

G933

Service training for motors and generators for Explosive Atmospheres

COURSE DESCRIPTION

Course goal

The goal of the course is to train and empower personnel for making service of ABB's AC low and high voltage induction and synchronous motors and generators designed for use in Explosive Atmospheres (Ex) on the protection types covered by the course contents.

Learning objectives

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

- describe the relevant standards and main principles of protection types
- describe the motor and auxiliary for use in explosive atmospheres
- evaluate proper selection and main maintenance requisites for Ex equipment
- describe which the main permitted overhaul and repair actions are
- carry out, supervise or advice maintenance and repair of Ex motors

Participant profile

This training is targeted at ABB and Service Provider personnel dealing with service and maintenance on electrical motors, and primarily to ABB and Service Providers Ex Responsible Persons, or whom is directly responsible for the work executed (a.e. Field Service Engineers) on ABB Ex Motors and Generators, in accordance with the scope of work for which the Service Center will be qualified (Service carried out in the WS and/or on the field)

Course duration

The duration of the course is three (3) days.

Prerequisites

The student shall have basic knowledge and experience in service of electrical motors prior to attending this course. Knowledge of IEC 60079-17 and IEC 60079-19 standards would also be recommended.

Topics

- Main concepts about explosive atmosphere
- Main regulations and standards (IEC 60079 Std series)
- Ex-protection types for electrical rotating machines
- Selection, Installation, Maintenance, Overhaul and Repair of Ex Equipment
- ABB´s Motor & Generators for explosive atmosphere, and related service requirements
- Hands-on training (practical part)

Course type and methods

This is an instructor led course with some hands-on exercises. The training will be based on IEC 60079 Standard series and specific ABB service requirements. In the end of the training, an examination test will be held to ensure that student has acquired the qualifications required.

Safety requirements

It is mandatory for the student to wear safety shoes during the hands-on training part, scheduled the third day.

Costs

1100,- USD /person

Language

The course is in English

Agenda

Day 1	Date
	Welcome and introduction to the course
	What is an "Explosive Atmosphere" and principles of areas classification
	Main global Standards in Explosive Atmosphere
	Ex-protection types for electrical rotating machines
	Identification of Ex equipment
	Finishing the day

Day 2	Date
	Welcome
	Selection and Erection of Ex equipment - IEC 60079-14 standard
	Inspection and Maintenance of Ex equipment - IEC 60079-17 standard
	Repair and Overhaul of Ex equipment - IEC 60079-19 standard
	ABB Ex Motors and Generators Product range and design
	Finishing the day

Day 3	Date
	Welcome
	Repair, overhaul and reclamation of ABB Ex Motors & Generators: how to keep the original certificate
	Final Exam
	Hands on training (practical part)
	Summary of the training – Certification
	End of the training

BL Motors and Generators training
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