

SINAMICS S120 - Diagnostics and Service with STARTER

OEM: Siemens • Code: DR-S12-DG

COURSE DESCRIPTION

In this online course you learn to determine the cause of faults and resolve them. You can also perform changes of the parameterization.

AUDIENCE PROFILE

- Service personnel
- Maintenance personnel

PREREQUISITES

- [Technical requirements](#) > MyLiveZone

Note

- Additional information regarding diagnostics at chassis and cabinet units is provided in course DR-S12-CHA.
- Included in the course price: Free access to the digital learning platform [SITRAIN access](#) – starting one week before the start of the course until two weeks after the end of the course.
- With the Learning Membership, you can deepen or repeat the content of this Learning Event as well as continue your education on other interesting topics.

COURSE OBJECTIVES

By the end of this course, participants will be able to:

- You are responsible for reliable operation of the SINAMICS S120 drive system. If faults occur, then these should be resolved in the shortest possible time and operation resumed.

In this course, you will learn how to correctly and safely handle SINAMICS S120 drives when a fault occurs. Based on various scenarios, you will practice suitable measures such as data backup, replacing components and recommissioning.

After the course, you can determine the cause of faults and resolve them faster. When changes are made to the plant or system, you are also in a position to adapt the parameterization.

COURSE OUTLINE

Module 1: Design and principle of operation of the SINAMICS S120 converter system:

- Control module, infeed and power units
- Motor, encoder and DRIVE-CLiQ interfaces

Module 2: Data backup and diagnostics using:

- STARTER software
- BOP operator panel and web server

Module 3: Determining the signal flow in the setpoint channel

Module 4: Internal interconnections to PROFIBUS and PROFINET

Module 5: Procedure when troubleshooting and recommissioning

- Checking the operating state and enable signals
- Analysis of alarms and fault messages
- Read-out of the diagnostics memory
- Tracing signals using the trace function
- Test operation using the control panel and measurement functions

Module 6: Typical power unit, motor, encoder and cable faults

Module 7: Procedure when replacing:

- Control module, power unit, motor and encoder
- Components with safety functions Safety Integrated

Module 8: Practical exercises on remote training equipment with SINAMICS S120 in the booksize format