

SINAMICS S120 - Parameterizing and Commissioning in the TIA Portal (DR-S12-PMT)

Short Description

In order to be able to provide you with the best possible support and training in your personal learning environment (own office/home office), we have implemented selected training courses for you in the form of digital online training. With the help of our virtual learning environment for practical exercises, we provide you with live theory lectures from our expert speakers, which convey the training content described in the learning objectives in a practical and comprehensive manner. In our virtual classroom, our subject specialist is also available to you at any time during your individual practical exercises for in-depth questions and technical discussions. In this course you learn to put the converter system SINAMICS S120 into operation using the PC-tool Startdrive in the TIA Portal. You can adapt the parameters to the respective application and perform diagnostics in case of a fault.

Objectives

You are responsible for the commissioning of SINAMICS S120 drive systems using the commissioning software Startdrive in the 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.

You will deepen your theoretical knowledge through numerous practice-oriented exercises in our remote learning environment with SINAMICS S120.

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

Consolidation of the contents through practice-oriented exercises in the remote learning environment with SINAMICS S120.

Prerequisites

Basic knowledge of electrical engineering.

Technical requirements:

For this training you need a computer with Windows7 or better Windows10 and a stable internet connection with 50MBit. As internet browser you need Google Chrome to access a virtual whiteboard and to use our TIA cloud solution well. Platform for this training is Microsoft Teams. We recommend installing the Microsoft Teams App for the best possible use of all functions.

Note

If you like to use 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

Online-Training

Duration

5 days

Language

en

