

***QUICK START FOR  
BRONCO II DC DRIVE***

**B160 SERIES  
DC MOTOR CONTROLLERS**

**BRONCO II  
DC MOTOR CONTROLLER**

For your safety and for proper operation, please take time to carefully read all instructions before installing and operating this unit.

LIM55445 REV B 7/01

Detailed changes to software programs are introduced frequently. Please ensure this manual refers to the software version you are using.

Danaher MOTION Engineered  
Systems Center  
13500-J SOUTH POINT BLVD.  
CHARLOTTE, NC 28273  
PHONE: (704) 588-5693  
FAX: (704) 588-5695

## Bronco II 160 Series DC Drive Quick Start ( With Local Operators )

This quick start guide is provided to get you up and running as quickly as possible. The diagram below shows the location of all jumpers that must be set before operating the Bronco II series drive. For quick configuration of the drive note the information on your motor nameplate ( i.e. armature voltage, armature current, etc. ), then make each adjustment in the charts provided below.

### Danger

Before performing the quick start procedure, the installer is expected to review all caution and warning descriptions contained in the instruction manual. Please review these details or **serious personal injury, death or damage to equipment may occur.**

AC Supply	Control Transformer Settings	Feedback Settings
115 VAC line input	Jumpers J4 and J5 in the 115V Position	J3 in the 90 VDC position
230 VAC line input	Jumpers J4 and J5 in the 230V Position	J3 in the 180 VDC position

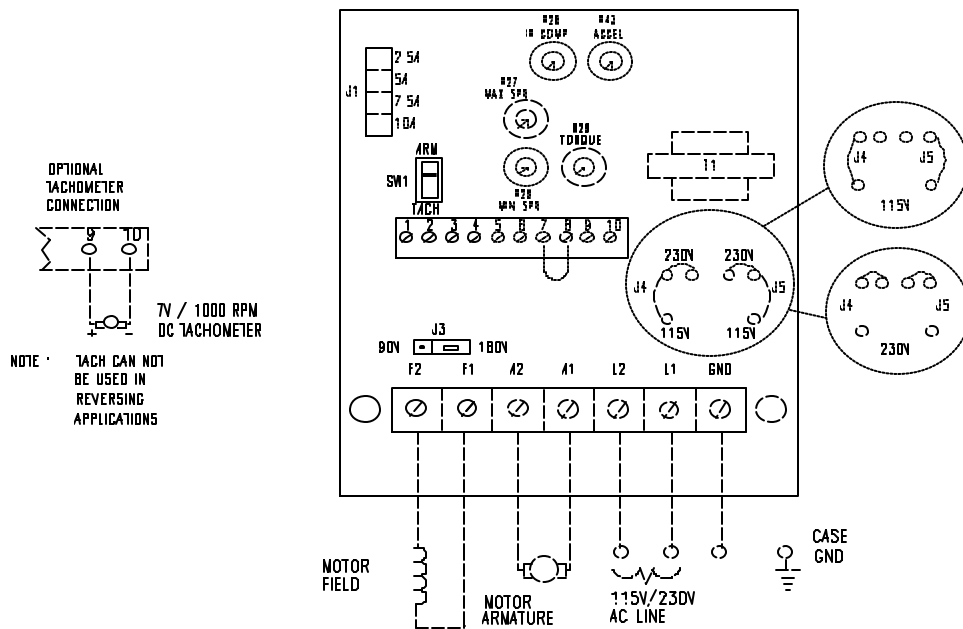
### Feedback Selection

Armature Voltage	SW1 in the ARM position
Tachometer	SW1 in the TACH position

### Armature Current Scaling

Current Rating (Full Load Amps) and Jumper Setting	HP (90 VDC Armature)	HP (180 VDC Armature)
2.5	1/4	1/2
5.0	1/2	1
7.5	3/4	1 1/2
10.0	1	2

## B160, B163, B168, B169 CONNECTIONS



Permanent magnet motors require no field connections. For field voltages other than 100 VDC and 200 VDC refer to Fig. 2-3 on page 9 of the manual. Before using the start command, power up and verify that the field voltage is correct with a voltmeter. Next ( again using the voltmeter ), verify that the voltage between TB1-5 ( + lead of voltmeter ) and TB1-6 ( common of voltmeter ) varies 0 to 10 VDC as you turn the speed pot. Now use the start/run toggle switch to issue a start command to the drive and the motor should change speed as you vary the speed pot reference. For external voltage or current reference input connections, please refer to the manual.

