



Advanced Control Systems

CM284

Programmable Automation Controller



Compact Logix PLC Training System Featuring Allen-Bradley RSLogix5000 Programming Software

The CM284 is a complete industrial-based PLC training system featuring the Allen-Bradley Compact Logix PLC. The Compact Logix platform is a powerful and new series of programmable automation controllers featuring Allen-Bradley's industry-leading Windows-based RSLogix5000 programming software. This system will enable learners to develop competence in operating, programming, and troubleshooting a true industrial Programmable Automation Controller using RSLogix5000 software.

Instructor's guide with student manual and exercises provide complete, clear instructions and laboratory exercises, permitting the student to rapidly attain PLC competency. The curriculum begins with basic wiring concepts and moves quickly through circuits, logic, and programming; encouraging proficiency of PLC operation, automation connectivity via Ethernet communications, and industrial applications. Additional units focus on troubleshooting and the special features of the Allen-Bradley Compact Logix.

The CM284 experiment station permits easy access to the PLC digital and analog input/output terminals with simple banana-jack connectors. This allows rapid set-up and testing of wiring changes, using the built-in input/output devices including digital pushbutton switches/lights, analog potentiometers and panel meter displays, or user-identified external devices. Also included is built-in Ethernet communications.

The Compact Logix controller is programmed using relay ladder, function block diagram, sequential function block, or structured text programming using the Windows-based RSLogix5000 programming software.

Because of the CM284's flexible design and expansion capabilities like adding sensor inputs, PID process control, robotic interfacing, or other advanced applications; coupled with Compact Logix's performance features, means you can create a PLC learning experience that will be industrially relevant today and in the future.

SPECIFICATIONS

The CM284 series of PLC training systems feature the Allen-Bradley Compact Logix Programmable Automation Controller. The standard configuration, CM284-L1 with 5370 series L1 processor is described below. Other Compact Logix processors, digital or analog inputs and outputs are available.

Regardless of the configuration selected, using the included instructor's guide and student activity manual with detailed exercises and written testing materials, the learner will develop competence in operating, programming, and troubleshooting a true industrial Programmable Automation Controller. Also included as standard is a computer interface for PC to PLC communications and Windows-based RS Logix software for on-line/off-line logic programming.

The CM284-L1 PLC Trainer is installed in a 16-gauge fabricated steel "wedge shaped" cabinet. The components are mounted on a 16-gauge brushed stainless steel panel. All features of the panel are silkscreened for easy identification.

CM284-L1 Workstation Specifications:

The workstation is mounted into the cabinet for convenient interfacing with other trainers. A power on toggle switch with light indicator and one amp system fuse protection is located along the cabinet side. The training panel contains the Allen-Bradley Compact Logix PLC (internally fused) with built-in 24 VDC power supply, Ethernet communications, and digital/analog I/O prewired.

Panel Components:

- 8 pushbuttons with colored bezels:
 - 2 momentary/normally open
 - 2 momentary/normally closed
 - 2 latching/normally open
 - 2 latching/normally closed
- 8 indicator lights prewired and addressed
- 20 sets of female connectors for interfacing to external devices using the universal connecting patchcord/banana jack system
- 2 potentiometers
- 4 panel meters
- Fault insertion back panel (**OPTIONAL**)

Allen-Bradley Compact Logix Specifications:

Processor Memory:	5370 L1 CPU with 384K user memory; other CPUs and memory available
Digital I/O:	16 Inputs; 16 Outputs
Analog I/O:	4 Inputs; 2 Outputs
Chassis:	Modular I/O
Power Backup:	No battery required
Memory Backup:	FLASH
Controller Tasks:	Integrated Architecture with optional Motion Control support for two axes
Programming:	RS Logix 5000 Software – relay ladder, function block diagram, structured text, sequential function block
Communication:	Ethernet and RS-232 ports
High Speed Counters:	4
Analog Capability:	PID
Certification:	U.L. Listed/CSA Approved/CE
Warranty:	One year

RSLogix5000 Software

- 64-bit Windows-based
- Offline/online programming
- Graphical I/O configuration
- Program reporting and documentation
- Automatic instruction addressing, block transfer placement, and tag generation
- USB port for downloads
- Advanced diagnostics

CM284-L1 FEATURE SUMMARY

- Comprehensive Courseware
- Programming instructions for RSLogix5000
- On-board inputs with full bank of switches
- On-board outputs with full bank of lights
- Potentiometers and panel meters for analog control and visualization
- Built-in connectors for easy interfacing with user-selected input and output devices
- Dual port Ethernet communications built-in

Trainer Dimensions: 16 in. W x 16 in. H x 13 in. D
Shipping Weight: 50 lbs.

For more information, customer service and technical assistance, call toll-free:

New England Academic Representative:



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