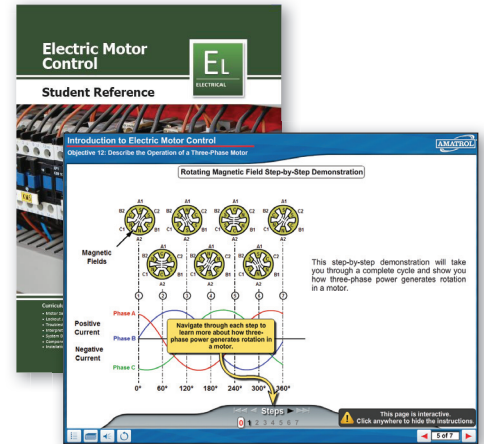


Portable Motor Control Learning System

990-MC1



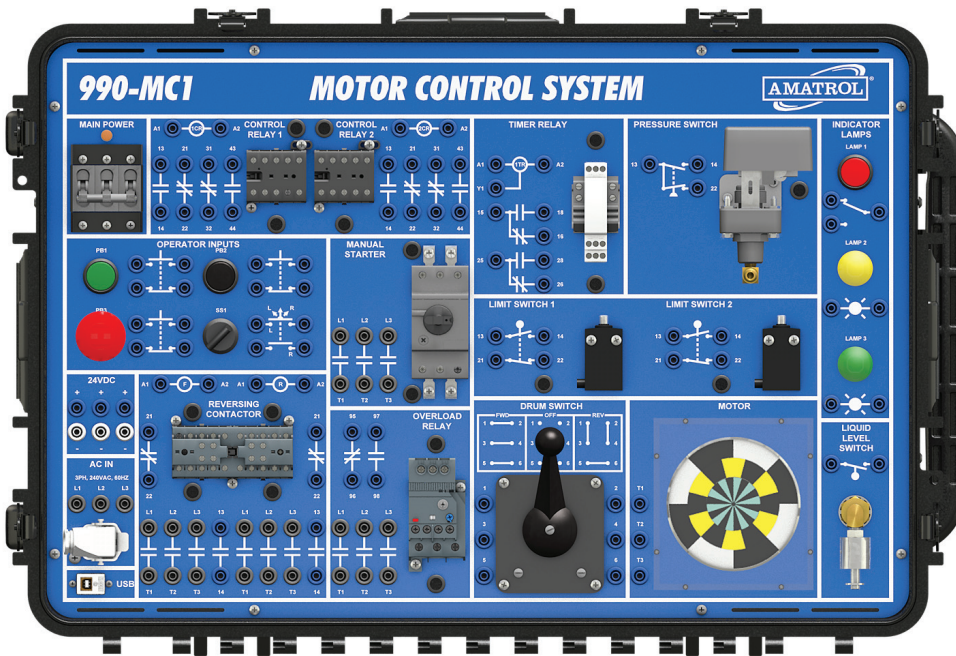
Student Reference Guide



Interactive Multimedia Curriculum



Portable Workstation



990-MC1

Learning Topics:

- Manual Motor Control
- Overload Protection
- Control Ladder Logic
- Control Relays
- Motor Starters
- Troubleshooting
- Reversing Motor Control
- Automatic Input Devices
- Component Operation
- Interpreting Schematics
- System Design
- Safety Interlocks
- Motor Control Applications
- Motor Safety

Amatrol's Portable Motor Control Learning System (990-MC1) features standard industry components like a 3-phase AC squirrel cage motor and uses 3-phase AC for power and 24 VDC for control all packed within a space-saving, portable product. Learners use these industrial components to study the operation, installation, and applications for electric relay control of AC motors. The 990-MC1 also includes lockout/tagout components to teach vital safety steps when working with industrial motors. Electronic fault insertion can be added to the 990-MC1 to teach valuable troubleshooting skills that will prepare learners for real-world problem solving.

Nowhere else can you find this breadth of training in a portable platform! Motor Control is prevalent in all industries, from conveyor control to driving large utility pumps. The 990-MC1 builds both knowledge and skills across topics like manual motor control, control ladder logic, motor starters, and automatic input devices. This innovative approach to bringing motor control training to wherever you need is one example of why Amatrol is the world's leader in skills-based, interactive technical learning.



Technical Data

Complete technical specifications available upon request.

AC 3-Phase Motor
Start, Stop, and Reset Pushbuttons
Reversing Motor Contactors
Transformer
Forward/Reverse Selector Switch
Overload Switch
Limit Switches (2)
Pressure Switch
Float Switch
Drum Switch
Manual Motor Starter
Reversing Motor Starter
DC Power Supply
Control Relays (2)
Timer Relay
Indicators (3)
Multimeter
Lead Set
Interactive Multimedia (M11134)
Instructor's Guide (C11134)
Install Guide (D11134)
Student Reference Guide (H11134)
Additional Requirements:

Personal Computer
Requirements: [http://www.amatrol.com/
support/computer-requirements](http://www.amatrol.com/support/computer-requirements)

Utilities:
Electricity (208VAC/60Hz/3 Phase)

Industrial Components in a Space Saving Package

Developing real-world skills takes practice on industry relevant components and systems. The 990-MC1 includes the most commonly used 3-phase AC squirrel cage motor used in industry as well as other industry-standard components, such as a drum switch, reversing motor contactors, a pressure switch, and a float switch, that they'll actually see in the field.



Superb Motor Control Multimedia Curriculum

Beginning at the foundation of motor control knowledge, the 990-MC1's extensive multimedia curriculum builds off of the basics to advance to topics such as three-wire start/stop control, reversing magnetic motor starter, and on-delay and off-delay timers. As the learner completes each new topic, they'll use this theoretical knowledge to complete hands-on skills. As an example, learners will study about the function, operation, and types of a control relays and then practice hands-on skills by actually connecting and operating a control relay in a circuit.

Mobile, Durable - Use Anywhere!

The 990-MC1 is set within a durable ABS plastic case featuring wheels and a handle so that moving this world-class trainer from one destination to another is safe and easy. Another advantage of the 990-MC1 is the minimal set-up time. Once the case's cover is removed, the trainer sits upright on the training surface.



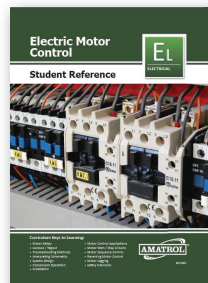
Optional Fault Insertion for Troubleshooting Skills Using FaultPro!

The 990-MC1 can be enhanced to include electronic faults by adding the 99-FTSMC1. This modification will allow users to troubleshoot over 30 faults on components such as the main power circuit breaker, control relays, the pressure switch, and many more! The 990-MC1F (Portable Motor Control Troubleshooting Learning System) includes everything on the 990-MC1, but has electronic fault insertion system pre-installed.

As the industry's premier program utilizing electronic faults, FaultPro allows instructors to instantly set and tailor faults to test a learner's weaknesses, turn them into strengths, and prepares learners to solve real-world technical problems once they're in the field.



FaultPro



Student Reference Guide

A sample copy of the Portable Electric Motor Control Learning System's Student Reference Guide is also included with the system for your evaluation. Student Reference Guides supplement this course by providing a condensed, inexpensive reference tool that learners will find invaluable once they finish their training making it the perfect course takeaway.

