



ServoMax™ Model 220

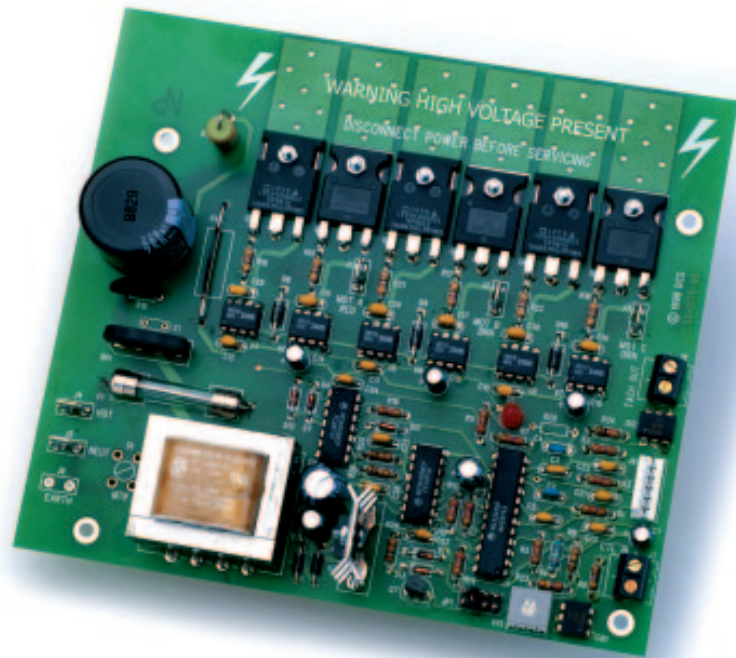
OEM Motor Speed Controllers

Up to 1/3 hp

Tachometer Output

Active Fault Detection

60° or 120° Separation



The *ServoMax*™ Model 220 Brushless DC amplifier is a compact, cost-effective way to drive fractional horsepower, three-phase brushless DC motors directly from 110 VAC line voltage. The single 5.5" x 6.1" printed circuit board assembly is designed for standoff mounting inside equipment enclosures. Using the latest FET and IGBT technology, the *ServoMax*™ Model 220 provides full motor drive functionality in an easy to use format. Control

inputs and outputs are optically isolated so the *ServoMax*™ Model 220 can be safely and directly connected to any controller.

Motor voltage is controlled with a PWM input and a tach signal derived from the hall effect commutation sensors in the motor itself. Many applications that do not require either very slow speed or extremely accurate speed control can be served this way, eliminating the need for expensive encoders.

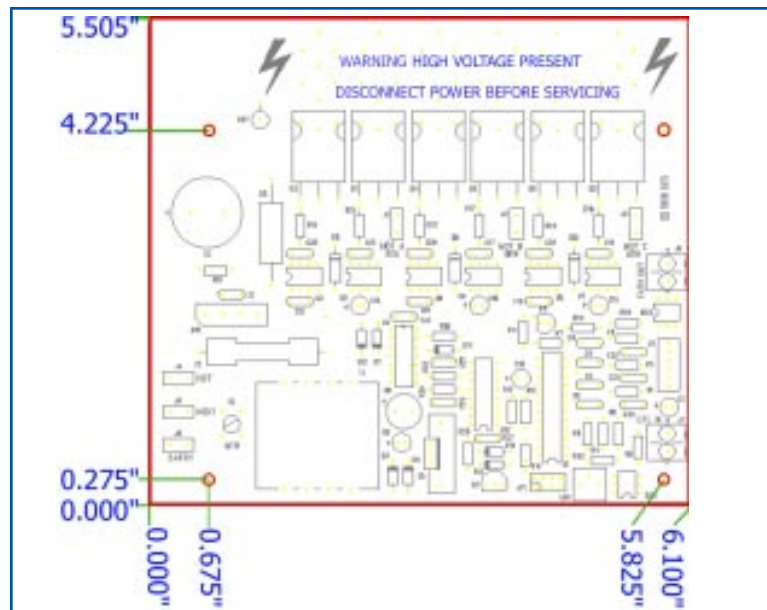
Digital Control Systems, Inc. • 7401 SW Capitol Highway • Portland, OR 97219 • USA
Phone: (503) 246-8110 • Fax: (503) 246-6747 • Toll Free: 1-877-468-6337 • <http://www.dcs-inc.net>

INNOVATION AND TECHNOLOGY

Parameter	Value
Motor Type	Three-phase brushless DC with commutation sensors
Hall Sensor Separation	60 ° or 120 °
Hall Sensor Power	6.2 VDC
Hall Sensor Interface	Open collector
Power Input	110 VAC \pm 10%, 50/60 Hz
Maximum Motor Current	Up to 10 A No heat sinking is required at currents below 1.5A
Motor Voltage	12 - 170 VDC
Motor Control Signal	Optically isolated PWM, $I_{LED} = .02$ A max
Tachometer Signal	Optically isolated open collector, I_c 2.0 mA max Nominal Pulse width = 1 ms Pulse rate = 12 pulses / shaft revolution
Mechanical Dimensions	5.5" x 6.1" footprint 2.5" clearance required above circuit

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 220 Mounting Dimensions



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



ServoMax™ Model 200



ServoMax™ Model 210

For more information, please contact us at:

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