

## SINAMICS PERFECT HARMONY GH180 - Diagnostics and Service (DR-GH18-DG)

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### Objectives

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You are responsible for service work and maintenance of medium-voltage converters.

In this course you will learn how the SINAMICS GH180 converter works in the circuit technology of the multi cell inverters.

After the course you will be able to read and understand operating parameters. In the event of a fault, you can carry out a target-oriented troubleshooting and recommissioning. For this purpose, you will also be able to back up data using the Tool Suite PC program.

### Target Group

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Service personnel

Maintenance personnel

### Content

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Design and function of the SINAMICS GH180:

- Principle of an inverter with multi cells
- Transformer, power cells and cell bypass

Operation, diagnostics and data backup:

- PC-Program Tool Suite and operator panel
- Upload, download and comparison of parameter sets

Working with circuit diagrams and function charts:

- Input and output signals, setpoint channel
- Control with NXGPro Control
- Interface to PROFIBUS / PROFINET

Diagnostics and troubleshooting:

- Checking the control and status signals
- Analysis of alarm and fault messages
- Signal recording via trace function
- Test functions after replacement of power cells

Design and function of heat exchanger units

Work safety on medium-voltage installations

Practical exercises on special training equipment

### Prerequisites

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Knowledge of electrical drive technology

### Note

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During the course you will work on special training equipment and partly on original equipment, adapted to low voltage (400 V) for your safety.

An introduction to the complete system and its operation under medium voltage (> 1000 V) is not covered by the course. This is usually done on site by personnel with the appropriate experience.

### Type

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Face-to-face training

### Duration

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5 days

### Language

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