

# Maintenance & Protection of AC Electrical Motors & Drives

## Course Objectives

- Specify, select and install motors
- Specify protection requirements for motors
- Specify speed control requirements for motors
- Install and commission motors
- Fix faults on motors
- Interpret motor performance curves
- Interface control circuits of motors with PLCs/DCS
- Reduce downtime on electrical motor
- Improve plant safety
- Improve plant throughput
- Reduce spares usage and requirements
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## Who Should Attend?

Engineers, Maintenance & Operation Technicians and Supervisors associated with the use of electrical motors in the industrial or automation environment. The workshop will also benefit those working in system design as well as site commissioning, maintenance and troubleshooting.

## Course Content

- Fundamentals of motor technology
- Ac motor theory, construction and maintenance
- Three phase ac induction motors
- Protection of ac motors
- Speed control of ac motors
- Sizing of different motor starters
- Contactor applications.
- Protection of ac convertors and motors
- Control systems for ac
- Variable speed drives.
- Pulse width modulation
- Field orientation
- Direct torque control
- Soft starters
- Motor Failure Analysis
- Motor Testing Methods
- Motor Maintenance Practices
- The selection of ac convertors for variable speed drive applications
- Installation and commissioning of ac variable speed drives
- Problems related to VSD