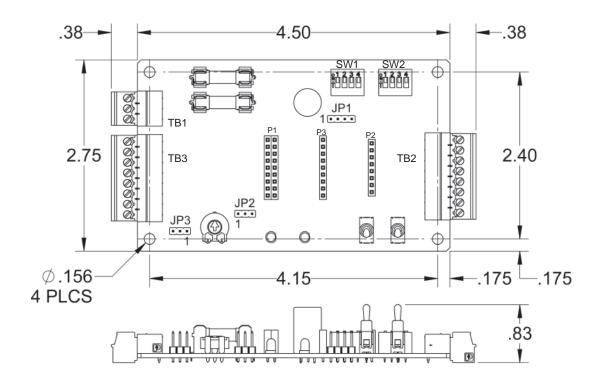


- Single-Axis System
- Suitable for Use With: MDC020-024031 MDC020-050101

MBDC020-024031

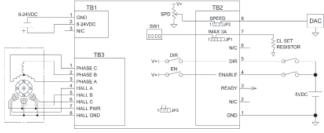
RoHS compliant



The MDC020-EVALBD is a Brushless and Brush DC Speed Controller Evaluation Board that can be used with the MDC020-024031, MBDC020-024031 or MDC020-050101 controller for immediate start-up and testing. Also included are terminal blocks for easier motor connections, onboard switches to control direction and stopping, and a potentiometer to control speed. With an MDC020-024031 or MBDC020-024031 controller, the allowable input voltage range is 8-24VDC; with a continuous output current of 1.5A (3A Peak). With an MDC020-050101 controller, the allowable input voltage range is 6-50VDC; with a continuous output current of 5A (10A Peak).

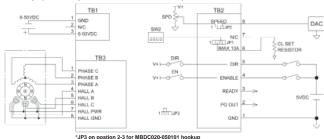


## MDC020-024031 hookup (Board placed on P2 and P3)



\*JP3 on position 2-3 for MBDC020-024031 hookup

## MDC020-050101 hookup (Board placed on P1 and P2)



| JP1          |  |  |
|--------------|--|--|
| POSITION 1-2 | SW1 current setting for 3A peak drivers  |  |
| POSITION 2-3 | SW2 current setting for 10A peak drivers |  |
| POSITION 3-4 | External resistor current setting        |  |

| JP2          |              |                                      |
|--------------|--------------|--------------------------------------|
| POSITION 1-2 |              | On board potentiometer speed setting |
|              | POSITION 2-3 | External voltage speed setting       |

| JP3          |                             |
|--------------|-----------------------------|
| POSITION 1-2 | Brushless DC driver setting |
| POSITION 2-3 | Brush DC driver setting     |

| SW1    |      |        |          |         |               |     |    |
|--------|------|--------|----------|---------|---------------|-----|----|
| Pos. 1 | L    | Pos. 2 | Pos. 3   | Pos. 4  | Current Limit |     |    |
| ON     |      | ON     | ON ON ON | 0.5A    |               |     |    |
| ON     |      | ON     | ON       | OFF     | 1A            |     |    |
| ON     |      | ON     | OFF      | ON      | 1.5A          |     |    |
| ON     | N ON |        | 0        | ON      | OFF           | OFF | 2A |
| ON     |      | OFF    | ON       | ON 2.5A |               |     |    |
| OFF    |      | OFF    | OFF      | OFF     | 3A            |     |    |

| SW2    |        |        |                |      |
|--------|--------|--------|----------------|------|
| Pos. 1 | Pos. 2 | Pos. 3 | Pos. 4 Current |      |
| ON     | ON     | ON     | ON             | 0.5A |
| ON     | ON     | ON     | OFF            | 2A   |
| ON     | ON     | OFF    | ON             | 4A   |
| ON     | ON     | OFF    | OFF            | 6A   |
| ON     | OFF    | ON     | ON             | 8A   |
| OFF    | OFF    | OFF    | OFF            | 10A  |

Power Requirements: 8-24VDC or 6-50VDC Input Signal Voltage 0-5 VDC

Output Current Range: 0.5-3A (Peak) or 0.5-10A (Peak) Storage Temperature: 0°-50° C

Driver Types: DC Brushless and DC Brush

Absolute Maximum
Driver Temperature

70°C

|   | Model #        | Description                                       | Input Voltage | Power<br>(Watt) |
|---|----------------|---|---------------|-----------------|
| ĺ | PSAM24V2.7A    | 24 VDC Power Supply, Up to 2.7 Amp Capability     | 90 - 265 VAC  | 65              |
|   | PSAM48V4.2A    | 48 VDC Power Supply, Up to 1.3 Amp Capability     | 90 - 265 VAC  | 200             |
|   | MDC020-024031  | DC Brushless Driver, Up to 3 Amp Peak Capability  | 8 - 24 VDC    | 36              |
|   | MDC020-050101  | DC Brushless Driver, Up to 10 Amp Peak Capability | 6 - 50 VDC    | 175             |
|   | MBDC020-024031 | DC Brush Driver, Up to 3 Amp Peak Capability      | 8 -24 VDC     | 36              |

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