



# Requirements

(DR-MD-IH) - 5 days

This training course encompasses the basics of the SIMOVERT Masterdrives drive system. It provides the technical knowledge required for startup, parameterization, drive optimization, and troubleshooting.

Practical exercises for reinforcing the knowledge gained are carried out on the SIMOVERT Masterdrives training Case. This course is for commissioning and configuring engineers, and service personnel who are involved with drive applications. Persons with basic knowledge of drives can attend this course.

## **Objectives**

On completion of the course, you will be able to implement automation solutions with the SIMOVERT Masterdrives. You can carry out startup and optimization of the SIMOVERT Masterdrives quickly and effectively with skilful use of the Drive Monitor & STARTER commissioning tool. In this way, you reduce engineering costs and minimize downtimes in your plant.

#### **Topics**

After attending the course, you can do the following:

- Overview of SIEMENS Drives System
- Startup and parameterization
- SIMOVERT Masterdrives with the DriveMonitor commissioning tool
- Analogue & Digital I/Os configuration
- Converter Function (Flying Restart, etc)
- Flexible signal switching with BICO Technology
- Diagnostics and troubleshooting
- Performing practical exercises on training devices
- Overview on SIEMENS new range of Drive System



# SIMOVERT MASTERDRIVES SERVICE COURSE (DR-MD-IH) – 5 days

#### **Course Certificate**

Certificate of participation will be awarded after the training.

Contact Information SIEMENS MALAYSIA SDN. BHD. (93008-X) HRDF Training Provider ID: 13213/82

Digital Factory/ Process Industries & Drives

Level 1, Reception, CP Tower, No. 11, Jalan 16/11,

Pusat Dagang Seksyen 16, 46350 Petaling Jaya, Selangor.

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#### **Bank Details**

Bank Name: Deutsche Bank (M) Sdn Bhd

Bank Account Number: 0020768000

Bank Address: 18th – 20th Floor, Menara IMC 8,

Jalan Sultan Ismail, 50250, Kuala Lumpur

Bank Swift Code : DEUTMYKLXXX



# **Daywise Schedule**

# Day 1

1. SIEMENS Drives System Overview

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- · The system concept of SIEMENS drive
- · SIEMENS drive design
- · Tools available for commissioning
- 2. SIMOVERT Masterdrives Drive Overview
  - · Structure and its components
  - Configuration
  - · Functions available

## Day 2

- 3. Commissioning with
  - PMU Keypad
  - · OP1S Operator Panel
  - DriveMonitor
- 4. Commissioning Steps
  - · Parameterizing
  - · Detail parameterizing.
  - · Basic Motor Startup

# Day 3

- 5. Commissioning details
  - · Customization of parameter
  - Type of Control Loop V/Hz/ Close loop
  - · Control/ Status Word
  - BiCo Technology
- 6. Practical Exercise
  - · Task Assignment

# Day 4

- 7. Diagnostics
  - Diagnostics via PMU/ OP1S
  - Interpretation of fault messages and alarm indications
  - · Diagnosis via Drive Monitor
- 8. Practical Exercise
  - · Generate Fault and troubleshoot

IngerDay 5

- 9. SIEMENS new range of Drive System
  - STARTER



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## **Time-wise Schedule**

Day	Time	Topics
Day - 1	09:00 Hrs – 10:00 Hrs 10:00 Hrs – 12:00 Hrs 13:00 Hrs – 15:00 Hrs 15:15 Hrs – 17:00 Hrs	Introduction to Masterdrives Motor Theory Inverter Theory Inverter Theory (cont.)
Day – 2	09:00 Hrs – 10:30 Hrs 10:45 Hrs – 12:00 Hrs 13:00 Hrs – 15:30 Hrs 15:45 Hrs – 17:00 Hrs	Programming of the unit Basic configuring steps via PMU-keypad Using OP1S-Keypad unit Basic Fault Findings
Day – 3	09:00 Hrs – 10:30 Hrs 10:45 Hrs – 12:00 Hrs 13:00 Hrs – 15:30 Hrs 15:45 Hrs – 17:00 Hrs	Communication using DriveMonitor Software Upreading and Downloading of Back-up file Operating Instruction - Parameterizing Practical exercise
Day – 4	09:00 Hrs – 10:30 Hrs 10:45 Hrs – 12:00 Hrs 13:00 Hrs – 15:30 Hrs 15:45 Hrs – 17:00 Hrs	Operating Instruction – Fault List Operating Instruction – Maintenance Parameter List - Explaination Practical exercise
Day - 5	09:00 Hrs – 10:30 Hrs 10:45 Hrs – 12:00 Hrs 13:00 Hrs – 15:30 Hrs 15:45 Hrs – 16:00 Hrs	Function Diagrams SINAMICS family & Overview Starter Software Q& A/ Feedback

# **Break Timings:**

 10:30 Hrs – 10:45 Hrs
 Morning Tea Break

 12:00 Hrs – 13:00 Hrs
 Lunch Break

 15:30 Hrs – 15:45 Hrs
 Afternoon Tea Break

15:30 Hrs – 15:45 Hrs Afternoon Lea Break 17:00 Hrs – 17:15 Hrs Recess & End of Day