
CANADIAN CATALOG

Product Training Motion



Your gateway to a comprehensive training portfolio

Training programs for engineers, programmers, maintenance and operations personnel provide up-to-date technical expertise for existing and new products, processes, and technology advances.

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G3590 ACH580

ACH580 Start-up & Maintenance Training

Description

The Authorized Start-Up training program for the ACH580 drives provides participants with comprehensive instruction in the installation, wiring, and commissioning of LV Drives. The program focuses on both wall mount, E-Clipse Bypass and enclosure installations of drives up to 350HP. This training includes commissioning practices for both standard analog controlled and for fieldbus communications controlled applications.

Student Profile

The program is intended for ABB authorized channel partners that are experienced working with and installing LV Drives. Students who complete the Authorized Start-Up program would be responsible for installation and technical services related to maintaining LV Drives.

Certification required

- LV Drive - General Competence
- Technical Support - LV AC drives
- Technical Support - ACH580-01

Tools required

- Microsoft Windows® Computers
- Drive Composer Entry or Pro

Prerequisites

- Experience working with power electrical equipment and voltage levels of up to 600Vac
- Understanding of basic motor control and LV AC Drives
- Operational knowledge of the ACH580 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 class-room training
- LOTO – Lock Out / Tag Out training and lock to be brought to class.
- Arc-Flash Certification according to CSA Z462-18. Recommended: CSA - Workplace Electrical Safety - CSA Z462-18
- Proof of any certification already obtained to be forwarded to the ABB training contacts for record keeping before the course.

Program 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
- Understand the installation requirements for a LV AC Drive
- Apply best wiring practices for LV Drives
- Commission an ACH580 including Communications
- Perform basic commissioning fault diagnostics and quickly correct installation issues on site.

Agenda

Day 1	Day 2
8:30 AM - 4:00 PM	8:30 AM - 4:00 PM
<ul style="list-style-type: none">• ACX580 Installation-Mechanical• ACX580 Installation-Electrical• Commissioning using Primary Settings• PPE & LOTO Review & Lab Exercise Preview• ACH580 Basic Wiring/Power-up Lab Exercise• ACX580 Before & After Applying Power• ACX580 Review – Assign Homework	<ul style="list-style-type: none">• Analog Startup Lab• Startup Review Lab• Programming Labs/Advanced product Features• ACH580 Tech Support Issues• Warranty Registration Process



G390 ACS580

ACS580 Start-up & Maintenance Training

Description

The Authorized Start-Up training program for the ACS580 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 con-trolled and for fieldbus communications controlled applications.

Student Profile

The program is intended for ABB authorized channel partners that are experienced working with and installing LV Drives. Students who complete the Authorized Start-Up program would be responsible for installation and technical services related to maintaining LV Drives.

Certification required

- LV Drive - General Competence
- Technical Support - LV AC drives
- Technical Support - ACS580-01

Tools required

- Microsoft Windows® Computers
- Drive Composer Entry or Pro

Prerequisites

- Experience working with power electrical equipment and voltage levels of up to 600Vac
- Understanding of basic motor control and LV AC Drives
- Operational knowledge of the ACS580 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 class-room training
- LOTO – Lock Out / Tag Out training and lock to be brought to class.
- Arc-Flash Certification according to CSA Z462-18. Recommended: CSA - Workplace Electrical Safety - CSA Z462-18
- Proof of any certification already obtained to be forwarded to the ABB training contacts for record keeping before the course.

Program 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
- Understand the installation requirements for a LV AC Drive
- Apply best wiring practices for ACS580
- Commission an ACS580 including fieldbus Communications
- Perform basic commissioning fault diagnostics and quickly correct installation issues on site.

