

CURRICULUM DESCRIPTION

ACS880 DASC Training

DASC (Drives Authorized Service Contractor)

Tuition

Value: \$4,650

Tuition is at no cost to DASC Members. See "[Training Class Cancellation Policy](#)" for details.

Description

This course is designed to provide Drives Authorized Service Contractors with the parts replacement knowledge and exercises to service and repair drives in the field. The course will cover safe working practices, advanced commissioning methods, basic troubleshooting for major drive components, and disassembly/reassembly of LV drives. The G380 ACS880 Authorized Start-up program is a required prerequisite.

Student Profile

The student is responsible for installing, commissioning, servicing, and maintaining the ACS880 Drives. The student must be employed by a DASC company. If the student is not an employee of an authorized DASC company, please contact ABB Training for a more appropriate course.

Training Type and Duration

The ACS880 DASC training program is 2 days of instructor-led training, including lab exercises. This course also includes approximately 16+ hours of prerequisite eLearning.

Prerequisites

Participants must have:

- Successful completion of an ACS880 Authorized Start-Up class
- 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
- Product Overview training program for the ACS880
- Familiarity with product commissioning PC tools, and basic computer skills

Learning Objectives

The objective of this course is to teach students to adjust, operate, maintain, troubleshoot, and repair the ACS880 AC Drive using available programming and troubleshooting tools. This DASC Service training program focuses on wall-mount drives up to 350HP.

Upon successful completion of this training, participants will obtain the following:

- Ability to apply basic safe work practices while they maintain, troubleshoot, and repair LV Drives
- Awareness and understanding of the risks associated with LV Drives
- A complete understanding of the installation requirements for a LV AC Drive
- Best wiring practices for LV Drives
- Experience commissioning an ACS880 using fieldbus communications
- Experience diagnosing and troubleshooting basic commissioning faults, and quickly correcting site-related installation issues
- Knowledge and experience repairing & replacing faulty hardware components
- Experience programming and troubleshooting the drive via Drive Composer Pro

Student Materials

Upon completion each student will receive:

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

Drive Authorized Service

The DASC program is comprised of third-party companies in the US and Canada and is used to provide start-up and on-site repair services for ABB LV Drive products. DASC participants are authorized to repair ABB LV Drives, which are warranty or non-warranty. Warranty repairs are managed by ABB LV Drives Technical Support. Non-warranty repairs are managed by the authorized DASC company.

Information to become an authorized DASC

Contact the local district office in your area to obtain an application for DASC authorization. The application is subject to an approval process. Students can enroll in DASC programs when the application reaches a pending status.

Training locations and scheduling

This training is accomplished using eLearning and in-person instruction. For a schedule of other training opportunities please visit the Drives, PLC and Motion Training website at:

<https://new.abb.com/service/training/abb-university/united-states/drives>.

Agenda

Day 1	Day 2
8:00 a.m – 4:30 p.m. <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 2 Lab Exercises• Day 1 Summary	8:00 a.m. – 5:00 p.m. <ul style="list-style-type: none">• VFD & Panel Firmware Updates Lab• R6-R9 Frame Dis/Reassembly Lab• Warranty Directives - Repair & Replacement• Parts Docs Knowledge Base• Study of ACS880 R1-R9 Schematics• ACS880 Troubleshooting Faults Lab• ACS880 R1-R5 Service Lab• Completion of Lab Exercises• Survey• Day 2 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.

