

Course description

G933

Service training for motors and generators for hazardous areas

Course goal

The goal of the course is to certify personnel for maintenance and repair of ABB's AC low and high voltage induction and synchronous motors and generators on the following protection types: flameproof, increased safety, pressurized, non sparking and dust ignition proof.

Learning objectives

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

- describe the relevant standards and main principles of protection types
- describe the hazardous area motor and auxiliary constructions and motor protection
- carry out trouble shooting, adjustments and settings of hazardous area motors
- describe which the permitted maintenance and repair actions are
- carry out, supervise or advice maintenance and repair of hazardous area motors
- test the functionality of the motor after undertaken action
- have a complete overview on the design of ABB Ex LV and HV Motors

Participant profile

This training is targeted to service and maintenance technicians.

Prerequisites

The student should have basic knowledge and experience in service of standard motors prior to attending this course. Provide IEC 60079-17 and IEC 60079-19 standard in participants language (if available).

Topics

- Hazardous environments
- Directives and standards (EN and IEC-standards)
- ABB's hazardous area motor product range and design
- Service requirements for Hazardous area motors
- Dismantling and assembly guides
- Hands-on training

Course type and methods

This is an instructor led course with some hands-on exercises. The training will be based on IEC 60079-17 and IEC 60079-19 standard. In the end of the training a test will be held to ensure that student has acquired the qualifications required.

Course duration

The duration of the course is three days.

Language

The course is in English

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Course outline (Agenda)

Day 1

8:30	Welcome Hazardous environments Standards in hazardous areas, general requirements of standards Ex-protection modes (first part):Flameproof, Pressurized, Increased safety
12:00 – 13:00	Lunch Ex-protection modes (second part):Non-sparking, Dust ignition proof, Ex-terminal boxes Ex-motors in VSD
16:00	Finishing the day

Day 2

8:30	Welcome Service requirements for Ex-motors: IEC 60079-17 standard Service requirements for Ex-motors: IEC 60079-19 standard
12:00 – 13:00	Lunch Repair methods on ABB LV and HV motors
16:00	Finishing the day

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Day 3

8:30	Welcome Maintenance and repair activities on ABB HV Motors Certification exam
12:00 – 13:00	Lunch Dismantling and assembly guides Ex-motor service & maintenance Hands on training Summary of the training – Certification
16:00	End of the training

BU Motors and Generators training

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