150W, Universal Input Battery Charger
BCM 150 Series
(formerly BCH 150 Series)

- Rugged industrial quality
- Conduction/convection cooled - no fan
- Fully protected
- Field proven design
- Analog ammeter
- Competitive pricing

The BCM 150 is a compact battery charger with a built in analog meter to indicate the charger output current. It provides 150W total power for float charging a battery. There is a separate pair of terminals for the battery and for the load. A built-in Charger Fail Alarm indicates either failure of the charger circuit or loss of AC input power. The battery input is protected against accidental reverse battery connection by a crossbar diode and internal safety fuse. The battery must be fused externally directly at the battery. Low component count and the use of components with established reliability result in a high MTBF. The unit is manufactured at our plant under strict quality control. Please see the BCH 150 and BCH 151 Series for other options.

SPECIFICATIONS

Input Voltage
95Vac to 264Vac
47 - 63Hz
120Vdc to 360Vdc

Input Protection
AC Input
Inrush current limiting
Varistor
Internal safety fuse
Lower voltage than the specified minimum input will not damage the unit
Battery Input:
Internal safety fuse and crossbar diode
Warning: Battery must be fused externally, directly at the battery

Input Isolation
2250VDC input to chassis
4300VDC input to output, 8mm spacing
500VDC output to chassis

Standards
Designed to meet EN 60950 and related standards

EMI
Meets EN 55022 Class B

Switching Frequency
47kHz +/- 2kHz

Output Voltages/Currents
13.8V/10A or 27.6V/5.4A
55.2V/2.7A as a special version
Consult factory for other voltages

Output Separation Diode
Installed internally

Line/Load Regulation
±1.5% combined from no load to full load including output separation diode

Output Ripple/Noise
Better than 1% of output voltage peak to peak or 0.2% RMS of the output voltage (20MHZ BW)

Overload Protection
Rectangular current limiting with hiccup mode short circuit protection
Thermal shut-down with automatic recovery in case of insufficient cooling
Internal battery safety fuse on battery input

Output Overvoltage Protection
Double regulator loop, stable and indep of the main feedback loop

Efficiency
Typically 80 - 90% at full load depending on output

Operating Temperature
0 °C to +50°C without derating.
Extended temperature range available

Temperature Drift
0.03% per °C over operating temperature range

Cooling
Conduction to customer heatsink or chassis and natural convection

Environmental Protection
Basic ruggedizing
Additional ruggedizing and conformal coating available

Shock/Vibration
Designed to meet IEC 61373 Cat 1 A&B

Humidity
5 - 95% non-condensing

MTBF
150,000h at 45°C
Demonstrated MTBF is significantly higher

Indicators
Analogue ammeter (current meter)

Control input
None

Alarm Outputs
Charger fail alarm
(Form C as option)

Package/dimensions (WxHxL)
F2: 112 x 57 x 256 mm
(4.43"x 2.25" x 10.08") including terminal block and flanges
Mounting holes are clear

Weight
1.2 Kg (2.6 lb) approx.

Connections
9-pole barrier type terminal block with 3/8" spacing for all connections

RoHS Compliance
Fully compliant

Warranty
Two years subject to application within good engineering practice.

Enhancements to these general specifications and customizing can be accommodated upon request. Specifications subject to change.

Designer and manufacturer of quality converters, inverters, UPS systems, complete rack mount systems and DC-input fluorescent lamp inverters since 1982. Custom or standard. Absopulse is a BABT-approved Facility.

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