Agenda

Day 1	Day 2
8:30 AM - 4:00 PM	8:30 AM - 4:00 PM
<ul style="list-style-type: none">• ACX580 Installation-Mechanical• ACX580 Installation-Electrical• Commissioning using Primary Settings• PPE & LOTO Review & Lab Exercise Preview• ACS580 Basic Wiring/Power-up Lab Exercise• ACX580 Before & After Applying Power• ACX580 Review – Assign Homework	<ul style="list-style-type: none">• Analog Startup LAB• Startup Review Lab• Programming Labs/Advanced product Features• ACS580 Tech Support Issues• Warranty Registration Process



G640 ACQ580

ACQ580 Start-up & Maintenance Training

Description

The Authorized Start-Up 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 con-trolled and for fieldbus communications controlled applications.

Student Profile

The program is intended for ABB authorized channel partners that are experienced working with and installing LV Drives. Students who complete the Authorized Start-Up program would be responsible for installation and technical services related to maintaining LV Drives.

Certification required

- LV Drive - General Competence
- Technical Support - LV AC drives
- Technical Support - ACQ580-01

Tools required

- Microsoft Windows® Computers
- Drive Composer Entry or Pro

Prerequisites

- Experience working with power electrical equipment and voltage levels of up to 600Vac
- 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 class-room training
- LOTO – Lock Out / Tag Out training and lock to be brought to class.
- Arc-Flash Certification according to CSA Z462-18. Recommended: CSA - Workplace Electrical Safety - CSA Z462-18
- Proof of any certification already obtained to be forwarded to the ABB training contacts for record keeping before the course.

Program 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
- Understand the installation requirements for a LV AC Drive
- Apply best wiring practices for ACQ580
- Commission an ACQ580 including fieldbus Communications
- Perform basic commissioning fault diagnostics and quickly correct installation issues on site.

Agenda

Day 1	Day 2
8:30 AM - 4:00 PM	8:30 AM - 4:00 PM
<ul style="list-style-type: none">• ACX580 Installation-Mechanical• ACX580 Installation-Electrical• Commissioning using Primary Settings• PPE & LOTO Review & Lab Exercise Preview• ACQ580 Basic Wiring/Power-up Lab Exercise• ACX580 Before & After Applying Power• ACX580 Review – Assign Homework	<ul style="list-style-type: none">• Analog Startup LAB• Startup Review Lab• Programming Labs/Advanced product Features (W&WW product features)• ACQ580 Tech Support Issues• Warranty Registration Process



G391/G393 ACx580

ACx580 Advanced Service Training

Description

This program is specifically designed to provide students with the part replacement knowledge and exercises to service and repair drives in the field. The class will cover safe working practices, basic troubleshooting for major drive components, and disassembly and reassembly of LV drives. This advanced service training program focuses on wall-mount drives up to 350HP.

Student Profile

This program is intended for electricians, technicians, and engineers responsible for installing, servicing and maintaining the ACx580 drives. The student must be an employee of an ABB Value Provider Program company.

eLearning required

- (LOTO) Lock Out Tag Out Confirmation
- G020e - Completed e-learning LV AC drives general installation practices, Internet course
- G375e - Drive composer entry fundamentals, Internet course
- G381e - All-compatible drives software features, internet course
- G107e - Fieldbus basics for ABB drives, Internet course
- G6281e - DIB4 basic course, Internet course
- G6282e - DIB4 Service reporting

Certification required

- LV Drive - General Competence
- Basics for Industrial Drives

Tools required

- Microsoft Windows® Computers
- Drive Composer Entry or Pro

Prerequisites

- ACS580 or ACH580 or ACQ580, Basic Hands-on
- Experience working with power electrical equipment and voltage levels of up to 600Vac
- Understanding of basic motor control and LV AC Drives
- Operational knowledge of the ACx580 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 class-room training
- LOTO – Lock Out / Tag Out training and lock to be brought to class.
- Arc-Flash Certification according to CSA Z462-18. Recommended: CSA - Workplace Electrical Safety - CSA Z462-18
- Proof of any certification already obtained to be forwarded to the ABB training contacts for record keeping before the course.

Program Objectives

Upon successful completion of this training, participants will be able to:

- Apply basic safe work practices for Installation, commissioning, troubleshooting and repair of LV Drives
- Define the risks associated with LV Drives
- Identify proper ACx580 hardware mounting de-tails for various drive frame sizes
- Program and troubleshoot the drive using the Composer pro PC tool
- Commission and troubleshoot ACx580 packages including communications
- Repair and / or replace faulty hardware
- Perform basic commissioning fault diagnostics and quickly correct installation issues on site.

