



Features:

- Upto 8 Digital inputs
- Upto 5 Digital Relay Outputs

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	8
Input Type	PNP
Input Voltage Range	11-28 VDC [abs. max.: 30 VDC]
Response Time (Inputs other than fast counter)	Programmable upto 1 to 255ms from Front End (Default 10ms)(Also depends on ladder execution time)
Isolation	2 kV

Output Specifications

Digital Output - Relay	
No. of Relay Output	5 [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-MM1013]
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 [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
Memory Retention	10 years

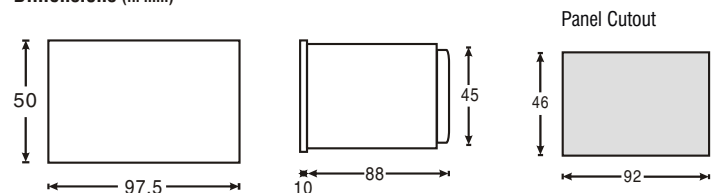
Supply Voltage

Supply Voltage	24V DC for MM1013-24V 90-270 VAC / DC for MM1013-230V
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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

MM1013-24V

I5	I4	I3	I2	I1	I0					
1	2	3	4	5	6	7	8	9	10	
22	I6						RS485 +		24	
21	I7						RS485 -		23	
11	12	13	14	15	16	17	18	19	20	
		NO0	NO1	NO2	NO3	NO4	COM	+24V	GND	

MM1013-230V

I5	I4	I3	I2	I1	I0					
1	2	3	4	5	6	7	8	9	10	
22	I6						RS485 +		24	
21	I7						RS485 -		23	
11	12	13	14	15	16	17	18	19	20	
+24V	GND	NO0	NO1	NO2	NO3	NO4	COM			
								L(+)	N(-)	

Ordering Information

Product	Order Code
MM1013	MM1013-24V MM1013-230V

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)