SP1061D Bi-Directional F2V Instructions

DESCRIPTION

The SP1061D is a Bi-Directional Frequency to Voltage converter designed for use with encoders with a maximum frequency of 2.5kHz to 20kHz. The unit determines direction by detecting the relative phase shift between pulses from an encoder, and produces a voltage output linearly proportional to pulse frequency. On board LED's indicate the direction of the motor.

SPECIFICATIONS

Voltage Input: +/-12 volts 10 mA

Note:
The encoder must also use a separate regulated 12 Volt supply, and power must be supplied to the F2V board whenever the encoder is powered. If power is applied to the encoder and not to the F2V board the F2V output may not be 0 volts.

Output -10 to 10VDC or -5V to 5VDC.

TERMINAL INPUTS

1 Positive Supply Input 12VDC
2 Encoder A Input (see input options)
3 N/C
4 Common
5 Rectified Analog Output 0 to 5VDC
6 N/C
7 Encoder B Input
8 Common
9 Negative Supply Input -12 VDC
10 Analog Tachometer Output -10 to 10VDC or -5 to 5VDC
The SP1061D has four frequency scaling ranges: 10-20 kHz, 5 - 10 kHz, 2.5 - 5 kHz, and 2 - 4.5 kHz. Refer to F2V detail sheet for full setup and scaling instructions.

**Wiring Details for 3600XRI and SLX series drives:**

**INPUT OPTIONS**

The F2V inputs feature 47k pullup resistors to +V and can use either open collector or active driver encoder outputs.

The unit provides a positive voltage output when the A pulses lead the B pulses, and a negative output when B leads A.

**INPUT NOISE SUPPRESSION**

To minimize noise use shielded cables (terminated to GND at one end) for the input signals. A ground point is not provided on the F2V board.

**FREQUENCY SCALING**

The SP1061D has four frequency scaling ranges: 10-20 kHz, 5 - 10 kHz, 2.5 - 5 kHz, and 2 - 4.5 kHz. Refer to F2V detail sheet for full setup and scaling instructions.

Wiring Details for 3600XRI and SLX series drives: