



96 x 96mm

## Features :

- PLC with Built-in HMI
- 2 x 16 Characters LCD Display
- Serial Printing
- Windows based User Friendly Software for Ladder Programming and HMI Configuration

### Display Specifications

Display	LCD (Backlight) 2 x 16 Characters Font Size : 5 x 7 mm
No. of Keys	8 Keys (6 User Configurable)

### Input Specifications

Digital Input		
No. of Digital Inputs	8 (Including Fast Channel Input)	
Input type	PNP	
Input voltage range	5 - 30V DC	
Debounce Time	Programmable 1 to 255 ms (Default 10ms)	
Isolation between Power supply & inputs	Yes	
Isolation between Inputs & MCU	No	
Response time	Depends on debounce time & ladder execution time	
Timer accuracy	0.1% or 2 ms (Which ever greater).	
Input current	2mA@12V	
Fast Input		
Input Type	PNP	
No. of channels	1 (DI0 & DI1)	
Max speed	5KHz	
Analog Input		
	MM3032-2-0-0-230V	MM3032-2-0-0-24V
No of Inputs	2 [AI0 & AI1]	
Input Type	Current (0 - 20mA)	Current (0 - 20mA), NTC
Accuracy	$\pm 0.5\%$ of Full Scale or 100 $\mu$ A	$\pm 0.5\%$ of Full Scale or 100 $\mu$ A (Current), $\pm 2\%$ of Full Scale (NTC)
Resolution	12 Bits	
Conversion Time	100 msec	
Linearity	0.1 %	
Maximum Non-Destructive Input	31mA	
Isolation between Channels	No	
Protection against Polarity Inversion	Yes	

### Output Specifications

Digital Output	
No. of Outputs	6 (2 Common for 6 Relay Outputs)
Type	Relay
Relay type	SPST
Contact rating	NO : 5A [Resistive@230V AC]
Isolation	No
Response time	10 ms
Mechanical life	5000000
Analog Output	
No. of channels	1
Output range	0 - 10V DC
Resolution	12 Bits
Load Limit	$\geq 1K\Omega$
Digital resolution	0.0 - 100.0% : 0 - 10.000 V
Conversion time	10 ms
Analog Output error at 25°C	0.25% of Full Scale
None Linearity	0.10%

\*Analog Output only available in 230V Model

### Functional Specifications

Programming method	Windows based Software for Ladder Programming and HMI Configuration.
Memory	Data Memory : 32 KB Program Memory : 240 KB Upload Memory : NA EEPROM : 2KB
Max. no. of objects	5000 objects (As per memory)
Minimum scan time	200 $\mu$ sec
Typical scan time	1 ms [Also depends on Ladder Programming]

### Environmental Specifications

Temperature	Operating : 0 to 55°C Storage : -20 to 60°C
Humidity	10% to 95% RH (Non - condensing)

### Communication

Communication Port	RS485 [Slave]
Communication Protocol	MODBUS RTU
Connector	RJ25 port
Transmission Mode	Half duplex
Transmission Speed	9600, 19200, 38400, 57600, 115200 bps
Data Bits	7 or 8
Parity	None, Odd, Even, Space, Mark
Stop Bits	1 or 2

### Mechanical Specifications

Weight	350 gms
Mounting	DIN Rail & Panel

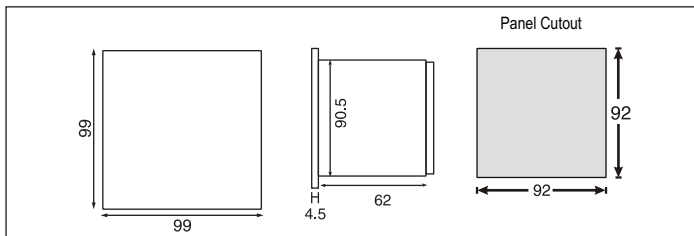
### Functional Features

Timer Operational Modes	On Delay, Off Delay, Special Timer (Up / Down) 1ms Timer* & Pulse Timer
Counter	Up Counter, Down Counter & Up / Down Counter [With & without over run]
Other Blocks	Totalizer, Rate Totalizer, Hysteresis & Scaling
Memory Retention	10 years (3KB)
RTC	No

