AC SOURCE BATTERY CHARGER

BCA1505

er Conversion Solutions Power Conversion Solutions



BCA1505 AC SOURCE BATTERY CHARGER

The BCA1505 battery charger provides up to 1500 watts to charge a one or two bank battery system at 12, 24, 32, 48 or 72(rail) volts from a 110 or 220 VAC source. The batteries must share a common ground.

Features include user selectable 2-stage or 3-stage charging profiles, temperature compensation and user initiated equalization for optimum charging and maximum battery life.

Protection include output overvoltage, battery or charger over temperature, low input voltage, overload and short circuit.

Available models

Input

110V & 220V

Output

12V 24V 32V 48V 72V (rail)

Applications













BCA1505 | AC SOURCE BATTERY CHARGER

INPUT

110 and 220 VAC (auto switching)
90-140 and 180-280 VAC
16.2 (at 90 VAC in)
25 A Magnetic
45 - 405 Hz
< 50 mV

OUTPUT

Output Volts Nominal VDC	12	24	32	48	72(rail)
Absorption Voltage VDC	14.4	28.8	38.4	57.6	76.8
Float Volts	13.6 ± 0.05	27.2 ± 0.05	36.3 ± 0.15	54.4 ± 0.2	72.5 ± 0.3
Float Adjust	+/- 0.5 V	+/- 1.0 V	+/- 1.5 V	+/- 2.0 V	+/- 3.0 V
Charging Amps	100	60	45	30	20
Battery Banks	1	1 or 2	1 or 2	1 or 2	1 or 2
Recommended Battery Capacity (Amp Hrs.)	200 - 600	100 - 300	75 - 200	50- 150	40 - 120
Output Overvoltage Protection Crowbar	17.0 ± 0.5 V	34.0 ± 1.0 V	45.0 ± 0.5 V	68.0 ± 2.0 V	90.0 ± 3.0 V
Temperature Compensation Coefficient	-30 mV /°C	-60 mV /°C	-80 mV /°C	-120 mV /°C	-160 mV /°C
Duty Cycle	Continuous				
Efficiency	> 80% @ Maximum Output				
Stages	2 or 3				

MECHANICAL

Dimensions	17.4 in / 44.2 cm Long x 8.35 in/ 21.2 cm Wide x 4.0 in / 10.2 cm High
Clearance	1.0 in / 2.5 cm all around
Weight	18.0 lb / 8.2 kg
Material and Finish	Marine Grade Black Anodized Aluminum with 18-8 Stainless Fasteners
Connections	Input - NEMA 5-15 plug with 2.5 m AWG14 cable (approx. length) (North America) or CEE 7/7 2.5 m cable (Europe)
	Output - Color coded Phoenix VDFK6 terminal blocks, 60 Amp rated

OPTIONS

European ROHS compliant (Lead Free Manufactured)

GMDSS - Digital Volt/Amp Meter & Remote control kit.

Military Rugged Package with MIL Connectors

Open frame (No chassis, just heat sink bars)

Portable (adds height, Carrying handle, rubber feet)

Safety Special Inspection (CSA/UL)

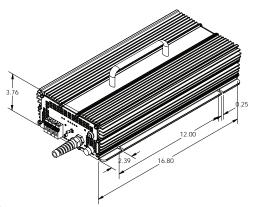
Integrated Digital Volt/Ammeter

Heavy duty ruggedization with wide temperature range

Custom input/output available

BCA1505MW model available with MIL connectors, extra input and output filtering and sealed to IP66

DIMENSIONS



ENVIRONMENTAL AND SAFETY

Operating Temperature Range	-25°C to +40°C @ maximum output. Derate Linearly 2.5% per °C from 40°C (Optional -40°C extra wide temperature operation available)
Humidity	0 - 95% Relative Humidity (non-condensing) with standard conformal coating
Isolation	Input-Case, Input-Output and Output-Case 1500 VDC
Audible Noise	40 dB when fans operating
Typical Service Life	> 10 years (87,600 hrs)
Warranty	Three years parts and labor
Safety	Built to meet CSA 22.2.107.1 & UL458

