

Objective

To configure the DC regenerative drive for a Forward / Reverse input to change the direction of the motor.

Description

In this example, an operator wishes to control direction of the motor. Since the format of the Digital Input VALUE FOR TRUE and VALUE FOR FALSE parameters is in percent, 0 is equal to 0.00% and 1 is equal to 0.01%.

When 24Vdc is applied to Digital Input 1 the sign of Setpoint Sum 1 will reverse the motor direction

Analog Input 1 (A2) is the Line speed input.

0vdc on Digital Input 1 (C6) the speed demand from the Setpoint Sum 1 block will be positive (forward).

24vdc on Digital Input 1 (C6) the speed demand from the Setpoint Sum 1 block will be negative (reverse).

Equipment

590+ / 590 Series DC drive(> 3.2 firmware), computer with ConfigEd Lite or DSELite installed.

Procedure for Figure 1 using drive firmware versions 3.2 to 5.x. For firmware version 7.x to 8.x see Figure 2.

1. Launch ConfigEd Lite or DSELite on the computer.
2. Under File:New, open the default configuration for the drive style that you are trying to configure.
(Example for a 590 Series DC drive with Version 4 firmware - Default4.590)
3. Delete the output connection from Digital Input 1, then reconnect the output of the Digital Input 1 to Sign 1 of the Setpoint Sum 1.
4. Delete the output connection from Analog Input 3 block.
5. Delete the SPT. SUM output connection from the Setpoint Sum 1 block, then reconnect the SPT. SUM output of the Setpoint Sum 1 block to the Ramp Input of the Ramp block.

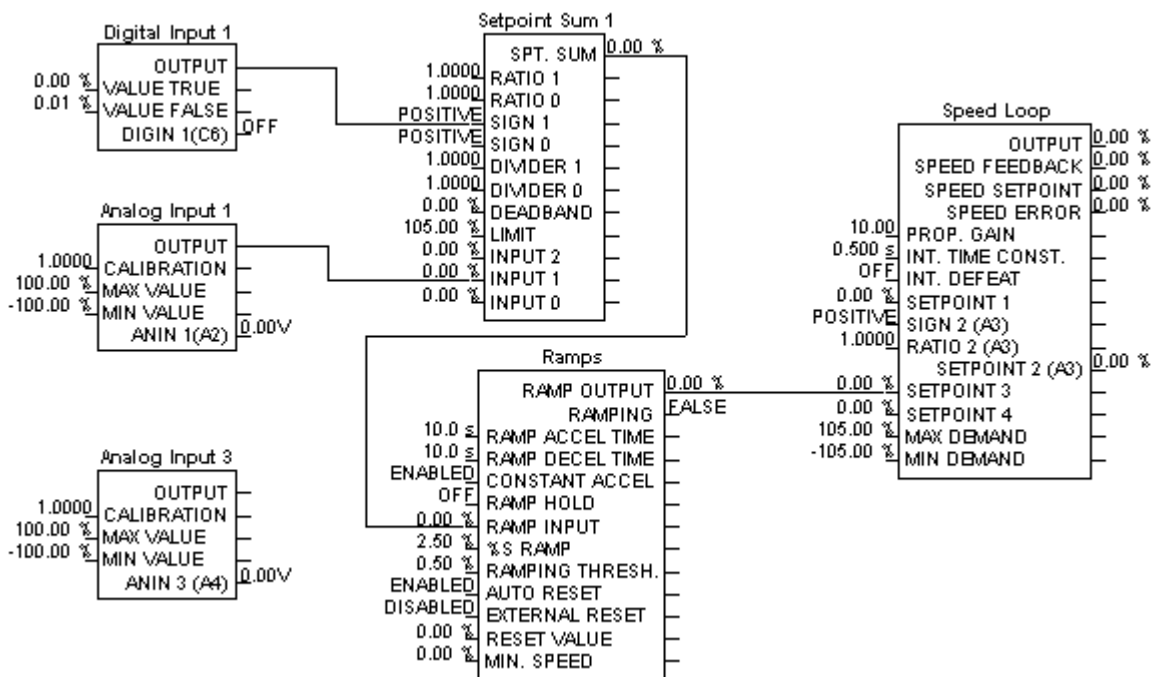


Figure 1. For drive firmware version 3.2 to 5.x

If you have questions, please call the Product Support Group at (704) 588-3246.

