

COURSE DESCRIPTION

CHH680 – MCC MNS 3.0

Course goal

The goal of this course is to provide participants with the required theoretical knowledge on operation and maintenance aspects of MNS MCC.

Main learning objectives

The participants will be able to:

- Understand the specific makeup of MNS MCC
- Understand the functionality of the main knowledge about MNS
- Assist the ABB commissioning engineer on-site during installation, erection and commissioning phase
- Use, set and document MNS workouts during erection and operation of the plant

Participant profile

This training is focused on commissioning, maintenance and service personnel.

Prerequisites

Participants should have basic knowledge about mechanical and electro technic skills.

Topics

- General system overview
- Functional description of the MNS 3.0 system
- General system overview
- MNS standard and features
 - Ratings
 - Design aspects
 - Horizontal busbars
 - Vertical distribution bars with MFW
 - Power contacts
- Incomer and coupler solutions
- Modular devices in the MCC
 - Plug-in modules
 - Withdrawable modules
 - Fixed outgoing solution
- Customer benefits
 - Portfolio applications & references

Service information

- Maintenance of the frame
- Cubicle frame basics
- Lifting angles & fixing methods
- Module handle positions
- Cable rails (outgoing cubicles)
- Earthing rails for Fieldbus cable entry
- Customer documents

Practical hands-on activities (if possible)

- Explanation of the hole pitches in the frame “E”
- Service access to withdrawable modules

Course type and methods

This is an instructor-led course (various subject-matter experts) with discussions, demonstrations and associated theoretical exercises. Limited practical hands-on activities are also part of this basic course.

Duration

The duration is approx. 2 hours.

Remarks

This training course will be executed at ABB factory and training facilities in Switzerland before installation and commissioning of the MNS and MNSiS system at customer site and shall be scheduled accordingly.

Course map

- Welcome, personnel introduction
- Course introduction
- Presentation switchboard system MNS 3.0
- Short introduction on erection and commissioning manual
- Handling of the withdrawable module
- Questions and answers
- Evaluation
- Course close