SIEMENS

SINAMICS and SIMOTICS - Basics of Drive Technology (DR-BASIC)

Korte beschrijving

This course provides extensive basic information for activities in the field of electrical drive technology. The topics are addressed in a general manner, independently of specific products. In further courses on SINAMICS converters, you will be able to more easily realize details and understand their context.

Doelen

This is an advantage both in commissioning and diagnostics, and when configuring and planning drive systems.

Doelgroep

Sales personnel
Project managers, project assistants
Startup engineers, configuration engineers
Service personnel
Maintenance personnel

Inhoud

• Electronic components: diode, thyristor, transistor, IGBT
• DC converter: design and function
• Rectifier and inverter operation
• Gating angle, commutation, inverter commutation failure
• AC converter: design and function
• Rectifier, DC link, inverter
• Pulse width modulation, pulse-edge and space-vector modulation
• Line connection: active power and reactive power, harmonics
• Line-side and motor-side components: reactors, filters, fuses
• Mechanics: equations of motion, energy balance, gear ratio
• Motors (DC, Synchronous, Induction): design, function and equivalent circuit diagram
• Measuring systems for sensing speed and position
• Control technology, Controller and control loops, optimization criteria

Vereiste voorwaarden

Basic knowledge in electrical engineering

Opmerking

Included in the course price: Free access to the digital learning platform SITRAIN access – starting one week before the start of the course until two weeks after the end of the course. Here you will find web-based trainings on SINAMICS Converters as well as other topics such as Industrial Automation Systems SIMATIC and many more. With the Learning Membership, you can deepen or repeat the content of this Learning Event as well as continue your education on other interesting topics.

Soort

Face-to-face-training

Duur

5 dagen

Taal

en

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