Procedure for Figure 2 using drive firmware version 7.x and 8.x

- Using ConfigEd Lite or DSELite reconfigure *Digital Input 2* so it is connected to the *Invert* parameter as shown below.

Move the default connection from RAMP HOLD to INVERT. When DIGITAL INPUT 2 goes True the drive will go Reverse

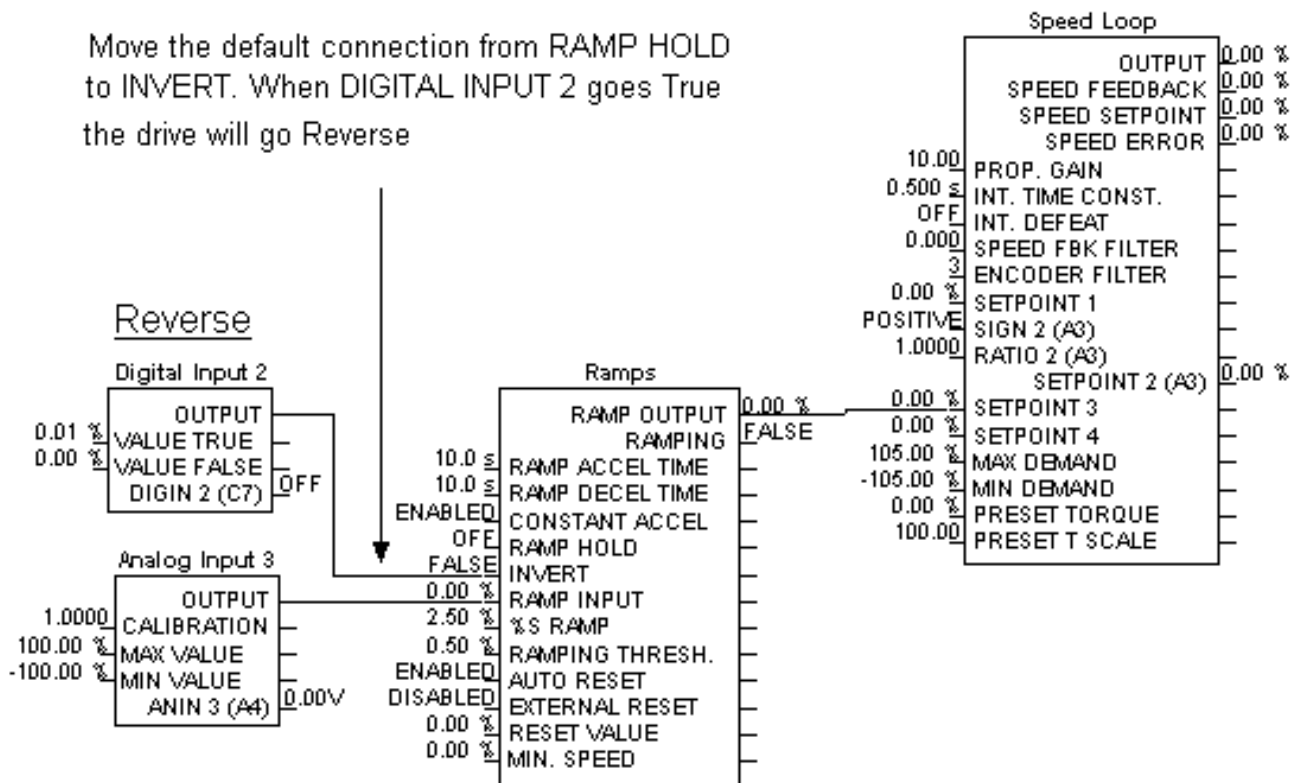


Figure 2. For 590+ drive firmware version 7.x and 8.x

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