Course description

G164
ACS800-77LC, operation and maintenance

Course Type
This is a classroom course with hands-on lab activities supported by an instructor.

Course Duration
The course duration is 2 days.

Course Goal
The goal of this course is to teach students to start-up, adjust, operate, maintain, troubleshoot and repair ACS800-77LC Wind Turbine drives.

Student Profile
This course is intended for electricians, technicians, and engineers, who install, operate and service ACS800-77LC Wind Turbine drives.

Prerequisites
Prior to attending this course, students should have
- Basic knowledge of electronics
- Experience in using PCs in the Windows environment

Description
The course contains theoretical presentations and hands-on exercises with ACS800-77 Liquid cooled Wind Turbine Drive unit.

Course Objectives
Upon completion of this course, students will be able to:
- Commission and tune ACS800-77LC drives
- Use the fault tracing methods
- Replace the faulty parts and units
- Operate and maintain ACS800-77LC drives

Main Topics
- Reading and interpreting circuit diagrams
- Installation procedure
- Ethernet adapter communication
- Locating and identifying terminals, boards and other components
- Converter commissioning
- Changing the setting
- Fault indications and maintenance
- DriveWindow commissioning and maintenance tool operations

Low voltage drives training
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Day 1
09:00 Introduction of the course
09:15 System presentation
  ■ product structure
  ■ system functionality
10:15 Break
10:30 Installation
  ■ mechanical installation
  ■ electrical installation
11:00 DriveWindow tool
  ■ connections
  ■ functions
11:30 DriveWindow exercises
12:00 Lunch
13:00 DriveWindow exercises continue
14:15 Break
14:30 Commissioning
  ■ safety
  ■ start-up procedure
16:00 End of the day

Day 2
08:30 Maintenance
  ■ annual maintenance
  ■ ethernet adapter functions
09:00 Fault tracing
  ■ fault indications, loggers, inverter
10:00 Break
10:15 Repair
  ■ replacing the cooling fans
  ■ replacing the inverter module
11:00 Inverter unit and module exercises
  ■ location exercise
  ■ cooling fan exchange exercise
11:45 Lunch
12:30 Inverter module exercise
  ■ module removal
  ■ component location
14:00 Break
14:15 Module installation back to the cabinet
15:00 Ethernet adapter exercise
16:00 End of the course