

Online-Training - SINAMICS PERFECT HARMONY GH180 - Parameterizing and Commissioning (DR-GH18-PM)

Short Description

[Also available as face-to-face training](#)

Objectives

This training course covers commissioning and servicing of SINAMICS PERFECT HARMONY GH180 drives according to Level III. You will understand the functional concept, the control structures and the integral PLC programming of "System Operational Program" (SOP). You will parameterize the drive, diagnose its status and analyze its function using the integral cabinet control panel, the TOOL SUITE PC tool and the DEBUG tool.

Target Group

For Siemens employees only
Commissioning engineers, configuring engineers
Service personnel

Content

Basics of VFDs, electronic power devices, motor theory and control
Personal safety with drives
Design and function of the SINAMICS PERFECT HARMONY GH180 drive
Power Topology: transformer and pre-charging, power cells, cell bypass, actual value monitoring, hardware identification and circuit diagrams
Application, function and interaction of control boards
Analyzing alarm and fault messages
Parameter assignment, diagnosis and data backup (via integral control panel, via TOOL SUITE PC program)
Programming the integral PLC with "System Operational Program" (SOP)
Functionality, programming and analysis of "command generator diagram" and "control"
Operating the drive via "network communication" (PROFIBUS)
Introductory information about "synchronous transfer", "staging", "parallel operation of drives", "water-cooled drives", "regenerative drives" and "HV-cells"
Function and operation of cooling units, maintenance issues
Commissioning of cooling units (steps to take, procedures to follow)
Extensive lab work on setting parameters, programming and analyzing the drive's functions (via integral control panel, via TOOL SUITE PC program)
Commissioning an air-cooled SINAMICS PERFECT HARMONY GH180 drive with motor

Prerequisites

Basic knowledge of drive engineering
Experience with low voltage or medium voltage drives
The participant must be an electrically skilled person

Note

The course is split in equal parts into "theory" (classroom presentation with active participation of the trainees) and "lab work" (working on given assignments on programming, engineering and commissioning)
Lab work is carried out on an air cooled SINAMICS PERFECT HARMONY GH180 drive with motor and on simulators (original control boards with simulated power device and motor)
Knowledge gained during the course is verified by an extensive test.
This converter was named until 2013 "ROBICON Perfect Harmony".
Until 2015 this course was named DR-PH-EXP.
Course also in German language available, please contact us.
Course also variable as online training, please contact us.

Type

Online-Training

Duration

10 days

Language
