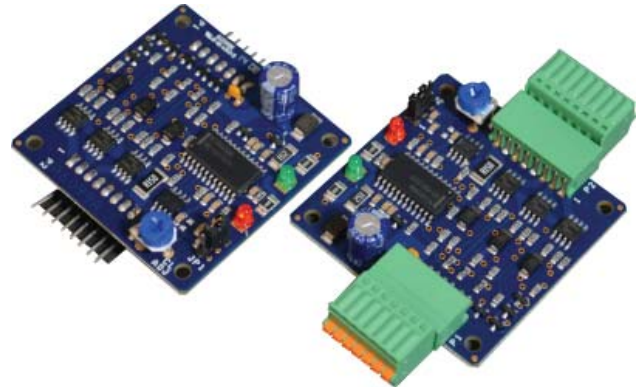
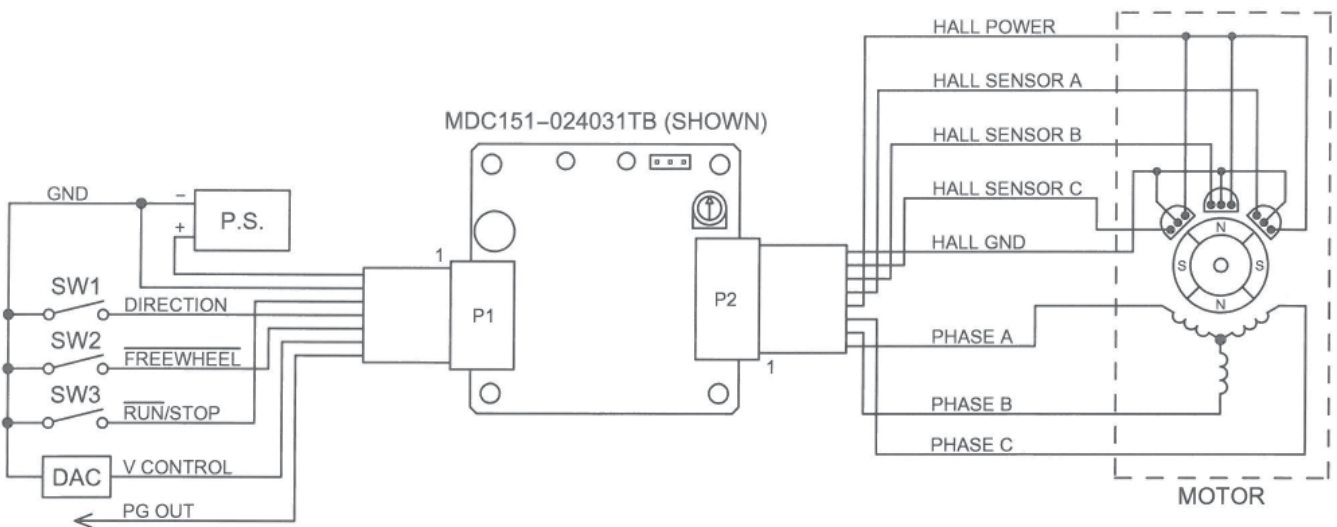


- **Current Limit Set at 3.0 Amps**
- **0V to 5V External Voltage Speed Control**
- **2-Quadrant Operation**
- **Closed-Loop Velocity Mode**
- **Cycle by Cycle Short Circuit Protection**
- **Requires 10 - 24VDC**
- **Freewheel and Direction Inputs**
- **TTL-CMOS Compatible Inputs**
- **Compact Size**
- **Open Frame**

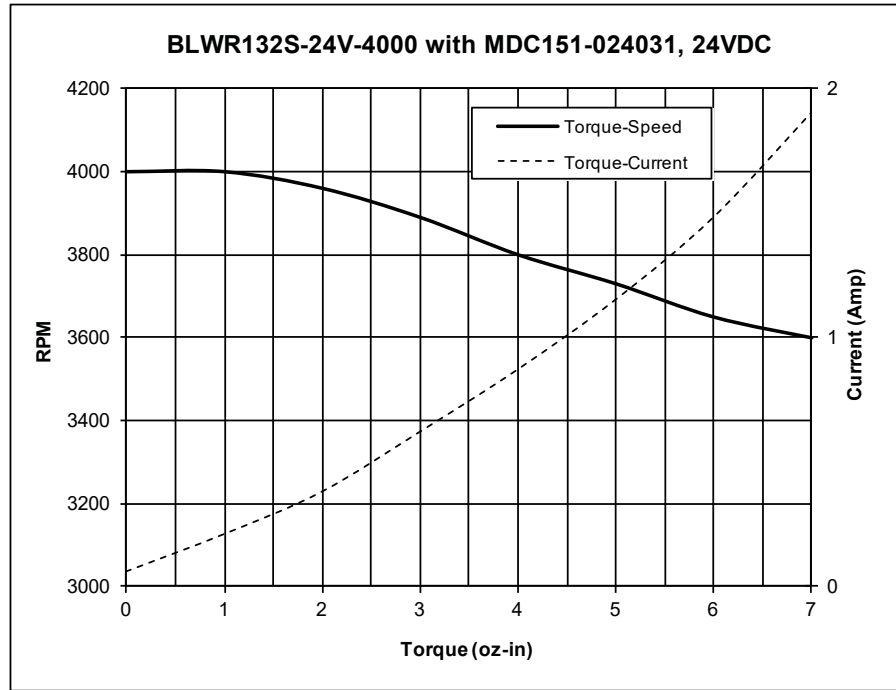


The MDC151-024031 driver is designed to drive Brushless motors at a fixed peak current of 3.0A and 24V. The driver is set to constant velocity mode (closed-loop mode) using hall sensor feedback and is protected against over current (cycle-by-cycle). Also hall sensor error and under voltage. When an error occurs, a fault light will notify the user. An external voltage (0-5VDC) is necessary to control the speed. The direction of the motor can be present by the direction control input. To disable energy from the motor, there is a Freewheel input that can be grounded.

