



48mm x 96mm

FEATURES

- Upto 6 Digital Inputs
- Upto 4 Digital Relay Outputs
- Two Analog Inputs
- One Analog Output

MM1012-1/-2

ORDERING INFORMATION

Order Code -	MM1012-1	MM1012-1-24V
	[0-10V Analog O/P]	MM1012-1-230V
MM1012-2	MM1012-2	MM1012-2-24V
	[0-20mA Analog O/P]	MM1012-2-230V

ACCESSORIES [to be ordered separately]

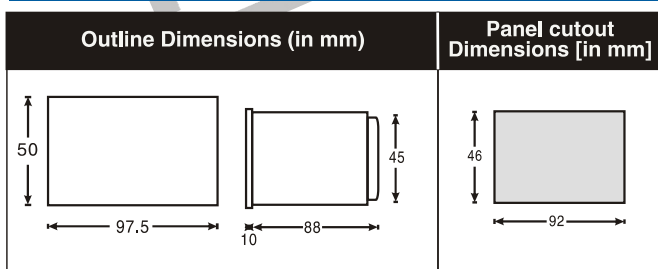
Communication cable:
Part no. - ACH - 001.

Windows-based software for ladder programming:
Part no. - ACD-003

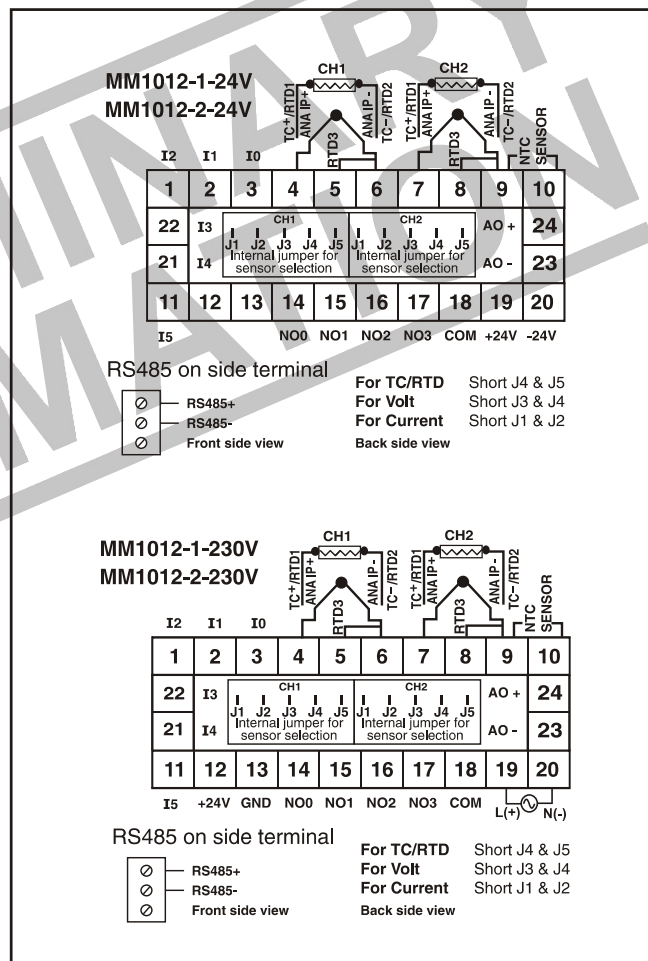
Power Supply module
AP-24V-500mA-NS131

RS485 to RS232 converter
AC - RS485 - RS232 - 01 (Non-Isolated)
AC - RS485 - RS232 - ISO (Isolated)

Dimensions [in mm]



TERMINAL CONNECTIONS



TECHNICAL SPECIFICATIONS

Display	7 segment LED
Digits	3 digit + [4 + 4] digit
No. of Keys	5
No. of Configurable Keys	4

GENERAL SPECIFICATIONS

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

INPUT SECTION

No. of Digital Inputs	6
Input Type	PNP
Input Voltage	11-28 VDC [abs. max.: 30 VDC]
Response Time	Programmable from 1 to 255ms from Front End [Default 10ms] [Also depends on ladder execution time]
Isolation	2 kV

ANALOG SECTION

No of Inputs	2
Type	TC / RTD / 0-10V / 0-20 mA [User selectable]
Accuracy	13.5 Bits
Resolution	16 Bits

OUTPUT SECTION

No of Outputs / Type [Analog]	1 output :- 0-10V for MM1012-1-24V/230V 0-20mA for MM1012-2-24V/230V
No. of Relay Outputs	4
Relay [NO Type] 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
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 [10 digits]	Up Counter, Down Counter, Up/Down Counter
Other Blocks	PID Control with Autotune, Analog input, Analog Output
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

