

## COURSE DESCRIPTION

# G723 ACS1000 & ACS2000 Service & Commissioning

### Course goal

The goal of this course is to introduce and instruct the service and commissioning engineers to the ACS1000 and ACS2000. To allow them to learn in a safe and instructive environment the techniques required to carry out the correct procedure in commissioning, servicing and maintaining these drives.

### Main learning objectives

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

- Understand the drive system topology
- Carry out basic commissioning, service and maintenance work and fault tracing
- Set and tune application and motor control parameters
- Locate and replace faulty hardware components
- Use System Drive Portal database to update the knowledge of the drive
- Start the certification program for commissioning; after completion of the certification program the participants are allowed to commission the medium voltage drive system.

### Participant profile

Commissioning and service engineers, testing and maintenance personnel of ABB or certified technical partners

### Prerequisites

- Good engineering knowledge of AC drives and motors
- Personal computer knowledge
- Laptop with DriveWindow, fiber optic programming tool RUSB-02
- Successful completion of the e-learning courses G711e and G781e

### Topics e-learnings G711e and G781e

#### Generalities

- Inverter topology, DTC control
- Options and typical applications

#### Control hardware ACS1000/2000

- Main circuit diagrams
- Component and PCB functions
- PCB settings and configuration

#### Power hardware description

- Air and water cooled ACS1000
- ACS1000i
- ACS2000

#### Protection concept

- Fault classes
- Protective reactions

### Topics classroom course

#### Generalities

- MV data base instructions
- Software compatibility and downloading sequence
- How to use software tools

#### Demonstration drive

- Component recognition and location
- Starting/stopping procedures
- Motor runs and tuning

#### Drive commissioning

- Cold and hot commissioning procedure
- Tests and reports

**Software description**

- Software structure, parameter description
- Application programming
- Fieldbus programming (interfacing with overriding system)
- Setting and tuning motor control parameters

**Fault-tracing and troubleshooting**

- Alarm and fault indications
- Measuring/replacing power components

**Course type**

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

**Methods**

- E-learning, internet-based courses
- Lectures and demonstrations

- Practical exercises with training equipment

**Follow-up training**

- Expert Session and Expert Days

**Duration**

ca. 4 days e-learning

5 days classroom training

**To register:**

Please apply online:

[Motion Upskill/G723](#)

Additional course dates are available on request.

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



Classroom lecture



Hands-on training on demo unit