

K315

# Fundamentals of Motors

## COURSE DESCRIPTION

### Course goal

The goal of the course is to provide participants with a basic understanding of the principles behind electric motors.

### Learning objectives

Upon completion of this course, students will be able to:

- Explain the relationship between current, magnetism, and movement within the induction process
- Identify motor components and explain their purpose
- Gain a basic understanding of motor performance and efficiencies
- Identify potential failure modes

### Participant profile

This training is targeted for individuals who work within the electric motor industry, including customers and ABB employees.

### Topics

- Student will experience a "hands-on" motor lab and a comprehensive plant tour (if applicable).

- Learn about the different ratings, speeds and enclosures of motors.
- Recognize different families of motors by sight.
- Learn about efficiency and what it means for your applications.
- Discuss NEMA standards and how they relate to HP, RPM, voltage, service factors and frame sizes.
- A brief overview of AC Motor Control Basics

### Course type and methods

This is an instructor-led course. The language of the course is English.

### Course duration

The duration of the course is 2.5 days and is held in Ft. Smith, Arkansas, USA

This course is not scheduled on a calendar basis but is scheduled periodically as need demands. Please continue to check the calendar for future offerings.

### ABB Training

**ABB Training – ABB Service for Motors and Generators**