

CURRICULUM DESCRIPTION (US9149)

ACH550 Usage and Maintenance Training

Tuition

Value: \$4,650

Tuition is at no cost to Channel Partners. See [“Training Class Cancellation Policy”](#) for details.

Description

This program is designed to provide students with the knowledge and hands-on experience to properly apply the ACH550 drive and maximize its useful life. The program 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.

Training Type and Duration

This program includes 2.5 days of instructor-led training that includes hands-on lab exercises to achieve course objectives. The US9149 program contains prerequisite e-learning courses that must be completed prior to the instructor-led class.

Student Profile

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

Training location and scheduling

The instructor-led class is offered at our New Berlin, WI training facility. Additionally, this training program can be held at a customer provided location or at a regional location such as a hotel or other event facility.

Prerequisites

- Experience working with power electrical equipment and voltage levels up to 690Vac
- Knowledgeable in using test equipment such as multi-meters, oscilloscopes, and basic computer skills
- Basic understanding of LV AC Drives
- Understanding of basic motor control

Learning Objectives

The goal of this program is to teach students to install, start-up, adjust, operate, maintain, and troubleshoot the ACH550 AC Drive, with and without bypass, using available programming and troubleshooting tools.

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

- Apply basic safe work practices for installation and commissioning of LV Drives
- Understand the risks associated with LV Drives
- Complete understanding of the installation requirements for a LV AC Drive
- Apply best wiring practices for LV Drives
- Commission an ACH550 with and without bypass
- Program and utilize standard software features of the drives
- Monitor signals in the ACH550 and bypass control panel for configuration & troubleshooting
- Understand how to utilize the macros available in the ACH550 drives
- Configure and apply supervisory functions available in the ACH550 and bypass
- Use 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
- Troubleshoot and correct ACH550 and bypass interface issues
- Plan and perform preventative maintenance on the ACH550 drive

Student Materials

Upon completion of the instructor-led class, each student will receive:

- Student manual with all training materials including practice labs
- The Basic Guide to Installing an AC Drive
- The ACH550 Master User Manual

Agenda

Day 1	Day 2	Day 3
8:00 a.m. – 5:05 p.m. <ul style="list-style-type: none"> • Introduction / About this Course/ Lab Safety Procedures • ACH550 Basic Analog Startup Lab • ACH550 Supply Fan Macro Lab • Parameter Configurations (Groups 1-11 and 16) • Parameter Configurations Lab Exercise (Groups 1-11 and 16) • Parameter Configurations (Groups 20-26) • Parameter Configurations Lab Exercise (Groups 20-26) • Process Variable Programming / Supervision Groups (32 & 34) • Process Variable Programming / Supervision Lab Exercise 	8:00 a.m. – 4:45 p.m. <ul style="list-style-type: none"> • Hardware troubleshooting • ACx550 Troubleshooting and Faults • E-Clipse Startup Lab • ACH550 Troubleshooting Faults and Alarms Lab Exercise • ACH550 Troubleshooting Faults and Alarms Worksheet Lab Exercise • Factory Tour • ACH550 Base Hardware Schematics • ACH550 Base Hardware Static Checks Lab • ACx550 Fan and Control Board Replacement • ACS550 Hardware Lab Component Replacements • Drive Services 	8:00 a.m. – 12:00 p.m. <ul style="list-style-type: none"> • DriveWindow Light Lab Exercise & Lab Exercise Review • ACH550 Communications / CAS BACnet Explorer Lab Exercise • ACH550 Communications / CAS BACnet Explorer Lab Exercise

