

Online Training - SINAMICS V90 (DR-V90)

Objectives

This course shows you how to handle the SINAMICS V90 inverter using operating panel and V Assistant software. After the course you will be able to commission and control the drive with different control modes. You will understand positioning concepts and able to use them for different applications. You can make data backup and taking appropriate measures when fault occur.

Target Group

Users, Commissioning / Service / Maintenance Engineers

Content

- VFD working principle and block diagram of AC Drive

HARDWARE

- Specifications, range, features and hardware details of SINAMICS V90
- Understanding of Operator panel functions, key operation & status LEDs on the drive
- Block diagram of the product, terminal details

COMMISSIONING

- Operation of Drive through BOP
- BICO technology concept
- Parameterization using SINAMICS V-ASSISTANT software
- Online connection via Profinet or mini-USB cable
- Optimization / One Button Tuning / Real time tuning

V90 FUNCTION & FEATURE

- Controlling the drive with different control modes
 - a) Internal Speed control
 - b) Torque Control
 - c) Internal position control (IPos)
 - Basic Positioning
 - Electronic gear ratio

PLC DRIVE COMMUNICATION

- Establishing Communication between SINAMICS V90 & Simatic PLC (S7-1200/S7-1500) over PTI or Profinet.
- Pulse train input (PTI) –Using S7 1200 PLC
- PZD description (Send / Receive data)
- Diagnostics at Drive & PLC Side (Control word /Setpoint / Status word)

DIAGNOSTICS

- Operating states, Alarms, and Fault codes
- Fault Diagnostics with Trace in V-ASSISTANT and other hardware options
- Project Backup

HANDS ON

- Exercises defined based on topic explained.
- Hands on practice on demo 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.& above)
- Team Viewer platform for Hands-on.
- Microsoft Teams platform for technical presentations.

Type

Face-to-face training

Duration

3 days

Language

en

Fee

16,500 INR
18% GST additional on course fees