

# MDC100-012101 - 50V, 5A Brushless Controller



## FEATURES

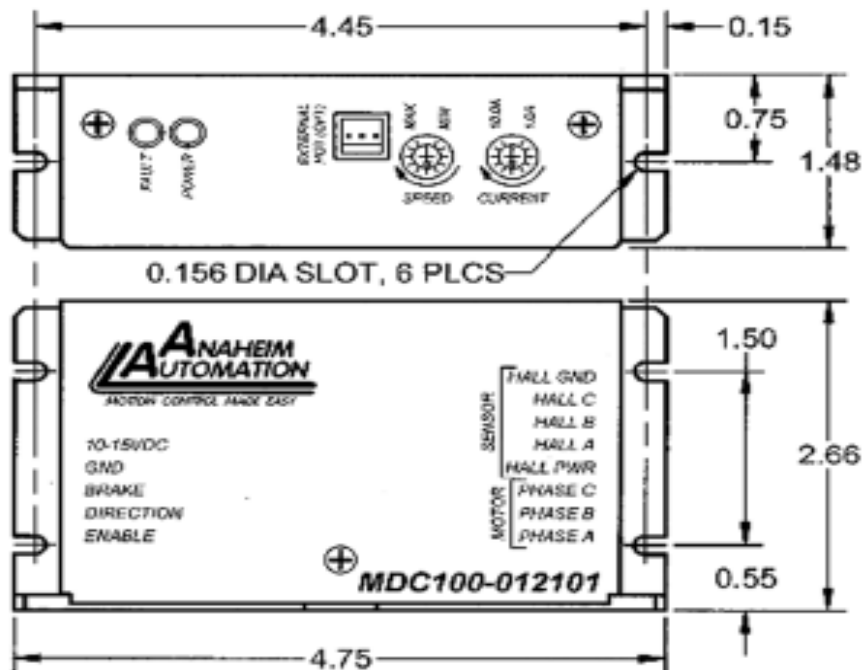
- **Maximum Current Limit Setting from 1.0-10.0 Amps (peak)**
- **Internal or External Potentiometer Speed Control**
- **2-Quadrant Operation**
- **Hall Sensor Feedback**
- **Constant Velocity Mode**
- **Short Circuit Protection**
- **Requires 10 - 15 VDC**
- **Brake, Disable and Direction Inputs**
- **TTL-CMOS Compatible Inputs**
- **Compact Size (4.45"x2.66"x1.48")**
- **Dual Mounting Option**
- **Detachable, Screw type Terminal Blocks**



## DESCRIPTION

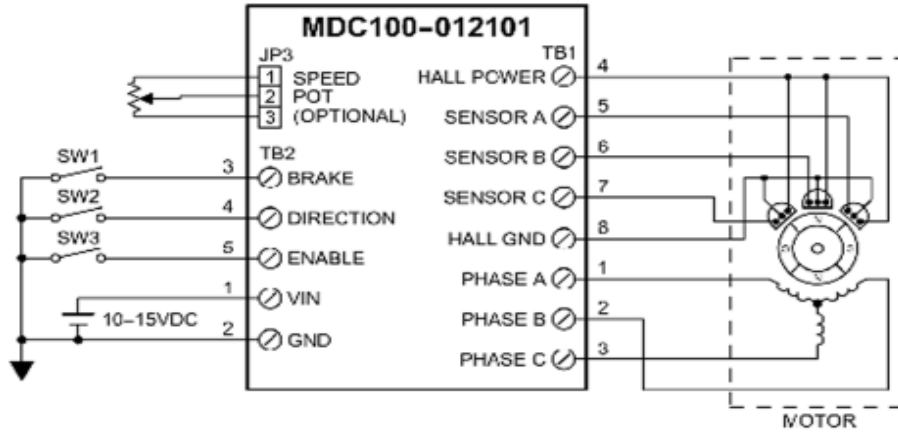
The MDC100-012101 driver is designed to drive DC brushless motors at currents of up to 10A (peak) and 12V. Using hall sensor feedback, a constant velocity mode can be selected. The driver is protected against over current (cycle-by-cycle), hall sensor error and under voltage. When an error occurs, a fault light is turned on to notify the user. Included on the driver is an internal potentiometer to control the maximum phase current allowed into the motor and an internal potentiometer to control the speed of the motor. An optional external potentiometer (10K) or external voltage (0-4VDC) can be used to control the speed as well. The direction of the motor can be preset by the direction control input. Other inputs to the drive include a dynamic brake and a motor disable input. When using the brake input, it overrides all other inputs into the driver.

## DIMENSIONS



L010594

# Hookup



L010594

## Specifications

Power Requirments:	10-15 VDC
Output Current Range:	1.0-10 Amps (Peak) 0.5 - 5.0 Amps (Continuous)
Control Inputs: (TB1, Pins 1-3)	TTL-CMOS Compatible Logic "1" = OPEN Logic "0" = 0.8 VDC All three inputs (run/stop, freewheel and direction) are pulled up through 40 ohm resistors
Freewheel: (TB1, Pin 1)	Logic "1" (open) - Motor is Enabled Logic "0" - Motor is de-energized and will coast to a stop
Direction Control: (TB1, Pin 2)	Logic "1" (open) - Clockwise Logic "0" - Counterclockwise
Run/Stop: (TB1, Pin 3)	Logic "1" (open) - Motor will not run Logic "0" - Motor will run and will accelerate according to speed setting
Operating Temperature:	0° C to 70° C

## Additional Ordering Information

Model #	Description
MDC100-012101	Featured BLDC driver 10A, 12v
MDC 100-050101	BLDC driver 10A, 50V

ADDITIONAL INFORMATION