
COURSE DESCRIPTION

J620 UNITROL® 5000

Operation and Maintenance training

Course goal

The course goal is to teach students to start-up, adjust, operate, and maintain the UNITROL® 5000 excitation system

Participant profile

Operator and maintenance personnel in power plants and industrial sites

Prerequisites

Basic knowledge of electronics and power generation
 Basic knowledge using personal computer
 English Level: B1

Topics

Basic operating condition of the synchronous machine
 Duties of excitation systems
 Configurations of UNITROL® 5000

- Single channel and double channel configuration
- Principle operation of the hardware
- Measuring units, I/O interfaces
- Controller board
- Fast I/O
- ARCnet field bus
- Converter types
- Local service and control panel

Principle operation of the software

- Voltage regulator with limiters and power system stabilizer
- Channel and follow-up control
- Monitoring and protection
- Superimposed cos phi / VAR control
- Communication to superior data buses (MODBUS / Profibus)

Using commissioning and maintenance tool

- How to read signals and the fault logger
- How to record and display signals with the data logger and trending window

Maintenance aspects

- How to localize and replace defective components
- How to interpret alarms
- What to do in case of troubles

Learning methods and tools

- Lectures, Presentations
- Demonstrations
- Exercises

Duration

5 days, Max. 8 participants
 Tailor made and on-site training courses on request



Classroom training



Hands-on training

ABB Switzerland Ltd.
Learning Center Power Electronics
Austrasse
CH-5300 Turgi / Switzerland
E-mail: training-pesmvd@ch.abb.com
<http://new.abb.com/service/abb-university>

—
ABB Switzerland Ltd
Learning Center Power Electronics
Austrasse
CH-5300 Turgi

<http://new.abb.com/service/abb-university>
training-pesmvd@ch.abb.com
ABB MyLearning