## Bronco II 160 Series DC Drive Quick Start ( Without Local Operators )

This quick start guide is provided to get you up and running as quickly as possible. The diagram below shows the location of all jumpers and adjustment potentiometers that must be set before operating the Bronco II series drive. For quick configuration of the drive note the information on your motor nameplate ( i.e. armature voltage, armature current, etc. ), then make each adjustment in the charts provided below.

### Danger

Before performing the quick start procedure, the installer is expected to review all caution and warning descriptions contained in the instruction manual. Please review these details or **serious personal injury, death or damage to equipment may occur.**

AC Supply	Control Transformer Settings	Feedback Settings
115 VAC line input	Jumpers J4 and J5 in the 115V Position	J3 in the 90 VDC Position
230 VAC line input	Jumpers J4 and J5 in the 230V Position	J3 in the 180 VDC Position

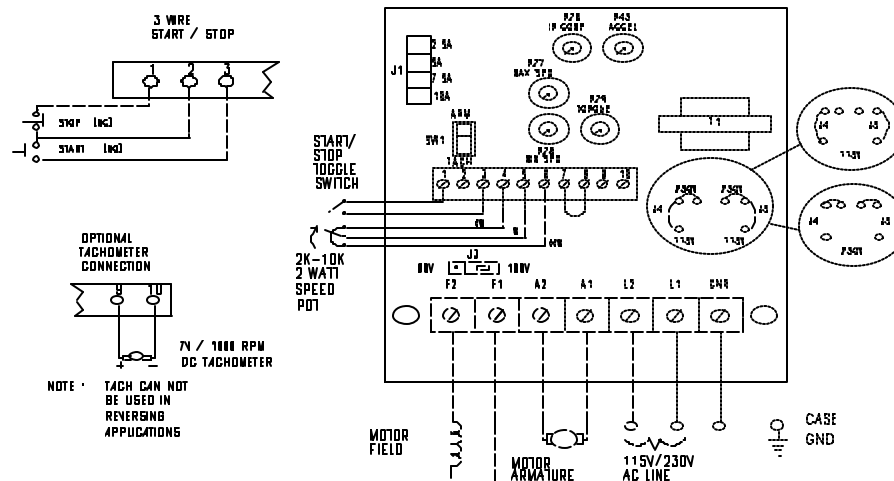
### Feedback Selection

Armature Voltage	SW1 in the ARM position
Tachometer	SW1 in the TACH position

### Armature Current Scaling

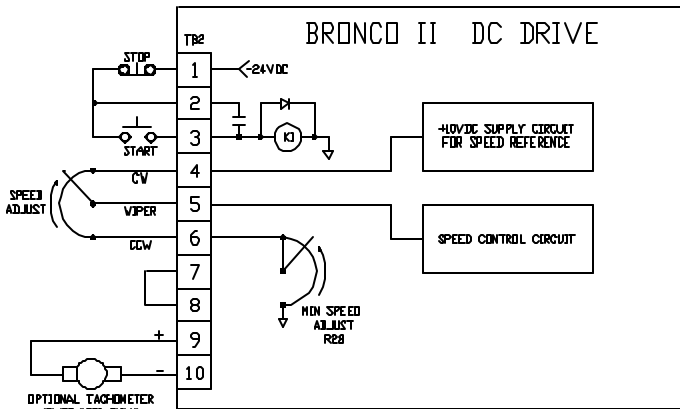
Current Rating (Full Load Amps) and Jumper Setting	HP (90 VDC Armature)	HP (180 VDC Armature)
2.5	1/4	1/2
5.0	1/2	1
7.5	3/4	1 1/2
10.0	1	2

