

AUTOMATIC BATTERY CHARGER WITH SCR TECHNOLOGY



BENEFITS

- ⊕ **Tough and durable design**
- ⊕ **Secure for the battery**
- ⊕ **Fully automatic operation**
- ⊕ **Fast, precise & unique setup**
- ⊕ **Stability of the calibration**
- ⊕ **Short circuit & over current protection**
- ⊕ **No need to disconnect during cranking cycle**
- ⊕ **Safe with battery charging alternator**
- ⊕ **Full charge time optimization**
- ⊕ **Optional useful current/voltage display**
- ⊕ **Very reliable, 2 year warranty**
- ⊕ **Very competitive price**

GENERAL FEATURES

- Breaker & switch at power input
- Low voltage & reverse polarity indicators
- Very low variation of the output voltage vs input voltage
- Gradual decrease of current according to the load of the battery
- Contact set for low battery voltage alarm
- Compensation circuit for the voltage lost in the wires battery connection
- Set at factory according to the battery type used
- Model available with or without cabinet
- Standard models available the same day
- CSA certified

DESCRIPTION

Battery chargers from the HX series are designed to maintain the exact voltage needed by lead-acid or nickel-cadmium battery for optimal performance. These chargers use the SCR technology and have an automatic equalization mode.

The control circuit protects your battery against surcharge and limits the output current under short-circuit conditions.

Although very economic, these chargers have very important features including, quality of the DC output signal, full rate power and quick adjustment.

Chargers are available with or without a cabinet and remote installations of the power transformer is possible for cumbersome installations. An optional display, allowing reading voltage and current output of the charger, can also be used for the setup of the charger.

Dry contacts are available as an option for remote alarm indication.

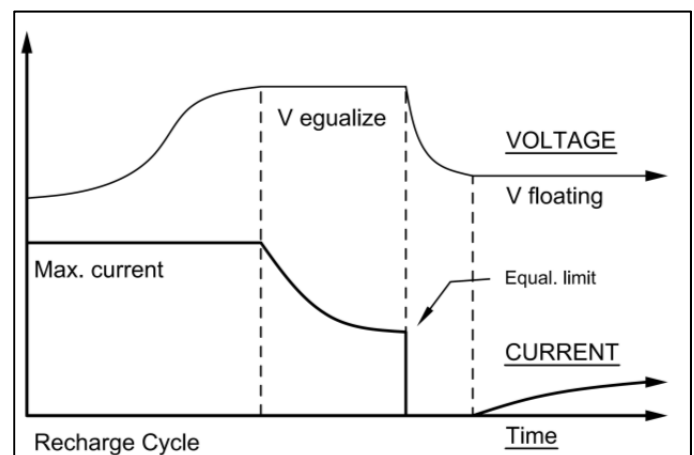
The reliability of the Enertec Battery Charger is why we offer a two year warranty

OPERATION

Upon loss of charge, the charger increases the current to its maximum capacity. Voltage is then decreased to keep the maximum current value constant, for as long as it takes to reach the equalization voltage.

Once the equalization voltage is reached, the current decreases gradually to reach the current limit of the equalization mode, which is 50% of the maximum value of the charge.

At this level of charge, voltage drops to the value of floating voltage.



FEATURES

- LED indicator:**
- AC SUPPLY
 - EQUALIZE MODE
 - LOW BATTERY VOLTAGE
 - INVERSE POLARITY
- Fault relay:**
- LOW BATTERY VOLTAGE
 - CHARGER DEFAULT (option)
 - HIGH DC VOLTAGE (option)
 - AC LOSS. (option)
- Pot. Setup:**
- FLOATING VOLTAGE
 - EQUALIZATION VOLTAGE
 - LOW BATTERY VOLTAGE

Digital display for the voltage & current (option):

- Alternation delay of 2 seconds
- Precision of $\pm 1/10$ of the unity
- Jumper for supply with the battery

Correction circuit for precise voltage on the battery (option):

- $\pm 5\%$ precision between the display voltage and then from the terminal of the battery (with 15 feet of #10 AWG wire gauge)

Manual Equalize (option):

- Input terminal for the activation of the manual Equalize mode

MODELS

Standard basic 115 Vac model:

Model	Output Voltage	Output Current	Enclosure
HX1210S1B	12 Vdc	10 A.	✓
HX1210S1D	12 Vdc	10 A.	
HX2410S1B	24 Vdc	10 A.	✓
HX2410S1D	24 Vdc	10 A.	

