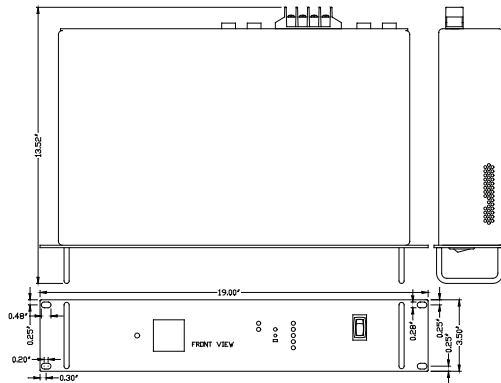


ANALYTIC SYSTEMS

Power Conversion Solutions

AC BATTERY CHARGER

MODEL BCA1000R



Description

The BCA1000R Rackmount Battery Charger (Rectifier)'s 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.

The model BCA1000R Battery Charger supplies either 12, 24, 32, 48 or 72 VDC from a 110 or 220 VAC power source (Field Convertible). A high quality Digital Volt/Ammeter allows the monitoring of charging current and charging voltage.

Benefits

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

Design Features

- Extremely rugged and well suited for marine and other demanding environments
- Adjustable output voltage for charging standard or deep cycle lead-acid, VRLA or Gel cell type battery
- High tolerance for shock and vibration
- Charge 1, 2 or 3 Banks (Option)
- Equalize Function
- Battery Temp. Compensation
- Ultra-quiet low EMI operation
- Can be left permanently connected
- Can function as a power supply
- Dry contact output fail relay
- User selectable 2 or 3 stage charging profile
- Standard Digital Volt/Ammeter
- 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
- Thermostatically controlled fan
- Custom output voltages available (8V to 55V)
- 3 year parts and labour warranty

Applications

- Marine & other rugged environments
- Automotive / RV
- Electric Utilities and Substations
- Base Station Power (Radio & Telecommunications)
- OEM Applications
- Field Work / Construction Sites
- Solar Power Systems
- Emergency Power Backup (UPS)
- Security Systems
- Charge any 12, 24, 32, or 48 Volt Battery System

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

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www.analysystems.com

AC BATTERY CHARGER

MODEL BCA1000R

Electrical (Input)		
Nominal (ip)	110	220
Actual (Vac)	90-130Vac	180-260Vac
Input Amps (max)	17	8.5
Input Fuse (MDA)	25A/20 (12V)	15A/10 (12V)
Input Frequency	45-65 Hz	
Noise on Input	< 50mV	

Electrical (Output)					
Output Nominal (op)	12	24	32	48	72
Output Volts (DC)	13.6 ± 0.05	27.2 ± 0.05	36.3 ± 0.05	54.4 ± 0.05	81.6 ± 0.05
Absorption Voltage (Vdc)	14.4	28.8	38.4	57.6	86.4
Charging Amps	60	40	30	20	13
Absorption to Float (15%)	9.0 Amps	6.0 Amps	4.5 Amps	3.0 Amps	2.0Amps
Output Adjustment (Vdc)	± 1.0V				
Output Fuses (ATC)	40 x 2	40 x 2	40 x 2	30 x 2	15 x 2
Battery Banks	1 or 2 (3 Bank Option Available)				
Battery Size (Amp Hrs.)	240 - 360	160 – 240	120 – 180	80 – 120	50 - 80
Output Crowbar	16.0 ± 0.5V	32.0 ± 1.0V	42.7 ± 1.3V	63.9 ± 2.0V	95.9± 4.0V
Output Ripple & Noise	< 50 mV				
Regulation (Line & Load)	< +/- 0.5%				
Temperature Comp.	-30 mV/°C	-60 mV/°C	-80 mV/°C	-120 mV/°C	-180 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° 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 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	
Depth	13.5 in/ 34.3 c
Width	19.0 in/ 48.3 cm
Height	2u (3.5 in.)
Clearance	1 inch (2.5 cm) all around
Material	Marine Grade Aluminium
Finish	Black Anodize / Powder Epoxy Coat
Weight	12.0 lb / 5.5 kg
Fastenings	All 18-8 Stainless Steel
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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