

Product availability: Non-Stock - Not normally stocked in distribution facility



Main

Range of product	Modicon TM5
Product or component type	Analog input module
Analogue input number	6
Analogue input type	Thermocouple - 210...1200 °C thermocouple J Thermocouple - 270...1300 °C thermocouple N Thermocouple - 270...1372 °C thermocouple K Thermocouple - 50...1768 °C thermocouple S
Analogue input resolution	16 bits

Complementary

Range compatibility	Modicon LMC058 Modicon M258
Product compatibility	Logic controller Motion controller
Measurement resolution	0.1 °C
Color	White
Input filtering	1...66.7 ms configurable by software
Measurement error	+/- 0.1 % of full scale, - 210...1200 °C thermocouple J at 25 °C +/- 0.11 % of full scale, - 270...1300 °C thermocouple N at 25 °C +/- 0.11 % of full scale, - 270...1372 °C thermocouple K at 25 °C +/- 0.17 % of full scale, - 50...1768 °C thermocouple S at 25 °C
Temperature coefficient	0.01 %FS/°C, analogue input type: thermocouple
Non-linearity	+/- 0.001 %FS, analogue input type: thermocouple
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 -15...20 %
Common mode rejection	> 70 dB
Local signalling	1 LED green power supply 1 LED red power supply 6 LEDs green input status
Current consumption	2 mA 5 V DC bus 38 mA 24 V DC input/output
Power dissipation in W	<= 0.92 W
Marking	CE
Product weight	0.06 lb(US) (0.025 kg)

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Environment

Standards	CSA C22.2 No 142 CSA C22.2 No 213 UL 508 IEC 61131-2
Product certifications	CSA C-Tick GOST-R cULus
Ambient air temperature for operation	32...131 °F (0...55 °C) without derating factor (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	IP20 conforming to IEC 61131-2
Pollution degree	2 conforming to IEC 60664
Operating altitude	0...6561.68 ft (0...2000 m)
Storage altitude	0...9842.52 ft (0...3000 m)
Vibration resistance	1 gn (f= 8.4...150 Hz) DIN rail 3.5 mm (f= 5...8.4 Hz) DIN rail
Shock resistance	15 gn 11 ms
Resistance to electrostatic discharge	4 kV on contact conforming to EN/IEC 61000-4-2 8 kV in air conforming to EN/IEC 61000-4-2
Resistance to electromagnetic fields	0.91 V/yd (1 V/m) 2...2.7 GHz conforming to EN/IEC 61000-4-3 9.14 V/yd (10 V/m) 80...2000 MHz conforming to EN/IEC 61000-4-3
Resistance to fast transients	1 kV I/O conforming to EN/IEC 61000-4-4 1 kV shielded cable conforming to EN/IEC 61000-4-4 2 kV power lines conforming to EN/IEC 61000-4-4
Surge withstand	0.5 kV differential mode conforming to EN/IEC 61000-4-5 1 kV common mode conforming to EN/IEC 61000-4-5
Electromagnetic compatibility	EN/IEC 61000-4-6
Disturbance radiated/conducted	CISPR 11

Ordering and shipping details

Category	22532 - M258 PLC
Discount Schedule	PC12
GTIN	00785901822486
Nbr. of units in pkg.	1
Package weight(Lbs)	8.999999999999997E-2
Returnability	N
Country of origin	AT

Offer Sustainability

Sustainable offer status	Green Premium product
RoHS (date code: YYWW)	Compliant - since 1039 - Schneider Electric declaration of conformity Schneider Electric declaration of conformity
REACH	Reference not containing SVHC above the threshold
Product environmental profile	Available Product Environmental Profile
Product end of life instructions	Available End Of Life Information
California proposition 65	WARNING: This product can expose you to chemicals including:
- - - - - Substance 1	Lead and lead compounds, which is known to the State of California to cause cancer and birth defects or other reproductive harm.
- - - - - More information	For more information go to www.p65warnings.ca.gov

