

HOW TO SETUP 2 WIRE START FORWARD AND START REVERSE ON A DCS800

Description:

Setting up 2 wire start forward and start reverse on a DCS800 drive requires using an adaptive program. Below is the DriveAP program for doing Start Forward and Start Reverse on the DCS800. It runs the drive as if it were controlled by fieldbus, utilizing the main control word, where DI7 starts the drive in forward direction and DI8 starts the drive in reverse.

Solution:

DriveAP program description: The exclusive OR block is tied to DI7 (parameter 8.05, DI Status word, bit 6) and DI8 (parameter 8.05, DI Status word, bit 7). If both DI7 and DI8 are high the output will be zero and the drive will stop. If either DI7 or DI8 are high, the output of the block will be a one. The output of the exclusive OR block goes to IN1 of Block 3 Switch I block. Block 2 Switch I block sends 3199 decimal to IN2 of the Block 3 Switch I block if DI8 is high and sends 1151 decimal to IN2 of block 3 Switch I if DI8 is low. The only difference between sending 1151 dec and 3199 dec is bit 11 is high when sending 3199 dec. Bit 11 defined in the main control word, 7.01 are for Aux Control. In this case parameter 10.02, Direction is programmed to MCW bit 11, so when this bit is high the drive will go in the reverse direction. If IN1 on Block 3 Switch I block is low, 1142 dec will be sent, which will stop the drive.

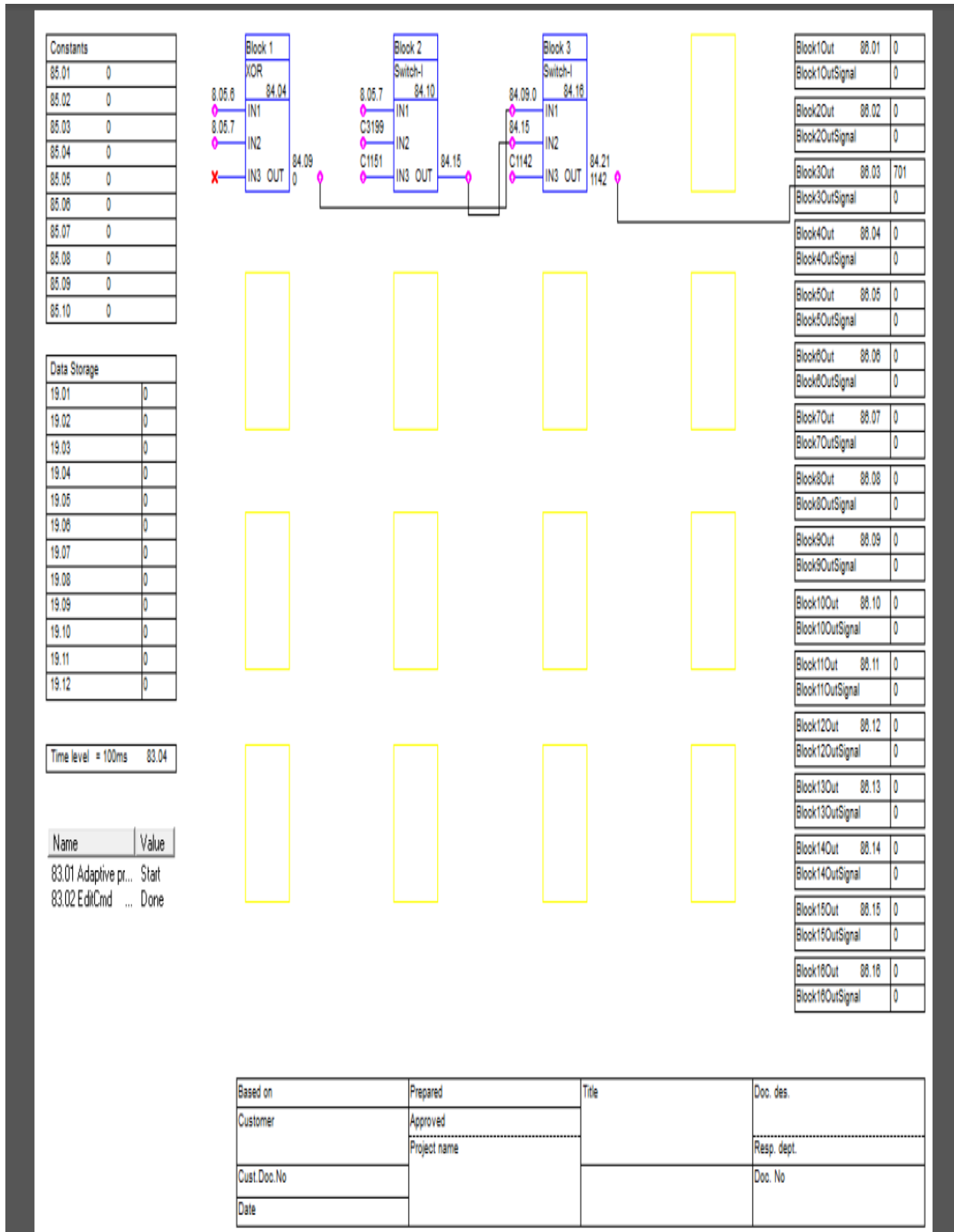
Parameters to adjust:

10.01: MainControlWord

10.02; MCW bit 11

21.16: On (default) or ON & Run; this should be set how you desire the contactor to function

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Documents or other reference material:

DCS800 Firmware Manual, document number 3ADW000193 R0701 REV G

Corrective Actions:

None

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