Steps:

1. Wire stepper drive: VDC+ to +24V VDC- to ground A+ to motor cable RED POWER SUPPL 24VDC V+ V-A- to motor cable WHITE B+ to motor cable GREEN B- to motor cable BLACK V+ V-1C X0 X1 X2 X3 X4 stp-drv-6575 STEP+ to +24V1C YD Y1 Y2 Y3 2C Y4 Y5 Y5 Y7 STEP+ V+ V-A+ B+ B-STEP- to PLC Y0 STEP-DIR+ to +24V DIR-EN+ EN-FAULT+ DIR- to PLC Y1 FAULT-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?