

# RIPEENERGY The Power Conversion Company

### **BCD805W DC/DC BATTERY CHARGER**

#### **SERIES BCD805W**

The BCD805W-12-24 battery charger provides up to 30 Amps of current to a one bank battery system at 24 volts nominal from a 12 VDC source.

The BCD805W is housed in a rugged IP66 rated water resistant extruded aluminum housing.

It is tested to MIL461E for both radiated and conducted emissions and to MIL810F for shock and vibration.

Visual indicators show when the unit is powered, when it is charging as well as indicators for Input Undervoltage, Output Undervoltage and Internal Overtemperature.

Available options include a carrying handle and various Mil-Spec Connectors.











Full electronic Control of Contro



Conduction Cooling (no Fan)

temperature

range



Output fai alarm



Waterproo IP66

#### **APPLICATIONS**

- Marine / Automotive / RV
- Electric Utilities and Substations
- Telecom Power Plants
- Manufacturing Locations
- Steel Mills
- Military Applications (COTS)
- Industrial Controls
- OEM Applications
- Solar / Alternative Power Systems
- Fuel Cells

#### **FEATURES**

- For charging standard or deep cycle lead-acid, VRLA or Gel cell type battery
- Visual indicators for operation and errors
- Extremely rugged and well suited for demanding environments
- High tolerance for shock and vibration
- Ultra-quiet low EMI operation
- IP66 rated, can be used in wet location
- Inrush current limiting
- Dual over-temperature sensors and shutdown with auto recovery
- Input under-voltage detection and shutdown with auto recovery
- Low Output Voltage detection and warning
- Output Short Circuit protection with auto recovery
- Output Current Limiting
- Battery Charging / Charge Complete indicator
- Ideal Diode Battery Isolation (prevents reverse current from battery with minimal forward voltage drop)
- Fault Output (current source to drive relay coil or external LED)
- Battery Reverse Connection Protection (output fuse will blow)

## **SPECIFICATIONS**

Input Voltage nom.	12VDC
Input Voltage range	10.5 - 16VDC
Input Current	max. 90A @ 10.5VDC
Input Breaker	None, External Fuse ecommended
Noise on Input	< 50mV
Output Voltage nom.	24VDC
Output Voltage Float	27.2VDC ±0.05VDC
Output Current max.	30A
Output Crowbar	34.0VDC ±1.0VDC
Isolation	Input-Case & Output-Case 1500VDC Input/Output Common Negative
Battery Banks	1
Charging Curve	2-Stage
Recommended Battery Capacity	100-300Ah
Efficiency	> 90% @ Maximum Output

Operating Temperature	-25° to +40°C @ maximum output Derate Linearly 2.5% per °C from 40°C
Humidity	5 - 95% non-condensing with standard conformal coating
Emission	Designed to meet MIL461F
Audible Noise	NONE 0dB @ 1m
MTBF	> 10 yrs. (87,600 hrs)
Dimensions	41.4 x 21.3 x 9.9cm (LxWxH)
Clearance	2.5 cm all around
Weight	7.3kg
Packaging	Watertight - Fully sealed to IP66 (IP67 Optional)
Material & Finish	Marine Grade Black Anodized Aluminum with 18-8 Stainless Fasteners
Connections	DC In and Out – Marathon ST722B2502UH, 175Amp, 300V Rating c/w Protective Snap On Cover
Shock and Vibration	Designed to meet MIL810G
Alarm output	Output fail alarm
Warranty	2 years

