

300W, SINGLE-OUTPUT UPS/BATTERY CHARGER BCH 300 SERIES

- Industrial quality
- Single regulated and adjustable output
- 300W output power
- Convection/conduction cooling
- Full electronic protection
- Field-proven design
- Also available as plug-in module



The BCH 300 Series battery charger utilizes high frequency conversion topology to generate 300W from a 115 or 230Vac ($\pm 15\%$) input and provides any output voltage from 12Vdc to 125Vdc. This design features low component count and high efficiency. The use of high quality components and rigorous quality control results in an MTBF exceeding 150,000 hours at 45°C. This unit has a Form C charger fail alarm and the battery output is protected against accidental reverse battery connection by a crossbar diode and an external battery fuse. (Internal safety fuse is available as an option).

SPECIFICATIONS

Input Voltage

115/230VAC +/- 15%
jumper selectable
47 - 420Hz

Input Protection

Internal safety fuse
Inrush current limiting
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

Any output voltage from 12Vdc to
125Vdc

Redundancy Diode

Yes

Line/Load Regulation

$\pm 1.5\%$ 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
Thermal shut-down with automatic
recovery in case of insufficient
cooling

Output Overvoltage Protection

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

Efficiency

Min 80% at full load

Operating Temperature

0 to +50°C without
de-rating. 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

MTBF

150,000h at 45°C

Indicators

Visible through cooling slots

Battery Temp. Compensation

None

Battery Reverse Protection

Crossbar diode. Customer must
provide external battery fuse.
Internal battery fuse is available as
option

Low Battery Disconnect

None.

Alarm Outputs

Charger Fail Form C

Dimensions

F3: 5.2" x 2.46" x 11.4"

Weight

1.8 kg (3.9 lb) approx.

Connections

12-pole barrier type terminal block
with 3/8" spacing for all
connections. No separate terminals
for battery.

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 ABBT-approved Facility*



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