

## LV Switchgear Products, Distribution & Panel (LV-SWPD)

### Short Description

LV Switchgear Products, Distribution & Panel

### Objectives

The participants will learn the functional principal and operation of the air circuit breakers, MCCBs, Contactors, MPCBs and Relays. The main emphasis of the course is on teaching practical product knowledge, in order to enable maintenance, inspect and service LV Switchgear products, to find simple errors, and to replace the spare parts.

### Target Group

Operation/ Service / Maintenance/Commissioning staff.

### Content

- Power Distribution Basics
- Selectivity of grid system
- Introduction and basic principles of low-voltage switchgear, switching principles.
- Basic Concepts of fault level, current carrying capacity.
- Principle of selectivity and cascading
- Function and operation of 3WL & 3WT circuit breakers.
- Installation and de-installation of the standard accessories.
- Introduction in protection settings of circuit breakers (characteristic curves)
- Overview of communication regarding 3WL air circuit breakers (Only theory)
- Maintenance instructions.
- Function and operation of 3VA & 3VT MCCB.
- Installation and de-installation of the standard accessories.
- Overview of communication regarding 3VA MCCB.
- Function and operation of HRC fuse and Switch Disconnecter Fuse.
- Function and operation of Contactors.
- RLT Contactor, Vacuum Contactor product range, features.
- Compactness DOL, RDOL.
- Overload Relays, Motor Protection Circuit Breaker function and operation- why MPCB needs to be used.
- Type-2 Co-ordination and Co-ordination chart reading.
- Use of the software SIMARIS
- Form of Internal separation
- Supply system
- Practical exercises

### Prerequisites

Basic principles of electrical engineering and power distribution, knowledge of technical options and specifications of LV Switchgear products.

### Note

After this course participants shall able to troubleshoot the errors, inspect and service LV Switchgear products, change or replace the spares/accessories.

### Type

Face-to-face training

### Duration

4 days

### Language

en

### Fee

28,000 INR