

BCH300-500 SERIES

Battery Chargers: 300 ~ 500 Watts



Features

- Convection cooled: No fans
- Two power levels: 300 & 500 watts
- Fully isolated input – output
- Over voltage protection
- Overload and short circuit protection
- Inrush current limiting
- MTBF > 150,000hrs
- Any output from 12vdc ~ 120vdc possible
- Customised mechanical solutions on request
- Power Fail / Charger Fail Alarm
- Battery Low Alarm
- **DIN Rail & 19in Rack mount options**

Specifications

| | |
|-------------------------------|---|
| Input Voltage | 230VAC (190 ~ 264) |
| Input Frequency | 47 ~ 63Hz |
| Input Current | BCH300 @ 2.8A, BCH500 @ 4.7A |
| Input Protection | Inrush current limiting Transient protection / Varistors Internal safety fuse |
| Isolation | Input – Output: 4300vdc Input - Chassis 2250vdc Output – Chassis 500vdc |
| Efficiency | Typically 80% |
| Output voltage | See table |
| Output Power | 300 ~ 500 watts |
| Voltage adjustment | 12V: 12-14V. 24V: 24-28V 48v: 48-56V |
| EMC | EN55022 Class A |
| Immunity | EN 61000-4-2 (ESD) EN 61000-4-3 (RF Immunity) EN 61000-4-4 (Fast Transients) EN 61000-4-6 (Conducted Imm.) |
| Switching Freq. | Typically 55KHz |
| Output Diode | Internally fitted output isolation diode |
| Parallel operation | Yes |
| Regulation | Line: $\pm 1\%$ Load: $\pm 1.5\%$ |
| Output Ripple/Noise | Typically <1% of output voltage |
| Overload Protection | Constant current limiting with short circuit protection. Battery must be externally fused. |
| Thermal Protection | Thermal shutdown with auto recovery, when unit cools down. |
| Overvoltage Protection | Yes. Recycle mains input to re-set |
| Operating Temp. | 0°C to +50°C at full load. Derate 2.5% per °C to +70°C. |
| Temperature Drift | 0.03% per °C over operating range |

Description

The **BCH300 & BCH500** series battery charger is a rugged, industrial-grade product, using field- proven design suitable for use in DC battery back-up applications.

It is a mature product providing excellent reliability and performance and delivering 300 / 500 watts of output power with convection/conduction cooling. ...NO Fans.

The two alarms provide external monitoring of Power Fail / Charger Fail and Battery Low via voltage free contacts. The chassis-mount design feature allows for easy mounting.

Additional ruggedizing and conformal coating is available for applications requiring higher immunity to shock, vibration, humidity, moisture, dust and insects.

Specifications Cont.

| | |
|------------------------------|---|
| Cooling | Conduction / convection cooled via base plate. |
| Shock & Vibration | IEC61373 Cat 1 A&B |
| Humidity | 5-95% non-condensing |
| MTBF | >150,000hrs @ 45°C |
| Indicator | Green LED visible through cooling slots |
| Alarm Output | <ul style="list-style-type: none">• Power Fail / Charger Fail Alarm• Low Battery Alarm Both Alarms are CLOSE FAIL with common return Low battery only operative if power / charger fails. |
| Connections | Terminal block / barrier strip with 3/8" spacing |
| Dimensions | BCH300: 290 x 132 x 62mm (F3) BCH500: 352 X 132 X 62mm (F4) |
| Weight | BCH300 / BCH500: 2.0 / 2.5kg |

BCH300-500 SERIES

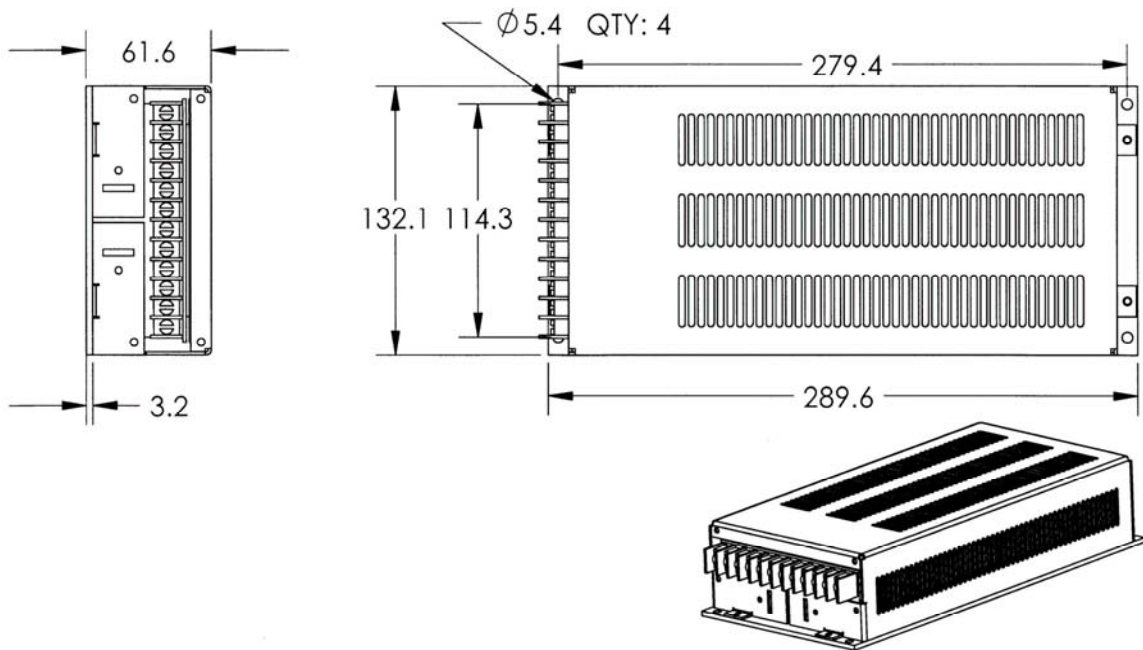
Battery Chargers: 300 ~ 500 Watts

| Model | Output | | | Power W |
|--------------|--------|---------|------|------------|
| | Nom V | Float V | A | |
| BCH300-14FT | 12V | 13.8V | 20A | 300W |
| BCH300-28FT | 24V | 27.6V | 11A | 300W |
| BCH300-55FT | 48V | 55.2V | 5.5A | 300W |
| BCH300-108FT | 96V | 108.0V | 2.8A | 300W |
| BCH300-127FT | 108V | 127V | 2.4A | 300W |

| Model | Output | | | Power W |
|--------------|--------|---------|------|------------|
| | Nom V | Float V | A | |
| BCH500-28FT | 24V | 27.6V | 18A | 500W |
| BCH500-55FT | 48V | 55.2V | 9A | 500W |
| BCH500-108FT | 96V | 108.0V | 4.6A | 500W |
| BCH500-127FT | 108V | 127 | 4A | 500W |

- Contact us for other output voltage options.

BCH300



BCH500

