



# CS1110 Series 12/24/36 Volt PWM Motor Controller

## Features/Benefits

- Dual, two quadrant, half H-bridge design for common ground split-series wound brushed DC motors
- Fully Programmable
- Over Temperature Protection
- LED diagnostic codes
- Power on Demand
- Throttle Fault detection
- Low/High Voltage Shutdown
- On-board integrated charging control
- Anti-Rollback
- Designed and fully manufactured in the USA



## Description

The CS1110 series is one of the most versatile and advanced motor controllers of its kind. With almost 100 programmable profile parameters via a hand-held programmer, the CS1110 series can be programmed to operate smoothly, reliably, and efficiently in a wide range of applications. Its flexible architecture is designed to allow a custom fit for special applications. The CS1110 series offers the highest in current carrying capability of any motor controller its size in the industry today, up to 100A. The CS1110 series also uses industry standard connectors, allowing simple changeover of existing product lines and field replacements.

These controllers are designed for medium to heavy-duty common ground split-series wound permanent magnet motor applications. The advantage of a series-wound motor is that it develops a large torque and can be operated at low speed. The CS1110 is well-suited for starting heavy loads; it is often used for industrial cranes and winches where very heavy loads must be

moved slowly and lighter loads moved more rapidly. The CS1110 series is available in 12V, 24V, and 36V versions.

### About Us

Control Solutions LLC designs, manufactures and provides American made mobility products for the dealer-provider marketplace. We are committed to providing state-of-the-art designed products that will give the independent dealer a competitive advantage.

Product reliability is our top priority. Significant investments into the design of our custom ASIC chip along with controller design and years of experience, has made our controllers an industry standard.

Control Solutions LLC is a pioneer of several industry standards and user features. We continue to innovate and evaluate new ideas and strive to help shape the future of electric mobility



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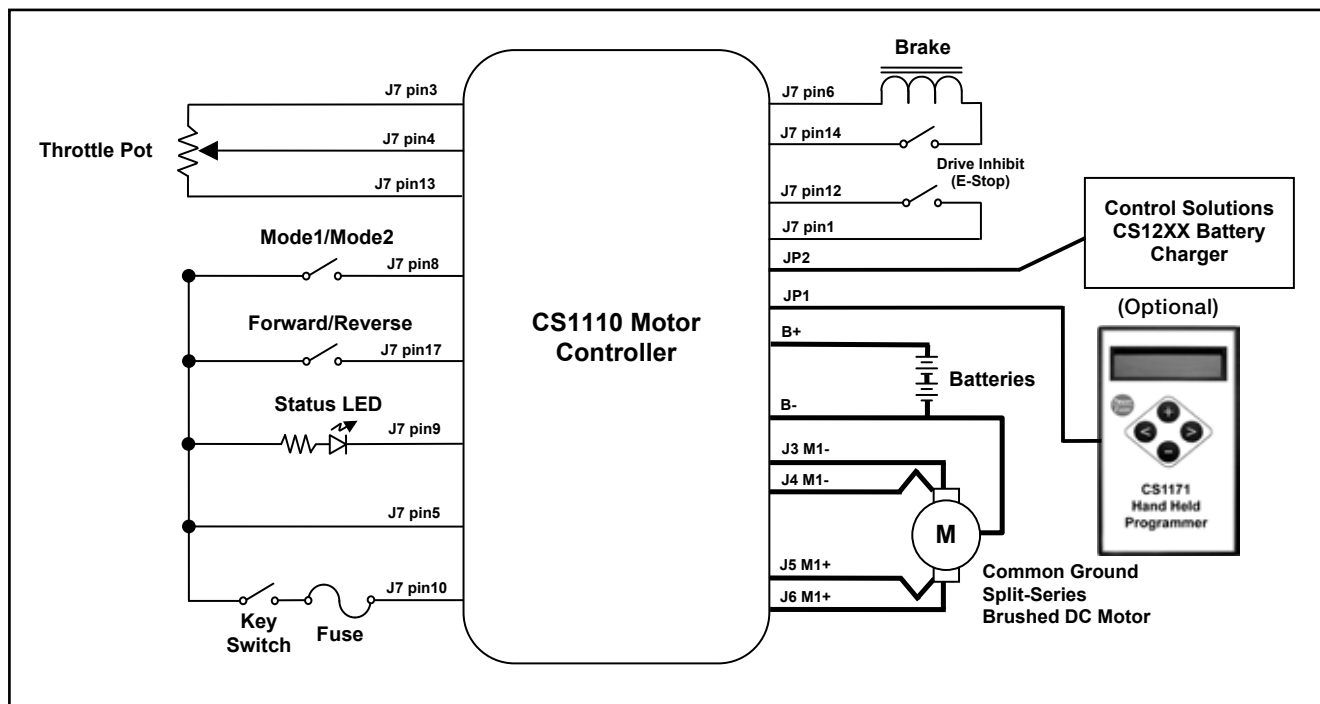
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## Specifications

CS1110 Series Specifications	Minimum	Nominal	Maximum
Input Voltage – 12Vdc	8.5	12	20
Input Voltage – 24Vdc	17	24	36
Input Voltage – 36Vdc	26	36	48
Peak Current Limit* – Amps		100	
Continuous Current Limit* – Amps		70	
Stand By Current @ 24V – mAmps		30	
Operating Ambient Temperature, °F (°C) (Optional Ambient Temperature),	-40 (-40) -85 (-65)	77 (25) -	113 (45) 221 (105)
Extended Ambient Temperature °F (°C) (available on request)	-40 (-40)	77 (25)	140 (60)
Enclosure Flammability Rating – UL94V-0			
Physical Size, Inches (mm)		3.3 x 5.8 x 1.8 ( 84 x 147 x 46)	
Weight, lbs. (kg)		.82 (.37)	

\* Current limit parameters are programmable.

## CS1110 Series Typical Wiring Diagram



Specifications subject to change without notice.



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