



Features:

- Upto 6 Digital inputs
- Upto 4 Digital Relay Outputs
- Two Analog Inputs

Size: 48mm x 96mm

Technical Specifications

Display

Display	7 segment LED
Digits	3 digit + [4+4] digit
No. Of keys	5 numeric keys, 4 User Configurable

Input Specifications

Digital Input	
No. Of digital input	6
Input Type	PNP
Input Voltage Range	11-28 VDC [abs. max.: 30 VDC]
Response Time	Programmable upto 1 to 255ms from Front End (Default 10ms)(Also depends on ladder execution time)
Isolation	2 kV
Analog Input	
No. Of Input / Type	2 TC / RTD / 0-10V / 0-20 mA [User selectable]
Accuracy	13.5 bits
Resolution	16 bits

Output Specifications

Digital Output - Relay	
No. of Relay Output	4 [Relay]
Contact Rating	NO type; 5A resistive@240V AC
Isolation	2 KV
Response Time	20 ms

Functional Specifications:

Programming Method	Windows based software for ladder programming and HMI Configuration. [Product selection in Selpro software-MM1012]
Memory	Data memory: 16K Code memory: 223K Upload memory: NA
No. of Objects	Maximum 5000 [as per memory]
Minimum Scan Time	200 µsec
Typical Scan Time	1 ms [Also depends on ladder programming]

Communication:

Communication Ports	RS485 ports [slave]
Communication Protocol	MODBUS RTU

Functional Features

Timer Operational Modes	On Delay, Off Delay, Pulse Special [Up / Down] Timer
Time Resolution	1ms
Time Display Format	Sec, Min, Hr, Day, Min. Sec, Hr.Min, Day.Hr.
Counter	Up Counter, Down Counter & Up/Down Counter
Other Blocks	PID Control with auto tune, Analog input
Memory Retention	10 years

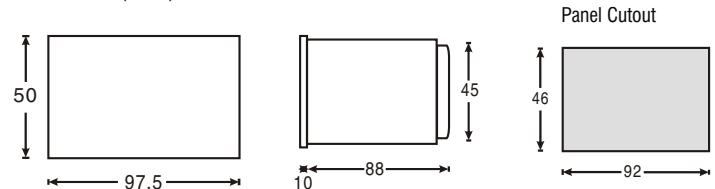
Supply Voltage

Supply Voltage	24V DC for MM1012-24V 90-270 VAC / DC for MM1012-230V
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Environmental Specifications

Temperature	Operating : 0 to 50C Storage : -20 to 60C
Humidity (non-condensing)	95% RH
Weight	258gms

Dimensions (in mm)



Terminal Connections

MM1012-24V

Terminal Connections:

I2	I1	I0	CH1		CH2		NTC SENSOR			
1	2	3	4	5	6	7	8	9	10	
22	I3	CH1				CH2				24
21	I4	Internal jumper for sensor selection				Internal jumper for sensor selection				23
11	12	13	14	15	16	17	18	19	20	
I5	NO0		NO1	NO2	NO3	COM	+24V		GND	

RS485 on side terminal

<p>○ RS485+ ○ RS485- ○ Front side view</p>	<p>For TC/RTD Short J4 & J5 For Volt Short J3 & J4 For Current Short J1 & J2</p> <p style="text-align: right;">Back side view</p>
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MM1012-230V

Terminal Connections:

I2	I1	I0	CH1		CH2		NTC SENSOR			
1	2	3	4	5	6	7	8	9	10	
22	I3	CH1				CH2				24
21	I4	Internal jumper for sensor selection				Internal jumper for sensor selection				23
11	12	13	14	15	16	17	18	19	20	
I5	+24V	GND	NO0	NO1	NO2	NO3	COM	L(+)	N(-)	

RS485 on side terminal

<p>○ RS485+ ○ RS485- ○ Front side view</p>	<p>For TC/RTD Short J4 & J5 For Volt Short J3 & J4 For Current Short J1 & J2</p> <p style="text-align: right;">Back side view</p>
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Ordering Information

Product	Order Code
MM1012	MM1012-24V MM1012-230V

Accessories (To be ordered separately)

Communication cable	ACH - 001
Windows-based software for ladder programming	ACD-003
Power Supply module	AP-24V-500mA-NS131
converter	
RS485 to RS232 converter	AC - RS485 - RS232 - 01 (Non-Isolated)
	AC - RS485 - RS232 - ISO (Isolated)