

Product data sheet

Specifications



analog input module, Modicon TM5, 2I, temperature probe PT100, PT1000, 16bits

TM5SAI2PH

Main

Range Of Product	Modicon TM5
Product Or Component Type	Analog input module
Analogue Input Number	2
Analogue Input Type	Pt 100/Pt 1000 temperature probe - 200...850 °C
Analogue Input Resolution	16 bits

Complementary

Range Compatibility	Modicon M258 Modicon LMC058
Product Compatibility	Logic controller Motion controller
Measurement Resolution	0.1 °C
Colour	White
Measurement Error	< 0.037 % of full scale - 200...850 °C Pt 100/Pt 1000 25 °C
Temperature Coefficient	0.004 %FS/°C temperature probe
Non-Linearity	0.00015 %FS temperature probe
Type Of Cable	Shielded cable
Isolation	500 Vrms AC insulation between channel and bus No insulation between channels
Supply	Internal
[Us] Rated Supply Voltage	24 V DC -15...20 %
Common Mode Rejection	> 95 dB
Local Signalling	1 LED green power supply 1 LED red power supply 2 LEDs green input status
Current Consumption	2 mA 5 V DC bus 46 mA 24 V DC input/output
Maximum Power Dissipation In W	1.11 W
Marking	CE
Net Weight	0.06 lb(US) (0.025 kg)

Environment

Standards	UL 508 CSA C22.2 No 142 IEC 61131-2 CSA C22.2 No 213
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Product Certifications	cULus CSA GOST-R C-Tick
Ambient Air Temperature For Operation	32...131 °F (0...55 °C) without derating horizontal installation) 32...140 °F (0...60 °C) with derating factor horizontal installation) 32...122 °F (0...50 °C) vertical installation)
Ambient Air Temperature For Storage	-13...158 °F (-25...70 °C)
Relative Humidity	5...95 % without condensation
Ip Degree Of Protection	IP20IEC 61131-2
Pollution Degree	2 IEC 60664
Operating Altitude	0...2000 m
Storage Altitude	0.00...9842.52 ft (0...3000 m)
Vibration Resistance	1 gn 8.4...150 Hz DIN rail 3.5 mm 5...8.4 Hz DIN rail
Shock Resistance	15 gn 11 ms
Resistance To Electrostatic Discharge	4 kV on contact IEC 61000-4-2 8 kV in air IEC 61000-4-2
Resistance To Electromagnetic Fields	0.91 V/yd (1 V/m) 2...2.7 GHz IEC 61000-4-3 9.14 V/yd (10 V/m) 80...2000 MHz IEC 61000-4-3
Resistance To Fast Transients	1 kV IEC 61000-4-4 I/O) 1 kV IEC 61000-4-4 shielded cable) 2 kV IEC 61000-4-4 power lines)
Surge Withstand	0.5 kV differential mode IEC 61000-4-5 1 kV common mode IEC 61000-4-5
Electromagnetic Compatibility	EN/IEC 61000-4-6
Disturbance Radiated/Conducted	CISPR 11

Packing Units

Unit Type Of Package 1	PCE
Number Of Units In Package 1	1
Package 1 Height	0.79 in (2.000 cm)
Package 1 Width	2.36 in (6.000 cm)
Package 1 Length	4.13 in (10.500 cm)
Package 1 Weight	1.41 oz (40.000 g)
Unit Type Of Package 2	S02
Number Of Units In Package 2	97
Package 2 Height	5.91 in (15.000 cm)
Package 2 Width	11.81 in (30.000 cm)
Package 2 Length	15.75 in (40.000 cm)
Package 2 Weight	9.26 lb(US) (4.200 kg)

Contractual warranty

Warranty	18 months
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Sustainability

Green Premium™ label is Schneider Electric's commitment to delivering products with best-in-class environmental performance. Green Premium promises compliance with the latest regulations, transparency on environmental impacts, as well as circular and low-CO₂ products.

Guide to assessing product sustainability is a white paper that clarifies global eco-label standards and how to interpret environmental declarations.

