

Product availability: Stock - Normally stocked in distribution facility



## Main

Range of product	Modicon TM5
Product or component type	Analog input module
Analogue input number	4
Analogue input type	Current 0...20 mA, differential Voltage +/- 10 V, differential
Analogue input resolution	15 bits + sign +/- 10 V 15 bits 0...20 mA

## Complementary

Range compatibility	Modicon LMC058 Modicon M258
Product compatibility	Motion controller Logic controller
Measurement resolution	305 µV, +/- 10 V 610 nA, 0...20 mA
Color	White
Input impedance	>= 20 mOhm voltage
Load impedance ohmic	<= 400 Ohm (current)
Sampling duration	50 µs
Measurement error	< 0.08 % of full scale, +/- 10 V, +/- 10 V at 25 °C < 0.08 % of full scale, 0...20 mA, 0...20 mA at 25 °C
Temperature coefficient	0.01 %FS/°C
Non-linearity	< 0.01 %FS, analogue input type: voltage < 0.015 %FS, analogue input type: current
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	> 70 dB
Local signalling	1 LED green power supply 1 LED red power supply 4 LEDs green input status
Current consumption	2 mA 5 V DC bus 63 mA 24 V DC input/output
Power dissipation in W	<= 1.51 W
Marking	CE
Product weight	0.06 lb(US) (0.025 kg)

## Environment

Standards	CSA C22.2 No 213 CSA C22.2 No 142 IEC 61131-2 UL 508
Product certifications	GOST-R C-Tick CULus CSA
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	00785901822165
Nbr. of units in pkg.	1
Package weight(Lbs)	8.0000000000000002E-2
Returnability	Y
Country of origin	AT

## Offer Sustainability

Sustainable offer status	Green Premium product
RoHS (date code: YYWW)	Compliant - since 1039 - Schneider Electric declaration of conformity <a href="#">Schneider Electric declaration of conformity</a>
REACH	Reference not containing SVHC above the threshold
Product environmental profile	Available <a href="#">Product Environmental Profile</a>
Product end of life instructions	Available <a href="#">End Of Life Information</a>
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 <a href="http://www.p65warnings.ca.gov">www.p65warnings.ca.gov</a>

## Contractual warranty

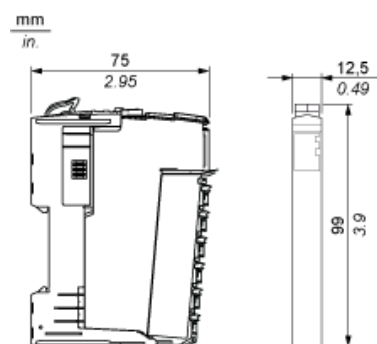
Warranty period	18 months
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TM5 Slice

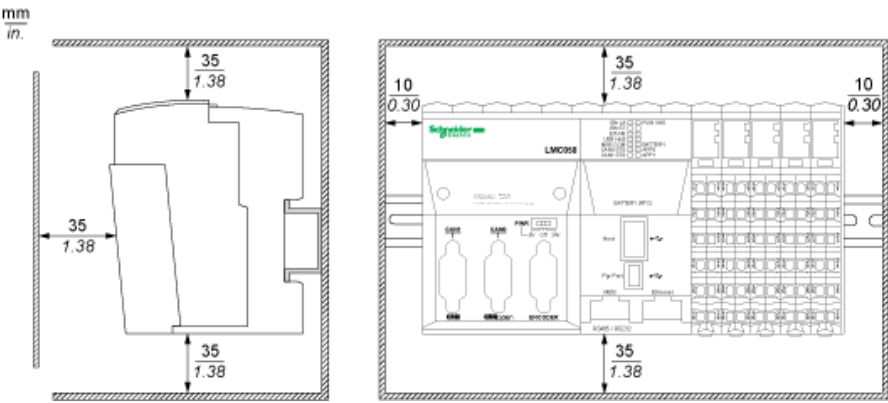
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Dimensions

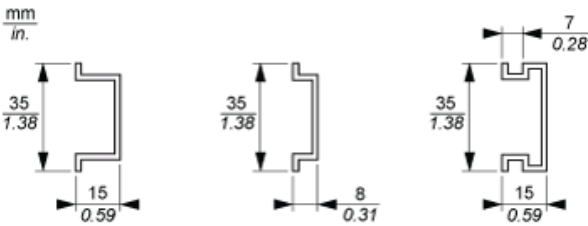


TM5 System

Spacing Requirements







Mounting on a DIN Rail



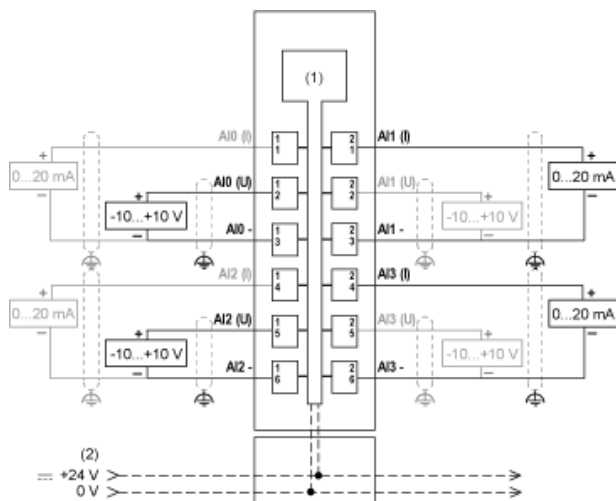
## TM5 System Wiring Recommendations

### 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 4AI ±10V/0-20mA 16 Bits

### Wiring Diagram



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

### Condition of Installation

Do not place 16-bit analog input modules side-by-side because their electromagnetic characteristics may lead to mutual interference and possible unintended equipment operation. Further, other types of equipments can generate similar electromagnetic interference affecting the conversion accuracy of the modules. In the physical configuration, a single slice of non-interfering equipment is sufficient to avoid this type of disturbance. Separate the 16-bit analog modules from each other and from the following equipment:

- TM5SBER2 Bus receiver
- TM5SPS2 and TM5SPS2F Power Distribution Modules
- TM258... and LMC058... Controllers

# Mouser Electronics

Authorized Distributor

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[TM5SAI4H](#)