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 Y2

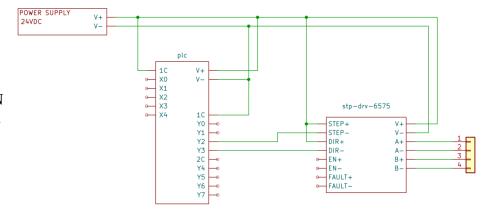
DIR+ to +24V

DIR- to PLC Y3

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, Y2 to STEP, Y3 to DIR
- 7. Make a ladder diagram with three stages. In S0, have a rung with \$0n and AXCONFIG box.
- 8. Configure AXCONFIG to Axis 1, rotary, rotary range to 1000 steps (0-999), 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 0 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?