HOW TO CONFIGURE THE ACS355 FOR BIPOLAR VOLTAGE ANALOG INPUT

Description:
How to set up an ACS355 drive to accept a bipolar voltage signal on its analog input?

Answer:
The steps shown below detail on how to configure an ACS355 drive to accept a bipolar voltage as an analog input.

Step 1.
Set switch SI (AI2) or (AI1) to the down position for voltage

Step 2.
Wire the wiper of the potentiometer to AI2 or AI1, the High side to +10 VDC and Low side to -10 VDC

Step 3.
Set parameter 1301 and/or 1304 to -100 and 1302 and/or 1305 to +100
Set parameter 1003 to Request
Set parameter 1103 and/or 1106 to AI2/joystick or AI1/joystick
Set parameter 2001 to negative minimum speed and/or parameter 2007 to negative minimum frequency
Set parameter 2002 to positive maximum speed and/or parameter 2008 to positive maximum frequency
Figure 1: ACS355 Terminal Board Layout

S1 Selection Switch for Voltage or Current

Figure 2: Wiring Diagram for bipolar voltage from external power supply

External power supply ground
Documents or other reference material:

ACS355 User Manual

Corrective Actions:

None