



# MV7 VSD with PECe system

Application: MV  
Induction/Synchronous motor

## Purpose

- Familiarize yourself with power and control system architectures
- Understand, know the MV7000 principles applied to the AC motor control & know the PECe control system using P80i tool
- Operate, maintain and troubleshoot the system.

## Target audience

- Operator personnel / Management personnel / Maintenance personnel / Engineering personnel.

## Prerequisite

- Experience or knowledge in Power Conversion products or/ and systems
- Experience or knowledge in VSD & Control Systems.

**Location:** Global Technical Learning Center  
Villebon

## Content

ELECTROTECHNICAL THEORETICAL  
(transformer/drive/rotating machines)

MV7000 OPERATING PRINCIPLE

- Configuration, main components and options
- DFE/AFE (Diode/Active Front End)
- DC Bus
- IGBTs and RC snubbers
- The P.W.M. strategy of the MV7000

Analogy between drawing and equipment

MV7000 PECe DRIVE CONTROL & PROCESS AUTOMATION

- MV7000 PECe system & Main CPU (RXi/B&R/VME)
- Power Interface Board PIBe
- EtherCAT network & P80i & PERTU

Training Code	EN MV7 B1
Max number of trainees	6
Price	Contact us

**Duration: 5 days (35 hours)**

**Practical Exercises: 80 %**

- Use of an MV7000 PECe application through the P80i tool & MV7000 piloting an AC motor
- Maintenance & Troubleshooting
- Replacement of parts.

## Training Equipment

- Use of MV7 mock-ups & dedicated tools
- Converter cooling unit.

## Training Equipment

- Quiz & practical exercises.

## Trainee's Documentation

- Specific customer documentation
- Customized training material

## Certificate of attendance.

### MV7000 APPLICATION

- Application structure
- Control sequences

### MAINTENANCE PROCEDURES

- Replacement of Remote IO modules, network switches
- Application reloading (P80i software)
- Focus on CCU parts

### TROUBLESHOOTING WITH MV7 MOCK-UP

- Configuration and use of commands
- Alarms & Faults
- Use of P80i tool (dynamic mode) & PERTU tool (recording & THL modes)