Agenda

Day 1	Day 2
8:30 AM - 4:00 PM	8:30 AM - 4:00 PM
<ul style="list-style-type: none"> • Introduction • ACx580 Warranty Directive/Repair & Replacement Policies • ACx580 Software Flow Diagrams • Composer pro PC tool & Lab Exercise • ACx580 Platform Solutions Connectivity • Static Checks Review – What to look for • ACx580 Block Diagram Review (R1 – R9) • ACx580 FENA-Modbus TCP or BACnet Fieldbus Lab Exercise • ACx580 Basic Service – Keypad and Drive FW Upgrade Procedures 	<ul style="list-style-type: none"> • ACx580 Troubleshooting and Faults – Tips from the Factory • ACx580 Technical Details • Schematics and Interconnects Review • Static Checks Review – What to look for • ACx580 Block Diagram Review (R1 – R9) • Component Replacement Procedures (R1 – R9) • Parts Documents & Matrix Chart, Knowledge Base & Drive Services • ACx580 Repair & Power-up Testing Lab Exercises & Rotation (R1 – R9), Hardware & Firmware Trouble-shooting & FW Upgrades



G152/G156 ACS800

ACS800 Advanced Service Training

Description

This program is specifically designed to provide students with the part replacement knowledge and exercises to service and repair drives in the field. The class will cover safe working practices, basic troubleshooting for major drive components, and disassembly and reassembly of LV drives. In the second part of the learning event the course contains hands-on exercises and fault tracing with ACS800-07 units, hands-on lab activities are supported by an instructor.

Student Profile

This program is intended for electricians, technicians, and engineers responsible for installing, servicing and maintaining the ACS800 drives.

eLearning required

- (LOTO) Lock Out Tag Out Confirmation
- G152e – ACS800 single drive fundamentals V2, Internet course – EN
- G156e ACS800 single cabinet-built drives fundamentals
- G159e ACS800-304/704+V992(New DSU) update course

Certification required

- Basics for Industrial Drives
- LV Drive - General Competence
- General - Drives - Basics 1
- General - Drives - Basics 2

Tools required

- Microsoft Windows® Computers
- Drive Composer Entry or Pro

Prerequisites

- Experience working with power electrical equipment and voltage levels of up to 600Vac
- Understanding of basic motor control and LV AC Drives
- Knowledgeable in using test equipment such as multi-meters, oscilloscopes and computer skills
- Operational knowledge of the ACS800 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 class-room training
- LOTO – Lock Out / Tag Out training and lock to be brought to class.
- Arc-Flash Certification according to CSA Z462-18. Recommended: CSA - Workplace Electrical Safety - CSA Z462-18
- Proof of any certification already obtained to be forwarded to the ABB training contacts for record keeping before the course.

Program 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
- Understand the installation requirements for a LV AC Drives
- Program and troubleshoot the drive using the Composer pro PC tool
- Commissioning an ACS800 utilizing the integrated control panel
- Repair and / or replace faulty hardware
- Perform basic commissioning fault diagnostics and quickly correct installation issues on site

Agenda

Day 1	Day 2
8:30 AM - 4:00 PM	8:30 AM - 4:00 PM
<ul style="list-style-type: none">• Standard application program• Control panel functions/assistants• Installation principles• Converter commissioning• Fine tuning of the converter• Adaptive programming	<ul style="list-style-type: none">• Diode Supply Section• Regenerative Drives• Inverter sections• Troubleshooting



G160/G161 ACS800

ACS800 Multi-Drive Start-up & Maintenance Training

Description

This program is specifically designed to provide students with the part replacement knowledge and exercises to service and repair drives in the field. The class will cover safe working practices, basic troubleshooting for major drive components, and disassembly and reassembly of LV drives.

