

Course description

K700

Rotating electrical machines theory, operation and maintenance

Course goal

This course aims to help reduce the total cost of ownership of motors and generators. It provides structured guidance towards reduced operational costs and increased availability. Subject areas include motor and generator construction, standards and specifications, operation, maintenance, energy efficiency, diagnostics, etc.

Participant profile

Participants typically have beginner or intermediate level experience with motors and generators and their operation. Participants could be engineers, technicians, service personnel, electrical and mechanical maintenance personnel, etc.

Topics

Day 1 - Dimensioning and selection criteria

- Course introduction
- What is total cost of ownership?
- Basic theory of motors and generators
- Mechanical and electrical design and components
- International standards
- Motor and generator performance and starting considerations
- Motors in VSD applications (basic aspects)

Day 2 - Operational considerations

- Safety
- Installation and commissioning
- Energy efficiency
- TEAM stresses and the concept of equivalent operating hours
- Typical issues and their causes

Day 3 - Availability

- Availability, maintainability, reliability
- Maintenance strategies: reactive, preventive and predictive
- Diagnosis and condition monitoring
- Online and offline tests
- Final test
- Summary

Course type and methods

This is an instructor led seminar with practical exercises. Participants min. 10 to max. 30. Dates and venue are subject to agreement. There is an end-of course assessment and course participants receive a certificate.

Course duration

The duration of the course is 3 days.

BU Motors and Generators Training

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