

ENCODER RECEIVER OPTION

Description



The Encoder Receiver Option allows incremental encoders to be connected directly to the motor controller to provide highly accurate speed feedback measurement. It mounts directly to the Main Control Board by means of three support stand-offs and a 10-pin interface connector built in to the board. A convenient board-mounted plug-in terminal block is provided for field connections.

Advantages

The Encoder Receiver Option board offers the following advantages:

- Contains two optically isolated differential inputs for channels A and B
- Decoding logic to interface the encoder to the control board
- Supplies fixed or customer-adjustable voltage, isolated encoder power supply

Used On

This option can be used on:

- 590 and 590P Series DC Controllers

Available Options

The Encoder Receiver is available in the following options:

Part Number	Description
AH387775U001	Encoder Receiver Customer Calibrated
AH387775U005	5V Encoder Receiver Option PCB
AH387775U012	12V Encoder Receiver Option PCB
AH387775U015	15V Encoder Receiver Option PCB
AH387775U024	24V Encoder Receiver Option PCB

Note: An adjustment potentiometer sets the supply voltage and may be calibrated for various voltages. Refer to the Application Notes, page 6. When used with Parker SSD Drives Encoder, AH387775U015 must be used.

Specifications

Maximum Input Frequency	100kHz per channel
Receiver Input Current	< 10mA per channel
Input Format	Two differential channels in quadrature
Minimum Differential Input Voltage	2.5V
Maximum Differential Input Voltage	30V
Encoder Supply Capacity	2W maximum
Terminal Wire Size (maximum)	16 AWG
Terminal Tightening Torque	Minimum 0.22Nm (1.9 pound-inches) Recommended 0.4Nm (3.5 pound-inches)

Recommended Spare Parts

Keep one Encoder Receiver board that matches the most commonly used supply voltage for spare parts. It can be modified for use at other supply voltages as shown in the Application Notes section.