



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 μ A | $\pm 0.5\%$ of Full Scale or 100 μ 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 μ 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 |

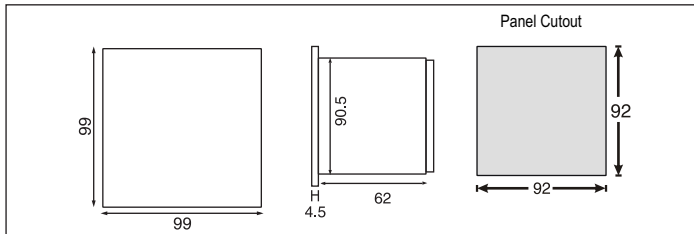
Functional Features

| | |
|-------------------------|--|
| 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

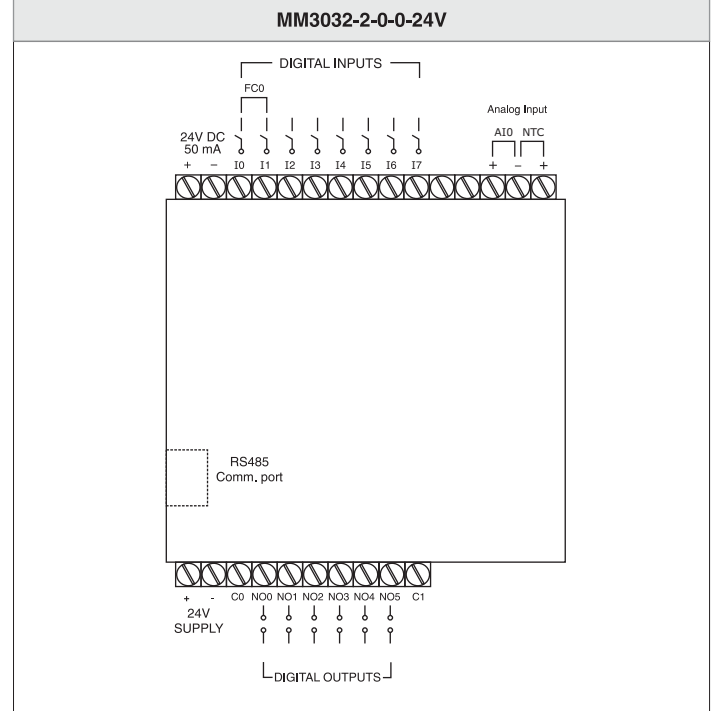
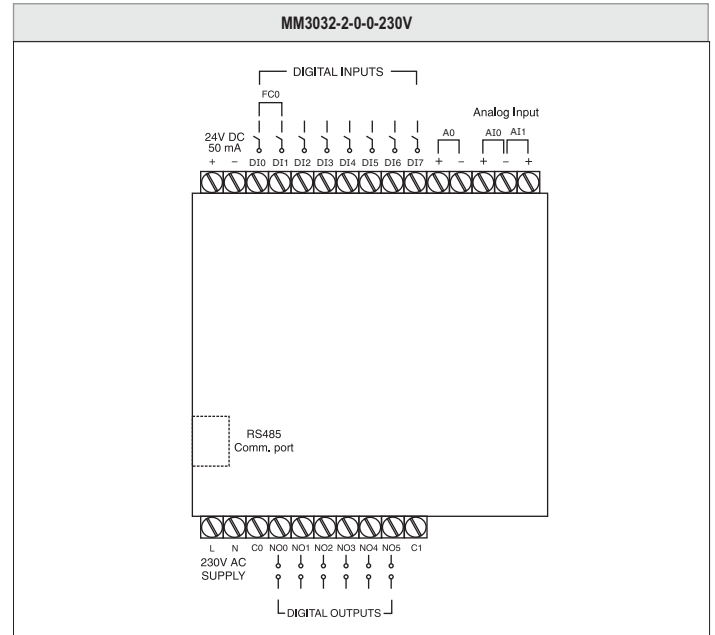
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|-------------------|---|
| Supply Voltage | 90 - 270 VAC @ 50/60 Hz (without Retention) / 180 - 270 VAC @ 50/60 Hz (with Retention), 18 - 30VDC |
| Power Consumption | 5 W |

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) |