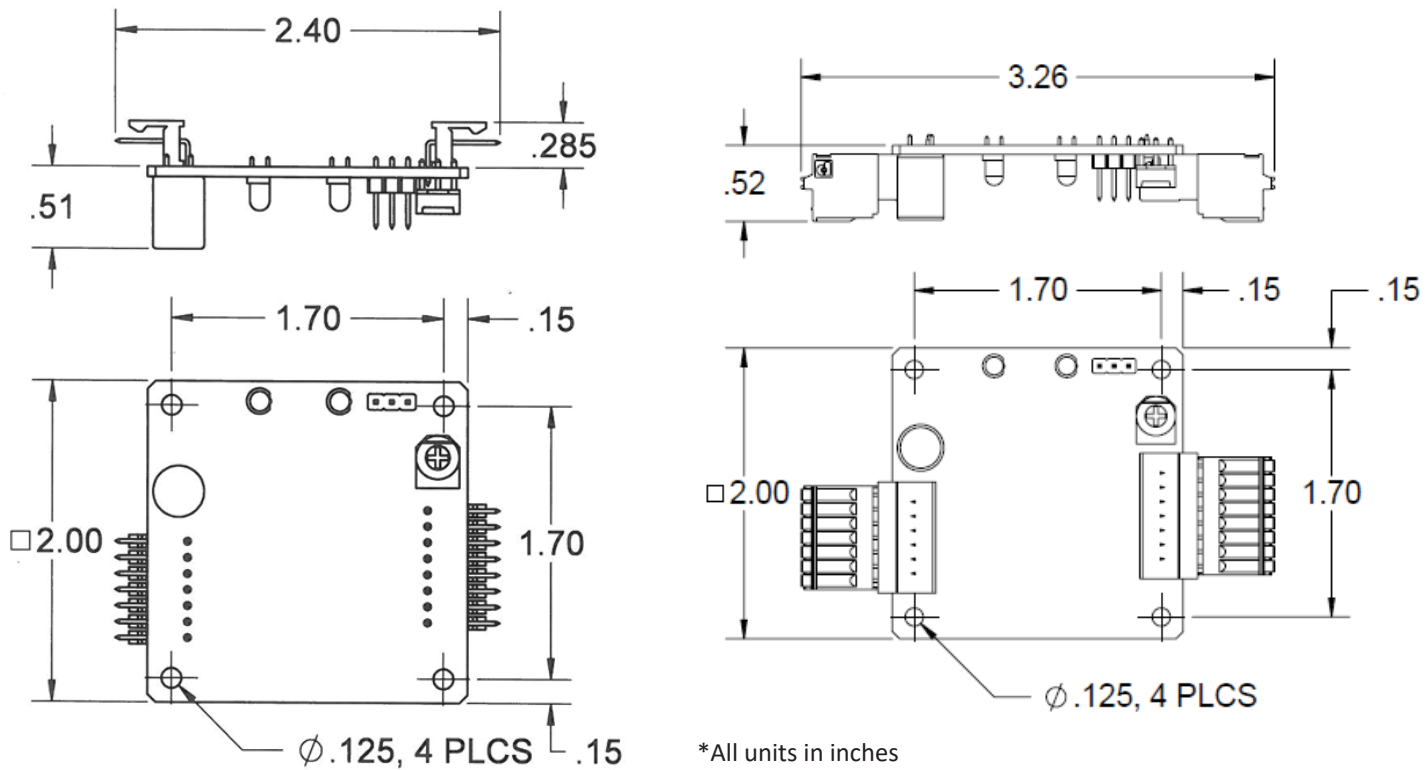


L011078

TORQUE CURVE



DIMENSIONS



Run/Stop: (P1, Pin 3):	Logic "1" (open) - Motor stopped Logic "0" - Motor will run
Direction Control (P1, Pin 4):	Logic "1" (open) - Clockwise Logic "0" - Counterclockwise
Freewheel: (P1, Pin 5)	Logic "1" (open) - Motor is Enabled Logic "0" - Motor is de-energized and will coast
Vspeed Control: (P1, Pin 6):	0VDC - Motor Stopped 5VDC - Max Speed (6VDC max)
PG Out: (P1, Pin 7)	An open drain output is available at a rate of 4 pulses for 1 revolution of an 8-pole motor, 3 pulses for 1 revolution of a 6-pole motor, and 2 pulses for 1 revolution of a 4-pole motor. 8-pole motor RPM = 15 * PG OUT in Hz 6-pole motor RPM = 20 * PG OUT in Hz 4-pole motor RPM = 30 * PG OUT in Hz Max rating of 30VDC/50mA.
Power Requirements	10VDC (min) - 24VDC (max)
Output Current Rating: (P1, Pins 1 and 2)	3.0 amperes peak maximum operating current.
Operating Temperature:	0°C to 70°C
Maximum Closed Loop Motor Speed	2 pole: 30,000 RPM 4 pole: 15,000 RPM 6 pole: 11,250 RPM 8 pole: 7,500 RPM
Maximum Open Loop Motor Speed	50,000 RPM

Model #	Description
MDC151-024031	BLDC Driver, 3A, 10-24V
PS-35-24	DC Power Supply 24VDC at 1.5 Amps
PSA24V2.7A	DC Power Supply 24VDC at 2.7 Amps