



Program Description (9TPC001565-US-EN)

# ACQ580 Training

## Installation & Commissioning

### Tuition Fee

\$3,400 per student

### Description

The Installation & Commissioning training program for the ACQ580 drives provides participants with comprehensive instruction in the installation, wiring, and commissioning of LV Drives. The program focuses on both wall mount and enclosure installations of drives up to 350HP. This training includes commissioning practices for both standard analog controlled and for fieldbus communications controlled applications.

### Goals

The goal of this program is to provide participants with the information, skills, tools, and training necessary to be self-sufficient in assessing and properly installing the ACQ580 VFD, including configuring the drive, tuning the drive, and performing complete commissioning services.

### Training Type and Duration

This curriculum is 16 hours (2 days) using a combination of eLearning and instructor-led classroom training, including approximately 55% hands-on lab exercises.

### Student Profile

The program is intended for personnel that are experienced working with and installing LV Drives. Students who complete the Installation & Commissioning program would be responsible for installation and technical services related to maintaining LV Drives.

### Prerequisites

Participants must have:

- Experience working with power electrical equipment and voltage levels of up to 690Vac
- Understanding of basic motor control and LV AC Drives
- Operational knowledge of the ACQ580 product
- Competence using Microsoft Windows® computers
- Familiarity with PC-based drives commissioning tools
- Completed all associated eLearning modules prior to enrolling in the Instructor Led classroom training

### Installation & Commissioning Program

The Installation & Commissioning program provides End User trained technicians with the knowledge and capability to safely startup LV Drives. Trained technicians can verify that the drive is installed and configured properly for service in the application.

Program benefits:

- Properly installed and commissioned drive
- Extended life of drive product
- Increased production and process up time

### 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
- Define the risks associated with LV Drives
- Identify proper ACQ580 hardware mounting details for various drive frame sizes
- Apply best wiring practices for ACQ580 electrical connections for the motor voltage and for control I/O
- Commission an ACQ580 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
- The Basic Guide to Installing an ACQ580 Drive

## Agenda

eLearning	Classroom	Classroom
<p>Pre-Requisites</p> <ul style="list-style-type: none"> <li>• Qualification for Power Equipment – (US0010t)</li> <li>• Lock-Out-Tag-Out-Confirmation – (9CSC000688t)</li> <li>• LV_Drive_Safety-Presentation – (US1008e)</li> <li>• LV_Drive_Safety-Presentation Video – (US1008v)</li> <li>• ACxxx Product Introduction – (9TPC000xxx)</li> </ul>	<p>Day 1</p> <p>8:00 a.m. ~ 5:00 p.m.</p> <ul style="list-style-type: none"> <li>• Welcome and Introductions</li> <li>• Website familiarization - <a href="https://new.abb.com/drives/segments/water-and-wastewater">https://new.abb.com/drives/segments/water-and-wastewater</a></li> <li>• ACX580 Installation-Mechanical (Wall-Mount)</li> <li>• ACX580 Installation-Electrical (Wall-Mount)</li> <li>• Commissioning using Primary Settings</li> <li>• PPE &amp; LOTO Review &amp; Lab Exercise Preview</li> <li>• ACQ580 Basic Wiring / Power-up Lab Exercise</li> <li>• ACX580 Before &amp; After Applying Pwr (Commissioning)</li> <li>• ACX580 Review - Assign Homework (Common Parameters)</li> </ul>	<p>Day 2</p> <p>8:00 a.m. ~ 5:00 p.m.</p> <ul style="list-style-type: none"> <li>• ACQ580 Review / Open Quiz (Common Parameters)</li> <li>• ACQ580 Basic Start-up Lab Exercise - Power Applied</li> <li>• ACQ580 Connectivity</li> <li>• ACQ580 ULH Overview and Commissioning</li> <li>• ACx580 Tech Support Issues</li> <li>• Installation Start-up Review</li> <li>• ProceduresQ&amp;A Session - Wrap-up</li> <li>• Class Evaluations</li> </ul>

*Note: Students will have access to ABB provided Laptops 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.*

