Course description

G330
ACS600 multidrive, operation and maintenance

Course Duration

The course duration is 3 days.

Course type

This is a classroom course with hands-on lab activities supported by an instructor.

Course Goal

The goal of this course is to teach students to start-up, adjust, operate, maintain, troubleshoot and repair ACS600 multidrive systems.

Student Profile

This course is intended for electricians, technicians, and engineers who install, operate and service ACS600 multidrive systems.

Prerequisites

- Basic knowledge of electronics
- Experience in using a Windows PC

Description

This course belongs to a learning path. Please see the accompanying figure of possible learning paths.

Course Objectives

Upon completion of this course,

students will be able to:

- Perform basic start-up operations of ACS600 multidrive systems
- Tune ACS600 multidrive frequency converters
- Make backups and restore ACS600 multidrive system application programs
- Use the ACS600 multidrive tool programs

Main Topics

- Component and board functions
- Direct Torque Control (DTC) principle
- Using and interpreting circuit diagrams and other system documents
- Locating and identifying terminals, boards and other components
- Inverter software functions
- ACS600 multidrive tool programs
- Frequency converter start-up and control
- Supply section operations and measurements
- Optional equipment overview
- Fault tracing methods

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ABB University Finland, Helsinki Training Center
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Course agenda

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Day 1

09:00 Introduction to the course

09:15 System description

10:15 Coffee break

10:30 Location exercise

11:00 Inverter units

- Main Circuit hardware
- Control hardware

12:00 Lunch

13:00 Control panel functions and start-up procedure

13:30 Start-up exercises with the panel

14:00 Coffee break

14:15 Software configuration

- Parameters
- Control diagram

16:00 End of day 1

Day 2

08:30 Software configuration continues

09:30 Coffee break

09:45 DriveWindow with ACS 600 multiDrive

10:30 Exercises with DriveWindow

12:00 Lunch

13:00 Exercises continue

14:00 Coffee break

14:15 Supply Sections

- Diode supply section
- Construction
- Commissioning

15:00 Thyristor supply section

- Construction

16:00 End of day 2

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Day 3

08:30 Thyristor supply section

- Software

10:00 Coffee break

10:15 Supply section exercises

11:30 Fault tracing principles

- Diagnostics

12:00 Lunch

13:00 Changing the power plates

13:30 Fault tracing simulations with the training unit

14:00 Coffee break

14:15 Fault tracing continues

15:00 Summary

16:00 End of the course

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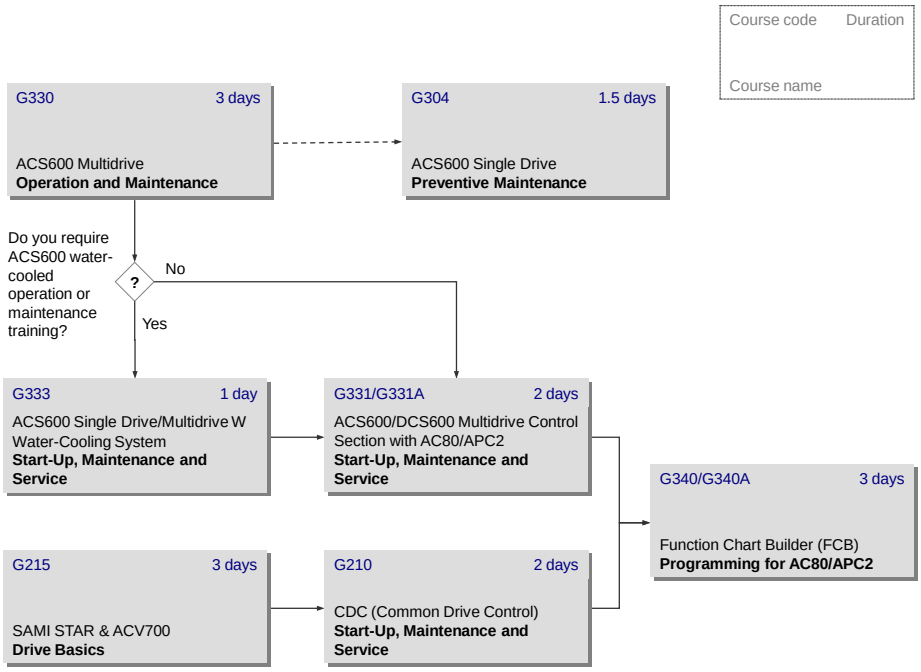
Learning Paths

ACS600 multidrives Learning paths



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