

DC DRIVE 6RA70 & 6RA80 (MFC-R70R80)

Objectives

- This training course shows you how to adapt the parameter settings & use of hardware / software options to diagnose the DC drive. It also gives you the opportunity to broaden your technical skills and troubleshoot the Drive system quickly to reduce downtime in the plants.

BENEFITS:

- 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 Software Tool.

Target Group

- Users, Commissioning / Service / Maintenance Engineers

Content

Grasp a basic overview of terminology, functions and components:

- Three phase-controlled converters
- Block diagram of DC Drive
- Line-side & Load-side components
- Typical applications

Getting familiar with hardware, wiring diagrams and features:

- Hardware Identification of 6RA70
- Control Unit – CUD1 & CUD2
- Power module – Armature & Field Circuit
- Block Diagram, Terminal & Wiring Details
- LBA, ADB & supplementary option boards
- Hardware Identification of 6RA80
- Control Unit: Standard CUD & Advanced CUD
- Power Module & Field card
- Interfaces, Terminal & Wiring Details
- Expansions with Terminal Modules & Sensor Modules via Drive-CLiQ
- Setting of Drive Parameters & I/O Assignment:
- SIMOREG DC Master 6RA70
- Basic Start-Up Procedure & operating with OP1S
- BICO Technology, Binary Inputs / Outputs & Analog Interfaces
- Commissioning and parameterization using Drive Monitor Software
- Automatic Optimization
- SINAMICS DCM 6RA80
- Commissioning and parameterization activities using the BOP-20 and AOP 30 operator panels as well as with STARTER PC tool.
- Online connection of Drive via PROFIBUS interface.
- Procedures for commissioning and functional checks.
- Project structure: drive objects and drive components.
- Automatic 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
- Thyristor Checking
- Project Backup using OP1S, Micro Memory Card & Software
- FW & Project Upgradation
- Maintenance & Service:
- Procedure for replacement & handling of hardware (CUD, Interface card & power cards)
- Procedure for FAN replacement.
- Precautions regarding ESD while handling electronic cards.
- Regular service & maintenance activities. (Dust deposit, ventilation, cable & screw terminals)

FAQs:

- Important Parameters
- Frequently occurred faults
- 6RA70 to 6RA80 Migration guide

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

Fee

45,000 INR