

Industrial Motor Control

Contest Update – March 25, 2021



Preparatory Information

Contestants will receive plans in a sealed envelope. The envelope must remain sealed until the beginning of the competition. Contestants will login to the live Zoom meeting and complete the assigned project. The advisor must be present for safety purposes only and may not interact with the contestant at any time.

Materials will be mailed to schools in the Contest Prep Box. Schools will be required to obtain some of their own materials. Each school will receive funding from Lowe's to offset the cost of materials. Gift card information will be sent to each instructor with specific instructions on activation.

The tool list provided below is a minimum. Competitors may bring other hand tools but no power tools (except the battery drill) are allowed.

Cell phones are not permitted during the contest. Cell phones and similar devices may not be used as a calculator.

A Second Camera Proctor is required for this contest. They will provide additional angles and information for the remote judges.

Contestants may also be required to submit photos of their final product. Submitted files must be in the designated format and named according to the Virtual General Regulations.

Tool List – to be Provided by Each Competitor

Each contestant must have the following equipment, tools and material for the competition. The care use and transportation of the tools and equipment to and from the contest is the responsibility of the contestant. All tools must meet proper OSHA safety standards. Each contestant must have their own tools; sharing of tools is not permissible.

Required tools:

- 2 pair of channel locks
- 1 MC cutter (roto-splitter or equal)
- 8" diagonal cutters (angle head)
- 9" linesman pliers
- 8" needle nose pliers
- 10" split joint pliers
- Torpedo level
- 603-3 Phillips screwdriver #1
- 603-4B Phillips screwdriver #2
- 605-4 ¼" screwdriver 4"
- 605-6 ¼" screwdriver 6"
- 25' tape measure
- 11045 Wire stripper/cutter
- 1550-11 Electricians Knife
- 85191 Reaming screwdriver

- 650 Scratch awl
- 32476 5-in-1 screwdriver
- 70570 Hex key set
- #1 Phillips screwdriver
- Flathead screwdrivers, 4mm and 5.5mm
- Tool pouch
- Tool belt
- Cordless drill with assorted bits
- ½" EMT bender
- Hack saw
- Battery powered drill motor 3/8" with 3/4" butterfly bit and 1/4" steel bit
- Safety glasses
- Hard hat
- Latest edition of the National Electrical Code (as of January 2021)
- Supplies for drawing ladder diagram (pencil, straightedge, etc)
- Calculator (may not be a cell phone)

Material List – to be Provided by Each Competitor

- 2 – keyless lamp holders
- 2 – 60-watt lamps
- 16" – ½" liquid tight
- 2 – ½" liquid tight connectors
- 2 – 3/8" MC Connectors
- 3' – 12/2 MC Cable
- 3/8" straps
- 9' – ½" Flexible Metallic Conduit
- 6 – ½" Flexible Metallic Connectors
- 3 – ½" rigid straps
- 60' – Stranded #14 THWN
- 2 – hex head grounding screws
- 6 – #8 X 1&1/2" screws
- 8 – #10 X 1" screws
- 15 – Nylon tie wraps
- 20 – twist on connectors
- 3' – Din rail (to be cut down)
- 1 – 4' x 4' sheet of plywood
- 1 page of marker numbers