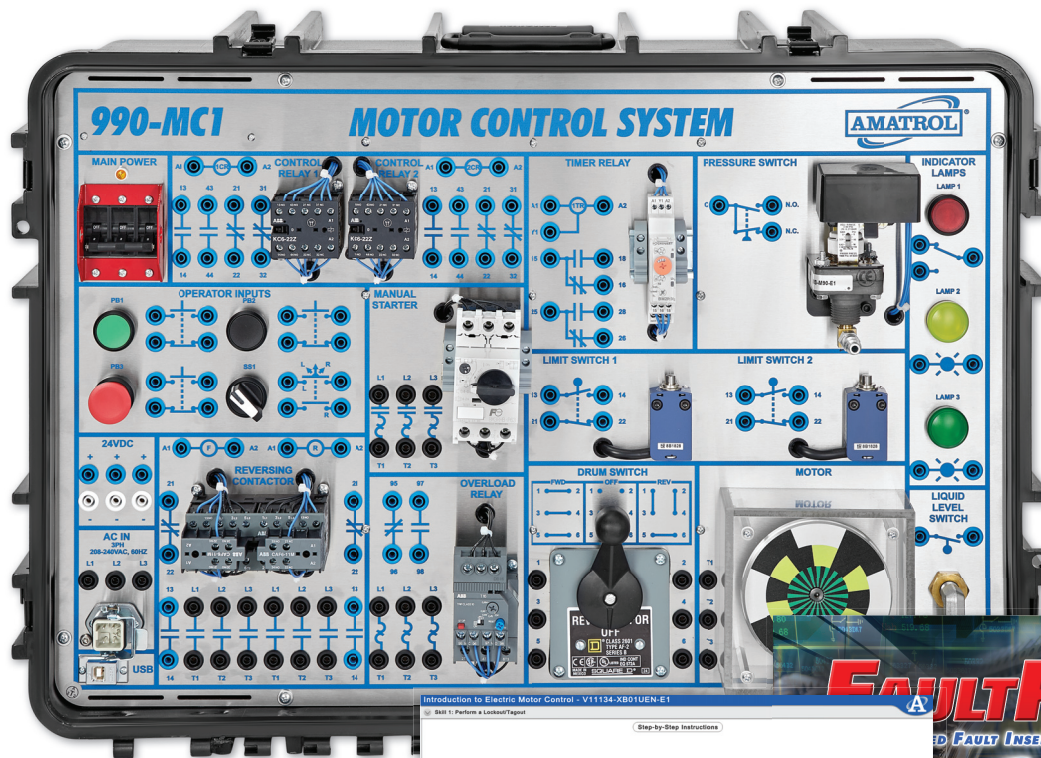


Portable Motor Control Troubleshooting (Sheathed Leads)

990-MC1FSL

EL

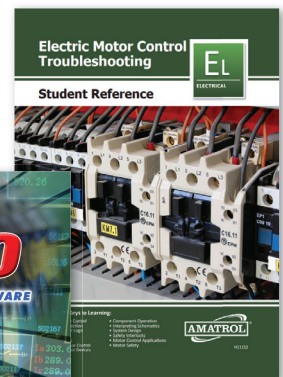
ELECTRICAL



990-MC1F



Includes FaultPro Software and Interactive eLearning



Student Reference Guide

Learning Topics:

- Control Transformers
- Manual & Magnetic Motor Starters
- Motor Overloads
- AC Induction Motors
- Limit, Pressure, Liquid Level, Pushbutton, Drum, & Selector Switches
- Overload Protection
- Timer & Control Relays
- Motor Sequence & Reversing Motor Control
- Motor Jogging
- Safety Interlocks
- Time-Delay Relay Control
- Lockout/Tagout
- Electric Motors Control Systems Applications
- Interpreting Ladder Diagrams
- System Design
- Troubleshooting Methods

Amatrol's Portable Electric Motor Control Troubleshooting Learning System (990-MC1FSL) 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. These real-world motor control components will prepare learners for work opportunities in industries where electric relay control is used in applications like conveyor control and driving large utility pumps. Teach students how to read and interpret ladder diagrams. The 990-MC1FSL also uses FaultPro, Amatrol's unique electronic fault insertion, to teach motor control troubleshooting skills, such as control relay, reversing contactor, limit switch, and pushbutton troubleshooting.

The 990-MC1FSL uses industrial components to cover the operation, installation, and applications for electric relay control of AC motors all within this portable, durable learning system that can be set up nearly anywhere. This system also builds knowledge and skills across topics like manual motor control, control ladder logic, motor starters, and automatic input devices. Nowhere else can you find this breadth of training in a portable platform!