[Learn more about Green Premium >](#)

[Guide to assess a product's sustainability >](#)



Transparency RoHS/REACH

Well-being performance

Toxic Heavy Metal Free

Mercury Free

Rohs Exemption Information [Yes](#)

Pvc Free

Certifications & Standards

Reach Regulation

[REACH Declaration](#)

Eu Rohs Directive

Pro-active compliance (Product out of EU RoHS legal scope)

China Rohs Regulation

[China RoHS declaration](#)

Environmental Disclosure

[Product Environmental Profile](#)

Weee

The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins

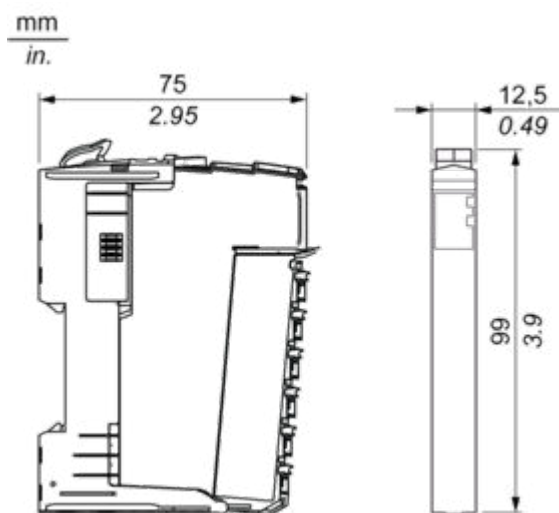
Circularity Profile

[End of Life Information](#)

