Motor Controls Lab #1 Transformer Wiring JD Jones

Name\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Point Value = 100 Points

In this lab you will be wiring up a transformer. Ask the instructor to show you how to do this lab. This is the first time you will be using the black wires. Black wires are to be used any time the voltage is over 120 VAC. This is considered the power circuit.

Good things to know about transformers.

· “H” is for the PRIMARY SIDE where the power is coming in.

· “X” is for the SECONDARY SIDE where the power is coming out.

· KVA is how a transformer is rated for how much power it can provide to its load.

· Primary Voltage.

· Secondary Voltage.

· Type of enclosure.

The first transformer will be wired up from 208 VAC to 120 VAC. Run a simple push button and pilot light circuit off the 120 VAC side of the transformer. We will power this one up together. Of course, don’t power up until the instructor is with you. The transformer will be mounted on the training boards.

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

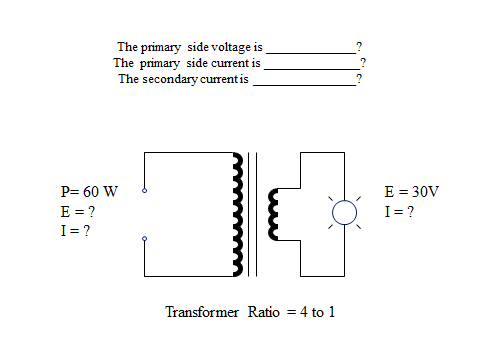
The second transformer will be wired up from 240 VAC to 120 VAC. We won’t be able to power this one up. Just run the wires as needed and be able to tell me where the power is coming in and going out. This will be the transformer with jumpers.

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

The third transformer will need to be wired up from 240 VAC to 12 VAC. We won’t be able to power this one up either. Just run the wires as needed and be able to tell me where the power is coming in and going out. This will be the enclosed transformer.

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

Use ohm’s law to solve the missing information.



Points for

a) Wiring of the transformer 40 pts

b) List below the 4 specification to match up if you are replacing a bad transformer. 40 pts

c) Answering the questions above 15 pts

d) Safety glasses 5 pts