Contractual warranty

Warranty period	18 months
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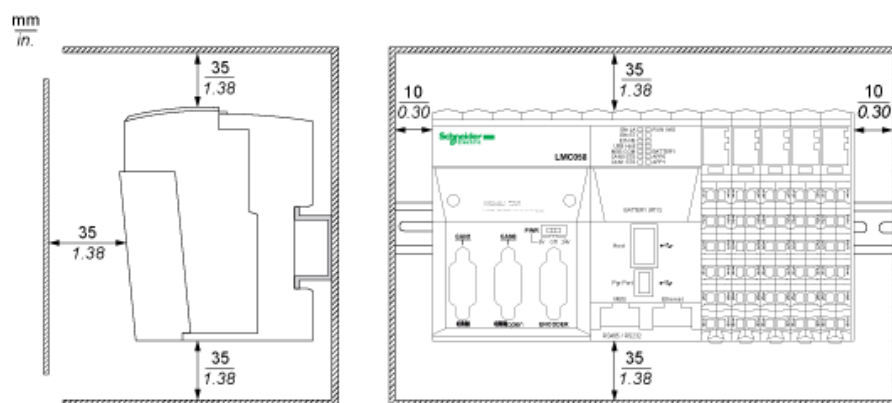
TM5 Slice

Dimensions



TM5 System

Spacing Requirements



Mounting on a DIN Rail



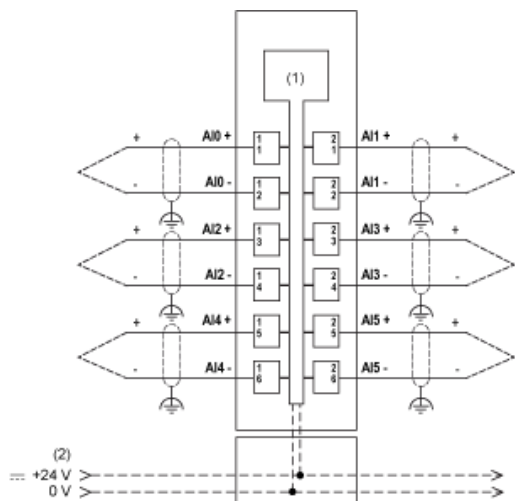
TM5 System Wiring Recommendations

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 6AI Thermocouple J/K/N/S 16 Bits

Wiring Diagram

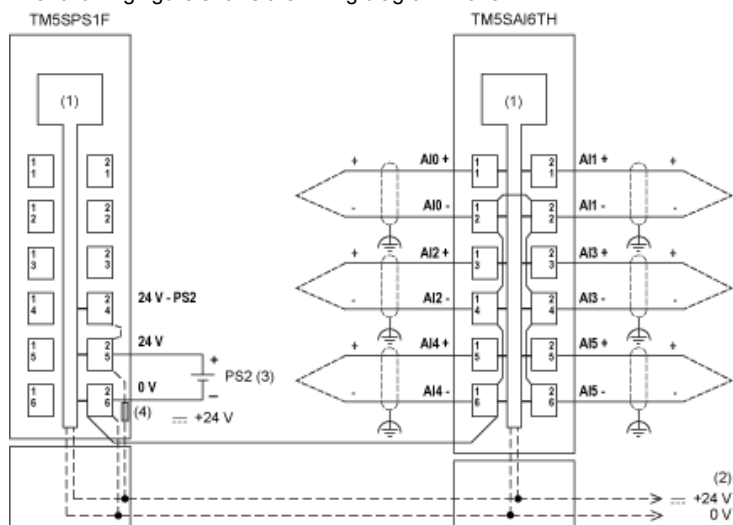


- (1) Internal electronics
- (2) 24 Vdc I/O power segment integrated into the bus bases

Ceramic Heating Element with Integrated Thermo Elements

Ripple voltage effects can potentially cause measurement errors.

The following figure shows the wiring diagram with a PDM:



- (1) Internal electronics
- (2) 24 Vdc I/O power segment integrated into the bus bases
- (3) PS2: External isolated SELV power supply 24 Vdc limited to 200 VA for UL508 conformance, or limited to 150 VA for CSA 22.2, N° 142 conformance
- (4) Integrated fuse type T slow-blow 6.3 A 250 V exchangeable

Mouser Electronics

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