

Electrical Test Equipment

OEM: Rockwell Automation • Duration: 2 Days (16 hrs) • Code: EMS-115

COURSE MODULES & TOPICS

Objectives

- Describe the operation of an analog meter
- Describe the operation of a clamp-on ammeter
- Describe the operation of a digital meter
- Describe the operation of a voltage detector
- Describe the operation of the basic oscilloscope
- Calculate amplitude, frequency, period, phase difference, and duty cycle
- Describe the operation of a megohmmeter (megger)
- Explain the purpose of thermography

Student Materials

- Student Manual includes the key concepts, definitions, examples, and activities presented in this course
- Lab Book provides learning activities and hands-on practice. Solutions are included after each exercise for immediate feedback.

Next Level Learning

- Conduit Bending and Wiring course (EMS-125)

Course Agenda

Day 1

- Categorizing Electrical Tests
- Recognizing Test Equipment Types
- Interpreting Ammeter readings
- Using Oscilloscopes
- Evaluating Waveforms with an Oscilloscope
- Measuring Insulation resistance
- Using Megohm Meters
- Performing High Potential Tests

Day 2

- Applying Predictive Maintenance Basics
- Performing Thermography
- Conducting Infrared testing
- Evaluating infrared images
- Review
- Written Exam