Student Profile

This program is intended for electricians, technicians, and engineers responsible for installing, servicing and maintaining the ACS800 multidrive. The student must be an employee of an authorized DSP company. If the student is not a DSP company employee, please contact ABB Training for a more appropriate program.

eLearning required

- (LOTO) Lock Out Tag Out Confirmation
- G160e – ACS800 multidrive fundamentals

Certification required

- Basics for Industrial Drives
- LV Drive - General Competence

Tools required

- Microsoft Windows® Computers
- Drive Composer Entry or Pro

Prerequisites

- ACS800 DSP Training (G152/G156)
- ACS800 multidrive product operational knowledge
- Experience working with power electrical equipment and voltage levels of up to 600Vac
- Understanding of basic motor control and LV AC Drives
- Knowledgeable in using test equipment such as multi-meters, oscilloscopes and computer skills
- Operational knowledge of the ACS800 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 class-room training
- LOTO – Lock Out / Tag Out training and lock to be brought to class.
- Arc-Flash Certification according to CSA Z462-18. Recommended: CSA - Workplace Electrical Safety - CSA Z462-18
- Proof of any certification already obtained to be forwarded to the ABB training contacts for record keeping before the course.

Program 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
- Understand the installation requirements for a LV AC Drives
- Program and troubleshoot the drive using the Composer pro PC tool
- Commissioning an ACS800 multidrive utilizing the integrated control panel
- Repair and / or replace faulty hardware
- Perform basic commissioning fault diagnostics and quickly correct installation issues on site

Agenda

Day 1	Day 2
8:30 AM - 4:00 PM	8:30 AM - 4:00 PM
<ul style="list-style-type: none">• Standard application program• Control panel functions/assistants• Installation principles• Converter commissioning• Fine tuning of the converter• Adaptive programming	<ul style="list-style-type: none">• Diode Supply Section• Regenerative Drives• Inverter sections• Troubleshooting



G380 ACS880 - Basic

ACS880 Start-up & Maintenance Training

Description

The Startup training provides the student with comprehensive instruction in the installation, wiring, and commissioning of LV Drives. The Authorized Startup training program for the ACS880 drives focuses on commissioning and enclosure installation. The program includes commissioning practices for standard analog controlled installation and installations utilizing the integrated control panel.

Student Profile

This program is intended for ABB authorized channel partners with experience working with and installing LV Drives. Students of an Authorized Start-up program would be responsible for installation and technical services related to maintaining LV Drives

eLearning required

- (LOTO) Lock Out Tag Out Confirmation

Certification required

- Technical Support - LV AC drives
- Technical Support - ACS880-01
- LV Drive - General Competence
- Functional Safety for ACS880

Tools required

- Microsoft Windows® Computers
- Drive Composer Entry or Pro

Prerequisites

- Experience working with power electrical equipment and voltage levels of up to 600Vac
- Understanding of basic motor control and LV AC Drives
- Knowledgeable in using test equipment such as multi-meters, oscilloscopes and computer skills
- Operational knowledge of the ACS880 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 class-room training
- LOTO – Lock Out / Tag Out training and lock to be brought to class.
- Arc-Flash Certification according to CSA Z462-18. Recommended: CSA - Workplace Electrical Safety - CSA Z462-18
- Proof of any certification already obtained to be forwarded to the ABB training contacts for record keeping before the course.

Program 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
- Apply best wiring practices for LV AC Drives
- Program and troubleshoot the drive using the Composer pro PC tool
- Commissioning an ACS880 utilizing the integrated control panel
- Perform basic commissioning fault diagnostics and quickly correct installation issues on site

Agenda

Day 1

8:30 AM - 4:00 PM

- Installation Start-up Review Presentation
 - Product Portfolio Introduction
 - Documentation and tools
 - Mechanical Installation
 - Electrical Installation (Frame R1-R9)
 - Warranty Registration Process
 - Best wiring practices
 - ACS-AP Panel
 - Macro Overview
 - Basic Start-up
 - Summary & Conclusion
-



G381/G383/G384 ACS880

ACS880 Advanced Service Training

Description

This program is specifically designed to provide students with the part replacement knowledge and exercises to service and repair drives in the field. The class will cover safe working practices, basic troubleshooting for major drive components, and disassembly and reassembly of LV drives.