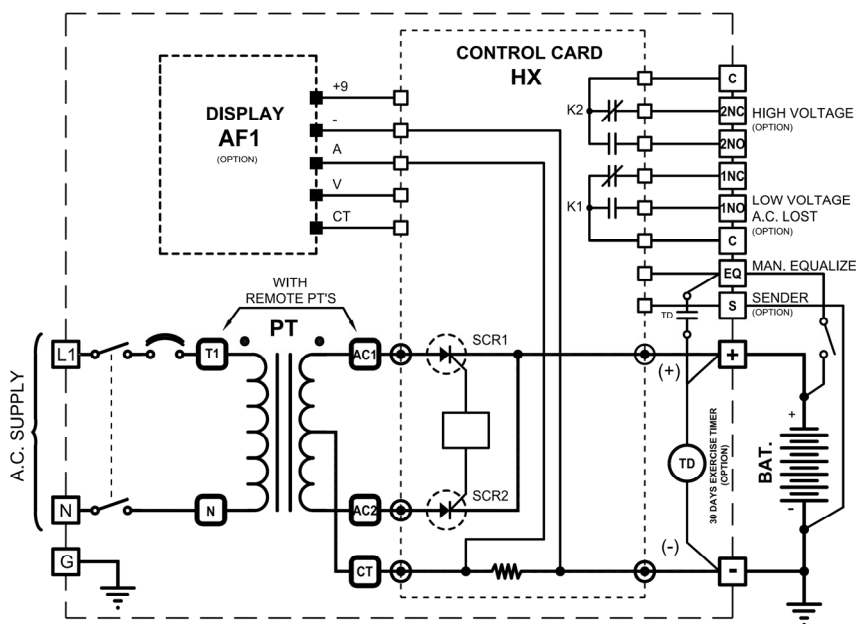
OPTIONS

- Digital display module for the voltage and the current
- Dry contacts type C form for low voltage, high voltage, AC loss and battery disconnected faults
- 240 Vac nominal input voltage
- 6 feet's extension cord for 6 amps 120 Vac charger
- Battery Leads with eye logs, 8 feet
- Programmable Cyclic exerciser, delay 0-30 days, duration from 0-10 hours
- Push button for programmable Equalization mode delay (0-10 hours)
- Charging Mode Selector Switch (EQ.-AUTO.-FLOAT)

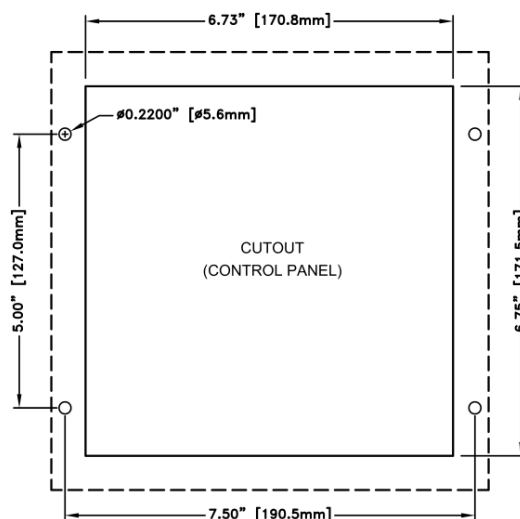
SPECIFICATIONS

MODEL:	10 amp. (12Vdc)	10 amp. (24Vdc)
SUPPLY:	115 Vac, $\pm 6\%$ at full load (standard model)	115 Vac, $\pm 6\%$ at full load (standard model)
OUTPUT:	Δ Vout of $\pm 0.1\%$ for Δ Vin of $\pm 6\%$ <u>at full load.</u>	Δ Vout of $\pm 0.1\%$ for Δ Vin of $\pm 6\%$ <u>at full load.</u>
WEIGHT: (with enclosure)	8.2 Kg (18.1 lbs) approx.	9.6 Kg (21.3 lbs.) approx.
DIMENSIONS:	Control: 8" H x 8" L x 4" P (max.) Cabinet: 8½" H x 12" L x 8" P	Control: 8" H x 8" L x 4" P (max.) Cabinet: 8½" H x 12" L x 8" P
CONSTRUCTION:	Front plate: Alum. 0.1", painted black Enclosure: Steel, painted black.	Front plate: Alum. 0.1", painted black Enclosure: Steel, painted black.
OPERATING TEMPERATURE:	-30°C / 40°C (charger). -35°C / 50°C (display).	-30°C / 40°C (charger). -35°C / 50°C (display).

CONNECTIONS



CUTOUT



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