

## Steps:

## 1. Wire stepper drive:

VDC+ to +24V

VDC- to ground

A+ to motor cable RED

A- to motor cable WHITE

B+ to motor cable GREEN

B- to motor cable BLACK

STEP+ to +24V

STEP- to PLC Y0

DIR+ to +24V

DIR- to PLC Y1

PLC output 1C to ground

PLC V+ to 24V

PLC V- to ground

2. Set stepper drive to proper motor current (see data sheet)
3. Set stepper drive to 2000 steps/rev resolution (see data sheet)
4. Connect plc to laptop, run Domore Designer, and connect to PLC.
5. Go to PLC -> System Configuration, BRX Local I/O, then click on High Speed I/O.
6. Under Axis/Pulse Outputs, set Axis 1 to pulse output, step/direction, Y0 to STEP, Y1 to DIR
7. Make a ladder diagram with three stages. In S0, have a rung with \$on and AXCONFIG box.
8. Configure AXCONFIG to Axis 1, rotary, 2000 pulses/rev, and jump to S1 on success.
9. In S1, put a rung with \$on and AXPOSTRAP box.
10. Configure AXPOSTRAP with Axis 1, rotary, absolute CW, target 1000 pulses, jump to S2 on success.
11. In S2, put a rung with \$on and AXPOSSCRV box.
12. Configure AXPOSSCRV with Axis 1, rotary, absolute CCW, target 1000 pulses jump to S1 on success.
13. Write PLC and run. Motor should rotate 1/2 rev each way. Experiment with changing acceleration and velocity parameters. What is the highest pulse rate before stalling?