

## SINAMICS DC Master 6RA80 (DR-DCM)

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### Objectives

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This training course shows you how to adapt the parameter settings for the converter in line with the application and DC motor. It also gives you the opportunity to broaden your theoretical knowledge by means of exercises carried out on special training equipment. Once you have completed the course, you will be familiar with the functions of a converter and the respective interfaces. You will also be able to commission a converter quickly and reliably. Routine fault diagnosis and rectification help save time and optimize the availability of your plant.

### Target Group

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Users, Commissioning / Service /Maintenance Engineers

### Content

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- Basics of DC Drive :- a) Basic DC Motor equations b) Three phase controlled converter Thyristor accessories c) PI Controller d) Block diagram of DC Drive e) Braking & Reversal/ Single & Multi-quadrant Drive f) Optimization g) Speed variation techniques
- Structure and functional principles of the SINAMICS DC MASTER converter: Control Unit CUD, Power Module, excitation circuit, interfaces
- Commissioning and parameterization activities using the BOP20 and AOP30 operator panels as well as the STARTER PC program
- BICO Technology, Binary Inputs & Outputs
- Procedures for commissioning and functional checks
- Optimizing current regulation and closed-loop speed control, automatic optimization
- Function block diagrams: Setpoint channel, inputs/outputs, free function blocks
- Concept of CDS and DDS
- Using Micro Memory Card: Structure and data backups
- Information on Drive Control Charts (DCC)
- Drive-end interface to PROFIBUS / PROFINET
- Expansions with Terminal Modules and Sensor Modules via DRIVE-CLiQ
- Parallel connections and peer-to-peer interfaces
- Thyristor Checking
- Operating states, alarms, and fault codes
- Service functions: Trace, measurement functions, diagnostic memories
- Practical exercises with AOP30 and STARTER on training equipment

### Prerequisites

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Engineers in Electrical / Electronic Engineering with Power Electronics Background

### Type

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Face-to-face training

### Duration

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6 days

### Language

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### Fee

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33,000 INR