

CURRICULUM DESCRIPTION

ACS800-67AC Usage & Maintenance Training

Tuition Fee

\$7,400 per student

Description

This course will cover safe working practices, preventative maintenance and basic troubleshooting. This training will aid the customer in reducing down time and give them the knowledge to decrease total cost of ownership.

Student Profile

The students should be electricians, technicians, service /maintenance personnel, and engineers responsible for installing, service, or maintaining a wind turbine drive system.

Training Type and Duration

This is an instructor led workshop with short presentations and demonstrations, extended exercises, and hands-on sessions and discussion.

Classroom training program is 3 days of instructor-led training including lab exercises. The program also includes pre-requisite e-Learning courses that must be completed before class begins.

Prerequisites

Participants must have:

- Experience working with power electrical equipment at voltage above 480Vac
- The ability and knowledge for use of test equipment such as multi-meters or oscilloscope and basic computer skills
- A basic understand of AC drives
- An understanding of basic motor control

Goal

To provide individuals listed in the student profile with the knowledge and capability to work on the ACS800-67AC cabinet and drives listed in the description.

Learning Objectives

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

- Be able to apply basic safe work practices for use and general maintenances of wind turbine drives
- Be aware of and understand the risks associated with wind turbine drives
- Program and utilize standard software features of the drive
- Locate parts in the ACS800-67 air cooled cabinet
- Understand the schematic layout of the system and the drives
- Identify and remove drive unit(s), breakers, and other parts from the cabinet
- Install, startup, operate, and troubleshoot the Drives Window Program
- Navigate an ACS800-67 air cooled cabinet electrical and communication wiring diagram

Student Materials

Upon completion each student will receive:

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

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

Classroom		
<p>Day 1</p> <p>8:00 a.m. ~ 5:00 p.m.</p> <ul style="list-style-type: none">• Introduction• ESD review• Theory of operation• System description• ACS800-67AC Cabinet layout and parts identification• Hardware discussion• ACS800 Inverter: parts ID, removal of units and breaker, parts location and removal, troubleshoot components, and power cabinet components• Maintenance• Different types of environments	<p>Day 2</p> <p>8:00 a.m. ~ 5:00 p.m.</p> <ul style="list-style-type: none">• How to read schematic diagrams• R8i and LCL schematic• Power Cabinet schematic• Converter Cabinet schematic• Schematic circuit tracing lab	<p>Day 3</p> <p>8:00 a.m. ~ 5:00 p.m.</p> <ul style="list-style-type: none">• Firmware Manual• Fault codes• Intro to Drives Windows• Tour of the facility• Drives Windows overview• Drive Window Walkthrough lab• Install and startup, troubleshooting with fault logger• Backup and restore functions• Parameter files (Hexadecimal to binary conversion, cross referencing firmware manual)• Monitor view• Data logger• Control panel exercises• Open forum

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 PCs 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.