SIEMENS

Training - SINAMICS G130 & S120 (MFC-G13S12)

Objectives

- This training course shows you how to adapt the parameter settings & use of hardware / software options to diagnose the drive. It also gives you the opportunity to broaden your technical skills and troubleshoot the drive system quickly to reduce downtime in the plants
- After the course you will be able to read and understand operating parameters. In the event of a fault, you can carry out a target-oriented troubleshooting. You will also be able to back up data using the STARTER PC program

Target Group

Users, Commissioning / Service / Maintenance Engineers

Content

Getting familiar with hardware, wiring diagrams and features:
- Control Units
- Chassis module (AC-AC/ DC-AC)
- CIM
- Power block
- Line infeed & Motor module of S120
- Option boards, Terminal modules, Sensor modules.
- Motors, encoders, and interfaces
- Operator panels: BOP 20, AOP 30
- Block Diagram, Terminal & Wiring Details
- Line-side & Load-side components

Setting of Drive Parameters & I/O Assignment:
- Basic Start-Up Procedure & operating with BOP20 / AOP30.
- BICO Technology concept & different interfacing options.
- Commissioning & Parameterization using STARTER software.
- Online connection via Profibus or Profinet.
- Configuration procedure with drive object concept.
- Drive CLiQ Component Interconnection with Topology Concept.
- Motor ID/Optimization

Diagnostics & Troubleshooting:
- Hardware
- LED diagnostics
- Cold testing
- Diagnostics using operating panel
- Software
- Fault Memory and Fault Diagnostics
- Service function -Trace
- Control & Status Word
- Missing Enables & Interconnections
- Inverter Checking
- Project Backup using CF card & Software tool
- FW & Project Upgradation

Maintenance & Service:
- Procedure for replacement & handling of hardware (Power Block, Power Module, Drive CLiQ components, CIM & Control Unit)
- Procedure for FAN replacement of Chassis & Block size module
- Maintenance for chassis format components. (Dust deposit, ventilation cable & screw terminals)
- Procedure for forming DC link capacitors
- Precautions regarding ESD while handling electronic cards

FAQs:
- Important Parameters
- Frequently occurred faults

HANDS ON:
- Exercises defined based on topic explained
- Hands-on practice on training 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 Team platform for technical presentations.
- TeamViewer platform for Hands-on.

Type

Face-to-face training

Duration

5 days

Language

en