

CURRICULUM DESCRIPTION

DCS880 Training Installation & Commissioning

Tuition Fee

\$3,400 per student

Description

This program provides the student with comprehensive instruction in the installation, wiring, and commissioning of LV (low voltage) DC (direct current) drive including commissioning for frame size H1-H8 modules, and practices for standard analog controlled installation, and installations utilizing fieldbus communications.

Student Profile

This program is intended for personnel that are experienced working with and installing LV DC Drives. The students are responsible for installation and technical services related to installation LV DC Drives.

Training Type and Duration

This curriculum is 16 hours (2 days) using a combination of eLearning and instructor-led classroom training, including approximately 40 % hands-on lab exercises.

Prerequisites

Participants must have:

- Competence using Microsoft Windows®
- Basic knowledge of motors, motor control, power electronics, and electrical circuits
- Completed all the following eLearning modules prior to attending the classroom training;
 - Qualification for Power Equipment
 - Lock-Out-Tag-Out Training Confirmation
 - LV_Drive_Safety-Presentation
 - LV_Drive_Safety-Presentation Video
 - DC_Motor_Fundamentals
 - Drive Composer Pro fundamentals
 - Installed Base - Warranty Registration Procedure
 - ACS-AP-I All-Compatible Panel Fundamentals

Goal

This program provides end user trained technicians with the knowledge and capability to Start-Up DCS880 Drives. The technician can perform the drive installation and configure the drive properly for service in the application.

Learning Objectives

Upon successful completion of this program, students will obtain the following:

- Gain skills to apply basic safe work practices for installation and commissioning of LV DC Drives
- Understand the risks associated with LV DC Drives
- Understanding the installation requirements for a LV DC Drive
- Apply best wiring practices for LV DC Drives
- Commission a DCS880 including fieldbus communications
- Perform basic commissioning fault diagnostics and quickly correct installation issues on site

Student Materials

Upon completion each student will receive:

- Student manual with all presentations and exercises
- Product Installation and Commissioning manuals in PDF format

Training locations and scheduling

This is a classroom training held in New Berlin Wisconsin. 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

eLearning	Classroom	Classroom
<p>Pre-Requisites</p> <ul style="list-style-type: none"> • Qualification for Power Equipment – (US0010t) • DCS880 ASU LOTO Confirmation– (9CSC013747t) • LV_Drive_Safety-Presentation – (US1008e) • LV_Drive_Safety-Presentation Video – (US1008v) • DC_Motor_Fundamentals– (US1212e) • Drive Composer Pro Fundamentals- (G376e) • Installed Base - Warranty Registration Procedure- (G6281e) • ACS-AP-I All-Compatible Panel Fundamentals- (G374e) 	<p>Day 1</p> <p>8:00 a.m. ~ 5:00 p.m.</p> <ul style="list-style-type: none"> • Welcome and Introductions • DCS880 Technical Presentation • DCS880 Dimensioning and Configuration • DCS880 Installation Mechanical • DCS880 Installation Electrical • Power Labs Exercise Safety • Basic Wiring & Power Up Lab 	<p>Day 2</p> <p>8:00 a.m. ~ 5:00 p.m.</p> <ul style="list-style-type: none"> • DCS880 Keypad Commissioning & Macros • DCS880 Basic Commissioning Lab Exercise • DCS880 Before and After Power Up • DCS880 Field Supplies • Introduction to Drive Composer Lab Exercise • DCS880 12-Pulse & Hard Paralleling Power Units • DCS880 Functional Safety STO • Q&A Session - Wrap up • Class Evaluations

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.

