

MTM4881

Temperature Transmitting Controller



Features

- Real-time temperature display in unit: °C or °F
- 14-segment LED display
- Button programming, easy operation
- Record the Max. in operation (button for clearing up)
- Support rail, cover and back mounting
- Hardware wrong operation protection
- Max. 4 relays control independently, time-delay function
- Switchable analog output
- Intrinsically safe products meet GB3836.1 and GB3836.4 standards, and have explosion-proof certification, Exia mark is Ex ib IIA T6 Gb
- MODBUS communication

Introduction

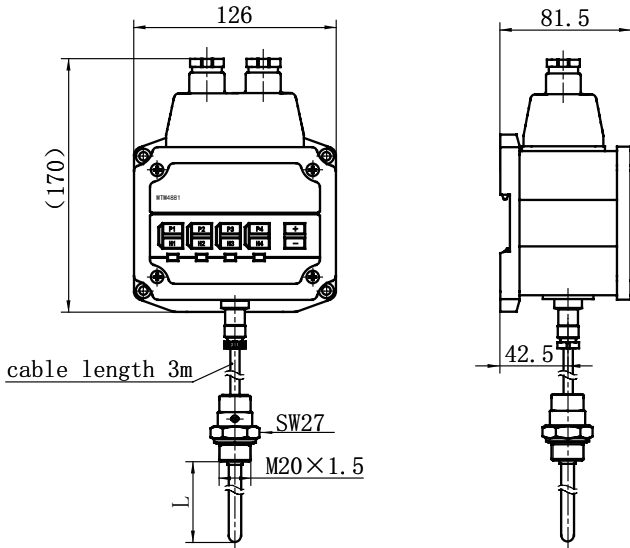
MTM4881 Temperature Transmitting Controller is an intelligent meter integrating temperature measurement, display, transmitting and control. It adopts the internationally advanced ARM processing chip. By compensation and adjustment of the sensor, the product can achieve precise measurement and provide quick response and control of multiple relay. The meter supports peak record and action delay, providing 4 digit LED indicator, easy for reading. And the design of multiple buttons makes the operation easier and more convenient. Either current or voltage output signal is optional. It supports back mounting, rail mounting, cover mounting. Whole product protection is IP65.

MTM4881 Temperature Transmitting Controller provides 4-relay output + 1 analog output, which is applied in liquid medium's temperature measurement, especially suitable for detection of oil temperature of hydraulic and lubrication transmission system.

Specification

Input	Power Supply	Non Intrinsically Safe: (220±44)V AC / 22V~32V DC Intrinsically Safe: 22V~28V DC (Supplied by Safety Barrier)
	Temperature Range	-30°C ~150°C / -22 °F ~302 °F
Output	Accuracy	≤±1°C (FS≤100°C); ≤±2°C (FS> 100°C)
	Repeatability	≤±0.2%FS
	Display	4 digit 0.56 inch 14-segment LED display
	Display Refresh	200ms
Analog Output	Current Version	4mA~20mA DC, Load resistance ≤560Ω
	Voltage Version	0V~10V DC, Load resistance ≥10kΩ
Switch Output	Output Mode	4 relays, normally open or closed contact
	Voltage Supply	≤277V AC;≤30V DC
	Current Supply	≤3A
	Response	about 20s
	Switch Point Setting	1.5%FS~99%FS
	Return Difference Setting	1%FS~10%FS
	Relay Life	≥10,000,000 times/load (min.); ≥100,000/times/load (max.)
	Switch Delay	0s~750s
Environmental Conditions	Operation Temp.(controller)	-25°C ~65°C / -13 °F ~149 °F
	Relative Humidity	0%~85%
	Storage Temp.(controller)	40°C ~70°C / -40 °F ~158 °F
	Media Temp.	-20°C ~80°C / -50 °F ~176 °F
	Electromagnetic compatibility	GB/T 17626.2/3/4-2006
	Shock	≤5g/10Hz...500Hz(IEC 60068-2- 6-2007)
	Impact	≤10g/11ms(IEC 60068-2-27-2008)
	Protection	IP65
	Sensor Plug	water-proof aviation plug

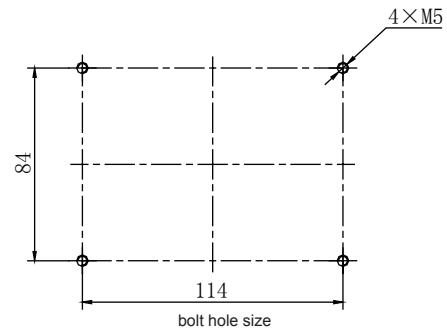
Outline Construction (Unit: mm)



