Course description

INMVD-101

ACS 1000 Medium Voltage Drive Operation and Maintenance

Course goal

The goal of this course is to train the participants in the safe operation, control, configuration, troubleshooting and maintenance of the ACS 1000 drive, air-cooled and water-cooled units.

Learning objectives

Upon completion of this course the participants will be able to:

- locate the hardware components, to verify and replace drive's parts and to perform preventive maintenance.
- use of the available programming and troubleshooting tools is trained by practical operating exercises.

Participant profile

Electricians, technicians and engineers who operate, maintain or troubleshoot ACS 1000

Prerequisites

Basic knowledge of AC motors and drives Basic knowledge using computers with Windows.

Topics

Generalities

- ACS 1000 family overview, system requirements
- AC motor and DTC control
- Medium voltage safety requirements

Hardware description (power electronics & control)

- Component and PCB functions
- Hardware schematics and electrical drawings
- PCB settings and configuration
- ACS 1000i characteristics

Water-cooled system

- Water circuits description
- Preventive maintenance

ABB India Limited Medium Voltage Drives

Survey No. 88/3 & 88/4, Basavana Halli, Kasaba Hobli, Nelamangala Taluk, Bengaluru – 562123, Karnataka, India

Email: training@in.abb.com www.abb.com/abbuniversity



Operation

- Energize / de-energize the drive, start-stop sequence
- Local operation with drive control panel and
- Drive Window tool

Software introduction

- Software structure, parameter's description
- Application configuration, parameter settings
- Fault tracing and troubleshooting
- Alarm and fault indications
- Checking and replacing PCB's and components
- Using Drive Window SW tool for configuration and troubleshooting
- Getting help from ABB

Course type and methods

This is an instructor led seminar with hands-on exercises. The language of the course is English.

Course duration

The duration of the course is 3 days. Minimum 4 participants.

Tailor made and on-site training courses on request