#### **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

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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 recognicion
- 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

				Course name
G106e 0.5 days*			G106	1 day
LV AC Drives Maintenance Basics Internet course			LV AC Drives Maintenance Basics Hands-on Training	
G215 3 days			G221	2 days
SAMI STAR & ACV700 Drive Basics				R & ACV700 Maintenance
G300 x days G330		•	G304	1.5 days
ACS600 Drives see: ACS 600 Learning Paths		•	ACS600 Di Preventive	r <b>ives</b> Maintenance
	_			
G152 x days G160				
ACS800 Drives see: ACS800 Learning Paths			G108	3 days
	•	<b>-</b>		ACS800 Drives Maintenance
G165 x days G166				
ACx550 Drives see: ACx550 Learning Paths	•			

Course code Duration

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

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