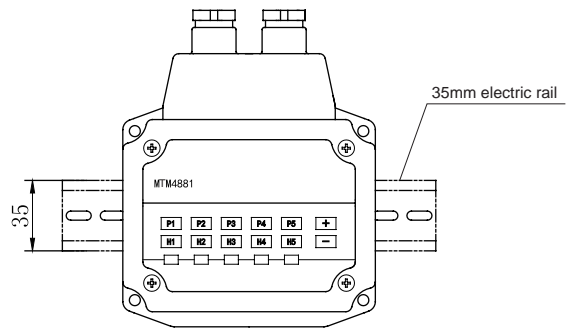
Outline Construction and Dimension

Installation

MTM4881 Temperature Transmitting Controller can be installed by rail mounting, cover mounting, back mounting.

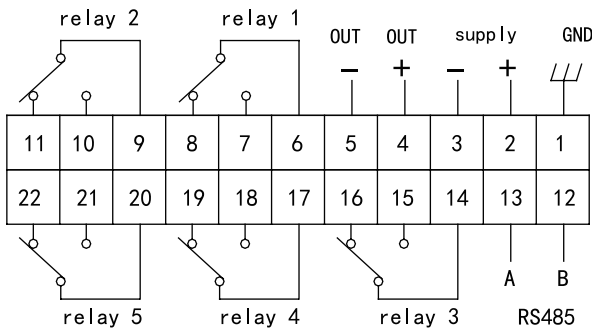


Back Mounting

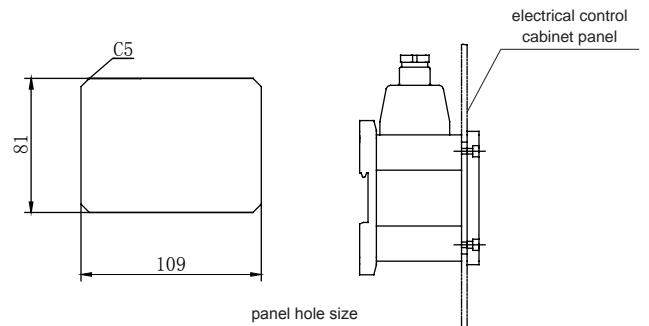


35mm Electric Rail Mounting

Terminal Diagram

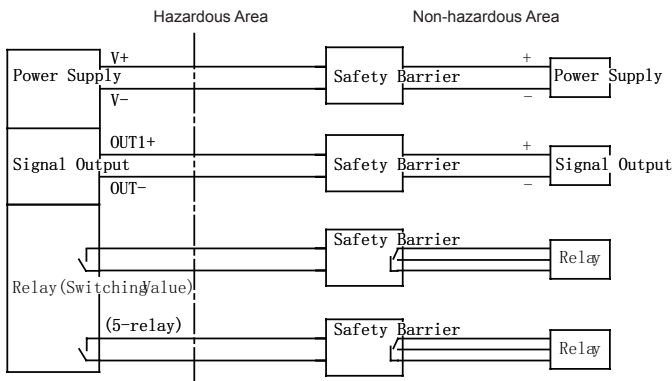


External Terminal Diagram



Cover Mounting

Electrical connection



Safety Barrier Output Explosion Proof Parameters:

[Exib Gb]IIA

Supply terminal, Signal terminal:

Ui: 28V DC li: 93mADC Uo: 28V DC lo: 93mA DC
 Li: 4.0mH Ci: 0.6uF Pi: 0.65W Po: 0.65W

Relay Output Terminal:

Ui: 10.5V DC li: 14mA DC Uo: 10.5V DC lo: 14mA DC
 Li: 0mH Ci: 0 uF Pi: 37mW Po: 37mW

Order Guide

MTM4881		Temperature Transmitting Controller				
Temperature Range						
[X~Y]°C		-30°C ~150°C / -22 °F ~302 °F				
Code		Power Supply				
AC		220V AC (Non Intrinsically Safe Only)				
DC		22V~32V DC (Non Intrinsically Safe) 22V~28V DC (Intrinsically Safe , supplied by Safety Barrier)				
Code		Output				
KA		4-relay +analog (4mA~20mA)				
KV		4-relay +analog (0V~10V)				
KAV		4-relay +analog (4mA~20mA / 0V~10V double use)				
Code		Probe Thread				
C1		M20×1.5 male(temperature casing pipe)				
C3		G1/2 male(temperature casing pipe)				
i		Intrinsically Safe ExibIIAT6 Gb				
Code		Probe Length(unit: mm)				
L		L: 20, 100,200				
MTM4881	[0~100]°C	DC	KA	C3	L100	the whole spec.

Notes

1. Probe thread can be customized for users. Please specify it in the contract.
2. If the user has special requirement, please feel free to contact us.