# Product data sheet Characteristics

# TM5SAI4PHK

Composition kit of I/O(TM5SAI4PH) + term. block(TM5ACTB12) + bus base(TM5ACBM11)



#### Main

Range of product	Modicon TM5	
Product or component type	Analog input module	
Analogue input number	4	
Analogue input type	Temperature probe - 200850 °C Pt 100/Pt 1000	
Analogue input resolution	16 bits	

# Complementary

- Compromentary				
Device composition	I/O module TM5SAI4PH Terminal block TM5ACTB12 Bus sub-base TM5ACBM11			
Range compatibility	Modicon LMC058 Modicon M258			
Product compatibility	Motion controller Logic controller			
Measurement resolution	0.1 °C			
Colour	White			
Measurement error	< 0.037 % of full scale, - 200850 °C, Pt 100/Pt 1000 at 25 °C			
Temperature coefficient	0.004 %FS/°C, analogue input type: temperature probe			
Non-linearity	0.001 %FS, analogue input type: temperature probe			
Type of cable	Shielded cable			
Isolation	No insulation between channels 500 Vrms AC insulation between channel and bus			
Supply	Internal			
[Us] rated supply voltage	24 V DC -1520 %			
Common mode rejection	>= 95 dB			
Local signalling	4 LEDs green for input status 1 LED red for power supply 1 LED green for power supply			
Current consumption	46 mA 24 V DC input/output 2 mA 5 V DC bus			
Power dissipation in W	<= 1.11 W			
Marking	CE			
Product weight	0.065 kg			

## Environment

Standards	CSA C22.2 No 142		
	IEC 61131-2 UL 508		
	CSA C22.2 No 213		
Duadout and Gratina			
Product certifications	CSA C-Tick		
	CULus		
	GOST-R		
Ambient air temperature for operation	060 °C with derating factor (horizontal installation)		
·	055 °C without derating factor (horizontal installation)		
	050 °C (vertical installation)		
Ambient air temperature for storage	-2570 °C		
Relative humidity	595 % without condensation		
IP degree of protection	IP20 conforming to IEC 61131-2		
Pollution degree	2 conforming to IEC 60664		
Operating altitude	02000 m		
Storage altitude	03000 m		
Vibration resistance	3.5 mm (f= 58.4 Hz) DIN rail		
	1 gn (f= 8.4150 Hz) DIN rail		
Shock resistance	15 gn for 11 ms		
Resistance to electrostatic discharge	8 kV in air conforming to EN/IEC 61000-4-2		
	4 kV on contact conforming to EN/IEC 61000-4-2		
Resistance to electromagnetic fields	10 V/m 802000 MHz conforming to EN/IEC 61000-4-3		
	1 V/m 22.7 GHz conforming to EN/IEC 61000-4-3		
Resistance to fast transients	2 kV power lines conforming to EN/IEC 61000-4-4		
	1 kV shielded cable conforming to EN/IEC 61000-4-4		
	1 kV I/O conforming to EN/IEC 61000-4-4		
Surge withstand	1 kV common mode conforming to EN/IEC 61000-4-5		
	0.5 kV differential mode conforming to EN/IEC 61000-4-5		
Electromagnetic compatibility	EN/IEC 61000-4-6		
Disturbance radiated/conducted	CISPR 11		

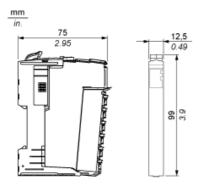


# Product data sheet Dimensions Drawings

# TM5SAI4PHK

## TM5 Slice

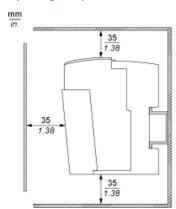
## Dimensions

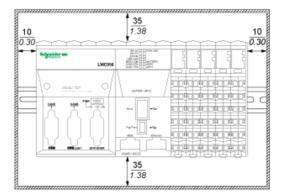


# TM5SAI4PHK

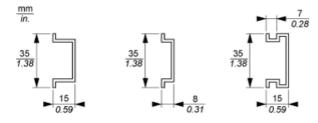
# TM5 System

## **Spacing Requirements**





# Mounting on a DIN Rail



# Product data sheet Connections and Schema

# TM5SAI4PHK

# TM5 System Wiring Recommendations

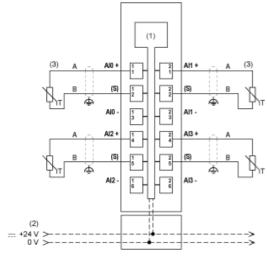
## Wire Sizes to Use with the Removable Spring Terminal Blocks

mm in.	0.35	<u> </u>	1		
	mm²	0,082,5	0,252,5	0,251,5	2 x 0,252 x 0,75
	AWG	2814	24 14	2416	2 x 242 x 18

#### Electronic Module 4AI PT100/PT1000 16 Bits

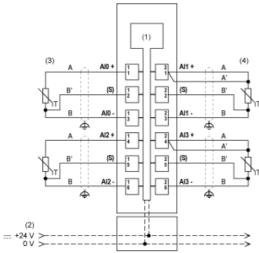
#### Wiring Diagrams

The following figure shows the 2-wire wiring diagram:



- (1) Internal electronics
- (2) 24 Vdc I/O power segment integrated into the bus bases
- (3) 2-wire sensor
- (S) Sensor

The following figure shows the 3-wire and 4-wire wiring diagram:



- (1) Internal electronics
- (2) 24 Vdc I/O power segment integrated into the bus bases
- (3) 3-wire sensor
- (4) 4-wire sensor
- (S) Sensor