



CVT-BC SERIES

BATTERY CHARGER / BATTERY BACK-UP

Model	Output		Efficiency
CVT12BC	12V	2.5A	81%
CVT15BC	15V	2A	84%
CVT24BC	24V	1.3A	86%
CVT48BC	48V	.7A	87%

DESCRIPTION

The CVT-BC charge controller is designed to be highly configurable to meet standard battery charging and battery back-up requirements. The CVT-BC is paired with one of ETA-USA's standard power supplies to provide full output power flexibility. The battery charge controller offers accurate, charging of lead-acid batteries. Unlike unregulated "battery boilers" or poorly regulated Ferro-resonant charges, the output voltage can optionally automatically adjust to changing inputs, loads and battery conditions. This prevents battery overcharging and consequent loss of battery electrolyte.

FEATURES

- -10 C to +50 C at full load
- Output Indication LED
- Output Fully Floating
- Over current Protection
- Over voltage Protection
- Self-contained Convection Cooling
- Lead Acid Battery Charging
- Charging Output Rating From .3A to 2.5A

OPTIONS

- Charge Temperature Compensation
- Output Current Limit
- Low Battery Voltage Disconnect
- Constant Voltage Charging with Current Limit
- Indicators: AC Power Good, On Battery, Battery Charging
- Alarms: On Battery, Battery Charging, Low Battery
- Output leads
- Automatic Charging Of Lead-Acid Batteries

ELECTRICAL SPECIFICATIONS

INPUTS

RANGE: Full input Range 85 to 264 VAC.

FREQUENCY: 47 to 440Hz.

INRUSH CURRENT: 20A averaged over ½ cycle

HARMONIC CURRENT: <5%

EFFICIENCY: 81% to 87% (Measured at full load and 208 VAC Input)

OUTPUTS

VOLTAGE: 5, 12, 24, and 48 VDC Standard

CURRENT: See Tables

ADJUSTMENT RANGE: + -10% of nominal output voltage.

POLARITY: Output is isolated. It may be referenced plus/minus as required.

STATIC REGULATION: Line: +/- 0.25% over full line range.

VOLTAGE STABILITY: +/-0.1% FOR 24 hour period after 30 minute warm up.

OUTPUTS

TEMP COEFFICIENT: +/-0.03%/ C FROM -10 c TO +50 c.

P-P RIPPLE AND NOISE: 1% + 50mv p-p Max.

MINIMUM LOAD: Not Required.

TURN ON DELAY: 1 sec. Max from application of AC line.

OVER VOLTAGE PROTECTION:

OVERCURRENT PROTECTION: Current I=Limit Point: 110% to 120% of full load.

ISOLATION RESISTANCE: 50mn. MIN.

LEAKAGE CURRENT: 0.75mA MAX.

HOLD-UP TIME: 20ms MIN. (AC115V) (Without Battery)

ENVIRONMENTAL

TEMPERATURE: Standard: -10 C to +50 C at full load.
Storage: -55 C to +85 C.

HUMIDITY: 20% to 95% non-condensing.

ALTITUDE: Operating: 8,000 Ft. Derates to 90% at 10,000 Ft.
Non-Operating at 30,000 feet.

VIBRATION: Operating: From 5 to 27Hz, 0.02" double amplitude: from 27 to 500Hz, 0.75G, 3 Axes, 5 min/octave sweep, dwell 1 min at resonance.

Non-Operating: From 5 to 17Hz, 0.01" double amplitude: from 17 to 500Hz, 1.5G peak: 3 axes, 5min/octave sweep, dwell 1 min at resonance.

MTBF: 150,000 hours

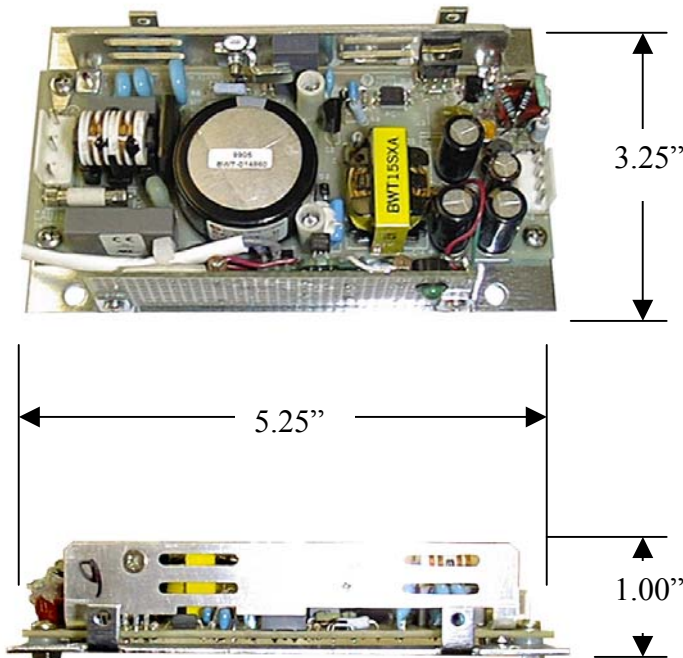
SHOCK: Operating: 5G, half sine, 11msec 3 axes. Non-Operating: 15G half sine, 11 msec, 3 axes.

COOLING: Convection

EMI: Conducted & Radiated EN55022 level B

SAFETY: Designed to Meet UL1950, CSA1950, and TUV EN60950. Factory is an approved ISO9001 manufacturer.

DIMENSIONS:



CN 1		CN 2	
PIN NO.	機能 function	PIN NO.	機能 function
1	ACIN(L)	1	Ground
3	ACIN(N)	2	Ground
5	FG	3	+V out
		4	+V out