

## Multi Loop Controller

MLC45



**Advanced Process Controller**

**Interface to DCS / PLC**

**32 DI's, 16DO's, 8 AI's, 4AO's**

**Easy operation and remote configuration with HMI**

MLC45 Multi loop controller is designed to measure & control the process parameters like Temperature, Pressure, Level etc to meet the process control requirements.

It incorporates 8 Analog Input (AI) channels, 32 Digital Input (DI) channel and 16 Digital Output (DO) channel which supports output type for relay, 4 Analog Output channel for 4-20mA for retransmission/ Control output (PI) and Dual RS485 MOBUS RTU. It contains user-friendly keypad and Alphanumeric LCD Display.

### Features

- Analog input type (4-20mA)-8no's
- DO's (12no's-24V & 4no's-Potential free)
- DI's (25no's-24V & 7no's 230V AC)
- Quad 4-20mA output
- Supports multiple DI & DO's for relay control outputs
- 4-20mA retransmission output or control output (PI) for Process Value / Set Value
- User friendly Keypad –Alphanumeric LCD display interface
- Dual Industrial standard high-speed RS 485 communications for HMI & PLC/DCS/SCADA
- Non-volatile Flash memory for storing program parameters
- Hardware debugging incorporated for DI, DO, AI, AO

### Applications

- Process control
- Reactor utility control
- SFHTS control

### Network Architecture



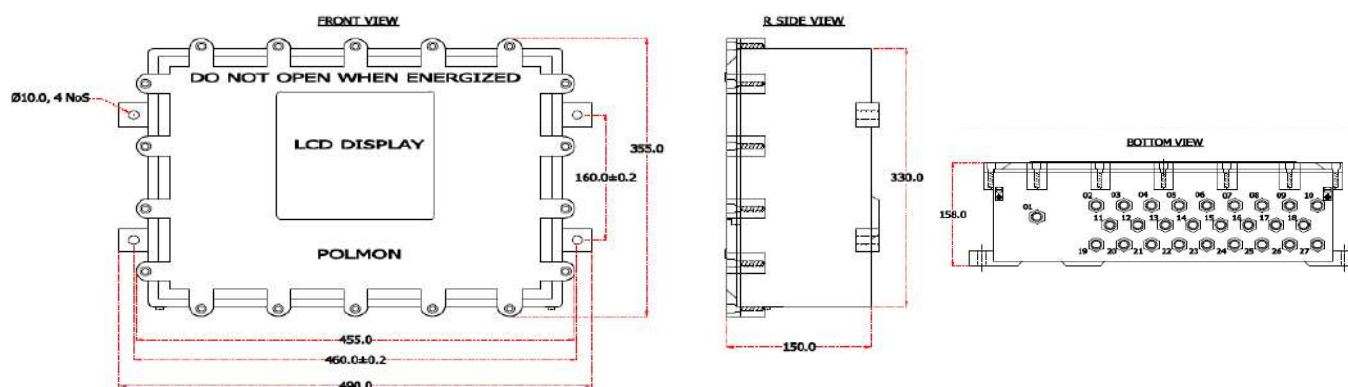
## Specifications

Technical			
Model No	MLC45-F-X-X		
Analog Input Type	4-20mA- 8no's		
Measuring Range, Accuracy and Resolution	Measuring Range	Resolution	Accuracy
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-25no's, 230V AC-7no's		
Analog Outputs	4-20mA (500Ohms of Max load)- 4no's		
Digital Output	NO NC (Relays) 24VDC-12no's & Potential free-4no's		
Calibration	Zero & Span through keypad		
Display	16 Character *4 line Alphanumeric LCD		
Scan rate	1 Sec		
Communication	Dual RS485 for HMI & PLC/SCADA		
Control Type	On/Off, PID		
Control Modes	Retransmission & PI for 4-20mA		
Keypad	Magnetic Keys		
Security	Password protected programming mode		
Power Supply			
Input Supply	100 to 260V AC, 50 Hz		
Physical			
Enclosure	Flameproof for Zone1, Zone2 Gas Gr.IIA, IIB, IIC		
Material	Aluminium		
Weight	15Kg (Approx.)		
Dimensions (LxWxH)	480x360x165mm		
Mounting	Wall Mounting		
Cable Entries	38 No's ¾" ET		
Glands	Not Provided (Order separately)		
Environmental			
Operating Temperature	10 - 50°C		
Humidity	10-95%RH, Non-Condensing		

Ordering Information for MLC45			
MLC45	X	X	X
Model No.	Enclosure Type	System Type	Inputs & Outputs
MLC45	F – FLP	1 – Customized #	X– DI: 24V DI's are 25No's 230V DI's are 7 No's DO: 24V DO's are 12No's C, NO DO's are 4 No's AI: 4-20mA AI's are 8No's AO: 4-20mA AO's are 4No's
	R – NFLP		1 – DI: All DI'S(32 No's) are 24V DO: All DO'S(16 No's) are 24V AI: All AI'S(8 No's) are 4-20mA AO: All AO'S(4 No's) are 4-20mA
	C– FLP IIC		

Note: # - Provide P&ID, Control Logic, Input and Output interface

### MECHANICAL DRAWING of MLC45



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All specifications are subject to change without notice.  
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