Student Profile

This program is intended for electricians, technicians, and engineers responsible for installing, servicing and maintaining the ACS880 drives. The student must be an employee of an authorized DSP company. If the student is not a DSP company employee, please contact ABB Training for a more appropriate program.

eLearning required

- (LOTO) Lock Out Tag Out Confirmation

Certification required

- G380 ACS880 - Basic
- Technical Support - LV AC drives
- Technical Support - ACS880-01
- Technical Support - ACS880-04
- LV Drive - General Competence
- Functional Safety for ACS880

Tools required

- Microsoft Windows® Computers
- Drive Composer Entry or Pro

Prerequisites

- ACS880 Authorized Startup (G380)
- Experience working with power electrical equipment and voltage levels of up to 600Vac
- Understanding of basic motor control and LV AC Drives
- Knowledgeable in using test equipment such as multi-meters, oscilloscopes and computer skills
- Operational knowledge of the ACS880 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 class-room training
- LOTO – Lock Out / Tag Out training and lock to be brought to class.
- Arc-Flash Certification according to CSA Z462-18. Recommended: CSA - Workplace Electrical Safety - CSA Z462-18
- Proof of any certification already obtained to be forwarded to the ABB training contacts for record keeping before the course.

Program 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
- Understand the installation requirements for a LV AC Drives
- Program and troubleshoot the drive using the Composer pro PC tool
- Commissioning an ACS880 utilizing the integrated control panel
- Repair and / or replace faulty hardware
- Perform basic commissioning fault diagnostics and quickly correct installation issues on site

Agenda

Day 1	Day 2	Day 3
8:30 AM - 4:00 PM	8:30 AM - 4:00 PM	8:30 AM - 4:00 PM
<ul style="list-style-type: none"> • Course Introduction • ACS880 Analog Start-Up • Hand-Auto Macro • Speed regulator tuning • Flow Diagrams • Supervisions • Technical Support top issues 	<ul style="list-style-type: none"> • ACS880-01 Assembly • Preventive Maintenance • ACS880-01 Advanced Maintenance • Hardware component replacement • Electrical Installation (Frame R10-R11) 	<ul style="list-style-type: none"> • Drive Composer • Load Sharing (Master / Follower) • Adaptive Programing • Firmware Downloading • Fieldbus basics



G3880 ACS880

ACS880 Multi-Drive Designated Service Partner Training

Description

This program is specifically designed to provide students with the part replacement knowledge and exercises to service and repair drives in the field. The class will cover safe working practices, basic troubleshooting for major drive components, and disassembly and reassembly of LV drives.

Student Profile

This program is intended for electricians, technicians, and engineers responsible for installing, servicing and maintaining the ACS880 multidrive. The student must be an employee of an authorized DSP company. If the student is not a DSP company employee, please contact ABB Training for a more appropriate program.

eLearning required

- (LOTO) Lock Out Tag Out Confirmation

Certification required

- G380 ACS880 - Basic
- G381/G383/G384 ACS880
- Technical Support - LV AC drives
- Technical Support - ACS880-01
- Technical Support - ACS880-04
- LV Drive - General Competence
- Functional Safety for ACS880

Tools required

- Microsoft Windows® Computers
- Drive Composer Entry or Pro

Prerequisites

- ACS880 ASU and DSP (G380/G381_83_84)
- Experience working with power electrical equipment and voltage levels of up to 600Vac
- Understanding of basic motor control and LV AC Drives
- Knowledgeable in using test equipment such as multi-meters, oscilloscopes and computer skills
- Operational knowledge of the ACS880 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 class-room training
- LOTO – Lock Out / Tag Out training and lock to be brought to class.
- Arc-Flash Certification according to CSA Z462-18. Recommended: CSA - Workplace Electrical Safety - CSA Z462-18
- Proof of any certification already obtained to be forwarded to the ABB training contacts for record keeping before the course.