Technical Data

Complete technical specifications available upon request.

AC 3-Phase Motor
Start, Stop, and Reset Pushbuttons
Reversing Motor Contractors
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
FaultPro Software (11164)
Student Curriculum – Interactive PC-Based
Multimedia (N11134, N11152)
Instructor's Guide (C11134, C11152)
Installation Guide (D11134, D11152)
Student Reference Guide (H11134, H11152)
Additional Requirements:
Personal Computer
Computer: See requirements: <http://www.amatrol.com/support/computer-requirements>
Utilities Required:
Electricity (208VAC / 60Hz / 3 Phase)

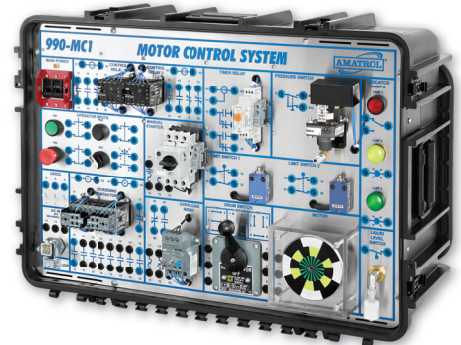
Learn Troubleshooting Using the Industry's Only Electronic Fault Insertion System!



Amatrol's FaultPro, the industry's only electronic fault insertion system, allows learners to insert faults in the system as they progress through industrial troubleshooting methods. FaultPro can also randomly select and insert faults to strengthen a learner's control relay and pushbutton troubleshooting abilities and prepare them for real-world technical problems. The 990-MC1FSL includes over 30 faults including control relay, reversing contactor, limit switch, and pushbutton troubleshooting.

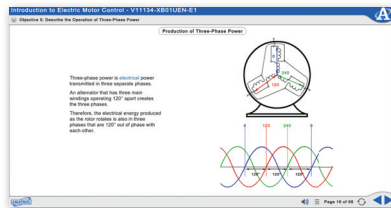
Industrial Components Packed Within One Space-Saving System

The portable electric motor control troubleshooting training system features an extensive range of industry-standard components needed to teach this complex industrial topic, all without sacrificing the curriculum depth and skill-building needed by today's industries. The 990-MC1FSL features a 3-phase AC squirrel cage motor, the most commonly used in industry, 3-phase AC for power, and 24 VDC for control. Additional industry-standard components include a drum switch, reversing motor contactors, a pressure switch, and a float switch, so that learners can practice skills on mechanisms that they'll actually see in the field. The 990-MC1FSL also includes lockout/tagout components to teach vital safety steps when working with industrial motors. Work in their chosen field.



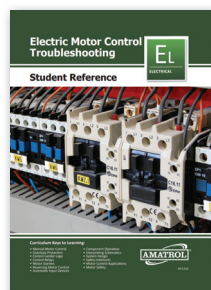
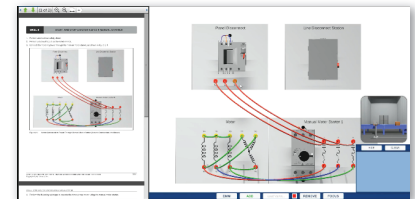
Stunning Motor Control Multimedia Curriculum

Amatrol's portable electric motor control troubleshooting training system 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. Specific electric motor control topics covered include: manual motor control and overload protection; control transformers; control ladder logic; control relays and motor starters; reversing motor control; automatic input devices; basic timer control; and systems troubleshooting. Within these topics, learners will study objectives like starting and stopping a motor using a manual starter; connecting and operating a basic electrical control circuit that uses a pushbutton switch; troubleshooting a 3-wire control system; and designing a motor reversing circuit that uses a drum switch and a magnetic motor starter.



Virtual Trainer for Online Motor Control Troubleshooting Skill-Building

Amatrol's portable electric motor control troubleshooting eLearning curriculum also features a virtual simulator that allows learners to practice hands-on skills even when they don't have access to the physical trainer. Virtual simulators replicate hands-on equipment in such great detail that learners will feel like they are using the actual equipment. Learners perform essentially the same industry-based tasks using the virtual equipment that they would perform using equipment hardware. Virtual simulators offer instructors and learners great flexibility when learning remotely or when a physical trainer must be shared by multiple learners.



Student Reference Guide

A sample copy of this course's Student Reference Guide is included with the learning system. Sourced from the multimedia curriculum, the Student Reference Guide takes the entire series' technical content contained in the learning objectives and combines them into one perfect-bound book. If you would like to inquire about purchasing additional Student Reference Guides for your program, contact your local Amatrol Representative for more information.

