



ALLEN-BRADLEY BULLETIN 1336 PLUS 2-WIRE & 3-WIRE START/STOP

APPLICATION NOTE #1336S - 8

May 23, 1997

PURPOSE

The purpose of this document is to provide guidelines for wiring and control schemes for the Bulletin 1336S AC Drive. This document is to be used as a suggestion only. Users must ensure that installations meet applicable codes and are suitable for the existing conditions.

The Bulletin 1336S User Manual should be used as a reference to ensure that proper wire selection, routing and fusing guidelines are followed.

WHAT THIS NOTE CONTAINS

The Bulletin 1336S drive Logic Interface boards allow the Users to control the start/stop functions with either TWO-WIRE or THREE-WIRE configurations. The TWO-WIRE control utilizes a single contact to start and stop the drive. The THREE-WIRE method has separate inputs for start and stop. Setup of the drive parameters is necessary to properly implement these different methods of control.

INTENDED AUDIENCE

This application note is intended to be used by personnel familiar with the hardware components and programming procedure necessary to operate the Bulletin 1336S.

WHERE IT IS USED

The diagrams, parameter settings and auxiliary hardware used in this application note are designed to address specific issues in many different applications. Some changes by the User may be necessary to apply the concepts of this document to a specific application.

TERMS AND DEFINITIONS

1336S-L4 - TTL logic interface
1336S-L5 - 24VDC logic interface
1336S-L6 - 115VAC logic interface

There is also an encoder version of each of the above boards designated with an "E" at the end (L4E, L5E and L6E).

DESCRIPTION

The **THREE-WIRE** style of control is typical for an operator station with push-button controls. The start push-button being a normally open momentary close and the stop a normally closed momentary open. The drive parameter settings will affect the required sequence of the push buttons and how the drive reacts to these inputs.

PARAMETER SETTINGS

Number	Group	Name	Setting
39	Faults	Flt Clear Mode	0 = Disabled 1 = Enabled

Setting FLT. CLEAR MODE (Parameter 39) to a value of 1 allows the STOP input to clear a fault. The START input must remain logically false while the STOP input goes false then true.

This type of start/stop control is not compatible with a process that requires "auto restart".

Refer to Figure 1 for diagram.

TWO-WIRE control is used most often when interfacing with PLC's or other process controls with relay outputs. This method uses a single input to control both the START and STOP functions.

For this method of control to work properly, the START input at TB3 Terminal 19 will start and stop the drive. The STOP input at terminal 20 will then reset the drive. The START input is a level detection that requires the input at TB3 terminal 19 to be a maintained input for the drive to run.

If the START input is maintained, and the STOP input is cycled (false to true) the drive will restart.

Refer to Figure 2 for diagram.

FIGURE 1, THREE-WIRE CONTROL WITH 115VAC INTERFACE

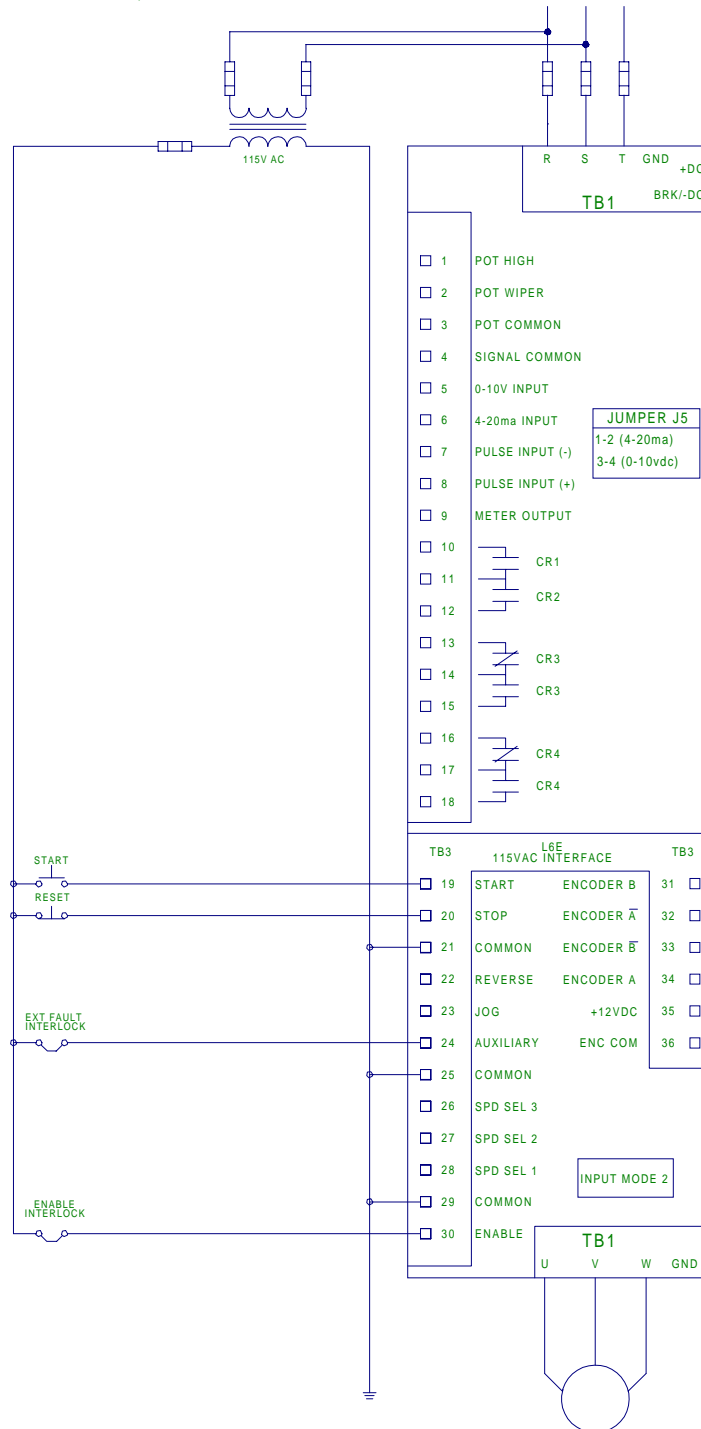


FIGURE 2, TWO-WIRE CONTROL WITH 115VAC INTERFACE

