Course description

G160
ACS800 multidrive, startup and maintenance hands-on

Course type and description
The ACS800 multidrive learning event comprises of two parts: e-learning courses and classroom course. This is the second part of the learning event: classroom course with hands-on lab activities supported by an instructor. The course contains hands-on exercises with ACS800 multidrive units.

Note! This course includes partly same exercises as courses G161 and G156. Course G161 includes same hands-on exercises and also theoretical part (duration 2.5 days).

The first part of the learning event includes the theory based e-learning courses mentioned below. Please note that the e-learning course material is not covered during the classroom course. You are required to complete the e-learning part before the classroom part, which is essential in order to be able to succeed in the hands-on lab activities during classroom days. The status of e-learning course completion is monitored.
Please see the accompanying figure of possible learning paths.

Prerequisites
Prior to attending this course, students should have
- Basic knowledge of electronics
- Experience in using PCs in the Windows environment
- Course G160e web course completed.

Course goal
The goal of this course is to teach students to start-up, adjust, operate, maintain and troubleshoot ACS800 multidrives.

Course objectives
Upon completion of this course, students will be able to:
- Commission and tune ACS800 multidrives
- Exchange the modules
- Operate and maintain ACS800 multidrives

Main Topics
- Reading and interpreting circuit diagrams
- ACS800 system application program
- Control panel functions
- Locating and identifying terminals, boards and other components
- Converter and Supply unit commissioning
- Changing the setting
- Fault diagnostics
- DriveWindow commissioning and maintenance tool operations

Course duration
The course duration is 1.5 days.

Student profile
This course is intended for electricians, technicians, and engineers, who install, operate and service ACS800 multidrives.
# Course agenda

**G160**

ACS800 multidrive, startup and maintenance hands-on

## Day 1

<table>
<thead>
<tr>
<th>Time</th>
<th>Activity</th>
</tr>
</thead>
<tbody>
<tr>
<td>09:00</td>
<td>Introduction of the course</td>
</tr>
<tr>
<td>09:15</td>
<td>Circuit diagrams</td>
</tr>
<tr>
<td>10:00</td>
<td>Break</td>
</tr>
<tr>
<td>10:15</td>
<td>Exercise 1</td>
</tr>
<tr>
<td>11:15</td>
<td>Exercise 2</td>
</tr>
<tr>
<td>12:15</td>
<td>Lunch</td>
</tr>
<tr>
<td>13:00</td>
<td>Exercise 3</td>
</tr>
<tr>
<td>14:15</td>
<td>Exercise 4 or 7</td>
</tr>
<tr>
<td>16:00</td>
<td>End of the day</td>
</tr>
</tbody>
</table>

- **Exercise 1:** DriveWindow 2 exercise
- **Exercise 2:** Inverter unit exercise
- **Exercise 3:** Diode supply unit and module exercise
- **Exercise 4:** IGBT supply unit (ISU) exercise
- **Exercise 5:** DriveWindow network exercise
- **Exercise 6:** Control panel and start-up exercise
- **Exercise 7:** TSU exercise

## Day 2

<table>
<thead>
<tr>
<th>Time</th>
<th>Activity</th>
</tr>
</thead>
<tbody>
<tr>
<td>08:30</td>
<td>Exercise 5</td>
</tr>
<tr>
<td>10:00</td>
<td>Break</td>
</tr>
<tr>
<td>10:15</td>
<td>Exercise 6</td>
</tr>
<tr>
<td>11:30</td>
<td>Lunch</td>
</tr>
<tr>
<td>12:30</td>
<td>End of the course</td>
</tr>
</tbody>
</table>

- **Exercise 5**
Would you like to take a course via the Internet?

Do you have knowledge of ACS600 single drives?

Would you like to take a course via the Internet?

Would you like to take a course via the Internet?

Course code | Duration
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G152e | 1-2 days
ACS800 Single Drive Fundamentals Internet course

G152A | 1 day
ACS800 Single Drive Fundamentals

G152B | 2 days
ACS800 Single Drive Fundamentals

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

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)

G161 | 2.5 days
ACS800 Multidrive Operation and Maintenance

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