Overload/Overcurrent Protection & Monitoring (EA02) delivers hands-on skills in the methods and devices used to protect industrial electric circuits. Overload/Overcurrent Protection & Monitoring (EA02) is an add-on to Electromagnetic Motor Starters (EA07), covering ten additional skills including:

- Drawing and Reading Circuit Protection Symbols
- Installing Fuses
- Troubleshooting Fuse Blocks
- Installing Overload Heaters
- Testing Overload Relays

The skills-based curriculum presents hands-on activities using industrial-grade components mounted on the three included Flexponent™ panels which attach to the JobMaster® Learning Station (not included). Panels are easily added and exchanged allowing the workspace to be re-configured as multiple students progress through the course.

Core concepts are taught through self-paced e-learning curriculum. All the necessary resources, including printable instructions and wiring diagrams are available online, ready for use at the JobMaster Learning Station. Instructors are also provided comprehensive resources, including a detailed instructors’ guide. Teachers’ versions of schematics and wiring diagrams as well as tips and tricks are all one click away.

With JobMaster, you can be sure your training program will deliver the skills needed for success in automated manufacturing careers!
E019 Capacitor-Start Motor Panel

- Panel type: Double
- 1 1-phase motor, 0.08hp, 1725rpm
- 2 Fault switches: 4A, 250V push-on/push-off momentary

E022 Manual Starter Panel

- Panel type: Single
- 1 Single-phase fractional horsepower starter (FP)
- 1 thermal overload unit (6A to 16-A) with pilot light
- 1 Non-reversing manual starter with bimetallic thermal trip and magnetic trip
- 2 Fault switches: 4A, 250V push-on/push-off momentary

E030 Circuit Overload Protection & Monitoring Panel

- Panel type: Double
- 1 Relay, Overload
- 1 Circuit Breaker, 2A
- 1 3-Phase Line Monitor
- 3 Midget Fuse 2A
- 1 Midget Fuse Block, 30A, 3 pole

Materials Included

Order #14-EA02:
- Relays, Timers & Time Delay Relays (EA02) E-Learning Course and Teachers’ Guide
- Flexponent™ panels:
  - E019 Capacitor-Start Motor Panel
  - E022 Manual Starter Panel
  - E030 Circuit Overload Protection and Monitoring Panel

Materials required (sold separately):
- JobMaster® Learning Station Order #10-LS00-0200
- Power Control Panel (220V) 3-Phase Order #10-PC06-0000

* International step-down transformer package (Order #10-PC09-0000) required for international applications.
- Digital Multimeter (Fluke Model 115 or equivalent)
- Prerequisite Courses
  - Electromagnetic Motor Starters (EA07) Order #14-EA07

Skills Acquired

- Skill 1 Drawing and Reading Circuit Protection Symbols
- Skill 2 Sizing Fuses
- Skill 3 Installing Fuses
- Skill 4 Testing and Replacing Fuses
- Skill 5 Performing Preventive Maintenance and Troubleshooting Fuse Blocks
- Skill 6 Sizing Circuit Breakers
- Skill 7 Testing and Resetting a Circuit Breaker
- Skill 8 Sizing and Installing an Overload Heater
- Skill 9 Adjusting and Testing the Overload Relay
- Skill 10 Installing and Setting Up a Three-Phase Monitor

Overload/Overcurrent Protection & Monitoring (EA02) is part of the Electrical Control Systems series, which includes comprehensive instruction in electrical control including motor controls, pilot devices and variable frequency drives.

The Electrical Control Systems series:
- Electric Motors (EA04)
- Pilot Devices (EA09)
- Variable Frequency Drives (VFD) (EA12)
- and more!

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Most courses require a JobMaster® Learning Station, sold separately. Some courses require other hardware purchased separately or as part of prerequisite courses in the same series. All included and required materials are noted on each product data sheet.