



### Main

Range of product	Modicon TM5
Product or component type	Analog input module
Analogue input number	2
Analogue input type	Voltage +/- 10 V differential Current 0...20 mA/4...20 mA differential
Analogue input resolution	12 bits + sign +/- 10 V 12 bits 0...20 mA/4...20 mA

### Complementary

Range compatibility	Modicon M258 Modicon LMC058
Product compatibility	Logic controller Motion controller
Measurement resolution	2.441 mV, +/- 10 V 4.883 µA, 0...20 mA/4...20 mA
Colour	White
Input impedance	>= 20 mOhm voltage
Load impedance ohmic	<= 300 Ohm (current)
Sampling duration	1 Ms, analogue input type: all inputs with filtering 300 µs, analogue input type: all inputs without filtering
Measurement error	< 0.08 % of full scale +/- 10 V +/- 10 V at 25 °C < 0.08 % of full scale 0...20 mA/4...20 mA at 25 °C
Temperature coefficient	+/- 0.009 %FS/°C, analogue input type: current +/- 0.006 %FS/°C, analogue input type: voltage
Non-linearity	< 0.025 %FS, analogue input type: voltage < 0.05 %FS, analogue input type: current
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 for power supply 1 LED red for power supply 2 LEDs green for input status
Current consumption	2 mA at 5 V DC bus 33 mA at 24 V DC input/output
Maximum power dissipation in W	0.81 W
Marking	CE
Net weight	0.025 kg

## Environment

Standards	IEC 61131-2 CSA C22.2 No 213 UL 508 CSA C22.2 No 142
Product certifications	CSA C-Tick CULus GOST-R
Ambient air temperature for operation	0...55 °C without derating (horizontal installation) 0...60 °C with derating factor (horizontal installation) 0...50 °C (vertical installation)
Ambient air temperature for storage	-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...2000 m
Storage altitude	0...3000 m
Vibration resistance	1 gn at 8.4...150 Hz on DIN rail 3.5 mm at 5...8.4 Hz on DIN rail
Shock resistance	15 gn for 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	1 V/M 2...2.7 GHz conforming to EN/IEC 61000-4-3 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

## Packing Units

Unit Type of Package 1	PCE
Number of Units in Package 1	1
Package 1 Weight	40.0 g
Package 1 Height	1.9 cm
Package 1 width	5.9 cm
Package 1 Length	10.4 cm
Unit Type of Package 2	S02
Number of Units in Package 2	97
Package 2 Weight	3.88 kg
Package 2 Height	15.0 cm
Package 2 width	30.0 cm
Package 2 Length	40.0 cm

## Offer Sustainability

Sustainable offer status	Green Premium product
REACH Regulation	 <a href="#">REACH Declaration</a>
REACH free of SVHC	Yes
EU RoHS Directive	Pro-active compliance (Product out of EU RoHS legal scope)  <a href="#">EU RoHS Declaration</a>
Toxic heavy metal free	Yes
Mercury free	Yes
RoHS exemption information	 Yes
China RoHS Regulation	 <a href="#">China RoHS Declaration</a>

Environmental Disclosure	<a href="#">Product Environmental Profile</a>
Circularity Profile	<a href="#">End Of Life Information</a>
WEEE	The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins
PVC free	Yes

### Contractual warranty

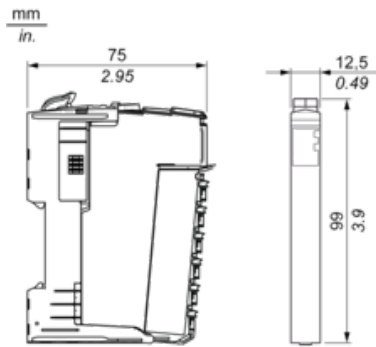
Warranty	18 months
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TM5 Slice

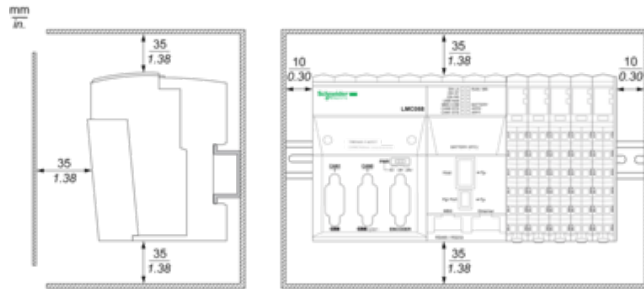
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Dimensions

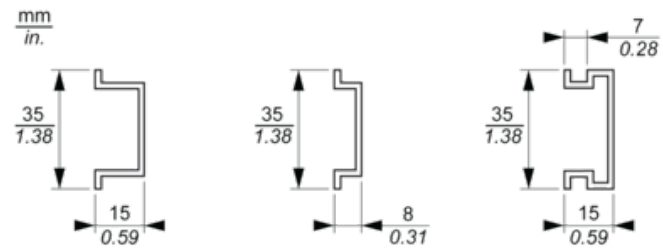


TM5 System

Spacing Requirements



Mounting on a DIN Rail



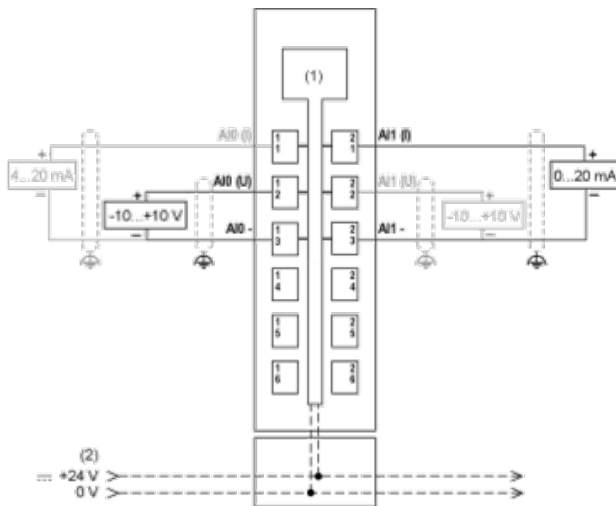
TM5 System Wiring Recommendations

Wire Sizes to Use with the Removable Spring Terminal Blocks

mm in.				
mm <sup>2</sup>	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 ±10V/0-20mA/4-20mA 12 Bits

Wiring Diagram



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