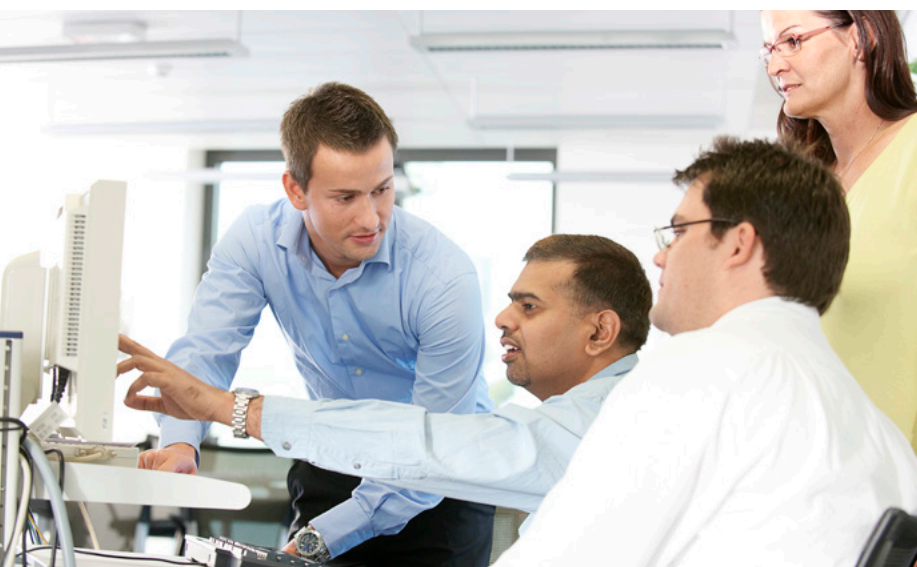


US192

ACS880 Multidrive Operation and Maintenance



Learn programming and troubleshooting tools to start-up, adjust, operate, maintain, troubleshoot, and repair ACS880 MultiDrive digital frequency inverter.

Course type and methods

This is an instructor led workshop with short presentations and demonstrations, extended exercises, and hands-on sessions and discussion.

Student Profile

This training is targeted to electricians, technicians and engineers who install, service and maintain ACS880 MultiDrive.

Prerequisites

Students should have basic knowledge of power electronics and computers.

Course objectives

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

- Communicate with the drive using all available operator interfaces
- Commission and tune the ACS880 MultiDrive frequency inverter
- Explain the relationship and interaction between the drives hardware and software and apply this knowledge to system troubleshooting
- Trace and correct faults using available troubleshooting tools

Main Topics

- Control and operation principles of AC inverters
- Hardware and software overview
- Direct Torque Control (DTC) principles
- Component and circuit board functions
- Reading and interpreting circuit diagrams
- Application software and parameter settings
- Operator panel usage (ACS-AP-x)
- Drives Composer operations
- Start-up, commissioning and fine-tuning
- Fault tracing and trouble-shooting
- Inverter supply sections

Duration

The duration is 4 days

Course Outline

Day 1	Day 2	Day 3	Day 4	Day 4 (Cont.)
<ul style="list-style-type: none">• Course information and introductions• Manuals overview• System overview• DTC Motor/drive concepts• Inverter units<ul style="list-style-type: none">- Main circuit hardware- Control hardware- Circuit diagrams	<ul style="list-style-type: none">• Hardware identification• Hardware lab exercises• Operations panel ASC-AP-x<ul style="list-style-type: none">- Actual values- Parameter handling- Start-up exercise• Software configuration<ul style="list-style-type: none">- Parameters/signals- Control software diagrams- I/O configurations	<ul style="list-style-type: none">• Software configuration (continued)• Drive Composer<ul style="list-style-type: none">- Parameter handling- Fault logger- Monitoring- Data logging- Backup and restore• Drive Composer lab exercises<ul style="list-style-type: none">- Commissioning- Fine tuning- Upload/download	<ul style="list-style-type: none">• Supply sections hardware and software<ul style="list-style-type: none">- DSU- ISU- RRU• Service and troubleshooting<ul style="list-style-type: none">- Fault analysis- Firmware loading- Board replacement- Power component removal and installation	<ul style="list-style-type: none">• Communications<ul style="list-style-type: none">- Modbus- Ethernet- D2D- Master Follower• Troubleshooting lab exercises• Summary<ul style="list-style-type: none">- Review- Q&A

To register, contact the North America Customer Service Center or visit us online ABB Inc.
+1 800 HELP 365 Option 2, Option 4
Fax: +1 919 666 1388
abbuniversity@us.abb.com

abb.us/abbuniversity

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