

## SINAMICS S120 Oppstart og Service for TIA Portal (DR-S12-PMT)

### Short Description

This training course encompasses the basics of the SINAMICS S120 drive system. It provides the technical knowledge required for startup, parameterization, drive optimization, and troubleshooting. Practical exercises for reinforcing the knowledge gained are carried out on the SINAMICS S120 Training Case.

### Objectives

You are responsible for the commissioning of SINAMICS S120 drive systems using the commissioning software Startdrive in TIA Portal. Modern converter systems offer a variety of functions and setting possibilities. By a purposeful procedure you can save time and avoid faults. In this course you will learn the procedure at commissioning step by step. You can handle parameter setting and data saving with the software Startdrive in the TIA Portal. By a correct parameter setting you support the reliable operation of the entire plant. After the course you can put the converter system SINAMICS S120 efficiently into operation. You can adapt the parameters of the closed-loop controller to the respective application and use the diagnostic tools in case of a fault.

### Target Group

Commissioning engineers

### Content

Design and functional principle of the converter system SINAMICS S120:

- Control unit, line infeed and motor modules
- Motors, encoders and interfaces

Parameterization, data backup and diagnostics using Software Startdrive in the TIA Portal:

- Online connection via PROFINET and Ethernet
- Project structure: drive objects and drive components
- Topology of the DRIVE-CLiQ-Interface

Function charts: setpoint channel, Input and output signals

Control signals and internal signal interconnection using BiCo-technology

Optimization of the closed loop control using automatic procedures

Functional principle of the operating modes Servo and Vector

Analysis of the operating status using enable signals, warnings and alarms

Monitoring of signals using the trace function

Introduction to positioning and Safety Integrated

Data exchange with SIMATIC S7 via PROFINET using PROFIdrive Standard Telegram

Practical exercises at training kits with SINAMICS S120 in frame size booksize with servomotor and induction motor

### Prerequisites

Basic knowledge of electrical engineering

### Note

If you like to use Software STARTER we recommend the course DR-S12-PM with apart from that same content. You find additional information about commissioning in the courses DR-S12-PA, DR-S12-OPT, DR-S12-CHA and DR-S12-SAF.

### Type

Face-to-face training

### Duration

5 days

### Language

no