



### FEATURES

- Upto 6 Digital inputs
- Upto 4 Relays / Digital outputs
- Two analog input
- One analog output

### SPECIFICATIONS

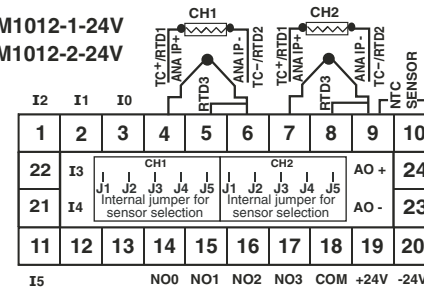
Display	7 segment led
Digits	3 digit + (4 + 4) digit
No. of Keys	5
No. of Configurable Keys	4
<b>DIGITAL INPUT</b>	
No. of Digital Inputs	6
Input Type	PNP
Input Voltage Range	11 - 28 VDC (abs. max.: 30 VDC)
Response Time (Inputs other than fast counter)	Programmable from 1 to 255ms from Front End (Default 10ms)(Also depends on ladder execution time)
Isolation	2 kV
<b>DIGITAL OUTPUT- Relay</b>	
No. of Relay Outputs	4
Relay (NO Type) Contact rating	NO type; 5 A resistive@240 VAC
Isolation	2 kV
Response Time	20 ms
<b>ANALOG INPUT</b>	
No of Inputs / Type	2 input:-TC / RTD / 0-10V / 0-20 mA(User selectable)
<b>ANALOG OUTPUT</b>	
No of Outputs / Type	1 output :- 0-10V for MM1012-1-24V/230V 1 output :- 0-20mA for MM1012-2-24V/230V
<b>FUNCTIONAL SPECIFICATIONS</b>	
Programming Method	Windows based software for ladder program & HMI configuration
Memory	Data memory: 16K, Code memory: 223K
No of Objects	Maximum 5000 (as per memory)
Minimum Scan Time	200 µsec
Typical Scan Time	1 ms

### FUNCTIONAL BLOCKS

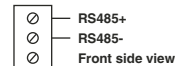
Timer Operational Modes	On Delay, Off Delay, Pulse Special (Up / Down)Timer
Timer Resolution	1 ms
Timer Display Format	Sec, Min, Hr, Day, Min. Sec, Hr.Min, Day.Hr, Hr.Min.Sec, Day.Hr.Min.Sec
Counter (8 digits)	Up Counter, Down Counter, Up / Down Counter
Other Blocks	PID Control, Analog input
Communication Ports	RS485 ports (slave)
Communication Protocol	MODBUS RTU
Memory Retention	10 years
Supply Voltage	24V DC for MM1012-1/2-24V 90-270 VAC / DC for MM1012-1/2-230V
Temperature	Operating: 0 to 50°C Storage: -20 to 60°C
Humidity (non-condensing)	95%
Weight	258 gms

### TERMINAL CONNECTIONS

MM1012-1-24V  
MM1012-2-24V

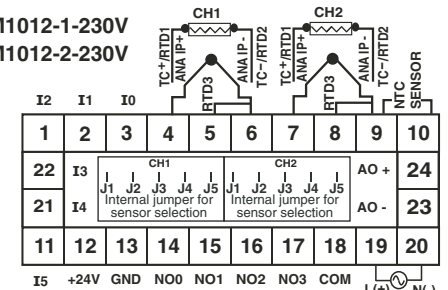


RS485 on side terminal



For TC/RTD Short J4 & J5  
For Volt Short J3 & J4  
For Current Short J1 & J2  
Back side view

MM1012-1-230V  
MM1012-2-230V



RS485 on side terminal



For TC/RTD Short J4 & J5  
For Volt Short J3 & J4  
For Current Short J1 & J2  
Back side view

### ORDERING INFORMATION

Product	Order Code	Accessories (ordered separately)	Order Code
MM1012-1	MM1012-1-24V	Communication cable	ACH-001.
	MM1012-1-230V	Windows-based software for ladder programming	ACD-003
MM1012-2	MM1012-2-24V	Power Supply Module	AP-24V-500mA-NS131
	MM1012-2-230V	RS485 to RS232 converter	AC - RS485 - RS232 - 01 AC - RS485 - RS232 - ISO
<b>Note : Select product MM1012 in Selpro software</b>			