

## CS1201A & CS1201B

# 24V Lead-Acid Onboard Battery Chargers

### Features/Benefits

- Five-stage charging cycle (cell preparation, charge qualification, bulk charge, cell balancing, and float charge); when used in conjunction with the CS11XX series motor controllers:
- Multiple protection levels with automatic recovery (short circuits, AC surges, battery reverse polarity and over temperature conditions)
- Charging indication (Built-in LED or external display)
- Designed to reduce battery heating and increase battery life (non-pulsed voltage)
- Charger can be left connected to batteries indefinitely to maintain full charge (through accurate float charge voltage)
- Extruded aluminum enclosure for EMI shielding and water resistance



- Switching power supply provides higher power output with smaller size and weight than traditional linear chargers
- Less than 8 hour recharge for battery capacity under 24 Amp-Hours (ANSI measurement method)

## **Description**

These chargers are designed to be used in conjunction with the CS11XX series motor controllers or as a standalone trickle chargers and are capable of charging two 12V, 17 Amp-Hour (or larger) sealed lead acid batteries wired in series.

These chargers are a true on-board battery charger, in that they are designed to be mounted permanently on a unit using existing enclosure mounting holes. These units are fully enclosed to minimize water entry.

When used with a CS11XX series motor controller, the CS11XX controller controls the entire charge cycle and monitors battery conditions to ensure batteries are fully charged without over-charging.

Our battery chargers are UL recognized to the following UL specifications:

**CS1201A** # UL 1012 E247509 **CS1201B** # UL 60601-1 E319673

#### **About Us**

We solve the world's toughest motion control challenges, providing custom solutions focusing on personal mobility and patient transportation products as well as many commercial applications. For over 20 years, Control Solutions LLC has developed a wide array of microprocessor-based control and battery charging solutions designed for flexible integration, feature-rich functionality, and robust performance.



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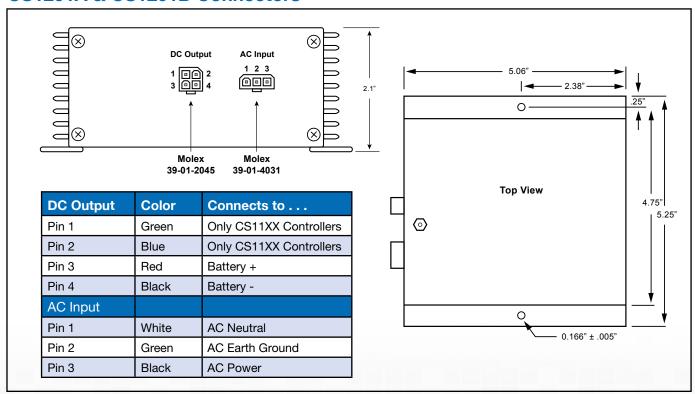
**Specifications** 

CS1201A/CS1201B* Specifications	Unit of Measure	Minimum	Nominal	Maximum
AC Input	Voltage	90	120	130
AC Input	Hz	50	60	60
AC Input Current	Amps		0.8	1.2
Peak Charge	Amps			3.7
Output Bulk Charge	Voltage	29.2	29.3	29.4
Output Float Charge	Voltage	27.4	27.6	27.9
Trickle Charge Current	mAmps		50	
Operating Ambient Temperature	°F (°C)	-4 (-20)	77 (25)	113 (45)
Physical Size	Inches (mm)		5.3 x 5.3 x 2.1 (135 x 135 x 53)	
Weight: CS1201A CS1201B	lbs. (kg)		1.55 (0.70) 3.02 (1.37)	

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#### CS1201A & CS1201B Connectors



Specifications subject to change without notice.



