G176
ACS800 single drive, Winch Control Program (+N698), operation and programming

Course Type
Classroom course

Course Duration
The course duration is 2 days.

Course Goal
The goal of this course is to teach students to:

- Understand different a winch application as anchor and mooring.

- Program and modify those winch applications made by using the Winch Control Program of the ACS800.

Student Profile
This course is intended for electricians, technicians, and engineers, who commission, install, operate and service ACS800 with the Winch Control Program application software and sales people.

Prerequisites
- Either course G152 or G156 (or equivalent knowledge). For course names and durations, please refer to the accompanying figures of learning paths.

Description
This course belongs to a learning path that may utilize blended learning. Please see the accompanying figure for possible learning paths.

Course Objectives
Upon completion of this course, students will be able to:

- Describe different winch applications
- Describe Winch Control Program features
- Describe protection functions
- Make settings and start-up to the Winch Control Program

Main Topics
- Basics of the winch application and terminology
- Winch control locations
- ACS800 Winch control with extended I/O
- Basic start-up of ACS800 with Winch Control
- Mechanical Brake Control and Winch system checking
- Anchor control
- Mooring control
- RoRo gateramp winch control
- Master/Follower configuration
- General protections
- Service counters
- Hands-on exercises

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ABB

Day 1

09:00	Course information
09:10	Basics of the winch application and terminology
10:00	Coffee break
10:15	Winch control locations

- EXT1 Stand alone mode
- EXT2 Winch mode
- User macro 1 / User macro 2
- Multi I/O for Winch control

11:00	ACS800 Winch control with extended I/O

- Optional IO modules
- Extended IO with AIMA-board
- IO connection with pointers
- Exercise

12:00	Lunch
13:00	Basic start-up of ACS800 with Winch Control

- Motor setup (passcode protetected)
- Basic control settings (EXT1)
- Rotation direction
- Exercise

14:15	Coffee break
14:30	Mechanical Brake Control and Winch system checking, braking resistors

- Exercises

16:00	End of the day

Day 2

08:30	Anchor control

- Principle of Anchor mode
- Slip detection
- Anchor in protection
- Exercise

10:00	Coffee break
10:15	Mooring control

- Hand mooring
- Auto mooring
  - Time control
  - Load cell
  - Constant
  - Peak torque protection
- Separate speed ramp and limit settings
- Exercise

12:00	Lunch
13:00	Power control
13:30	Master-Follower

- Exercise

14:15	Coffee break
14:30	General protections
15:00	Service counters
16:00	End of the day and the course

- Course feedback
- Certificates

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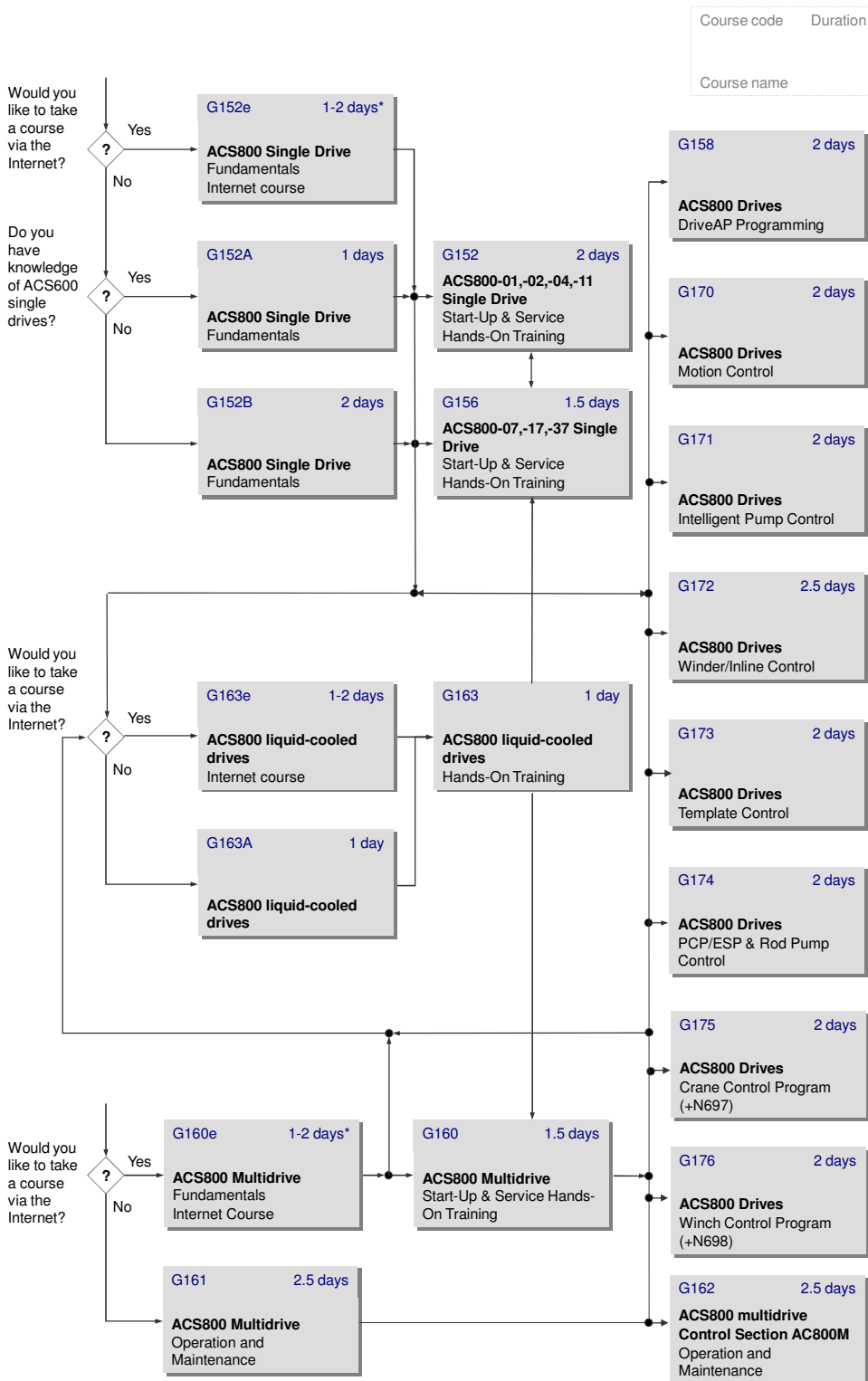for a better world™

ABB

ACS800 drives
Learning paths

Course code	Duration
Course name	

Would you like to take a course via the Internet?

? — Yes →

No ↓

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

Do you have knowledge of ACS600 single drives?

? — Yes →

No ↓

G152A   1 days
ACS800 Single Drive
Fundamentals

G152B   2 days
ACS800 Single Drive
Fundamentals

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

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

Would you like to take a course via the Internet?

? — Yes →

No ↓

G163e   1-2 days
ACS800 liquid-cooled drives
Internet course

G163A   1 day
ACS800 liquid-cooled drives

G163   1 day
ACS800 liquid-cooled drives
Hands-On Training

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)

Would you like to take a course via the Internet?

? — Yes →

No ↓

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

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

G162   2.5 days
ACS800 multidrive Control Section AC800M
Operation and Maintenance

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