



User Guide

SE51

Bipolar Speed Reference Card

Part Number: 0452-0024

Issue: 2

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Author	CTDL
Issue	2

The SE51 is an optional bipolar speed reference input card. It allows the direction of rotation of a motor to be controlled via a speed potentiometer rather than the run forward and run reverse terminals or a forward/reverse terminal.

The +10V potentiometer reference can be supplied from the Drive (terminal 3) or from an external power supply. The -10V potentiometer reference must be supplied from an external power supply.

The SE51 also has a 'zero speed' relay (as default) which is controlled by the digital output (terminal 8) of the Drive. The function of this relay can be changed through the advanced menus by re-programming the source parameter of the digital output (parameter **8.21**) for example, as an 'at speed' relay.

NOTE

This change can only be done via serial communications using the Universal Keypad or SE Soft and SE71 serial communications converter.

Example

To reconfigure the SE51 as an 'at speed' relay:

Set parameter **8.21** to **10.06**

Set a zero parameter e.g. 0100 to 1000 and press the Stop/Reset key

SE51 Terminal Layout

PL2		PL1	PL3
Pin 1	0V	+10 to -10V bipolar input	Relay - common
Pin 2	0 to +10V output	0V	Relay - normally open
Pin 3	+24V power supply		
Pin 4	Digital input to card		
Pin 5	Run Forward output		
Pin 6	Run Reverse OR Forward/Reverse output		

Relay Specification

Voltage Rating: 48VAC/DC

Maximum Current: 2A Resistive

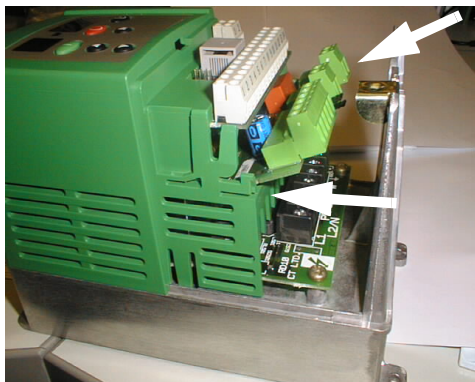
Update Time: 1.5ms



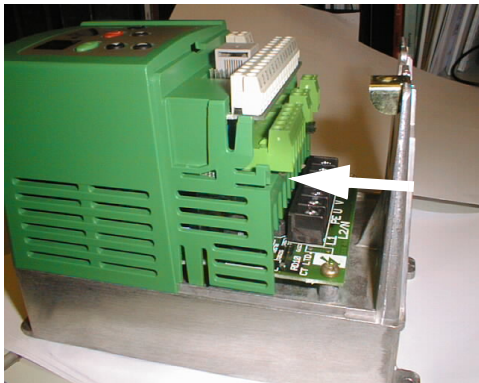
Provide fuse or other over-current protection in relay circuit

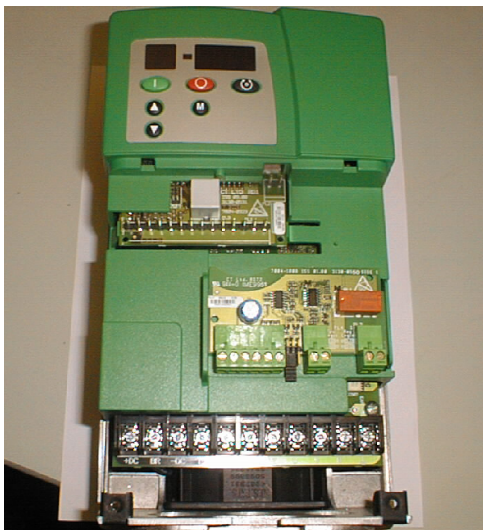
Commander SE Size 1

Step 1



Step 2





Connection details

The connections between the SE51 and the Commander SE depends on the setting of parameter 35, Stop/Start logic.

This parameter changes the functionality of terminals 9, 10 and 11, which are normally associated with enabling, starting and stopping the Drive.

The following four diagrams give the connections required for the different settings of parameter 35.

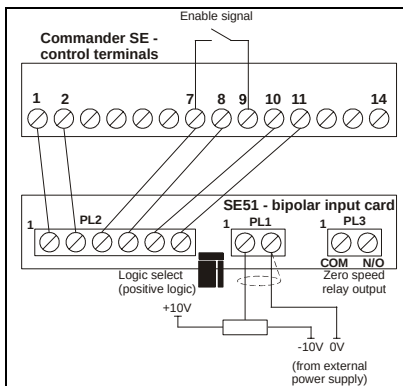
The logic select header, PL4, on the SE51 should be set to the correct position depending on the logic selected by parameter 34.

For further information on parameters 34 and 35, refer to the *Commander SE User Guide*.

Connection details 1

Parameter 35 = 0 (default).

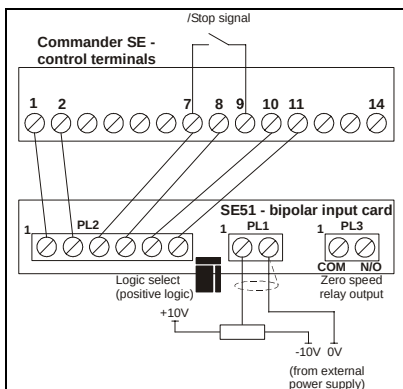
Parameter 34 = On, Positive logic (default).



Connection details 2

Parameter 35 = 1.

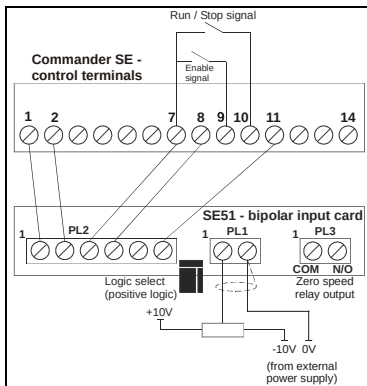
Parameter 34 = On, Positive logic (default).



Connection details 3

Parameter 35 = 2.

Parameter 34 = On, Positive logic (default).



Connection details 4

Parameter 35 = 3.

Parameter 34 = On, Positive logic (default).

