Course description

G172
ACS800 drives, winder/inline control

Course Duration
The course duration is 2.5 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, and operate ACS800 Winder/Inline Control drives.

Student Profile
This course is intended for electricians, technicians, and engineers who design, install, operate and service ACS800 Winder/Inline drives.

Prerequisites
- Basic knowledge of electronics
- Experience in using a Windows PC
- Course G152 or G156 or G160 or G161.

Please refer to the accompanying figure for course names and durations.

Description
The course contains theory part and hands on exercises with ACS800 units.

This course belongs to ACS800 single drive and ACS800 multidrive with Control Section learning paths that may utilize blended learning. Please see the accompanying figure of possible learning paths.

Course Objectives
Upon completion of this course, students will be able to:
- Commission and tune ACS800 Winder/Inline drives
- Activate and tune the features of ACS800 Winder/Inline Control drives

Main Topics
- Software overview
- Tension control methods
- Dimensioning basics
- Inline application SW
- Center winder application SW
- Tuning of the Inline converter
- Tuning of the Center winder converter
- DriveWindow commissioning and maintenance tool measurements for Center winder drive
- DriveWindow commissioning and maintenance tool measurements for Inline drive
Course agenda

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Day 1
8:30 – 8:45 Course introduction
8:45 – 10:00 Tension Control Methods
Open Loop
Closed Loop
10:00 – 10:15 Coffee break
10:15 – 11:30 Dimensioning Basics
Steps to Sizing a Motor and Drive
Inline Application examples
Winder Application examples
11:30 – 12:30 Lunch
12:30 – 14:00 Inline Application Software
Basic Setup
Application Specific Settings
14:00 – 14:15 Coffee break
14:15 – 16:00 Inline Application Software

Day 2
8:30 – 9:30 Inline Lab Exercises
Master / Slave and DriveWindow setup for Progressive Draw
9:30 – 9:45 Coffee Break
9:45 – 11:3 Inline Lab Exercises – Continue
Progressive Draw functionality & DW measurements
11:30 – 12:30 Lunch
12:30 – 14:00 Center Winder Application Software
Basic Setup
Application Specific Settings
14:00 – 14:15 Coffee Break
14:15 – 16:00 Center Winder Application Software

Day 3
8:30 – 10:00 Winder Lab Exercises
10:00 – 10:15 Coffee break
10:15 – 11:30 Winder Lab Exercises - Continues
11:30 – 12:00 Feedback
12:00 – 12:30 Lunch

Low voltage drives training
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Learning Paths

ACS800 drives

Learning paths

Would you like to take a course via the Internet?

Yes → G152e 1-2 days* ACS800 Single Drive Fundamentals Internet course

Do you have knowledge of ACS600 single drives?

Yes → G152A 1 day ACS800 Single Drive Fundamentals

No → G152B 2 days ACS800 Single Drive Fundamentals

Would you like to take a course via the Internet?

Yes → G163e 1-2 days* ACS800 liquid-cooled drives Internet course

No → G163A 1 day ACS800 liquid-cooled drives

Would you like to take a course via the Internet?

Yes → G160e 1-2 days* ACS800 Multidrive Fundamentals Internet Course

No → G160 1.5 days ACS800 Multidrive Start-Up & Service Hands-On Training

Would you like to take a course via the Internet?

Yes → G158 2 days ACS800 Drives DriveAP Programming

No → G152 2 days ACS800-01,-02,-04,-11 Single Drive Start-Up & Service Hands-On Training

G156 1.5 days ACS800-07,-17,-37 Single Drive Start-Up & Service Hands-On Training

G152B 2 days ACS800 Single Drive Fundamentals

G163 2 days ACS800 liquid-cooled drives Hands-On Training

G160e 1-2 days* ACS800 Multidrive Fundamentals Internet Course

G161 2.5 days ACS800 Multidrive Operation and Maintenance

G160 1.5 days ACS800 Multidrive Start-Up & Service Hands-On Training

G162 2.5 days ACS800 Multidrive Control Section AC800M Operation and Maintenance

G158 2 days ACS800 Drives DriveAP Programming

G170 2 days ACS800 Drives Motion Control

G171 2 days ACS800 Drives Intelligent Pump Control

G172 2.5 days ACS800 Drives Winder/Inline Control

G173 2 days ACS800 Drives Template Control

G174 2 days ACS800 Drives PCP/ESP & Rod Pump Control

G175 2 days ACS800 Drives Crane Control Program (+N697)

G176 2 days ACS800 Drives Winch Control Program (+N698)

G175 2 days ACS800 Drives Crane Control Program (+N697)

G176 2 days ACS800 Drives Winch Control Program (+N698)

* The duration of the Internet courses depends on personal professional background and study pace