EAGLE EYE POWER SOLUTIONS

BC-1000 Industrial Float Battery Charger

Common Applications: Utility, switchgear, process control, & other industrial applications

BC-1000 S-1 Charger

Product Description

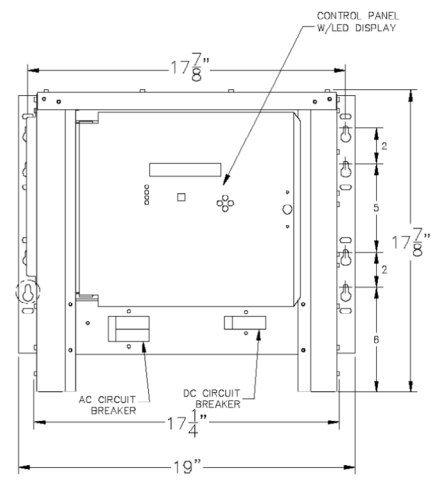
The **BC-1000** is a stationary power float battery charger desgined for use in utility, switchgear, and other industrial environments. Nominal output ratings include 24, 48, and 130 volts DC and 6, 12, 20, 25, or 50 amps DC. Built-in alarms are included for high DC voltage, low DC voltage, positive and negative ground fault, and end of discharge. A number of safety features are included such as wire protection on all field terminals and full AC input and DC output protection.

Standard Features

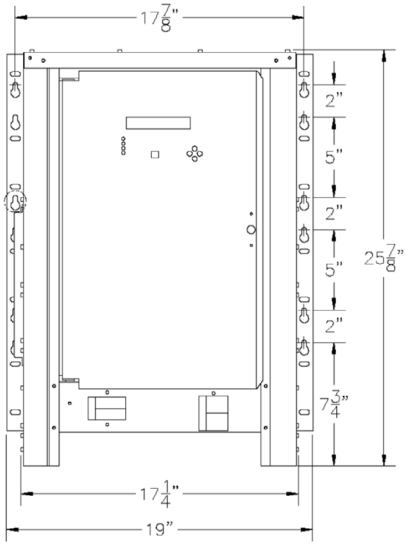
- 5-year warranty
- LCD display and navigation pad
- Field programmable with security levels
- Compatible with a wide variety of battery types
  - Vented lead-acid (VLA), valve regulated lead acid (VRLA), and nickel-cadmium (Ni-Cd)
- AC, DC, float and equalize indicator LEDs
- High / low DC voltage alarm
- High / low DC voltage alarm and AC fail indication
- Positive and negative ground fault alarm
- High DC voltage shutdown
- Summary alarm relay & buzzer
- Push button mode selection
- Full AC input and DC output protection
- AC input and DC output circuit breakers
- Control panel and circuit breakers recessed
- AC and DC surge suppressors
- Wire protection on all field terminals
- Bottom / side cable entry
- Compression terminal strip for field wiring

Optional Features

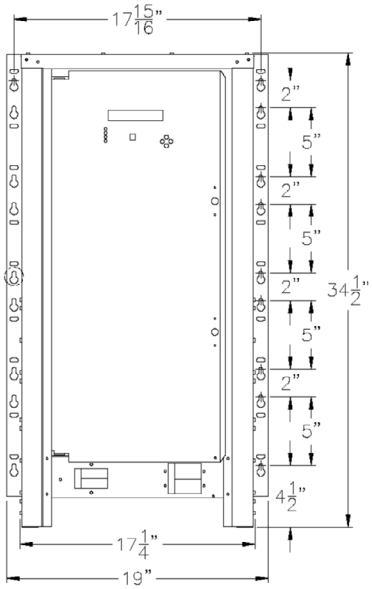
- Enhanced DC output filtering / battery eliminator
- Individual alarm relay contact board
- AC input lightning arrestor
- Remote DC voltage sensor
- Remote battery temperature sensor
- Conformal coated electronic boards
- EIA 19-inch or 23-inch rear rack



S-1 Chassis



S-2 Chassis



S-3 Chassis

Technical Specifications				
Specification	**Conditions**	**24 VDC**	**48 VDC**	**130 VDC**
Output Voltage Regulation	VAC +10%, -12%	± 0.25%		± 0.25%
	0 – 100% load			
	Temp. 32 – 105ºF (0 – 40ºC)			
	Freq. 50 – 60 Hz ± 3 Hz			
DC Output Current	120, 208, 240 VAC Input	6, 12, 20, 25, 50 A		6, 12, 20, 25 A
	240 VAC Input			50 A
Transient Response	20 – 100% load charge, with battery connected	Does not exceed ± 6%. Does not activate High Voltage Alarm.		
Output Ripple Voltage (Meets or Exceeds NEMA PE5 Requirements)	Standard filtering on battery	1% V rms		2% V rms
	Enhanced filtering / battery eliminator	30 mV rms		30 mV rms
	Enhanced filtering / battery eliminator off battery	30 mV rms		100 mV rms
Current Limit	Adjustable	0 – 110%		
Charger Delay	After AC return	8 sec. to 60 min.		
Soft Start	0 – 100% load	Dynamic depending on battery voltage		
Voltage Adjustment Range	Float	2.00 – 2.50 V/C		
	Equalize	2.00 – 2.50 V/C		
	High DC Voltage alarm	1.00 – 2.70 V/C		
	Low DC Votage alarm	1.00 – 2.50 V/C		
	End of Discharge Voltage alarm	1.00 – 2.00 V/C		
Voltmeter Range	All ratings	0 – 120%		
Reverse Current From Battery	AC input power failure; no options installed	Less than 90 mA		
Audible Noise	Average for 4 sides, 5 ft. from charger	Less than 62 dB (A)		
Cooling		Natural Convection (No Fans)		
Ambient Temp.	Operating	32 – 105ºF (0 – 40ºC)		
Elevation	Without Derating	1000 m (3000 ft)		
Relative Humidity	Non-Condensing	0 – 95%		
Alarm Relay Contact Rating	Max. Switching Voltage	150 VDC, 125 VAC		
	Max. Switching Power	30 WDC, 60 VA AC		
	Max. Switching Current	2.0 A		
	Max. Carry Current	2.0 A		
Certifications	UL listed, 1012 and 1564; cUL/CSA certified; FCC part 15 and ICES-003, class A; designed to NEMA PE5			
Dimensions (WxHxD)	S-1	483 x 435 x 454 mm (19.00 x 17.125 x 17.875 in.)		
	S-2	483 x 657 x 454 mm (19.00 x 25.875 x 17.875 in.)		
	S-3	483 x 902 x 456 mm (19.00 x 34.5 x 17.9375 in.)		
Case Material	Powder-coated steel			
Mounting	Wall, floor, shelf, EIA 19-inch rear rack			

Ordering Information

Model No.	Description
BC-1000	Stationary Power Float Battery Charger, 24, 48, or 130 Volts DC