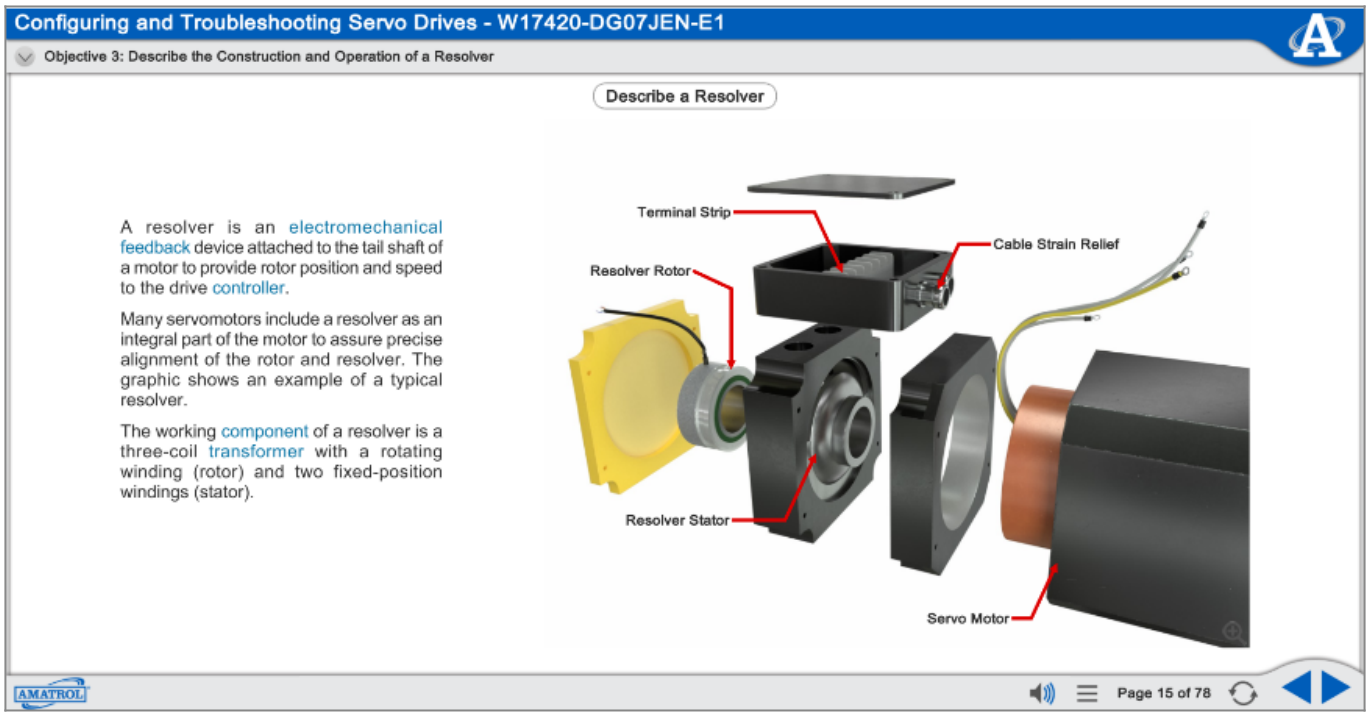
AC Electronic Drives | eLearning Course



eLearning Course: M17420

Industrial AC electronic motor drives are used to provide accurate control of speed, position, and acceleration in applications such as CNC machine tools, conveyors, robots, mixers, and presses. Amatrol's Multimedia Courseware – AC Electronic Drives (M17420) teaches learners essential AC electronic drives concepts applicable throughout modern industry. Learners using Amatrol's AC electronic drives eLearning course begin with an introduction to AC drives. From this building block, learners begin practicing industry-relevant skills, like configuring and troubleshooting AC drives.

Teach A-B PowerFlex 70 Drives and Servo Drives

In-Depth, Comprehensive AC Electronic Drives Curriculum Connected to Real-World Skills
Amatrol's eLearning curriculum is unique in that it thoughtfully combines in-depth theoretical knowledge with practical, hands-on skills. This powerful combination of knowledge and skills solidifies understanding and creates a strong foundation for pursuing more advanced skills.

