48 x 96 mm

Features :

- Compact PLC with uilt - in HMI
- Configurable LED Display
- indows ased User Friendly Software for Ladder Programming HMI Configuration
- RS485 ased Communication with MOD US RTU Protocol

Display Specification

Display	7 Segment LED
Digits	(4 + 4) RED + 6 GREEN Digits
LED Bank	4 RED LED s, 4 GREEN LED s
No. of eys	5 eys (4 User Configurable)

Input Specifications

Digital Input	
No. of Digital Inputs	6
Input Type	PNP
Input Voltage Range	5 - 30V DC
Response Time	Typical 2 mSec (Based on Ladder Scan Time) & 100 Sec for fast Input
Debounce Time	0 to 255 mSec (Default 10 mSec)
Fast Counter Input	
Input Type	PNP
No. of Fast Input Channels	1
Max Speed	5 kHz
Analog Input	
No. of Channels	1
Sensor Type	TC / RTD
Sensor	, T,,R, S, C, E, B, N, L, U, W, PLTNL, mV (-5 to 65mV), PT100
Accuracy	0.25% ±1 ℃ (TC), 0.1% ±1 ℃ (RTD) at 25°C
Conversion time	50 msec
Resolution	14 Bits

Output Specifications

Digital Output - Relay	
No. of Outputs	4
Type	Relay
Relay Type	SPST
Contact Rating	5A 230VAC (Resistive) 5A 28V DC (Resistive)
Response Time	10 mSec
Mechanical Life	2000000 Cycles
Isolation	No

Communication

Communication port	RS485 Slave
Communication protocol	MODBUS RTU
Connector	R 25 (6 Pin ack)
Transmission mode	Half Duplex
Transmissions speed	9600, 19200, 38400, 57600, 115200 bps
Data bits	7 or 8
Parity	None, Odd, Even, Space, Mark
Stop bits	1 or 2

Functional Specifications

Programming method	Windows based Software for Ladder Programming and HMI Configuration
Memory	Data Memory : 16 kB Code Memory : 112 kB EEPROM Memory : 1 kB
Max. no. of ob ects	2000 (As per memory)
Minimum scan time	200 Sec
Typical scan time	2 mSec (Based on ladder scan time)

Environmental Specifications

Operating temperature	0 to 55°C
Storage temperature	-20 to 70°C
Humidity (non - condensing)	10% to 95% RH

Mechanical Specifications

Mounting	Panel
Weight	240 gms approx

Functional Features

Timer operational modes	On delay, Off delay, Pulse, Special Up / DownTimer, 1ms Timer
Timer resolution	1 mSec (Accurate only for 1 mSec Timer block)
Counter	Up counter, Down counter, Up / Down counter, Special Up / Down counter
Other blocks	Analog Input, FTC, PIDT, Rampsoak
Memory retention	10 years (2 B memory)
RTC	No

Usage Limited to 4 nos

Dimensions

Terminal Connection

Compliance

Applicable EMI / EMC Standards		
Product Standard : IEC 61326 - 1		
Category		**Standards Compliance**
ESD Immunity	IEC 61000 - 4 - 2	Level IV (Air Discharge : 15kV), (Contact Discharge : -8kV)
Surge Immunity	IEC 61000 - 4 - 5	+ / - 2kV Common Mode, (Line to Ground) + / - 1kV Differential Mode, (Line to Line)
Radiated Susceptibility	IEC 61000 - 4 - 3	Level III, 80 to 1000MHz (10V / m) Level II, 1.4GHz to 2GHz (3V / m) Level I, 2GHz to 2.7GHz (1V / m)
Conducted Susceptibility	IEC 61000 - 4 - 6	Level II (3V / m)
Voltage Dips and Interruptions	IEC 61000 - 4 - 11	**Dips** : 0% residual voltage / 1 cycle (Criteria B), 40% residual voltage / 10 cycles 50Hz / 12 cycles 60Hz (Criteria C) 70% residual voltage / 25 cycles 50Hz / 30 cycles 60Hz (Criteria C) **Interruptions** : 0% residual voltage / 250 cycles 50Hz / 300 cycles 60Hz (Criteria C)
Conducted Emission	CISPR - 11	
Radiated Emission	CISPR - 11	
Electrical Fast Transient	IEC 61000 - 4 - 4	Level III (2kV)

Ordering Information

Product code	Supply Voltage	Output		Certification
MFM376-C-CE	85V to 270V AC, 40 to 270V DC	Pulse Output	Comm. (RS485)	CE