

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	1
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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

Isolation between No

Inputs & MCU

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	± 0.5% of Full Scale or 100μA	± 0.5% of Full Scale or 100μA (Current), ± 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
 ≥1KΩ

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%

## **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 µsec

Typical scan time 1 ms [Also depends on Ladder Programming]

### **Environmental Specifications**

Temperature	Operating : 0 to $55^{\circ}$ C Storage : -20 to $60^{\circ}$ C
Humidity	10% to 95% RH (Non - condensing)

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<sup>\*</sup>Analog Output only available in 230V Model

#### Communication

RS485 [Slave] Communication Port Communication Protocol MODBUS RTU RJ25 port Connector Half duplex Transmission Mode 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)

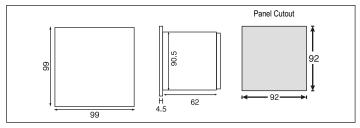
RTC

No

### **Auxiliary Supply Specification**

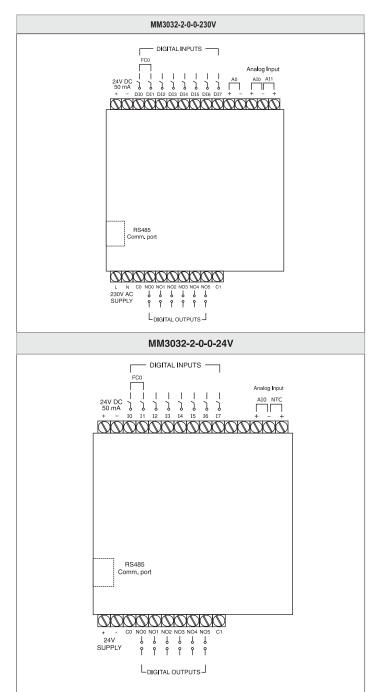
Supply Voltage	90 - 270 VAC @ 50/60 Hz (without Retention) / 180 - 270 VAC @ 50/60 Hz (with Retention), 18 - 30VDC
Power Consumption	5 W

#### 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	<b>C € RoHS</b> in Process
MM3032-2-0-0-24V	PLC – 8DI, 6RO, 1AI (0-20mA), 1AI-NTC & 24VDC	<b>C</b> € 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)

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