CURRICULUM DESCRIPTION

ACS880-11 & -31 Training

Usage & Maintenance

Tuition Fee
Tuition is $1780 per student

Description
This program provides the student with comprehensive instruction in the installation, wiring, and commissioning of LV Drives.

The training program for the ACS880 Regenerative and Low Harmonic drives focuses on installation, troubleshooting and maintenance of wall-mount drives from 5 up to 150HP. The course includes commissioning practices for standard analog controlled installations utilizing fieldbus communications.

Student Profile
This program 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 the ACS880-11 or ACS880-31 AC drives.

Training Type and Duration
This curriculum is 24 hours (3-days) of instructor-led training. In addition, eLearning pre-requisites prepare students for classroom sessions. Approximately 70% of the program is hands-on lab exercises.

Prerequisites
Participants must have:

- Experience working with power electrical equipment and voltage levels of up to 690Vac
- Basic understanding of LV AC Drives
- Understanding of basic motor control
- Understanding of LV AC Drive operation
- Product operational knowledge of the ACS880
- Familiar with product commissioning PC tools
- 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
  - Product Introduction (ACS880-11 & ACS880-31)

Goal
The goal of this program is to provide participants with the information, skills and tools necessary to operate and maintain the ACS880 regenerative and Ultra low Harmonic drive. The focus is for the student to be self-sufficient in properly installing, programming and maintaining the drive.

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 and avoid situations that would jeopardize safety
- Apply the installation requirements for an ACS880 Regenerative and Ultra Low Harmonic AC Drive
- Apply best wiring practices for LV Drives
- Commission an ACS880-11 & -31 drive including fieldbus communications to meet specifications
- Perform basic fault diagnostics and quickly correct installation and operational issues on site

Student Materials

Upon completion each student will receive:

- Student manual with all presentations and exercises.
- Product Installation and Commissioning manuals
- The Basic Guide to Installing an AC Drive.

Training locations and scheduling

This training is a combination of eLearning and Instructor led class. 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
8:00 AM – 5:00 PM	**8:00 AM – 5:00 PM**	**8:00 AM – 5:00 PM**
• Introduction/Course Overview • ACS880-11, -31 Product Review • Mechanical Installation • Electrical Installation • Best Wiring Practices • Control Panel & Macros • Commissioning (ID Run types) • Lab Overview • Before & after applying power (commissioning) • Software Flow Diagrams (Signals, Start, & Groups)	• Software Flow Diagrams (Groups 22-28, 30, 97, Reference, Limits) • Speed Regulator Tuning Lab • Faults & Warnings Lab • Drive Composer Presentation/Demo • Drive Composer Pro Lab • Industrial Fieldbus • Modbus TCP – Fieldbus Lab	• Hardware Mechanics Overview/ID (R3, R6, R8) • Block Diagram Schematics • Hardware Static Checks/Lab • Hardware Component Identification & Lab • Component Replacement Procedures • Drive Maintenance & Troubleshooting

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.