Motor Controls Lab #15 AB VFD #5 JD Jones

Name \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Points 100

In this lab you will be wiring up a VFD (Variable Frequency Drive). We will take and build more of the features with each lab. As always, wait for the instructor to approve your wiring prior to powering up. You will be using the **Allen Bradley** VFD on the LabVolt trainers

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Use the website for the drive. Here is a link.

<http://literature.rockwellautomation.com/idc/groups/literature/documents/um/22b-um001_-en-e.pdf>

For the PowerFlex 40 VFD labs you will first have to reset the factory defaults. You will need to do the same for the PowerFlex 525. You will need to figure out the process on it.

Tasks to complete:

A) Use the PLC communication port to control the VFD.

1. Speed
2. Start
3. Stop
4. Direction

B) Max frequency of 100.

C) Min frequency of 50.

D) Have the PLC turn on a light when the speed is greater than 75.

Points for PowerFlex **40** VFD

A) Use the PLC communication port to control the VFD. 30 pts

1. Speed
2. Start
3. Stop
4. Direction

B) Max and min frequency. 5 pts

C) Have the PLC turn on a light when the speed is greater than 75. 10 pts

D) Safety glasses and all grounds are connected. 5 pts

Points for PowerFlex **525** VFD

A) Use the PLC communication port to control the VFD. 30 pts

1. Speed
2. Start
3. Stop
4. Direction

B) Max and min frequency. 5 pts

C) Have the PLC turn on a light when the speed is greater than 75. 10 pts

D) Safety glasses and all grounds are connected. 5 pts

INSTRUCTOR’S INITIAL\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_