

Online Training - SINAMICS G120 with STARTER (DR-G120)

Objectives

After the course you will be able to correctly commission the inverter and adapt it to address the application. You will know suitable inverter functions and parameter settings for a wide range of applications. You can make a data backup, and taking the appropriate measures when faults occur.

Target Group

Users, Commissioning / Service / Maintenance Engineers

Content

- Design and principle of operation of the SINAMICS G120 inverter.

HARDWARE:

- Control Unit CU
- Power Module PM
- Operator panels: BOP-2 and IOP/IOP-2
- Detailed Block diagram of AC Drive System

COMMISSIONING

- Operation of Drive through BOP-2/IOP/IOP-2
- BICO Technology concept
- Parameterization using STARTER software
- Online connection via Profibus, Profinet or mini USB cable
- Motor ID/Optimization

G120 FUNCTION & FEATURE

- Various Function Modules
- Setpoint channels
- Operation of drive with V/F control & Vector Control mode.
- Using various Data sets – CDS, DDS
- Free Function Blocks
- Inverter Functions in G120
 - Automatic Restart
 - Flying Restart
 - Kinetic Buffering
 - Vdc max Controller

PLC DRIVE COMMUNICATION

- Establishing Communication between Sinamics G120 & Simatic PLC (S7-300/S7-400/S7-1500) over Profibus or Profinet.
- PZD description (Send / Receive data)
- Diagnostics at Drive & PLC Side (Control word /Setpoint / Status word)
- Integrated project & Individual project data mapping wrt. defined PZD

DIAGNOSTICS

- Operating States, Alarms, and Fault codes
- Fault Diagnostics with Trace in Starter & other software / hardware options
- Control signals and signal interconnections
- Project Backup
- FW & Project Upgradation
- Hardware Replacement

DIGITALIZATION

- Web based control of SINAMICS G120 using Smart Access Module

HANDS ON

- Exercises defined based on topic explained.
- Hands-on practice on demo kit.

Prerequisites

Engineers in Electrical / Electronic Engineering with Power Electronics

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 platform for technical presentations
- TeamViewer platform for Hands-on

Type

Online-Training

Duration

5 days

Language

en

Fee

27,500 INR

18% GST additional on course fees