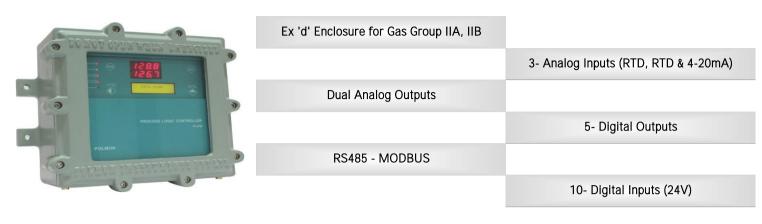


Multi Loop Controller

MLC40



Low cost Multi Loop Controller provides easy process configurability and robust control capability.

Incorporates features from decades of POLMON's instrumentation & process control experience in the Pharma manufacturing industry.

Prevents Contamination issues with automated valve interlocking and built-in control.

Features

- Optimized to include commonly used ready to call functions
- Level control
- Dead band control
- ON / OFF control
- Inbuilt PI control
- Provides 2 direct input channels for RTDs in addition to 4-20mA Analog Input for process value feedback
- 3 Analog Input, Two Analog Output channels, 10 Digital Input and 5 Digital Output Channels
- Can be ordered with Flame Proof (FLP) enclosure for use in Ex zones, Clean rooms and with Stainless Steel enclosures for outdoor installations
- Multi Loop Controller MLC 40 is an advanced micro-controller based Control System that can be used to measure process parameters such as temperature & any 4-20mA analog input and provide configured control outputs
- The unit can be programmed for On/Off & PI control methods with field configurable Input & Output logic configuration

- Programmable Baud rate selection (9600/19200/38400)
- User friendly Keyboard Display interface: 7-Segment display for process values & LCD for diagnostic messages
- Multiple Digital Inputs (DI) for level switches & feedback from pumps or valves
- Digital Outputs (DO) for controlling valves & pumps
- All DOs & AO can be configured to operate either in Auto or Manual mode
- Dual Analog Output (AO) for Retransmission or proportional valve control
- User friendly local software
 calibration facility for instrument &
 sensor
- Non volatile Flash memory for storing program parameters
- Enhanced hardware debugging incorporated for Relays & AOs
- Individual PROCESS START/STOP
- Individual OUTPUT ON /OFF

- PI selection for Proportional valve control
- PV Retransmission
- Dead Band
- Dual Set
- Acknowledgement
- Levels Switch

Applications

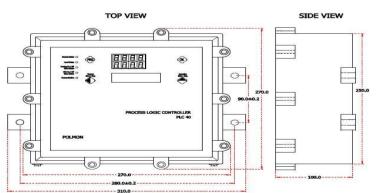
- Utility Automation
- Reactor control
- Prevents utility contamination
- Heating & cooling skids
- AHU control

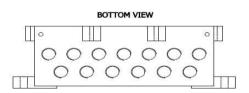
Specifications				
Technical				
Model No	MLC40-X-X-X	MLC40-X-X-1		
No. of channels	Analog Inputs: 3	Analog Inputs: 3	Analog Inputs: 3	
	Digital Inputs: 10	Digital Inputs: 10	Digital Inputs: 10	
	Digital Outputs: 5	Digital Outputs: 5	Digital Outputs: 5	
	Analog Output :1	Analog Output :2	Analog Output :2	
Analog Input Type	RTD (2 Channel's), 4-20mA (1 Channel)	RTD / 4-20mA (2Channel	RTD / 4-20mA (2Channels) (Field Configurable), 4-20mA (1Channel)	
Measuring Range, Accuracy and Resolution	Measuring Range	Resolution	Accuracy	
RTD	-199.0 to 500.0°C	0.1	±0.1% of FSR	
4-20mA	-1.999 to 9.999	0.001	±0.1% of FSR	
	-19.99 to 99.99	0.01		
	-199.9 to 999.9	0.1		
	-1999 to 9999	1		
Digital Input	24VDC (10 No's) / 24VDC (8 No's), 230VAC (2 No's)			
Analog Output	Current O/P PI (4-20mA@500 Ω load, Software Selectable for a Single Channel) / Voltage O/P retransmission (2-10 Volt)			
Digital Output	5 C NO (Relays)			
Output Accuracy	± 0.05mA			
Calibration	Zero & Span through keypad			
Display	0.39" 4 digit seven segment LED Display for CH1			
	0.39" 4 digit seven segment LED Display for CH2 / CH3			
	16 Characters *2line Alphanumeric LCD for Diagnosis messages			
Scan rate	1 Sec			
Communication	RS485 MODBUS RTU			
Control Type	On / Off			
Control Modes	PI for 4-20mA			
Keypad	Magnetic Keys			
Security	Password protected programming mode			
I/P Impedance	mA : 100 Ω, Voltage: > 1MΩ.			
Power Supply				
Power Supply	100 to 260V AC, 50 Hz, 25W	100 to 260V AC, 50 Hz, 6	50W	
Physical				
Enclosure	Ex 'd' Enclosure for Gas Group IIA, IIB			
Dimensions	Size- 250X250 (LxW)mm			
Mounting	Wall Mounting			
Weight	6.2Kg (Approx.)			
Environmental				
Operating Temperature	10 - 50°C			
Humidity	10-95%RH, Non-Condensing			

Ordering Information for MLC40				
MLC40	X	X	Х	
Model No	Enclosure Type	System Type	Future use	
MLC40	F – FLP	1 - Hot Water Control System	X – Single 4-20mA	
		2 - VTD Control System	1 – Dual 4-20mA	
		3 - Customized System#		

 $Note: \mbox{ \ensuremath{\#}\xspace} \text{Povide P&ID, Control Logic, Input and Output interface & customized overlay details}$

MECHANICAL DRAWING of MLC40





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