Variable Frequency AC Drive Training | eLearning Course

eLearning Course: M17411

Amatrol’s Multimedia Courseware – Variable Frequency AC Drive (M17411) teaches learners essential variable frequency AC drive concepts applicable throughout modern industry. Variable frequency drives (VFDs) have many industrial applications, including fans, pumps, conveyors, mixers, grinders, and hoists. Learners using Amatrol’s variable frequency AC drive eLearning course begin by studying the basic principles of variable frequency AC drives. From this building block, learners begin practicing industry-relevant skills, like accelerating, decelerating, and troubleshooting VFDs.

In-Depth Variable Frequency AC Drive Curriculum

Comprehensive Variable Frequency AC Drive Curriculum Connected to Real-World Skills

Amatrol's variable frequency AC drive eLearning course covers important topics, such as:

Introduction to Variable Frequency AC Drives

Learners begin with an introduction to variable frequency AC drives, including two- and three-wire control and jogging control. Individual lessons focus on topics like types of variable speed AC drives, external control capabilities, and how to jog a motor with a VFD. Learners will also practice skills, such as operating a motor using the program keypad of a variable frequency AC drive, programming and operating a two-wire control circuit using a VFD, and programming, connecting, and operating a variable frequency AC drive for motor jogging.

Speed and Torque Control

Learners will study basic principles of speed and torque control. Individual lessons focus on topics like reflected wave voltage, how to program a VFD, and volts per hertz ratio. Learners will also practice skills, such as connecting and operating a circuit to control motor speed using a variable frequency AC drive, programming and operating a variable frequency AC drive to drive a motor above its base speed, and calculating volts per hertz ratio.

Acceleration, Deceleration, and Braking

Learners using Amatrol’s variable frequency AC drive eLearning course will study basic principles of acceleration, deceleration, and braking. Individual lessons focus on topics like ramping, S-curve acceleration, and DC injection braking. Learners will also practice skills, such as programming and operating a variable frequency AC drive to ramp a motor to a stop, programming and operating a variable frequency AC drive to provide S-curve acceleration, and programming and operating a variable frequency AC drive to provide DC injection braking to a motor.

Fault Diagnostics and Troubleshooting

Learners will study various aspects of fault diagnostics and troubleshooting. Individual lessons focus on topics like fault detection, troubleshooting, and clearing faults. Learners will also practice skills, such as determining faults based on the fault display of a variable frequency AC drive, troubleshooting the parameter settings of a variable frequency AC drive, and manually clearing a fault on a VFD.

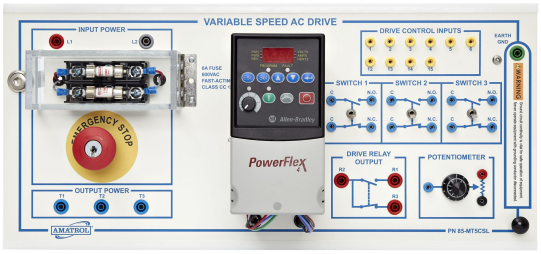
Interactive eLearning with Learning Management System

Highly-Interactive Multimedia Format Appeals to All Learning Styles

Amatrol's variable frequency AC drive eLearning course features interactive eLearning curriculum that integrates various types of learning methods to create an engaging, effective learning experience. Amatrol's multimedia eLearning curriculum includes text with voiceovers, videos, 3D animations, pictures, and interactive activities, quizzes, and self-reviews.

Free Learning Management System (LMS)
Amatrol eLearning is easy-to-use for both students and instructors. Its web-based interface is simple to navigate and available on any WebGL-compatible Internet browser. Instructors love Amatrol eLearning for its simple, yet sophisticated Learning Management System (LMS). The LMS allows instructors to create custom courses, monitor student participation, track course progress, assess knowledge levels prior to a course, and test knowledge levels after completion. Learners appreciate the fact that they can start and stop as needed, moving through each Amatrol course at their own pace. If a self-review reveals that they didn't understand a particular topic as well as they thought they did, they can revisit it before moving on.

Additional Info



Requires:

- Computer (see Computer Requirements)

Options:

- Variable Frequency AC Drive Learning System (85-MT5C)

Address

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Contacts

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