

## Elektromagnetische Verträglichkeit für die Praxis (MP-EMVPRA)

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### Short Description

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The course is aimed at all personnel in Development, Design, Manufacturing, and Service who require practical knowledge and abilities regarding EMC in their day-to-day work. The individual topics are explained with video films and practice-oriented effects of electromagnetic phenomena are demonstrated, along with the relevant measures for prevention or correction.

### Objectives

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The aim of the course is to enable you to prevent EMI or correct the faults resulting from it.

### Target Group

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- Programmers
- Commissioning engineers
- configuring engineers
- Service personnel
- Maintenance personnel

### Content

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- Points for special attention when planning systems
- What an electromagnetically-compatible control cabinet looks like, especially with variable-speed drives
- How to differentiate software errors, hardware faults and electromagnetic interference (EMI)
- Suitable measuring resources for troubleshooting and how they are used
- Tips and tricks for increasing noise immunity at a later stage
- Static discharge - causes, effects and remedies
- Advantages and disadvantages of different grounding methods, causes of potential differences. How is equipotential bonding carried out?
- Origins, effects and prevention of harmonics, system resonances, harmonic absorbers, lock-out circuits, etc.
- How and when can filters be used to effect
- Everything about cable shield connections
- Motor shaft currents - origins, effects, remedies
- Aspects of lightning protection, from detecting the hazard to the use of protective elements
- Introduction to standardization, CE, EMC directive

### Prerequisites

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Basic knowledge of automatization

### Type

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Face-to-face training

### Duration

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2 days

### Language

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