COURSE DESCRIPTION

CHH643 – ACS880
Operation and Maintenance

Course goal
The goal of this course is to learn the operation and maintenance aspects of ACS880-01 and ACS880-07 frequency converters.

Main learning objectives
The participants will be able to:
- Identify the hardware components and the installation principles
- Describe the features and advantages of the ACS880 drive
- Start-up, operate, maintain and troubleshoot a drive
- Adjust and tune the drive by using the available programming tools

Participant profile
This training is targeted to engineering, planning, maintenance, testing and service personnel.

Prerequisites
Participants should have basic knowledge of (power) electronics and electric.

Topics
- Control and operation principles of AC drives
- Direct torque control (DTC) principle
- Hardware and software single drive overview
- Manuals (firmware and hardware)
- Component and board functions
  - Main circuit diagrams
  - Locating and identifying electronic boards and terminals
- Options and optional equipment overview
- Installation principles and initial inverter start-up
- Control panel functions
- Application software
  - Parameter settings
  - Application macros
- Commissioning, operation and fine-tuning
- Fault tracing and troubleshooting
- Drive maintenance and Preventive maintenance
- Software tools
  - Drive composer entry and drive composer pro for commissioning and parameterization

Course type and methods
This is an instructor-led course with lectures, interactive classroom discussions, associated practical exercises, demonstration of best practice examples and group work.

Duration
The standard duration is 3 days. This can be extended by additional 2 days on request to deepen the knowledge and practical exercises.
## Course map

<table>
<thead>
<tr>
<th>DAY 1</th>
<th>DAY 2</th>
<th>DAY 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Welcome, personnel</td>
<td>Review day 1</td>
<td>Review day 2</td>
</tr>
<tr>
<td>introduction</td>
<td>Options and optional equipment</td>
<td></td>
</tr>
<tr>
<td>Course overview</td>
<td>Communication options, serial</td>
<td></td>
</tr>
<tr>
<td>Control principles AC</td>
<td>Installation principles</td>
<td></td>
</tr>
<tr>
<td>drives</td>
<td>Control panel functions</td>
<td>Preventive maintenance</td>
</tr>
<tr>
<td>Overview features and</td>
<td>ACS880 startup, tuning and operation</td>
<td>Firmware manual and hardware manual for ACS880</td>
</tr>
<tr>
<td>hardware</td>
<td>Questions and answers</td>
<td>drives</td>
</tr>
<tr>
<td>Applications</td>
<td>Questions and answers</td>
<td></td>
</tr>
<tr>
<td>Components hardware</td>
<td></td>
<td>Summary</td>
</tr>
<tr>
<td>Application software</td>
<td></td>
<td>Course evaluation</td>
</tr>
<tr>
<td>Parameters and software</td>
<td></td>
<td></td>
</tr>
<tr>
<td>overview</td>
<td></td>
<td>Course close</td>
</tr>
<tr>
<td>Questions and answers</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Time

- **DAY 1**: 9:00 am – 5:00 pm
- **DAY 2**: 9:00 am – 5:00 pm
- **DAY 3**: 9:00 am – 5:00 pm

Typical course layout (time or sequence may change)