

Part Number: AI-001.

Applicability: E7, P7, F7, G7, GPD506/P5.

Introduction: The trim potentiometer option card fastens to the +15VDC drive terminal (+V) to provide a 5kohm potentiometer for use as a dropping resistor for maximum or minimum speed trim.

Receiving: All equipment is tested against defect at the factory. Report any damages or shortages evident when the equipment is received to the commercial carrier who transported the equipment.

Warning: Hazardous voltage can cause severe injury or death. Lock all power sources feeding the drive in the "OFF" position.

Important: Before installing this option, a technically qualified individual, who is familiar with this type of equipment and the hazards involved, should read this entire installation guide.

Installation and Wiring:

1. Disconnect all electrical power to the drive.
2. Remove the drive's front cover.
3. Check that the "CHARGE" indicator lamp inside the drive is off.
4. Use a voltmeter to verify voltage at the incoming power terminals (L1, L2, L3) has been disconnected.
5. **Option Card Installation:** See Figure 1. Insert the plated board "finger" into the drive control board I/O terminal +V and tighten the screw. Wire as shown.
6. **Wiring:** See Figure 1 or 2 and Table 2. Make wire connections between the trim potentiometer card and external circuits according to your application requirements.
 - a) Keep control circuit wiring separate from power circuit input/output wiring. A separate metallic grounded conduit with only the option card's wiring running through it is preferred.
 - b) To prevent erroneous operation caused by noise interference, use shielded cable for control signal wiring. Limit the distance to 10m (33 feet) or less. Route wires from the drive and connect to the peripheral device. Refer to the drive technical manual for further information on use of shielded cables.
7. **Adjustment:** When the card has been wired in either of the configurations shown in Figures 1 or 2, it can be simply adjusted to obtain the desired speed by setting the trim potentiometer on the card and reading the speed on the drive keypad. To adjust, proceed as follows:
 - a) Apply power to drive without applying a run command. Set the keypad display to monitor the analog input value (U1-15) or view the default-power up display that displays the input set value in percentage. Refer to the drive manual for details in case you have problems reading the keypad values.
 - b) For the Figure 1 wiring configuration, set the system speed pot to maximum and adjust the trim pot to read the desired maximum value on the keypad. For Figure 2, set the system speed pot to minimum and adjust the trim pot to read the desired minimum value on the keypad. This value will be displayed on the keypad as a percentage of the maximum speed.
8. Reinstall and secure the drive's front cover.
9. Place this instruction sheet with the drive's technical manual.

Parameter	Value
Input Voltage	±15VDC, ±30%
Output Format	Open Variable Resistor
Output Voltage	0 to ±15VDC, ±30%
Input/Output Impedance	0 to 5kohm ±10%, 0.5W

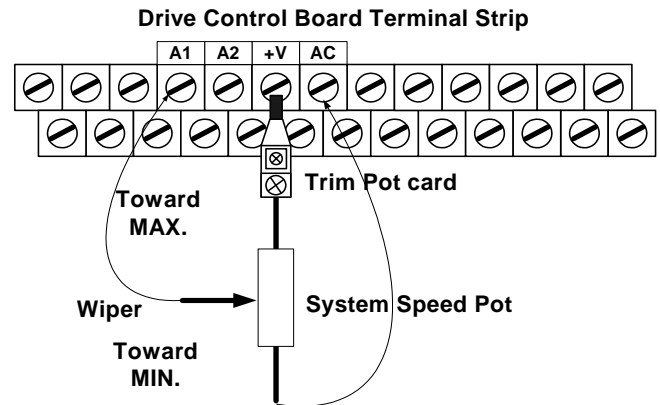


Figure 1. Maximum Speed Delimiter Wiring

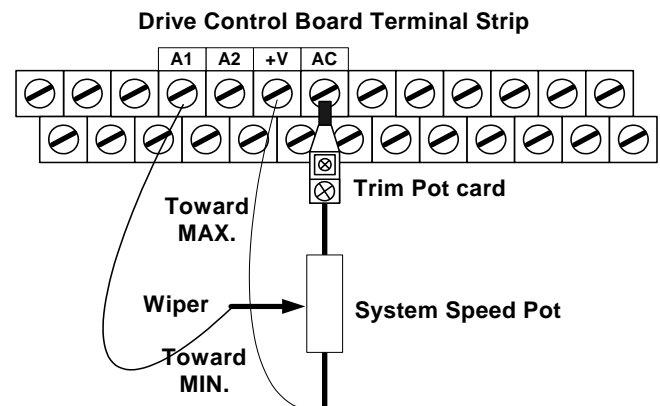


Figure 2. Minimum Speed Delimiter Wiring

Note: The terminal positions shown belong to E7 and P7 drives. For same positions on P5, F7 or G7 drives please refer to their manuals, as the wiring concept will remain as shown.

Terminal Symbol	Screw	Clamping Torque Lb-in (N-m)	Wire Range AWG (mm ²)
J1	6-32	7.9 (0.89)	22 to 14 (Stranded: 0.34 to 2.5) (Solid: 0.34 to 2.0)