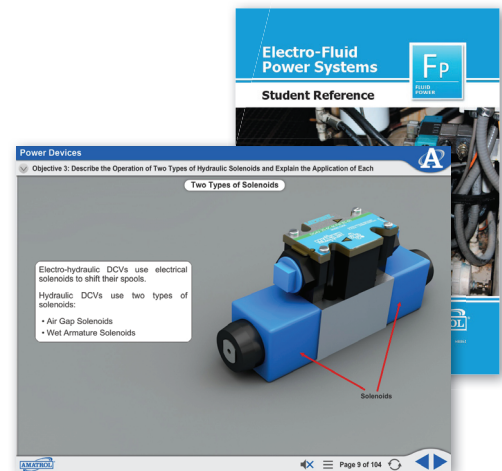


85-EP



Interactive Multimedia Curriculum and Student Reference Guide

Learning Topics:

- Electrical Control Systems
- Logic Elements
- Basic Control Devices
- Ladder Diagrams
- Power Devices
- Control Relays
- Sequencing Control
- Limit Switch Operation
- Timer Control
- Pressure Control Applications
- Circuit Applications
- Safety Circuits

Amatrol's Electro-Pneumatics Learning System (85-EP) adds to the Basic Pneumatics Learning System (850-P1) to teach electrical relay control of pneumatic systems and their industry applications. Learners will study industry-relevant skills related to these topics including operation, installation, performance analysis, and design.

The 85-EP provides students with the components to set up a variety of industrial relay control circuits using ladder diagrams and Boolean logic. Relay control is a fundamental building block in the study of automation since programmable controllers and solid state controls also use the same programming methods.

The model 85-EP includes an Electrical Control Module with relay control components, Electrical Valve Module with solenoid operated pneumatic directional control valves and electrical / electronic sensors, lead set, student curriculum for both theory and lab, student reference guide, and an instructor's guide.

Technical Data

Complete technical specifications available upon request.

Electrical Control Panel

- Selector Switch
- Pushbutton, DPST (2)
- Indicator Light, Green
- Indicator Light, Red
- Power Switch Assembly
- Control Relay, Cube, DPDT, 24 VDC (2)
- Timer Relay
- Lead Set with Pinjacks

Electrical Valve Module

- Directional Control Valve, Double Solenoid, 4-Way, 5-Ported
- Directional Control Valve, Single Solenoid, 4-Way, 5-Ported
- Limit Switch Assembly, Left Acting
- Limit Switch Assembly, Right Acting
- Photo Electric Switch Assembly

Intermediate Multimedia Curriculum (MB861)

Instructor's Guide (CB861)

Installation Guide (DB861)

Student Reference Guide (HB861)

Additional Requirements:

- 24VDC Power Supply.
- Basic Pneumatics (85-BP, 850-P1, or 850-C1)

Optional Products:

- Intermediate Pneumatics (85-IP)

Build Hands-On Electro-Pneumatic Skills with Real-World Equipment

The 85-EP Learning System includes two panels, an Electrical Control Panel and Electrical Valve Module, for hands-on learning and skill practice. The Electrical Control Panel contains components like a selector switch, power switch assembly, timer relay, and indicator lights, and the Electrical Valve Module features directional control valves, limit switches, and a photo-electric switch assembly.

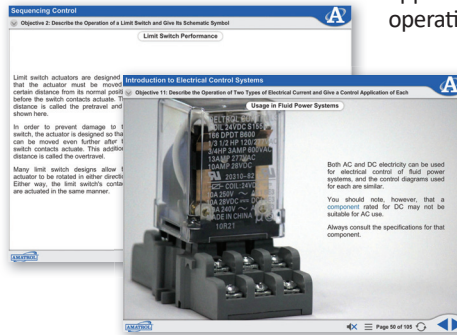


85-EP with 850-P1

Learners will use these components to practice real-world skills such as connecting and operating the following: a hydraulic motor using a 4/2 solenoid-operated DCV; a multiple pressure control circuit that uses a solenoid relief valve; an emergency stop control circuit; and a single-cycle cylinder reciprocation circuit. Learners will also design a time-driven traffic light circuit, a motor control circuit with multiple start/stop pushbuttons, and much more!

World-Class Curriculum for Comprehensive Electro-Pneumatic Knowledge

Amatrol's curriculum is well known for its comprehensive coverage of subject areas. The 85-EP's curriculum is no different covering major areas like basic control devices, power devices, control relays, sequence control, timer control, and more. With these main topic areas, learners will delve into deeper comprehension of the subject by studying ladder diagrams, relay operation, motor control applications, multiple cylinder control, and pressure switch operation and applications.



Amatrol's peerless interactive multimedia curriculum utilizes text with voiceovers, pictures, videos, stunning 3D animations, and interactive quizzes and reviews that engage learners in theoretical knowledge and concepts. This thorough, detailed curriculum begins with the basics and advances to complex concepts. Through partnerships with key industry leaders and leading educators, Amatrol developed the right balance of knowledge to train learners to work in their chosen field.

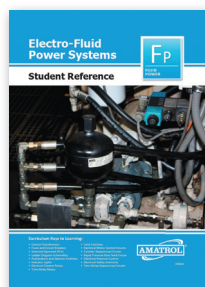
Additional Amatrol Learning System Integration

In addition to the 850-P1, the 85-EP can also be integrated with Amatrol trainers such as the Basic Fluid Power Learning System (850-C1), the Basic Fluid Power Learning System – Double Sided A-Frame Bench with Two Hydraulic Manifolds (850-CD1), and the Basic Fluid Power Learning System – Double Sided A-Frame Bench with One Hydraulic Manifold (850-CD2). The 850-C1 allows learners to practice both hydraulic and pneumatic skills on the same learning system. The 850-CD1 and 850-CD2 also include the opportunity to practice both hydraulic and pneumatic skills on the same system, but double the training capacity of the 850-C1.



850-CD1 Basic Fluid Power Learning System – Double Sided A-Frame Bench with Two Hydraulic Manifolds

Student Reference Guide



A sample copy of the Electro-Pneumatics Student Reference Guide is also included with the system for your evaluation. Sourced from the system's 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.

