Transportable Battery Charger for Field Applications BCH 300-PEL and BCH 500-PEL Series

- Rugged industrial quality
- Field-proven design
- Convection cooled no fan
- Full electronic protection

The BCH 300-PEL and BCH 500-PEL Series of battery chargers was designed for extremely heavy-duty applications such as military, transportation, marine, oilfields and industrial plants. The field-proven circuitry provides many years of trouble free operation in the toughest environments. This series provides up to 500W output power. Since ABSOPULSE is a custom manufacturer, the design can be adapted to any battery voltage required. A range of options including panel-meters, temperature compensation, charge disconnect, timer and alarms are available on request.



SPECIFICATIONS

Input Voltage

115Vac or 230Vac ±15% 47 - 63Hz or 250Vdc Universal PFC and DC inputs as options

Input Protection

Inrush current limiting
Surge protection
Reverse battery protection
Internal safety fuse
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

55kHz +/- 2kHz

Charger Output Voltage

Any voltage up to 400Vdc

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

Current limiting with short circuit protection

Output Overvoltage Protection

Double regulator loop

Efficiency

Min 80% at full load

Operating Temperature

0°C to +50°C without de-rating. Optional extended temperature range available

Temperature Drift

0.03% per °C over operating temperature range

Cooling

Natural convection

Environmental Protection

Heavy ruggedizing, conformal coating, waterproof case

MTBF

150,000h at 45°C

Indicators

Charger ON LED

Battery Temperature Compensation

As ontion

As option

Battery Reverse Polarity Protection

Crossbar diode and breaker

Equalize & Timer

As option on request

Low Battery Disconnect

None

Alarm Output

Charger fail Form C available as option

Dimensions (L x W x D)

Pelican Top Loader Case #1430 50.2 x 40 x 18.8 cm 19.78" x 15.77" x 7.41"

Weight

Approx 5.9 kg (13 lb) depending on model

Connections

AC-input: IEC 320 receptacle Output/battery: Circular MIL type connector. Battery cable provided on request

RoHS Compliance

According to requirements

Warranty

Two years subject to application within good engineering practice.