For example, the AC electronic drives eLearning course covers important topics, such as:

Introduction to AC Drives

Learners begin with an introduction to AD drives. Individual lessons focus on topics like categories of VFDs, safety rules, and human interface modules. Learners will also practice skills, such as connecting a PowerFlex 70 drive, performing a SMART setup of a PowerFlex 70 drive, and operating a PowerFlex 70 drive.

Configuring A-B PowerFlex 70 Drives

Learners will study the components and operation of Allen-Bradley PowerFlex 70 Drives. Individual lessons focus on topics like menu structures, parameter files, and basic startup procedures. Learners will also practice skills, such as editing PowerFlex 70 parameters using the HIM, performing a basic startup of a PowerFlex 70 drive, and displaying drive current and voltage values on the HIM.

A-B PowerFlex 70 Control Parameters

Learners using Amatrol's AC electronic drives eLearning course will study Allen-Bradley PowerFlex 70 control parameters. Individual lessons focus on topics like the function of torque parameters, load limit parameters, and analog and digital input/output parameters. Learners will also practice skills, such as editing volts per hertz parameters in a PowerFlex 70 drive, configuring a PowerFlex 70 drive to skip selected frequencies, and editing dynamic control parameters to start the motor at powerup.

Communications and Diagnostics for A-B PowerFlex 70 Drives

Learners will study various aspects of communications and diagnostics for Allen-Bradley PowerFlex 70 drives. Individual lessons focus on topics like drive memory parameters, datalink parameters, and drive and alarm status at fault parameters. Learners will also practice skills, such as saving drive parameters to the PowerFlex 70 memory and to the HIM, configuring data in and data out parameters in a PowerFlex 70 drive, and using diagnostic parameters to determine status of a PowerFlex 70 drive.

Troubleshooting A-B PowerFlex 70 Drives

Learners using Amatrol's AC electronic drives eLearning course will study various aspects of troubleshooting Allen-Bradley PowerFlex 70 drives. Individual lessons focus on topics like types of drive faults, causes of VFD failures, and how to troubleshoot analog inputs. Learners will also practice skills, such as resetting a PowerFlex 70 drive fault, troubleshooting incoming power failures to a VFD, and troubleshooting analog input failures in a PowerFlex 70 drive.

Configuring and Troubleshooting the A-B PowerFlex 40 Drive

Learners will study various aspects of configuring and troubleshooting the Allen-Bradley PowerFlex 40 drive. Individual lessons focus on topics like ramping, volts per hertz ratio, and stop modes by general-purpose drives. Learners will also practice skills, such as connecting and operating a general-purpose AC drive, programming and operating a general-purpose AC drive for S-curve acceleration, and troubleshooting a general-purpose AC drive.

Configuring and Troubleshooting Servo Drives

Learners using Amatrol's AC electronic drives eLearning course will study various aspects of configuring and troubleshooting servo drives. Individual lessons focus on topics like basic components of an AC servo drive, types of feedback used with AC servo drives, and how to configure an AC servo drive. Learners will also practice skills, such as connecting and operating an AC servo drive, monitoring AC servo drive operation using Mint WorkBench software, and troubleshooting an AC servo drive.

Interactive eLearning

Highly-Interactive Multimedia Format Appeals to All Learning Styles
Amatrol's AC electronic drives eLearning course curriculum features a highly-interactive multimedia format. Stunning 3D animations, videos, pictures, voiceovers of all text, and interactive quizzes and exercises bring learning to life. Amatrol's multimedia curriculum contains elements that will appeal to every learning style, keeping learners motivated and engaged.

Anytime, Anywhere Access Promotes Self-Paced Learning
In today's fast-paced, technology-driven world, it's more important than ever to extend the reach of industrial skill training beyond the borders of traditional classrooms. Amatrol's eLearning meets the challenge for flexibility by offering in-depth, comprehensive technical skills training via an intuitive, easy-to-use web-based Learning Management System (LMS).

With anytime, anywhere online access, Amatrol's eLearning allows learners to set their own pace at home, on the job, in a traditional class setting, or a blended approach of these options.

Additional Info

Requires:

- Computer (see Computer Requirements)

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