Course description

G106
LV AC drive maintenance basics

Course Duration
The course duration is 1 day.

Course type
Classroom course

Course Goal
The goal of this course is to deepen, after the web course, students knowledge of the basic technical principles of the ABB LV AC drives maintenance.

Student Profile
This course is intended for LV AC drives maintenance personnel of ABB and authorized service partners.

Prerequisites
- G106e web course.
- Fundamentals of ABB LV AC drives mechanics and operation
- Some experience of both single and system drives

Description
This course belongs to a learning path. Please see the accompanying figure of possible learning paths.

Course Objectives
Upon completion of this course, students will be able to:
- Explain the significance of the correct working methods (safety, ESD)
- Recognize the effect and analyze the state of critical ambient conditions
- Recognize the effects of aging of components
- Recognize the aging of the whole drive system and as a result the possible need for corrective actions
- Recognize different mechanical and electrical connection types, check the condition of the connections and as a result recognize the possible need for corrective actions.

Main Topics
- LV Drives preventive maintenance
- Safety and ESD
- Ambient conditions
- Aging of the drive system and components
- Connections
- Preventive maintenance tools
Course agenda

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Day 1

09:00 Welcome and introduction
09:15 Safety and ESD
10:00 Coffee break
10:15 Exercises
- determining the age of drive
- speed controller effects
11:00 Brainstorming session
- environmental effects
12:00 Lunch
13:00 Brainstorming session
- environmental effects
13:45 Exercises
- corrosion recognition
- checking & correcting connections
- fibre optics measurement and making of optic fibre
14:00 Coffee break
14:15 Exercises
15:30 Summary and end of the course
16:00 End of the course
Learning Paths

Preventive maintenance
Learning paths

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<th>Duration</th>
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<td>0.5 days*</td>
<td>LV AC Drives Maintenance Basics Internet course</td>
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<td>G106</td>
<td>1 day</td>
<td>LV AC Drives Maintenance Basics Hands-on Training</td>
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* The duration of the Internet courses depends on personal professional background and study pace