



Electrical Industrial Motors

Program: Electrician Technician

Course: EL170 – Motor and Industrial Motor Controls

Objectives: Under the supervision of your instructor, you should be able to do the following:

- Learn how to connect an electrical motor.
- Learn how to read an electrical diagram.
- Learn how to read and apply technical information on a motor plate.

Lab Equipment:

- 1 – 3 PHASE electrical motor
- 1 – Electrical conductors' different sizes
- 2 – Start/Stop push button
- 1 – 3-phase electrical contactor 14cu32A
- 1 – overload protection ESP200
- 3 – Fuses

Required Tools:

- 1 – Phillips screwdriver
- 1 – Flathead screwdriver
- 1 – Pair of diagonal cutters
- 1 – Pair of wire strippers

Materials:

- 10' - Red THHN
- 8' - Black THHN

Safety (PPE):

- Safety glasses/goggles

Resources: N/A

Required Time: One Day

Shop Maintenance:

- All work will cease 20 minutes prior to the end of class.
- All work areas must be cleaned.
- Tools and equipment must be cleaned and returned to the designated areas (cage, tool room, cabinets etc.)
- Any broken or missing tools must be reported immediately.
- Tools and equipment are students' responsibility.

Procedures: *(Eye protection must always be worn, and power must be turned off till testing)*

1. 1-Connect the DAYTON electrical motor according to the electrical diagram provided.
2. Use the pictorial diagram as guide.
3. Ask your instructor to check your connections.
4. If everything is correct, turn on the power.







