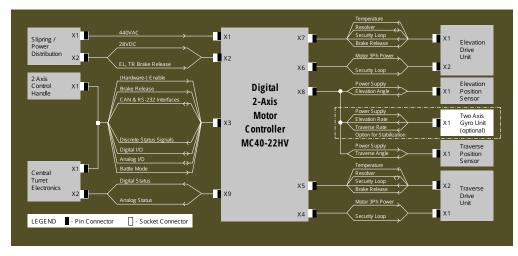
## MC40-22HV DIGITAL 2-AXIS 440VAC 3-PH BRUSHLESS MOTOR CONTROLLER



This series of digital militarized high voltage, 2-Axis, brushless motor controllers is designed to provide torque, velocity, and position loop closure. The controller accepts command signals from any fire control system (FCS) in either digital or analog format, and interfaces with a control handle. The advanced space vector algorithms provide optimum performance for new or existing motors to provide outstanding power densities. There is also an Insulated-Gate Bipolar Transistor (IGBT) and resistor shunt regulator circuit to control regenerative energy if required. Additionally, there are a wide range of end user programmable software features, as listed below.

## **PROGRAMMABLE SOFTWARE FEATURES**

- Extensive built in test
- No-fire zones
- Obstacle avoidance zonesEnd-damping limits
- Health Usage Monitoring System (HUMS)
  Acceleration limits
- Comprehensive loop tuning
- Tracking/stabilization modes
- Field weakening
- Joystick shaping function
- Analog and digital I/O
- Status and fault history
- Data logging



Note: All of our products are flexible and customizable to meet your specific needs. Please contact us for more information.





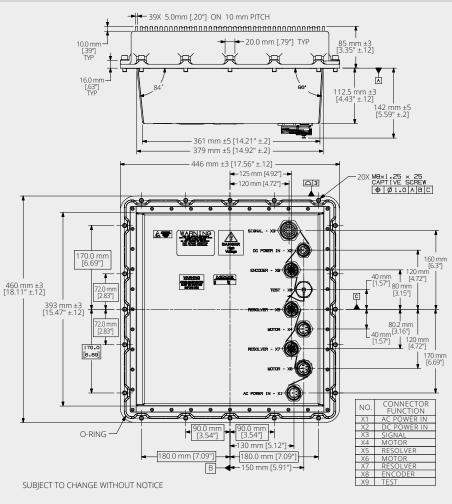




## MC40-22HV SERIES 2-AXIS BRUSHLESS MOTOR CONTROLLER

PERFORMANCE	
Features	Specifications
Power supply (control electronics)	18VDC-32VDC (per VG96916)
Power supply (motors)	440VAC ±10%, 3 Phase, 50-60 Hz (per STANAG 1008)
Temperature (ambient)	-40 °C to 65 °C (-40 °F to 149 °F)
Environmental specification	Complies with Mil-Std-810
Command communication interface	CAN-Bus and RS-232
EMC specification	Complies with Mil-Std-461
Weight	24 kg (53 lbs)
Position sensor interface	SSI or EnDat serial interface
Motor commutation sensor	Resolver
Envelope	460 mm x 446 mm x 227 mm (18.1" x 17.6" x 8.9")
Self protection	Over-temperature and over-current
Output current (for each axis)	20 A peak
Option: Stabilization kit	2-Axis gyro interface

## ARCHITECTURAL AND DIMENSIONAL DRAWING





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