

## COURSE DESCRIPTION

# G875 ACS6000c Cycloconverter Operation & Maintenance

### Course goal

The participant will learn how to operate, maintain and troubleshoot the ACS 6000c Cycloconverter system. He will also be informed on the road map of his product. The trainee will also learn how to use the available programming and troubleshooting tools with practical exercises.

### Main learning objectives

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

- Understand the safety requirements for medium voltage
- Understand the drive system topology
- Identify drive components and configure settings
- Operate the drive
- Carry out preventive maintenance
- Perform basic troubleshooting tasks
- Locate and replace faulty hardware components

- Software tools
- Hands-on training
- Preventive Maintenance
- Troubleshooting
- Life Cycle information

### Hardware description

#### (power electronics & control)

- Component and PCB functions
- Hardware schematics and electrical drawings
- PCB settings and configuration
- ACS6000c characteristics

### Participant profile

Electricians, technicians and engineers, who will operate, maintain or troubleshoot the ACS6000c Cycloconverter drive system.

### Prerequisites

- Basic knowledge on synchronous motors and drive systems
- Basic knowledge using computers with Windows

### Operation

- Safety requirements
- Energize / de-energize the drive
- Local operation with drive control panel and DriveWindow tool
- Remote control

### 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

### Topics

#### Generalities

- Overview Cycloconverter
- Control hardware
- Power hardware
- Operation

### Course type

This is a face to face class room training with maximum 8 participants.

### Learning methods and tools

- Lectures and demonstrations
- Practical exercises with training equipment
- Factory visit

### Duration

4 days

### To register:

Please apply online ([signup](#) required):

[Motion Upskill/G875](#)

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	DAY 4
<ul style="list-style-type: none"><li>—Course overview</li><li>—Cycloconverter theory</li><li>—System description</li><li>—Hands-on: Replacing thyristors and fiber optics</li></ul>	<ul style="list-style-type: none"><li>—Control topology</li><li>—Control boards</li><li>—Hands-on: Local operation, phase test</li><li>—Factory visit</li></ul>	<ul style="list-style-type: none"><li>—Hands-on: Shaft encoder synchronization</li><li>—Hands-on: SW tool DriveWindow</li></ul>	<ul style="list-style-type: none"><li>—Troubleshooting</li><li>—Preventive maintenance</li><li>—Content review</li><li>—Final exam</li><li>—Course conclusion &amp; feedback</li></ul>



Classroom training



Hands-on training