Course description

G166e
ACHI550 standard drive, fundamentals
Internet course

Course Duration
The duration is approximately 1 day (8 hours), but the time spend depends on personal professional background and study pace of the learner. This course is a prerequisite for G166 classroom course.

Course type
Internet course

Course Goal
The goal of this course is to teach students the basics of installation, start-up, adjustment, operation, maintenance, troubleshooting and repair of the ACH550 Standard drive.

Student Profile
This course is intended for electricians, technicians and engineers, who install, operate and service ACH550 drives.

Prerequisites
- Basic knowledge of electronics
- Basic knowledge in using a computer and Internet browser. The recommended browser is Microsoft Internet Explorer version 5.0 or later version.
- An Internet connection

Description
This course contains self-study material, self-assessment questions and interactive exercises (e.g. operating the Assistant panel).
This course belongs to a learning path that utilizes blended learning. Please see the accompanying figure of possible learning paths.

After this e-learning training, learner can take hands-on classroom course (G166) on the ACH550 drive.

Course Objectives
Upon completion of this course, students will be able to:
- Describe the functions of the ACH550 drive
- Describe the hardware structure of the product
- Use the HVAC Control Panel (ACS-CP-B)
- Describe the basics of installation, commissioning and service operations for the ACH550
- Describe the basic principles of fault-tracing

Main Topics
- Overview of the ACH550 features
- Hardware construction
- Component and board functions
- ACH550 application program
- HVAC Control Panel functions
- Optional equipment overview
- Fieldbus communication
- Fault tracing principles
- Installation principles
- Basic service operations
- DriveWindow Light commissioning and maintenance tool operations
Course description

G166

ACH550 standard drive, start-up, maintenance and service hands-on training

Course Duration
The course duration is 1 day. Theory part of the course is in e-learning course G166e (prerequisite).

Course type
Classroom course with hands-on lab activities led by an instructor.

Course Goal
The main goal of this course is to teach students to install, start-up, adjust, operate and maintain the ACH550 drive. Some topics how to do basic troubleshooting and basic repair are also covered.

Student Profile
This course is intended for electricians, technicians, and engineers, who install, operate and service ACH550 drives.

Prerequisites
Prior to attending this course, students should have
- Basic knowledge of electronics / electricity
- Experience in using PCs in the Windows environment
- Completed the Internet course ACH550 Standard Drive: Fundamentals (G166e)

Description
This hands-on-course contains hands-on exercises with ACH550 units. This course belongs to a learning path that utilizes blended learning. Please see the accompanying figure of possible learning paths.

Course Objectives
Upon completion of this course, students will be able to:
- Installation and commission the ACH550 drive.
- Trace and correct basic troubles.
- Operate and maintain the ACH550 drive.

Main Topics
- Locating and identifying terminals, boards and other components with the circuit diagrams
- HVAC Assistant Control Panel (ACS-CP-B) functions
- Mechanical Installation and the cabling
- Commissioning and maintenance
- DriveWindow Light, commissioning and maintenance tool operations

Side topics if requested
- FlashDrop and DrivePM, programming and maintenance tool
Course agenda

G166
ACH550 standard drive, start-up, maintenance and service hands-on training

Day 1

08:30 Course Information
08:35 Exercise 1
09:30 Coffee break
09:45 Exercise 2
10:45 Exercise 3
11:45 Lunch
12:15 Exercise 4
13:15 Exercise 5
14:15 Coffee break
14:30 Fault Tracing
16:00 End of the day
Learning Path

ACH550 standard drive
Learning path

<table>
<thead>
<tr>
<th>Course code</th>
<th>Duration</th>
<th>Course name</th>
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<tbody>
<tr>
<td>G166e</td>
<td>1-2 days*</td>
<td>ACH550 Standard Drive Fundamentals Internet course</td>
</tr>
<tr>
<td>G166</td>
<td>1 day</td>
<td>ACH550 Standard Drive Start-Up, Maintenance and Service Hands-On Training</td>
</tr>
<tr>
<td>G352e</td>
<td>0.5 day*</td>
<td>FlashDrop and DrivePM Operation and Programming Internet course</td>
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<tr>
<td>G352</td>
<td>0.5 day</td>
<td>FlashDrop and DrivePM Operation and Programming</td>
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* The duration of the Internet courses depends on personal professional background and study pace