

ServoMax[™] Model 210

Motor Speed Controller



The compact $ServoMax^{TM}$ 210 Series three-phase motor amplifier and controller modules are designed to directly drive 10to 45-volt brushless DC motors at a continuous load current up to 2 amps. The 210 Series is ideal for speed control of sub-fractional horsepower motors in shaking, stirring, vibrating, or other motion applications that require constant speed despite varying loads.

Model 210A

The 2.5 X 3.5 *ServoMax*[™] Model 210A amplifier requires only an external power transformer or DC supply to drive a 3-phase Brushless DC motor in response to a logic level PWM control input. A logic level tach output derived from the commutation sensors is provided for use with closedloop speed controls.

This robust amplifier is thermally protected and currentlimited for safe and reliable operation. It provides the drive power for the motor's hall effect sensors, and has brake, reversing, and enable inputs. Controls are enabled via jumpers.

The *ServoMax*[™] Model 210A amplifier is the obvious choice for manufactures seeking a reliable, cost-effective 3-phase Brushless DC motor driver for sub-fractional horsepower applications.

Model 210C

The *ServoMax*TM Model 210C adds a digital speed controller board with LED display to the *ServoMax*TM Model 210A amplifier. The *ServoMax*TM Model 210C is a complete digital motor speed controller solution with a small footprint. The controller board mounts directly behind a panel and implements a complete user interface for displaying and adjusting motor speed. The amplifier board comes stacked directly behind the controller board and requires no additional mounting.

The two-board *ServoMax*[™] Model 210C provides closedloop regulation of the motor speed using the hall effect sensor outputs instead of expensive encoders. Motor speed is displayed on a three-digit, .56" LED display and adjusted with "UP" and "DOWN" buttons. The front panel display is scaled to units appropriate for the application.

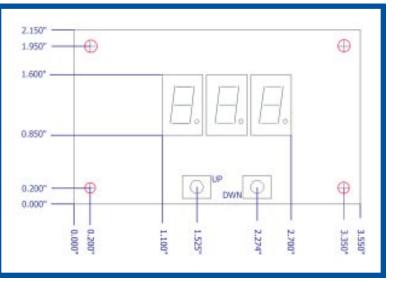
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INNOVATION AND TECHNOLOGY

Parameter	Value
AMPLIFIER SPECIFICATIONS	
Motor Type	3-phase brushless DC
Supply Voltage	10 - 45 VDC, 8 - 28 VAC
Maximum Motor Current	2 Amp. continuous, 3 Amp. peak
Sensor Separation	60° or 120°
Sensor Output	Open collector
Sensor Drive Voltage	6.2 VDC
Control Inputs	Speed (PWM), enable, direction, brake
Control Outputs	Tachometer
CONTROLLER SPECIFICATIONS	
RPM Display and Setpoint Range	0 - 999 with user-adjustable maximum
Operator Controls	'UP' and 'DOWN' buttons
Display	3 digit, .56" LED (Red, Green & Yellow available)

For complex or specialized applications, DCS will cost-effectively design and manufacture a custom module to your exact specifications. DCS will help you to add technology and value to your product without consuming your engineering resources. DCS will also assist you in meeting domestic and overseas regulatory agency requirements placed on your products by agencies such as UL, CSA, CE and others.

ServoMax[™] Model 210 Mounting Dimemsions



Digital Control Systems, Inc. manufactures an array of motor speed controllers, inclucing the products pictured at right:





ServoMax[™] Model 200

ServoMax[™] Model 220

For more information, please contact us at:

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