

CURRICULUM DESCRIPTION (US9446)

ACH580 Training Usage & Maintenance

Tuition Fee

\$4,650 per student

Description

This course is specifically designed to provide students with the knowledge and hands-on experience to properly apply the ACH580 drives and E-Clipse to maximize their useful life. The class will cover safe working practices, installation, commissioning, preventative maintenance and basic troubleshooting. This training will aid the customer in reducing product down time and give them the knowledge to decrease total cost of ownership.

Student Profile

This course is intended for electricians, technicians, service and maintenance personnel, or engineers responsible for installing, servicing or maintaining AC Drives.

Training Type and Duration

This curriculum is a combination of eLearning and instructor-led training. Curriculum consists of 6 hours of eLearning and 28 hours of instructor-led classroom training, which includes approximately 60% hands-on lab exercises.

Prerequisites

Participants must have:

- Competence using Microsoft Windows®
- Basic knowledge of motors, motor control, power electronics, and electrical circuits
- Experience working with power electrical equipment and voltage levels up to 690VAC
- Ability to use test equipment such as multi-meters or oscilloscopes and basic computer skills
- Completed all the following eLearning modules prior to attending the classroom training

Goal

The goal of this course is to teach students how to install, start-up, adjust, operate, maintain, and troubleshoot the ACH580 and E-Clipse packages 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
- Understand the installation requirements for a LV AC Drive
- Apply best wiring practices for LV Drives
- Commission an ACH580 and E-Clipse packages
- Program and utilize standard software features of the drives
- Monitor signals in the ACH580 control panel for configuration and troubleshooting
- Configure the drive using the Primary Settings
- Configure and program the E-Clipse bypass
- Develop supervisory functions to automatically generate maintenance reminders on auxiliary mechanical equipment
- Perform basic fault diagnostics and quickly correct installation issues on site
- Troubleshoot and correct faults using available tools
- Plan and perform preventative maintenance drive
- Learn how to use the free software tool to program, graph and troubleshoot the drive

Student Materials

Upon completion each student will receive:

- Student manual with all presentations and exercises

Training locations and scheduling

This training is comprised of self-paced eLearning, and instructor-led classroom sessions. 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	Day 4
8:00am -5:00pm	8:00am -5:00pm	8:00am -5:00pm	8:00am -12:00pm
Installation-Mechanical	Basic Commissioning Lab	Software Flow Diagrams	R1 – R9 Repair (Fan, Contr Bd Repl) Lab cont.
Installation-Electrical	Advanced Features Lab	Introduction to Drive Composer Tool	Troubleshooting Faults Lab cont.
Power-Lab Exercise Safety PPE	ACH580 Eclipse Installation and Wiring	80 Series Drives Platform Solutions Connectivity	
Basic Wiring and Power-up Lab	ACH580 Eclipse Basic Startup Lab	ACH580 Communications Lab	
ACH580 Keypad Commissioning	ACH580 Communications	Block Diagram/Hardware	
Commissioning using Primary Settings	ACH580 ULH Overview and Commissioning	80 Series Drives Circuit Board Review	
ACH580 Before & After Applying Pwr	ACx580 Tech Support Issues	80 Series Drives Faults & Alarms	
	Installation Start-up Review	Static Checks Procedure - What to Look for / Where to Find it	
		Static Check Replace Fan and Control Bord Labs	
		Troubleshooting Lab	

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.