### Auxiliary Supply Specification

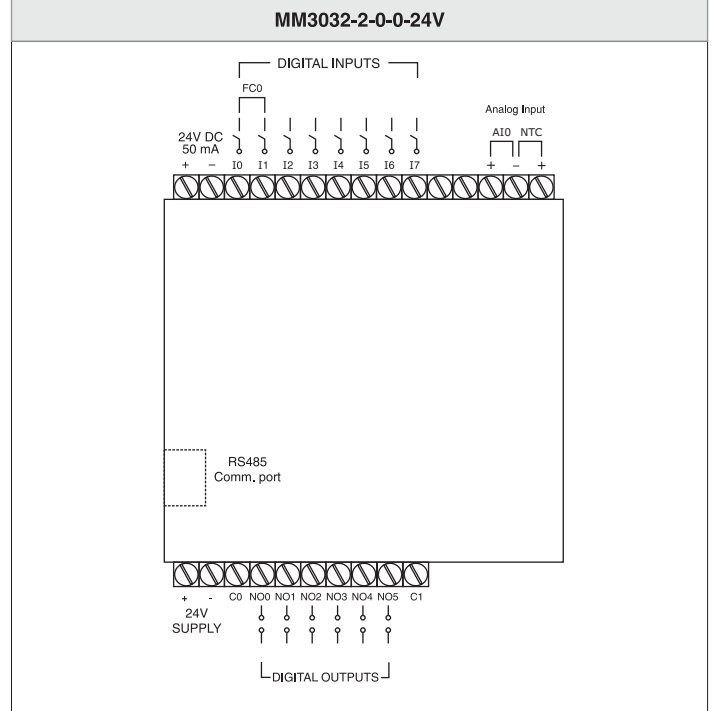
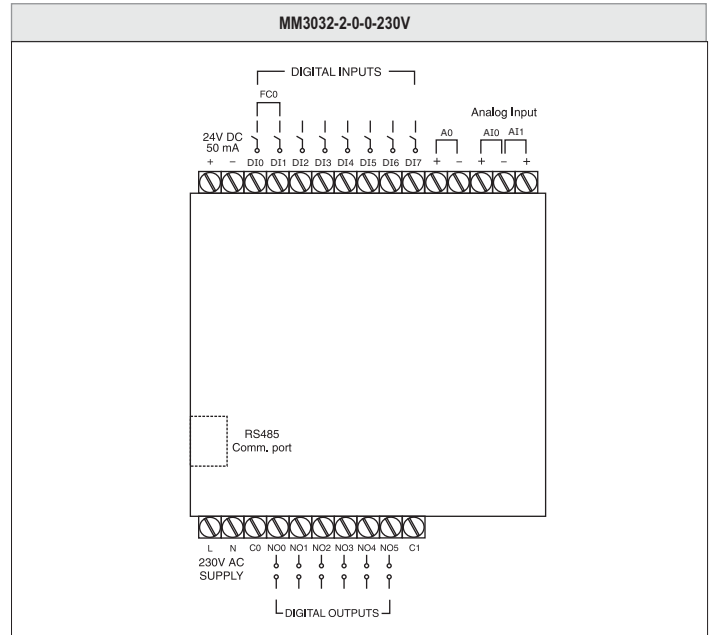
Supply Voltage	90 - 270 VAC @ 50/60 Hz (without Retention) / 180 - 270 VAC @ 50/60 Hz (with Retention), 18 - 30VDC
Power Consumption	5 W

### Dimensions (in mm)



### Port Description

Port 1 (6 Pin Jack)	
Pin	Description
1	RS485 Slave +ve
2	NC
3	NC
4	NC
5	NC
6	RS485 Slave -ve



### Ordering Information

Product Code	Description	Certification
MM3032-2-0-0-230V-V2	PLC – 8DI, 6RO, 2AI (0-20mA), 1AO (0-10V DC) & 230VAC	CE RoHS in Process
MM3032-2-0-0-24V	PLC – 8DI, 6RO, 1AI (0-20mA), 1AI-NTC & 24VDC	CE RoHS in Process

### Accessories for communication

AC-USB-RS485-03	Downloading cable (6 Pin RJ25 Jack)
ACH-004	(6 Pin to 6 Pin RJ25 Jack) Network cable
AC-IOEXP-03	Expansion Adapter
AC-USB-RS485-02	Communication Cable (2 wire)