

CURRICULUM DESCRIPTION

ACS880 Usage & Maintenance

Tuition Fee

\$4,650 per student

Description

The ACS880 Usage & Maintenance training provides customers and end user's trained technicians with the required knowledge to start-up the ACS880. The technician can perform and verify the drive is installed and configured properly for service in the application.

Customer & End User advantages:

- Additional engagement with the factory
- Improved overall customer satisfaction
- Improved life cycle management
- Properly install, commission, and maintain a drive
- Extended life of drive & increased production time

Student Profile

This course is intended for customers and end users with experience working with and installing LV Drives. Students of this course would be responsible for installation and technical services related to maintaining LV Drives.

Training Type and Duration

This course is **2.5 days of instructor-led training class** that includes hands-on lab exercises to achieve course objectives. This course also includes approximately **18+ hours of prerequisite eLearning**.

Prerequisites

Participants must have:

- Experience working with power electrical equipment and voltage levels of up to 690Vac
- The ability to use test equipment such as multi-meters and oscilloscopes
- Knowledge of LV AC Drive theory and operation
- An understanding of basic motor control
- Product operational knowledge of the ACS880
- Familiarity with product commissioning PC tools and basic computer skills

Goal

The ACS880 Usage & Maintenance training provides the student with comprehensive instruction in the installation, wiring, and commissioning of LV Drives. The curriculum combines on-line, instructor-led, and hands-on lab exercise training.

This training incorporates hands-on commissioning of a wall-mount drive. Training focuses heavily on wall-mount drives (up to 350 HP). It also includes e-Learning and video modules regarding commissioning of ACS880-07 cabinet drives (up to 700 HP). The course includes commissioning practices for standard analog controlled installation and installations utilizing fieldbus communications.

Learning Objectives

Upon successful completion of this training, participants will have the required knowledge to:

- Apply basic safe work practices for installation and commissioning of LV Drives
- Understand the risks associated with LV Drives
- Understand the installation requirements for an ACS880
- Apply best wiring practices for LV Drives
- Commission an ACS880 using fieldbus comms and both the ABB "Assistants" and "Bluetooth" control panels
- Diagnose and troubleshoot basic commissioning faults and quickly correct site-related installation issues
- Replace select faulty hardware components
- Utilize Drive Composer Entry/Pro to commission, troubleshoot, and monitor an ACS880 drive
- Follow ABB's Maintenance Schedule to minimize downtime and ensure peak performance from their ACS880

Student Materials

Upon completion each student will receive:

- Student Manual with all training materials
- All necessary ACS880 hardware and firmware manuals (upon request, in PDF format)

Training locations and scheduling

This training is conducted in our New Berlin, WI facility. For a schedule of other training opportunities please visit the Drives, PLC, and Motion Training website at:
<http://new.abb.com/service/training/abb-university/united-states/drives>.

Agenda

Day 1	Day 2	Day 3
8:00AM – 5:00PM <ul style="list-style-type: none">• Course Introduction• Installation Start-up Review Presentation• Review of prerequisite video/e-Learning modules• Power Labs Safety Presentation• Basic Wiring & Power-up Lab• Analog Start-up Lab• Drivetune-Functions Lab• (Optional) Programming Exercise Labs• Day 1 Summary	8:00AM – 4:30PM <ul style="list-style-type: none">• Study of Speed/Torq SW Diagrams• Speed Regulator Tuning Lab• Drive Composer Intro Lab• ACS880 Connectivity• ACS880 Modbus TCP Comm Lab• ACS880 Circuit Boards• ACS880 Hardware Mecahnics• ACS880 Maintenance• Review of ACS880 Maintenance Sched.• Capacitor Reforming• Explanation of Day 3 Lab Exercises• Day 2 Summary	8:00AM – Noon <ul style="list-style-type: none">• ACS880 R1-R5 Service Lab• ACS880 Troubleshooting Faults Lab• Drive Composer Intro Lab• Survey• Day 3 Summary• Dismissal

Note: Students will have access to ABB provided laptop with software and tools used in the training at no additional cost. Students who wish to use their own PC's for training are required to purchase, install, and test the current software versions prior to attending a classroom training event. ABB will not troubleshoot student owned PC's.