## B161S AND B162 CONNECTION DIAGRAMS

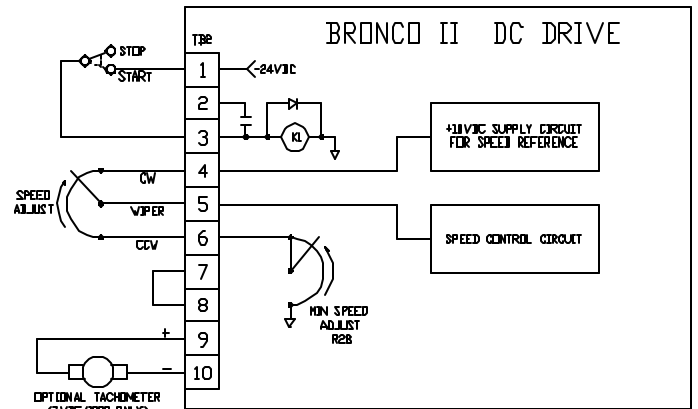


Permanent magnet motors require no field connections. For field voltages other than 100 VDC and 200 VDC refer to Fig. 2-3 on page 9 of the manual. The diagram above shows a simple two wire start/stop with armature voltage feedback. Also shown above are connections for a 3 wire start/stop and optional tach feedback. Power up after making these connections with the start/ stop toggle switch open. Verify that the field voltage is correct with a voltmeter ( 100 VDC for a 115 VAC input or 200 VDC for a 230 V input ). Also using the voltmeter, verify that the voltage between TB1-5 ( + lead of voltmeter ) and TB1-6 ( common of voltmeter ) varies 0 to 10 VDC as you turn the speed pot. Now close the start/stop toggle switch ( or push the start button ) and the motor should change speed as you vary the speed pot reference.

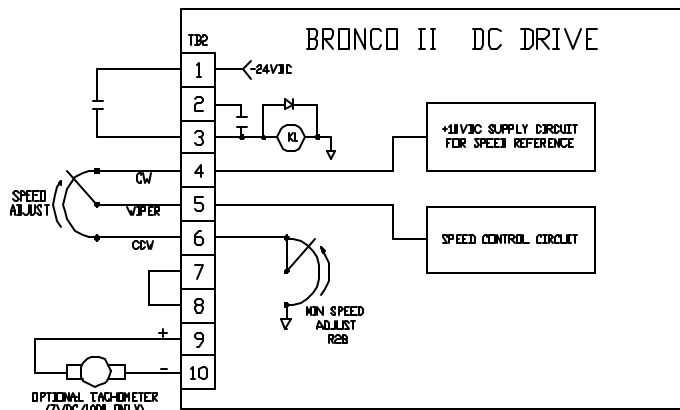
# Sample TB2 Connection Options



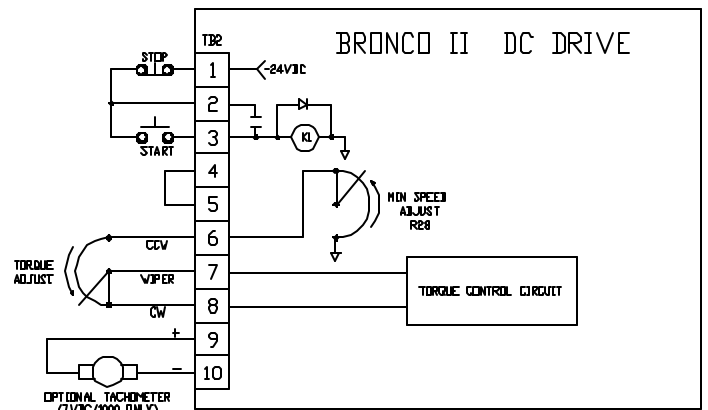
3 WIRE START/STOP WITH SPEED POTENTIOMETER



2 WIRE START/STOP WITH SPEED POTENTIOMETER



EXTERNAL DRY CONTACT START/STOP WITH SPEED POTENTIOMETER



3 WIRE START/STOP WITH TORQUE POTENTIOMETER