Program 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
- Understand the installation requirements for a LV AC Drives
- Program and troubleshoot the drive using the Composer pro PC tool
- Commissioning an ACS880 multidrive utilizing the integrated control panel
- Repair and / or replace faulty hardware
- Perform basic commissioning fault diagnostics and quickly correct installation issues on site

Agenda

Day 1

8:30 AM - 4:00 PM

- Course Introduction
 - ACS880 MultiDrive hardware portfolio
 - Locating hardware inside ACS880-07
 - Electrical Installation (R8i)
 - ACS880-07 Module replacement
 - ACS880-07 Maintenance
-



G560 DCS800

DCS800 Advanced Service Training

Description

This program is specifically designed to provide students with the part replacement knowledge and exercises to service and repair drives in the field. The class will cover safe working practices, basic troubleshooting for major drive components, and disassembly and reassembly of LV drives.

Student Profile

This program is intended for electricians, technicians, and engineers responsible for installing, servicing and maintaining the DCS800 drives. The student must be an employee of an authorized DSP company. If the student is not a DSP company employee, please contact ABB Training for a more appropriate program.

eLearning required

- (LOTO) Lock Out Tag Out Confirmation
- G575e Portfolio, internet course
- G560e_a - DCS800 Basic Training (D1-D4), Internet course
- G560e_b - DCS800 Basic Training (D1-D4), Internet course
- G561 Hands-on Training
- DCAUTH800a - Technical authorization exam DCS800

Tools required

- Microsoft Windows® Computers
- Drive Composer Entry or Pro

Prerequisites

- Experience working with power electrical equipment and voltage levels of up to 600Vac
- Understanding of basic motor control and DC Drives
- Knowledgeable in using test equipment such as multi-meters, oscilloscopes and computer skills
- Operational knowledge of the DCS800 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 class-room training
- LOTO – Lock Out / Tag Out training and lock to be brought to class.
- Arc-Flash Certification according to CSA Z462-18. Recommended: CSA - Workplace Electrical Safety - CSA Z462-18
- Proof of any certification already obtained to be forwarded to the ABB training contacts for record keeping before the course.
- Completed General - DC Drives - Basics

Program Objectives

Upon successful completion of this training, participants will be able to:

- Apply basic safe work practices for installation and commissioning of DC Drives
- Define the risks associated with DC Drives
- Understand the installation requirements for a DC Drives
- Program and troubleshoot the drive using the Composer pro PC tool
- Commissioning an DCS800 utilizing the integrated control panel
- Repair and / or replace faulty hardware
- Perform basic commissioning fault diagnostics and quickly correct installation issues on site

Agenda

Day 1	Day 2
8:30 AM - 4:00 PM	8:30 AM - 4:00 PM
<ul style="list-style-type: none">• Course Introduction• Review of prerequisite video / eLearning modules• Technical Presentation• Start-up Procedures• Start-up Lab• Internal Hardware Overview	<ul style="list-style-type: none">• Field Supplies• Inductor, Contactor and Fuses• Firmware Configuration Lab• Armature tuning demo• Speed loop tuning demo• Install Base & Warranty directive



G5951 DCS880

DCS880 Advanced Service Training

Description

This program is specifically designed to provide students with the part replacement knowledge and exercises to service and repair drives in the field. The class will cover safe working practices, basic troubleshooting for major drive components, and disassembly and reassembly of LV drives.

Student Profile

This program is intended for electricians, technicians, and engineers responsible for installing, servicing and maintaining the DCS880 drives. The student must be an employee of an authorized DSP company. If the student is not a DSP company employee, please contact ABB Training for a more appropriate program.

eLearning required

- (LOTO) Lock Out Tag Out Confirmation
- G570e - DC Fundamentals
- G5950e - DCS880 Basic Hardware (H1-H4) + Options
- G5951e - DCS880 Standard Firmware
- G5952e - DCS880 Safety Functions (STO)
- G5953e - DCS880 STO verification and validation procedure training
- DCAUTH880 - Technical authorization exam - DCS880 H1-H4
- G374e - All-compatible panel fundamentals
- G375e - Drive composer entry tool fundamentals
- G376e - Drive composer pro fundamentals
- G3761e - Adaptive programming basics with Drive composer
- G1110e - Functional safety awareness
- G1110t - Functional safety awareness, Quiz
- G1111e - Drives functional safety technical basics
- G1111t - Drive Functional Safety Technical Basics Quiz
- G5951 - DCS880 Basic Training

