

SMD – Commissioning, diagnostics and service of SIMOVERT MASTER DRIVES / Курс SMD (Привод переменного тока SIMOVERT MASTER DRIVES) (SMD)

Short Description

The course is intended for the experts who are engaged in adjustment, commissioning and service of SIMOVERT MASTER DRIVES VC drives. During a course the device and properties of the transistor frequency converter (FC) with a link of constant tension is studied properties of asynchronous and synchronous electric motors. Use of the Simovert VC converter and asynchronous electric motor for realization of various technological modes, methods of construction and optimization of the closed systems of automatic control by means of the built-in means of PCh, diagnostics of a condition of the electric drive, behavior in non-standard and emergencies is considered.

Content

- Electromechanical properties of engines of alternating current
- Regulation of coordinates of the electric drive of alternating current
- Bases of the theory of automatic control
- It is frequency the adjustable electric drive of alternating current of Simovert Master Drives
- Appointment, main functions, scopes and technical characteristics of converters
- Frequency converter device
- Functional and electric schemes. Connection of chains of management and power chains
- Electromagnetic compatibility and protection against hindrances
- Additional options PCh Simovert Master Drives
- Principles of creation of a control system of PCh Simovert Master Drives
- Functional blocks, connectors and binektor, word of management and word of a state
- Parameters and groups of parameters. PCh control, management and diagnostics
- Block diagrams of a control system of the electric drive
- The opened control system. Stages of control and check of operability of elements of management
- The closed system of scalar management. Stages of control and check of operability of the electric drive
- The closed systems of vector control of the electric drive. Stages of control and check of operability of the electric drive
- Additional opportunities of Simovert Master Drives converters
- Special functions
- Free functional blocks
- Communication of PCh among themselves and with a control system of the top level

Prerequisites

For successful passing of a course the higher technical or secondary vocational education, basic knowledge of electrical equipment, the theory of the electric drive and the theory of automatic control is desirable

Note

Practical exercises are carried out at the demonstration stand Siemens with the SIMOVERT MASTER DRIVES VC converter.

Type

Face-to-face training

Duration

5 days

Language

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