

Power Transformers

OEM: Rockwell Automation • Duration: 3 Days (24 hrs) • Code: EMS-200

COURSE MODULES & TOPICS

Objectives

- Identify and discuss safety issues relating to transformers
- Explain the theory of transformer operations
- List and describe the types of transformers
- Describe the construction and nameplate information of a transformer
- Demonstrate different types of transformer tap connections
- Demonstrate proper inspection techniques for transformers
- Demonstrate proper maintenance techniques for transformers

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

- Motor Theory course (EMS-105)

Course Agenda

Day 1

- Explaining Induction and Transformer Action
- Distinguishing Transformer Types
- Describing Transformer Components
- Detailing Three Phase Circuits
- Wiring Single Phase and Three Phase Configurations
- Interpreting Nameplate Data

Day 2

- Following Safety Precautions
- Changing Taps

- Sizing Transformers
- Performing Maintenance and Inspections

Day 3

- Identifying Transformer Malfunctions
- Troubleshooting and Repairing Transformers
- Final Lab
- Review
- Written Exam