

Basic course on AC/DC Drives (DR-BDT)

Objectives

The participants:

- Will have a basic or fundamental knowledge of various DC/AC Variable speed drives.
- Will know about the product specifications, range, hardware / constructional details and features of the product.
- Will be able to perform drive start-up and parameterize drive for different configurations including use of programmable digital and analog inputs and outputs.

Target Group

Users, Commissioning / Service / Maintenance / Fresh Engineers.

Content

- Brief Basic Power Electronics (including Thyristors, Power-Transistors & IGBTs).
- DC Motor Basics (construction, principle of operation, T-N Characteristic etc).
- DC Drives Basics (Block diagram, 1Q-4Q principle of operation, T-N Curves etc)
- Selections, calculations & applications of typical DC drives.
- Siemens DC Drives (6RA80) Ratings, Specs, features, options & applications.
- AC Motor Basics (construction, principle of operation, T-N Characteristic etc).
- AC Drives Basics (Block diagram, 1Q-4Q principle of operation, T-N Curves etc)
- Selections, calculations & applications of typical AC drives.
- AC Drives (Sinamics V, G & S) Ratings, Specs, features, options & applications.
- MEDIUM VOLTAGE (MV Drives & Motors):
- MV Motor types & Fundamentals (including starting methods, options / features)
- MV Motor offers from Germany (separately for Induction & Synchronous Motor)
- MV Converter Basics & types (Voltage, Current Source & Cyclo-converters)
- Siemens MV Converters (Sinamics GM / GL, Sinamics SM / SL)
- Sinamics Perfect Harmony GH180 Drive
- Selection, configuration & applications of MV Drive systems
- Short briefing on MV Transformers along with their options & protections
- Hands on practice on DC and AC drive

Prerequisites

Engineers in Electrical / Electronic Engineering with Power Electronics Background **Type** Face-to-face training **Duration** 5 days Language en Fee

27,500 INR