COURSE DESCRIPTION

G751 ACS6000
Operation & Maintenance with AAC

Course goal

The goal of this course is to train the participants in the safe operation, control, configuration, troubleshooting and maintenance of the ACS6000 with AAC unit for metal applications. The students will develop their knowledge, confidence and skills in the handling of ACS6000 Voltage Source Inverter and AAC unit.

Main learning objectives

The course goal is to teach students how to operate, maintain and troubleshoot the ACS6000 drive and AAC unit.
Upon completion of this course, the students will be able to locate the hardware components, to verify and replace drive's parts and to perform preventive maintenance. The use of the available programming and troubleshooting tools is taught by practical operating exercises.

Participant profile

Electricians, technicians and engineers who operate, maintain or troubleshoot ACS6000 and AAC unit

Prerequisites

- Basic knowledge of AC motors and drives
- Basic knowledge using Windows computers

Topics

Generalities

- ACS6000 family overview, system requirements
- AC motor and DTC control
- Drive specific safety requirements

ACS6000 Hardware description (power electronics & control)

- Component and PCB functions
- Hardware schematics and electrical drawings
- PCB settings and configuration

Water cooling system

- Cooling circuits description
- Preventive maintenance

Operation

- Energize / de-energize, start / stop sequence
- Local operation with drive control panel and DriveWindow tool
- Remote control

Software introduction

- Software structure, parameter's description
- Application configuration

AAC Unit

- Hardware Component
- Software download to the AC800PEC
- Software download to the PP865

Fault tracing and troubleshooting

- Alarm and fault indications
- Checking and replacing PCB's and components
- Using DriveWindow SW tool for configuration and troubleshooting
- How to get help from ABB

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Course type

This is a face to face classroom training with maximum 8 participants.

Learning methods and tools

- Lectures and demonstrations
- Practical exercises on fully operational training drive and other training equipment
- Factory visit

Duration

5 days

To register:

Please apply online (signup required):
ABB MyLearning/G751
Custom-tailored training courses or standard training at additional course dates are available on request.
Please note: The course is only carried out if at least 4 participants have been booked.

Course outline

DAY 1	DAY 2	DAY 3
— Course overview — Product overview — Active Rectifier / Inverter Unit — Hands-on: Checking semiconductors	— Hands-on: Removing phase module — Line Supply Unit — Capacitor Bank Unit — Excitation Unit — Water Cooling Unit — Factory visit	— Control Unit — Protection concept — Hands-on: Operation of the drive — Application SW — Hands-on: DriveWindow tool

DAY 4	DAY 5
— Preventive maintenance — Hands-on: Exchanging semiconductors — Hands-on: Troubleshooting	— AAC unit Hardware — Hands-on: Software download to AC800PEC — Hands-on: Software download to PP865

Classroom training

Hands-on training

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