

APPLICATION NOTE

FECA-AN-191

MEGA 3-Wire with Direction Switching Custom Logic

Inverter type FRENIC-MEGA

Software version All Required options None

Related documentation FRENIC-MEGA User's Manual,

FECA-AN-122 (3-wire operation)

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Introduction

The FRENIC-MEGA series VFDs can be programmed for custom behavior by utilizing the customized logic programming functionality. You can find more information on the customized logic functionality in the FRENIC-MEGA User's Manual.

Functionality

The following program modifies the standard 3-wire operation to allow the switching of the motor direction while running by pressing the FWD or REV momentary buttons, without first pressing the stop (HLD) button. This program assumes that you are using terminal X1 for the HLD command.

Configuration

The momentary FWD/REV/STOP buttons should be wired as shown. You will need to set the following function codes, in addition to any other settings required by your application:

F02 = 1 (TERMINAL)

E01 = 100 (NO FUNCTION)

U00 = 1 (ON)

U01 = 4010 (FWD)

U02 = 4011 (REV)

U03 = 4 (XOR + T)

U04 = 3 (PULSE)

U05 = 0.01s

U06 = 3001 (STEP 1 OUT)

U07 = 4001 (X1)

U08 = 2 (AND)

U71 = 2 (SO02)

U81 = 6 (HLD)

