

150W, UNIVERSAL INPUT UPS/BATTERY CHARGER

BCH 151 SERIES

- Industrial quality
- Competitive price
- Input 95VAC-264VAC
- Conduction/convection cooled - no fan
- Fully protected
- Single output
- Made in North America



The BCH 151 is a constant voltage switch mode battery charger with automatic temperature compensation. It utilizes high frequency conversion topology to generate 150W. The input accepts any AC voltage from 95V to 264V as well as DC voltage from 120V to 360V. Standard output float voltages are 13.8V/10A, 27.6V/5.4A (for 12Vdc or 24Vdc batteries). Other output voltages are available. (48V and higher versions are available as special versions).

The battery temperature compensation function ensures optimum charging at various temperatures: as the battery temperature rises, the charge voltage is automatically reduced; when the batteries cool, the charge voltage increases. The adjustment rate (slope) is 3mV/cell/°C for lead acid batteries. (Other values can be factory set). The probe is included.

The BCH 151 has Low Battery Disconnect as well as a built-in Charger Fail Alarm and Low Battery alarm (both Form C). The battery input is protected against accidental reverse battery connection by a crossbar diode and safety fuse with a 3-times higher Amp rating than output fuse.

SPECIFICATIONS

Input Voltage

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

Input Protection

Internal safety fuse
Inrush current limiting
Battery fuse
Surge protection
Lower voltage than the specified minimum input will not damage the unit

Input Isolation

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

Standards

Designed to meet IEC950,
CSA 22-2-950 and UL 60950

EMI

Meets EN 55022 Class A as a minimum

Switching Frequency

47kHz +/- 2kHz

Output Voltages/Currents

13.8V/10A, 27.6V/5.4A
(55.2V/2.7A as special version).
Consult factory for other voltages

Line/Load Regulation

±1.5% combined from no load to full load

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
Hiccup mode at short circuit or massive overload. Thermal shut-down with automatic recovery in case of insufficient cooling
Output fuse
Battery safety fuse with 3-times rating of output fuse

Output Overvoltage Protection

Double regulator loop, stable and independent of the main feedback loop

Efficiency

Min 80% at full load

Operating Temperature

-20°C to +50°C without de-rating.

Temperature Drift

0.03% per °C over operating temperature range

Cooling

Conduction to customer heatsink or chassis and natural convection

MTBF

150,000h at 45°C

Indicators

Charger "ON" LED outside the alarm terminals

Battery Temp. Compensation

Temperature probe is included. Slope:3mV/cell/°C for lead acid batteries.

Battery Reverse Protection

Crossbar diode and fuse

Low Battery Disconnect

Installed to prevent battery from deep discharge.

Alarm Outputs

Rectifier fail (Form-C)
Low battery (Form-C)

Environmental Protection

Basic ruggedizing

Dimensions

F2: 4.4"x 2.2" x 10"

Weight

1.1 kg (2.5 lb) approx.

Connections

9-pole barrier type terminal block with 3/8" spacing for 9-pole terminal for input/output and BTC 6-pole WECO for alarms

RoHS Compliance

According to requirements

Warranty

Twelve months 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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