

CURRICULUM DESCRIPTION

ACS800 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 specifically designed to provide Drive Authorized Service Centers with the part replacement knowledge and exercises to service and repair drives in the field. The class will cover safe working practices, basic troubleshooting for major drive components, and disassembly and reassembly of LV drives.

Training Type and Duration

This curriculum is a 1.5-day instructor-led training class that includes hands-on lab exercises to achieve course objectives. The program includes prerequisite e-learning courses. It is recommended that students complete these e-learning courses before attending the class.

Student Profile

This course is intended for electricians, technicians, and engineers responsible for installing, servicing, and maintaining the ACS800 Drives. The student must be an employee of an authorized DASC company. If the student is not an employee of company, please contact ABB Training for a more appropriate course.

Prerequisites

Participants must have:

- ACS800 Authorized Startup
- Experience working with power electrical equipment and voltage levels of up to 690Vac
- Knowledgeable in using test equipment such as multi-meters, oscilloscope, and computer skills
- Basic understanding of LV AC Drives
- Understanding of basic motor control
- Understanding of LV AC Drive operation
- Product operational knowledge of the ACS800
- Attended ACS800 product overview training
- Familiarity with product commissioning PC tools

Goal

The goal of this program is to teach students to adjust, operate, maintain, troubleshoot, and repair the ACS800 AC wall-mounted drive between 1-150 horsepower using available programming and troubleshooting tools.

Learning Objectives

Upon successful completion of this training, participants will be able to:

- Apply basic safe work practices for installation and commissioning of LV Drives
- Understand the risks associated with LV Drives
- Gain complete understanding of the installation requirements for a LV AC Drive
- Apply best wiring practices for LV Drives
- Commission an ACS800 including fieldbus communications
- Perform basic commissioning fault diagnostics and quickly correct installation issues on site
- Program and troubleshoot the drive via DrivesWindow
- Troubleshoot and correct faults using available tools

Student Materials

Upon completion each student will receive:

- Student binder with all training materials
- The Basic Guide to Installing an AC Drive
- The Basic Guide to Commissioning the ACS800

Drive Authorized Service

The DASC program comprises of third party companies in the US and Canada 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: <http://new.abb.com/service/training/abb-university/united-states/drives>.

Agenda

Day 1	Day 2
1:00 p.m. – 5:00 p.m. <ul style="list-style-type: none">• Course Introduction• ACS800 Warranty Directives, Repair & Replacement• Troubleshooting Worksheet/Lab Exercise• Troubleshooting tips from the factory• Software Flow Diagrams – Signal Tracing	8:00 a.m. – 5:00 p.m. <ul style="list-style-type: none">• Hardware Overview & Troubleshooting• Schematic Review (R2 – R6 Frames), Static Checks• Component Replacement Procedures• Hardware Replacement Lab Exercises, Parts ID• Parts Availability, Matrix, Support Documents• Supplement Documentation, Knowledge Base

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.