Tools required

- Microsoft Windows® Computers

- Drive Composer Entry or Pro

Prerequisites

- Experience working with power electrical equipment and voltage levels of up to 600Vac
- Understanding of basic motor control and DC Drives
- Knowledgeable in using test equipment such as multi-meters, oscilloscopes and computer skills
- Operational knowledge of the DCS880 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 class-room training
- LOTO – Lock Out / Tag Out training and lock to be brought to class.
- Arc-Flash Certification according to CSA Z462-18. Recommended: CSA - Workplace Electrical Safety - CSA Z462-18
- Proof of any certification already obtained to be forwarded to the ABB training contacts for record keeping before the course.
- Completed General - DC Drives - Basics

Program Objectives

Upon successful completion of this training, participants will be able to:

- Apply basic safe work practices for installation and commissioning of DC Drives
- Define the risks associated with DC Drives
- Understand the installation requirements for a DC Drives
- Program and troubleshoot the drive using the Composer pro PC tool
- Commissioning an DCS880 utilizing the integrated control panel
- Repair and / or replace faulty hardware
- Perform basic commissioning fault diagnostics and quickly correct installation issues on site

Agenda

Day 1	Day 2	Day 3
8:30 AM - 4:00 PM	8:30 AM - 4:00 PM	8:30 AM - 4:00 PM
<ul style="list-style-type: none"> • Course introduction • Recap DC Drives Fundamentals • DCS880 product presentation • Environmental conditions and application area • DCS880 functional safety (STO) • DCS880 dimensioning • Exercise dimensioning and selection of components 	<ul style="list-style-type: none"> • DCS880 FW structure & features • Drive composer pro for DCS880 • Drive loader tool • Commissioning • Parameter backup and restore • Parameter compare / cloning • Faults tracing 	<ul style="list-style-type: none"> • DCS880 STO verification and validation • IEC-Programming • Master follower • Inspection of existing hardware • Questions and closing



Certification

General - DC Drives - Basics

Requirements

- G570e - Completed e-learning_DC Fundamentals, internet course
- DCAUTH010 - Completed_Technical authorization exam - DC Drives basics
- G573e - Completed e-learning_DC Drives Dimensioning, internet course
- G627e - Basics of ABB support information databases, internet course
- G111e - Completed e-learning Functional safety for ABB drives, internet course
- G1110e Drives functional safety awareness
- G1111e - Drives functional safety technical basics
- G621e - Completed e-learning_LVAC drives warranty process - ABB Drives, internet course
- G629e - DriveHelp service, internet course

LV Drive - General Competence

Requirements

- G089e LV AC Drive General Drive Cabinet Engineering Principles
- G1111e Drive functional safety technical basic
- G1111t Drive functional safety technical basic Quiz
- G1110e Drive function safety awareness
- G1110t Drive function safety awareness Quiz
- G376e Drive composer pro fundamentals
- G106e LV AC drives maintenance basics
- G106e_a AC drive basic service and safety in onsite work
- G6281e Drive install base
- G6282 Drive install base service reporting

Technical Support - LV AC drives

Requirements

- G020e LV AC drives General installation practices
- G102e AC drive dimensioning
- G374e All-compatible panel fundamentals
- G375e Drive composer entry fundamentals
- G381e All-compatible software common features
- G107e Fieldbus basics for ABB drives



Certification

Technical Support - ACS580-01

Requirements

- G3900e - General purpose drives, ACS580 series offering
- G3901e - ACS580-01 installation, Internet course
- G3902e - ACS580-01 software features, advantages and benefits
- G3903e - ACS580-01 hardware features, advantages and benefits
- G3905e - ACS580 technical hardware details
- G3911e - ACS580 standard control program specific features

