

## SINAMICS GH180 (PH-GH-180)

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### Short Description

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The course is intended for professionals involved in the setup, commissioning and maintenance of Robicon Perfect Harmony high voltage drives.

### Objectives

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- The course covers the theoretical foundations of the electric drive, the Robicon Perfect Harmony hardware, commissioning the drive using a PC, setting up the drive regulators and integrating it into automatic control systems.

### Target Group

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Commissioning engineers, configuring engineers  
Service personnel  
Maintenance personnel

### Content

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- Information on product properties and performance of the Perfect Harmony series frequency converter (FC).
- Familiarization with the general structure of the inverter and power cells.
- Familiarization with the function of the inverter rectifier and inverter.
- Familiarization with Cell Bypass - Power Cell Bypass.
- General security issues.
- Tasks and functions of control and regulation units.
- The principle of interaction between blocks.
- Entering parameters using the control panel.
- Data transfer between RAM and CFC for data protection.
- The process of entering parameters using software tools.
- Application of the "Logs" diagnostic menu.
- Signal analysis using "graphic files".
- Analysis of actual values and determination of errors.
- Principle of generation of IGBT control signals.
- Application of control and adjustment tools - Debug Tools.
- Management and use of configuration files.
- Functions of the setpoint channel and its parameterization.
- Functional principles of control methods with and without a speed sensor.
- Settings in the speed control and torque limiting menu.
- User interface functions.
- Practical lesson with inverter - structure and connections of inverter.
- Practical lesson with the simulator - control using the panel and PC.

### Prerequisites

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- Experience with WINDOWS, preferably higher technical or secondary specialized education.
- Basic knowledge of electrical engineering, electric drive theory and automatic control theory.

### Note

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- The course is conducted with a visit to the Customer.

### Type

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Face-to-face training

### Duration

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4 days

### Language

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