

CURRICULUM DESCRIPTION

DCS800 DASC Training

DASC (Drives Authorized Service Contractor)

Tuition Fee

Value, \$1780; offered at no charge for DASC members.

See "[Training Class Cancellation Policy](#)" for details.

This training is NOT open to non-DASC Members.

Description

This program is specifically designed to provide students with the knowledge and hands-on experience to perform basic service during and after the warranty period. The class will cover safe working practices, warranty directives, hardware for wall mount drives, preventative maintenance, basic troubleshooting, and servicing. This DASC Service training program focuses on wall-mount and cabinet drives up to 1100HP.

Student Profile

This program is intended for electricians, technicians, service and maintenance personnel, and engineers responsible for installing, servicing or maintaining DC Drives. To attend this class, the student must be an employee of an authorized DASC company. If the student is not an employee of said company, please contact ABB Training for a more appropriate course.

Training Type and Duration

This curriculum is a 1.5 day instructor-led training class that includes lab exercises to achieve learning objectives. The US9112 program contains prerequisite e-learning courses and is recommended that students complete these courses before attending the class.

Prerequisites

Participants must have:

- Qualified to work on electrical equipment, motors and drives.
- Experience working with power electrical equipment and voltage levels up to 690Vac
- Knowledgeable using test equipment such as multi-meters, oscilloscopes, and basic computer skills
- Basic understanding of LV DC Drives
- Understanding of basic motor control

Goal

The goal of this program is to teach students how to troubleshoot and service wall mounted DCS800 DC drives. The course assumes students are currently Authorized Start-up qualified and can install and commission the drive.

Learning Objectives

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

- ... Understand hardware components associated with DCS800 DC drives frame D1 – D5
- ... Understand and perform the preventative maintenance required for DCS800 DC drives frame D1 – D5
- ... Perform Basic fault tracing and trouble-shooting related to the DCS800 DC drives frame D1 – D5
- ... Know where to find spare parts for the DCS800 DC drives frame D1 – D5
- ... Replace the control boards
- ... Replace the control panel, Cover, skeleton and panel holder
- ... Replace the fan(s)
- ... Replace the firing and measuring board and or fuses.
- ... Replace the thyristors of the main circuit and or field.
- ... Replace the Transducers
- ... Replace option Modules
- ... Replace the Thermal Sensor and Resistor

Student Materials

Upon completion each student will receive:

- Student manual with all training materials including practice labs
- The DCS800 Firmware Manual
- The DCS800 Hardware Manuals
- The Warranty Directive
- The DCS800 Service Manual

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 entirely eLearning, and self-paced. 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
8:00AM – 5:00PM	8:00AM – 12:00PM
Course Introduction	Exercises D1 – D5
Internal Hardware	Course Review
Preventative Maintenance	Evaluations
Fault Tracing & Replacing the Thyristers	
Spare Parts	
Exercises D1 – D5	

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.