

G890

ACS580MV Operation and Maintenance

Course Description

Course Goal

The goal of this course is to train the participants in the safe operation, control, configuration, troubleshooting and maintenance of the ACS580MV.

Through various training methods the students will develop their knowledge and skills in troubleshooting and maintenance work.

Learning Objectives

Upon completion of this course the participants will be able to:

- Understand the protection and safety concepts of the drive.
- Identify drive components, configure settings and understand the drive system topology.
- Operate the drive, familiar with the control panel and the parameters.
- Carry out maintenance tasks.
- Perform basic troubleshooting tasks, using data loggers, fault loggers and DriveComposer tools.

Participant Profile

This training is targeted to electricians, technicians and engineers who will operate, maintain or troubleshooting the ACS580MV drive system. This course is only suit for the end user.

Prerequisites

Basic knowledge on asynchronous machine and drive.
Well using of MS Windows based computers.



Topics

- Overview
- Control hardware
- Power hardware
- Site inspection and safety
- Operation
- Application software
- Software tools
- Protection concept
- Preventive Maintenance
- Troubleshooting

Course Type and Methods

This is an instructor led course with classroom discussion and demo unit practice, about 50% hours for hands-on exercises.

Duration

The duration is 3 days.

G890

ACS580MV Operation and Maintenance Course Description

Day 1	Day 2	Day 3
<ul style="list-style-type: none">▪ Product overview<ul style="list-style-type: none">▪ System configurations▪ Technical data and options▪ Control hardware<ul style="list-style-type: none">▪ Control boards▪ I/O and optional modules▪ Auxiliary power supply▪ Hands-on exercises<ul style="list-style-type: none">▪ Identify the components▪ Analysis the drawing	<ul style="list-style-type: none">▪ Power hardware<ul style="list-style-type: none">▪ Main circuit diagram▪ Phase modules▪ Charging and discharging▪ Air cooling principle▪ Application software<ul style="list-style-type: none">▪ Software functions▪ Parameters setting▪ Hands-on exercises<ul style="list-style-type: none">▪ ACS-AP control panel▪ DriveComposer tools	<ul style="list-style-type: none">▪ Site inspection and safety<ul style="list-style-type: none">▪ Preconditions▪ Field safety▪ Protection concept<ul style="list-style-type: none">▪ Fault and trip level▪ Troubleshooting▪ Preventive maintenance<ul style="list-style-type: none">▪ PM introduction▪ Maintenance schedule▪ Hands-on exercises<ul style="list-style-type: none">▪ Operation the drive▪ Monitor the running▪ Troubleshooting▪ Function testing▪ Measure and replace the phase module

G891

ACS580MV Service and Commissioning

Course Description

Course Goal

The goal of the course is to introduce and instruct the service and commissioning engineer to the ACS580MV. To allow them to learn in a safe and instructive environment the techniques required to carry out the correct procedure in commissioning, servicing and maintaining the ACS580MV.

Learning Objectives

Upon completion of this course the participants will be able to:

- Identify drive components, configure settings and understand the drive system topology
- Know the protection and safety concepts of the drive
- Operate the drive, energizing, de-energizing, start, stop and adjust speeds
- Carry out service and maintenance work as well as fault-tracing, be able to locate and replace faulty hardware components
- Carry out the commissioning of the ACS580MV drive system in the most efficient manner using the corresponding tools
- Perform basic troubleshooting tasks, using data loggers, fault loggers, and DriveComposer

Participant Profile

This training is targeted at Service and Commissioning engineers, testing and maintenance personnel, ABB personnel and service partner. This course is only suit for ABB engineer.

Prerequisites

Engineers with previous working experience on ABB drive's (low or medium voltage) and motors.
Good personal computer skills and English knowledge are essential.
Laptops recommended (with DriveComposer and DriveStartup loaded) but not essential.
Finished the e-Learning course G790e and G791e.



Topics

- Overview
- Control hardware
- Power hardware
- Site inspection and safety
- Installation of the drive
- Operation
- Application software
- Software tools
- Protection concept
- Commissioning
- Preventive Maintenance
- Troubleshooting

Course Type and Methods

This is an instructor led course with classroom discussion and demo unit practice, about 60% hours for hands-on exercises.

Duration

The duration is 4 days.

G891 ACS580MV Service and Commissioning Course Description

Day 1	Day 2	Day 3
<p>Product Overview Technical data Configurations Used basic modules</p> <p>Control Hardware PCB boards I/O and option modules Auxiliary supply concept</p> <p>Hands on Exercises Local operation Locate the components Drawing analysis</p>	<p>Power Hardware Main circuit and phase module Function of components</p> <p>Safety and Installation Site Inspection and Safety Mech. and Elec. installation</p> <p>Hands on Exercises Control panel Drive composer Downloading firmware</p>	<p>Protection Concept Fault and tripping classes Protection sequence Typical cases discussion</p> <p>Application Software Compatibility and parameter</p> <p>Preventative Maintenance Maintenance schedule</p> <p>Hands on Exercises DriveStartup exercises</p>
Day 4		
<p>Hands on Exercises DriveStartup exercises (con.) Trouble shooting exercises Commissioning practice Parameters setting exercises Phase module handling</p> <p>Course conclusion/feedback</p>		