Technical Support - ACQ580-01

Requirements

- G6400e ACQ580 series offering
- G3901e - ACS/H/Q 580-01 installation, Internet course
- G6401e ACQ580 hardware features
- G6402e ACQ580 software features
- G6403e ACQ580 startup

Technical Support - ACH580-01

Requirements

- G3590e ACH580-01 Series offering
- G3901e - ACS/H/Q 580-01 installation, Internet course
- G3591e ACH580-01 Hardware features
- G3592e ACH580-01 Software features
- G3593e ACH580-01 Startup

Technical Support - ACS880-01

Requirements

- G371e All-compatible industrial drives, ACS880 series offering
- G3801e ACS880-01 installation and startup
- G380e ACS880-01/11/31 technical details

Certification

Functional Safety for ACS880

Requirements

- G3850e FSO-11 safety functions modules fundamentals
- G3851e FSO-11 safety functions modules configuration
- G3852e FSO safety functions modules with FSE safety
- G3851 ACS880 functional safety configuration with FSO-11
- G3852 Encoder safety functions with FSO and FSE safety encoder interface module
- 9CSC006267 FSPS-21 PROFIsafe safety functions module fundamentals, e-learning

Technical Support - ACS880-04

Requirements

- G371a All-compatible industrial drives, ACS880 series offering
- G3804e ACS880-04 installation
- G3841e ACS880-04 technical details

Basics for Industrial Drives

Requirements

- G089e - Completed e-learning_LV AC Drives General Cabinet Engineering Principles, internet course
- G102e - Completed e-learning_Basics of Dimensioning, internet course
- G1110e - Completed e-learning - Drives functional safety awareness, Internet course - EN
- G1110t - Passed the internet quiz Functional safety awareness
- G1111e - Completed the e-learning Drives Functional Safety Technical Basics, Internet course
- G1111t - Passed the internet quiz Functional Safety Technical Basics

General - Drives - Basics 1

Requirements

- G060e - Completed e-learning_Low Voltage AC drives product portfolio
- G101e_a - Completed e-learning_Drive technology basics, internet course
- G101e_b - Completed e-learning Basics of AC drives - Hardware construction, Internet course
- G107e - Completed e-learning_Fieldbus basics
- K800v - The principles of electromagnetic induction
- K801v - Direct current (DC) motors
- K802v - Alternating current (AC) motors



Certification

General - Drives - Basics 2

Requirements

- G621e - Completed e-learning_Warranty handling, internet course
- G627e - Completed e-learning_Service reporting and service tools, internet course
- G629e - Completed e-learning_DriveHelp basics, internet course

Recommended Tools

This list aims to give a checklist to an onboarding Onsite Service personell about items intially needed to fullfill onsite service. Certificate also have an expiry date of 5 years so that it provides an oportunity to recheck missing, changed items periodically

- Drive Installed Base (DIB) access
- Driveware tools to connect all drives like DriveWindow or Drive Composer installed on Computer
- Hexagon socket bits set
- Screw driver set for electrical work
- Socket wrench kit
- Fiber Optice cable polish set
- Soldering iron, soldering tin, tin remover and flux
- True RMS Multimeter
- Fixed Voltagemeter for measuring absence of voltage before starting work
- Up to 1000V insulation resistance meter (megger)
- ESD kit
- Swivel mirror telescopic magnet
- Flashlight

MyLearning

What is MyLearning?

ABB MyLearning is the completely new, global Learning Management System developed for ABB employees & customers utility. The tool replaced old Training Partner along with similar systems that had been used locally by some of ABB departments before.

MyLearning helps ABB to deliver a superior LMS experience that enables adoption, speeds compliance and significantly improves training effectiveness. The platform supports knowledge transferring process, organizing & scheduling live or F2F training sessions and also tracking & verifying Student's progress in training material. In addition to the full range of standard LMS functionalities - as a cloud solution, our tool offers online & offline access, regardless of you are using desktop or mobile devices. Find out more about MyLearning here. Check out our mobile app available for Android & iOS devices.





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