SIEMENS

Online Training - SINAMICS G120 & S120 Drives with STARTER (CO-G12S12)

Objectives

- In this course you will learn the procedure at commissioning step by step. You can handle parameter setting and data saving with the software STARTER. By a correct parameter setting you support the reliable operation of the entire plant.
- After the course you can put the converter system SINAMICS G120 & 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

- Users, Commissioning / Service / Maintenance Engineers

Content

- Design and principle of operation of the Sinamics G120 & S120 inverter.

HARDWARE:
- Control Unit CU
- Power Module PM
- Operator panels: BOP-2 and IOP/IOP-2
- Operator panels: BOP-20
- Option boards, Terminal modules, Sensor modules.
- Motors, encoders, and interfaces
- Detailed Block diagram of AC Drive System

COMMISSIONING:
* Operation of Drive through BOP-2/IOP/IOP-2/BOP20
- BICO Technology concept
- Parameterization using STARTER or SCOUT software
- Online connection via Profibus, Profinet or mini USB cable
- Motor ID/Optimization
- Automatic configuration.
- Project structure: drive objects and drive components
- Topology Concept.

SINAMICS G120 & S120 FUNCTION & FEATURE:
- Various Function Modules
- Setpoint channels
- Operation of drive with V/F control & Vector Control mode.
- Using various Data sets – CDS, DDS.
- Sinamics Compact Flash structure
- Free Function Blocks

PLC DRIVE COMMUNICATION:
- Establishing Communication between Sinamics G120/S120 & Simatic PLC (S7-300/S7-400) over **Profibus or Profinet**
- PZD description (Send / Receive data)
- Diagnostics at Drive & PLC Side (Control word /Setpoint / Status word)
- Logic Blocks for Send / Receive data.

DIAGNOSTICS:
- Fault Diagnostics with Trace in Starter & other software / hardware options
- Project Backup
- Firmware & Project Upgradation
- Hardware Replacement

DIGITALIZATION:
- Access of S120 with web browser without using commissioning software.

HANDS ON:
- Exercises defined based on Topic explained
- Hands on practice on demo kit

Prerequisites

- Engineers in Electrical / Electronic Engineering with Power Electronics Background

Note

TECHNICAL REQUIREMENT (ONLY FOR ONLINE TRAINING):
- A Desktop or laptop with Windows 7/10 OS and a stable internet connection. (We recommend a data transfer rate of 5 Mbit/s.)
- Microsoft Teams for technical presentations
- Team Viewer platform for Hands-on

Type

Online-Training

Duration

6 days

Language

en

Fee

46,200 INR