



MLC 9000+ Four Loop Controller Module

DESCRIPTION

The Loop Control Module (LCM), when combined with a Bus Control Module (BCM), forms the basis of the MLC 9000+ DIN rail mount PID control system. Each four Loop Controller Module (LCM) is an independent PID controller with 4 loops of control. Up to a max of eight LCMs can be configured for each Bus Communication Module (BCM). Each LCM contains its own PID processor as well as all input and output connections. Mixed installations of Single, Three and Four Loop LCMs are available. Each LCM can be removed and replaced ("hot swapped") while the process is running.

MLC 9000+™

Maximum Productivity and Versatility for Control without Compromise!

APPLICATIONS:

Ideal for multi-zone temperature or process control applications (speed, flow, pressure, etc.) Takes the place of either a PLC and multiple discrete controllers or combination PLC/HMI. For users seeking an integrated solution for improved PLC performance with factory networks.

INDUSTRIES

Packaging, plastics, converting, semiconductor, food processing, heat treat and environmental test chambers to name a few.

FEATURE/BENEFITS

- Heat/Cool Operation
- Process & Loop Alarms
- 100ms Scan Time
- Soft Start
- Universal Input
- Hot Swapping with Auto Loop Configuration



PARTLOW™ brand

MLC 9000+™

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SPECIFICATIONS*

STANDARD FEATURES

Power Supply: Powered by BCM within its operating condition

Function: Four loop temperature or DC process inputs. Type and scale user selectable

Measuring Accuracy: DC = ±0.1% of span ±1 LSD; RTD = ±0.1% of span, ±0.3°C; Thermocouple = ±0.1% of span, +1°C for CJC, +0.3°C for 0.1°C resolution ranges, or 1°C for 1° resolution ranges

Input sample rate: 10Hz (100msec)

Sensor Break Detection: Break detected within two seconds. Control outputs turn off (0% power). Alarms activate (except heater break alarms)

Construction/Enclosure: Compact, modular, behind the panel (BTP), DIN rail design.

OPERATING CHARACTERISTICS (APPLIES TO BOTH BCM/LCM)

Operating Temp: 32° to 131°F (0° to 55°C)
Storage Temp: -4° to 176°F (-20° to 80°C)
Humidity: 30% to 90% non-condensing R.H.

UNIVERSAL INPUTS

Each input will accept signal from any of the following:

Thermocouple: B, N, J, R, K, S, L, T; Spans from -400°F to +3198°F (-240°C to +1759°C) dependent on T/C type

RTD: 3-Wire PT100; -327.3°F to 1472.5°F (199.9°C to +800.3°C)

DC Linear: 0-20mA, 4-20mA, 0-50mV, 10-50mV, 0-5V, 1-5V, 0-10V, 2-10; Scaleable -32000 to +32000

OUTPUTS

Output types provided are dependent upon specific LCM model. See "ORDERING INFORMATION for details".

Relay Outputs: Contact type: Single Pole Single Throw (SPST); Rating: 2A resistive @ 120/240 VAC; Lifetime: >500,000 operations at rated voltage/current

SSR Driver Outputs: Drive Capability: 12VDC nominal (10V minimum), at up to 20mA; Isolation: Isolated from process input and relay outputs. Not isolated from each other, other similar outputs or linear outputs in the same system.

RATINGS/AGENCY APPROVALS

Safety: EN61010 and UL/ULc 3121-1
EMC: Certified EN61326-1: 1997
Other: ISO 9002 Registered; CiA approval pending.

PROTECTION

IEC IP20; Designed for installation in an enclosure which is sealed against dust and moisture.

PHYSICAL DIMENSIONS

Width: 0.87" (22mm)
Depth: 4.72" (120mm)
Height: 3.94" (100mm)
Weight: 5.3 oz (0.15kg)
Mounting: directly fitted onto 35mm Top-Hat DIN rail mounting (EN55022, DIN 46277-3)

WARRANTY

3 Years

ORDERING INFORMATION

MLC 9002-Z4620-00 Four Universal inputs, six SSR outputs
 MLC 9002-Z4610-00 Four Universal inputs, six relay outputs

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