

## Online-Training - SINAMICS GM150 - Diagnostics and Service (DR-GM15-DG)

### Short Description

In this online course you will learn how the SINAMICS GM150 converter works. After the course you can carry out troubleshooting and recommissioning. For this purpose, you will also be able to back up data using the STARTER PC program.

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

### Objectives

You are responsible for service work and maintenance of medium-voltage converters. In this course you will learn how the SINAMICS GM150 converter works in the circuit technology of the voltage source inverters VSI. 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 STARTER PC program.

### Target Group

Service personnel  
Maintenance personnel

### Content

Design and function of the SINAMICS GM150:

- Principle of an inverter with DC-link voltage
- Rectifier, precharge and circuit breaker
- Inverter in IGBT and IGCT design

Operation and diagnostics with Operator Panel AOP30

Operation and diagnostics with PC program STARTER

Data backup:

- Upload and download of parameter sets
- Comparison of parameter sets

Reading and understanding circuit diagrams:

- Input and output signals, setpoint channel
- Control with CU320-2 and actual value measurements
- Interface to PROFIBUS / PROFINET

Diagnostics and troubleshooting:

- Checking the control and status signals
- Analysis of alarm and error messages
- Signal recording via trace function

Test functions after replacement of spare parts

Work safety on medium-voltage installations

Practical exercises on special remote training equipment

### Prerequisites

- Knowledge of electrical drive technology
- Knowledge of SINAMICS or STARTER is not required
- [Technical requirements](#) > cRSP

### Note

During the course you will work online via internet browser on special training equipment and partly on original equipment.

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.

Course also in German language available, please contact us.

### Type

Online-Training

### Duration

5 days

### Language

en