Dimensions Drawings

TM5 Slice

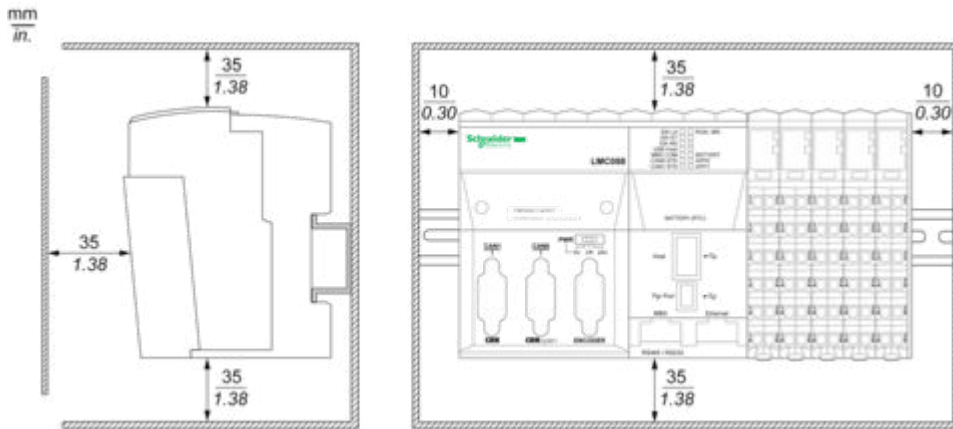
Dimensions



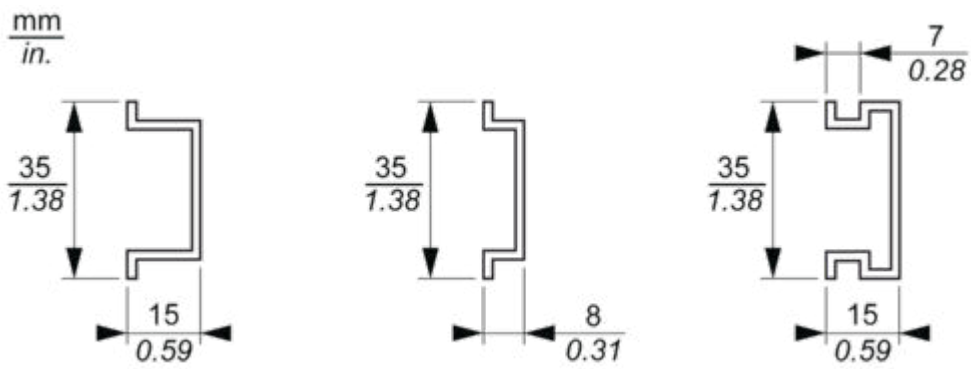
Mounting and Clearance

TM5 System

Spacing Requirements



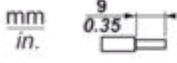




Mounting on a DIN Rail



Connections and Schema

TM5 System Wiring Recommendations

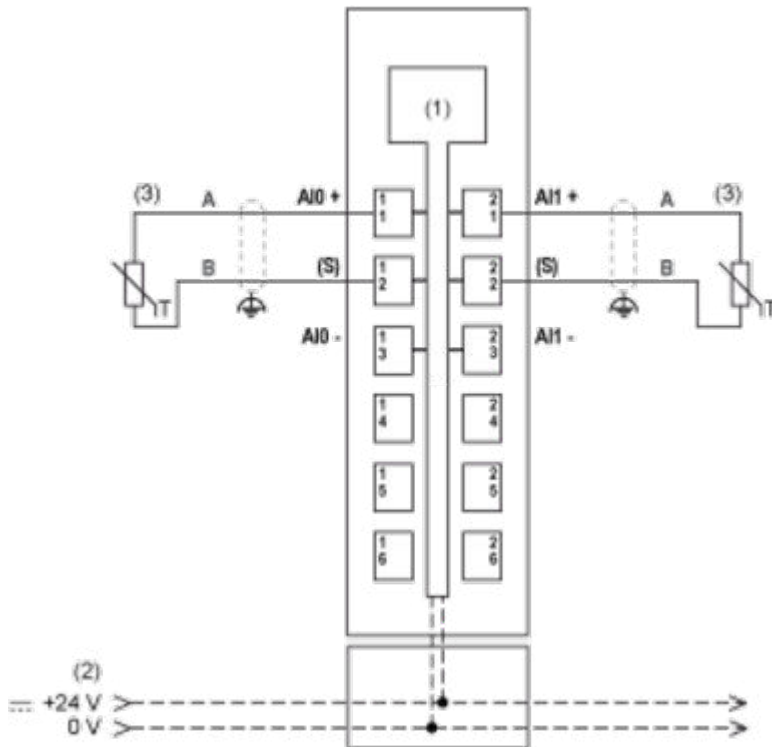
Wire Sizes to Use with the Removable Spring Terminal Blocks

 mm in.				
mm ²	0,08...2,5	0,25...2,5	0,25...1,5	2 x 0,25...2 x 0,75
AWG	28...14	24...14	24...16	2 x 24...2 x 18

Electronic Module 2AI PT100/PT1000 16 Bits

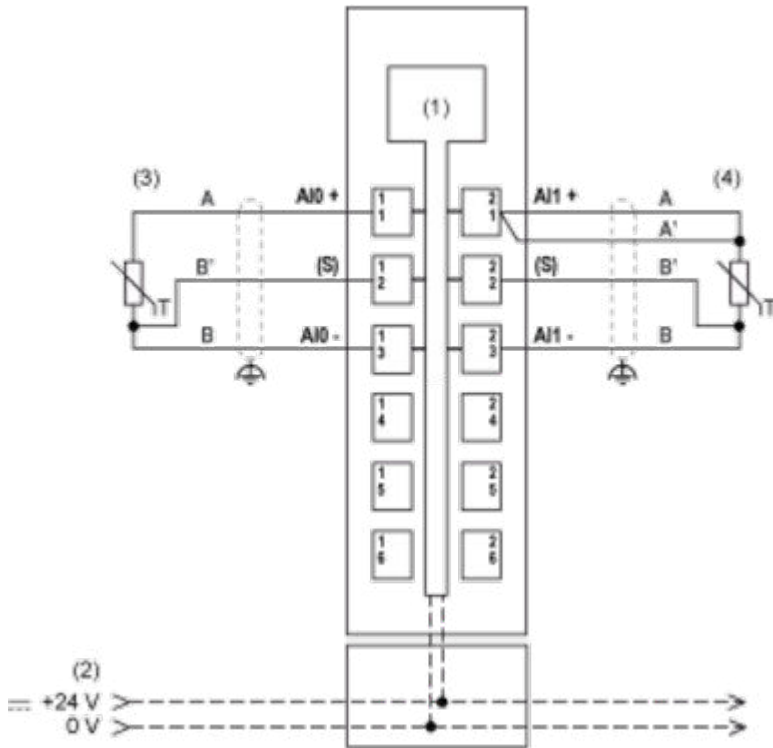
Wiring Diagrams

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