

**FCOURSE DESCRIPTION** 

# G750 ACS6000 Operation & Maintenance Classroom training in Turgi, Switzerland

# Course goal

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

#### Main learning objectives

The course goal is to teach students how to operate, maintain and troubleshoot the ACS6000 drive.

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

#### **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

# 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, parameters description
- Application configuration

#### 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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Visit <u>our page</u>

# **Course type**

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

# Learning methods and tools

- Lectures and demonstrations
- Practical exercises on training drive and simulators
- Factory visit

#### Duration

4 days

Tailor-made training on request

# To register:

Please apply online (signup required): Motion Upskill/G750

Custom-tailored training courses or standard training at additional course dates are available on request.

<u>Please note</u>: The course is only carried out if at least 4 participants have been booked.

#### **Course outline**

DAY 1	DAY 2	DAY 3	DAY 4
<ul> <li>Course overview</li> <li>Product overview</li> <li>Active Rectifier /</li> <li>Inverter Unit</li> <li>Hands-on: Checking semiconductors</li> </ul>	<ul> <li>Hands-on: Removing phase module</li> <li>Line Supply Unit</li> <li>Capacitor Bank Unit</li> <li>Excitation Unit</li> <li>Water Cooling Unit</li> <li>Factory visit</li> </ul>	<ul> <li>Control Unit</li> <li>Protection concept</li> <li>Hands-on: Operation of the drive</li> <li>Application SW</li> <li>Hands-on:</li> <li>DriveWindow</li> </ul>	<ul> <li>Preventive</li> <li>maintenance</li> <li>Hands-on: Exchanging</li> <li>semiconductors</li> <li>Hands-on:</li> <li>Troubleshooting</li> </ul>



Classroom training



Hands-on training