SIEMENS

SINAMICS G120 – Setup and Maintenance

General Information

Course Code	SCT-DV120M1A
Global Code	DR-G12-PM
Length	4 Days
CEUs	2.6

Audience

This course is for maintenance and engineering personnel responsible for installing, maintaining, and troubleshooting the SINAMICS G120 series AC drives SINAMICS G120, Siemens PG and PLC will be used for hands-on exercises

Prerequisites

- 20 AC Motor Basics & 24 AC Drive Basics https://www.sitrain-lms.com/STEP.aspx

Profile

This course is intended to provide knowledge and skills related to the SINAMICS G120 as it pertains to hardware identification, commissioning, operation, configuration, maintenance, diagnostics, and troubleshooting. Interconnections with the G120 – Computer – PLC will be utilized in the session. It is formatted as a combination of instruction and carefully structured, hands-on exercises aimed at developing job-related knowledge and skills.

Upon completion of this course, the student shall be able to:

- Locate modules, terminals, options.
- Commission with Operator Panels (BOP-2, IOP, SINAMICS Starter).
- Perform Drive/Application optimizations.
- Operate Drive remotely or locally – utilization of BOP-2, IOP and Starter control panel.
- Data backup, Save, Upload/Download projects.
- Troubleshoot Power Electronics.
- Configure Analog, Digital, and Comm. I/O.
- Configure, Trace, and Evaluate BICO connections in the drive control logic.
- Configure common Drive Functions
- Evaluate drive system performance using the trace function.
- Evaluate operating states, alarms, and fault codes.
- Create Project/ Connect to Drive via TIA Portal.
- Configure/Commission/Diagnose utilizing Start Drive.
- Operate Drive via networking (PLC).
- Troubleshoot Drive via LED's Operator Panels, Starter, StartDrive.

Topics

1. Overview of Hardware components/function
2. Operator Panels (BOP-2, IOP)
3. SINAMICS Starter
4. Data Backup
5. Repair and Maintenance
6. BICO Technology
7. Diagnostics
8. Control Modes and Tuning
9. Extended Functions/Features
10. TIA Portal
11. StartDrive
12. Networking with PLC

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