

Main

Range of product	Modicon TM5
Product or component type	Compact I/O expansion block
Enclosure material	Plastic
Colour	White
Input/Output number	16
Input/Output number of splitter box	8 I + 8 O
Number of modules	2 module(s) with 4 analog input 2 module(s) with 4 analog output
Analogue input number	8
Analogue input range	+/- 10 V 0...20 mA 4...20 mA
Analogue input resolution	12 bits current 11 bits + sign voltage
Analogue output number	8
Analogue output type	Voltage 4 Current 4
Analogue output range	+/- 10 V 0...20 mA

Complementary

Input filtering	<= 50 ms not configurable
Sampling duration	20 ms input/output for the whole module 5 ms input/output per channel
Response time	<= 1 ms status change for output circuit
Leakage current	5 µA when switched off for output circuit
Protection type	Short-circuit for output circuit
Isolation	No insulation between channels 500 Vrms AC insulation between channel and bus
Current consumption	8 mA at 5 V DC bus

	217 mA at 24 V DC input/output
Power dissipation in W	5.25 W
Local signalling	8 LEDs green for input status 8 LEDs yellow for output status 4 LEDs green for power supply 4 LEDs red for power supply
Electrical connection	Removable spring terminal block
Surge withstand	0.5 kV (differential mode) at 24 V DC conforming to EN/IEC 61000-4-5 1 kV (common mode) at 24 V DC conforming to EN/IEC 61000-4-5
Mounting support	DIN rail
Product weight	0.25 kg

Environment

Standards	CSA C22.2 No 142 IEC 61131-2 UL 508 CSA C22.2 No 213
Product certifications	CSA C-Tick UL GOST-R
Marking	CE
Ambient air temperature for operation	-10...50 °C vertical installation -10...60 °C horizontal installation
Ambient air temperature for storage	-40...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 (f = 8.4...150 Hz) DIN rail 3.5 mm (f = 5...8.4 Hz) 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
Electromagnetic compatibility	EN/IEC 61000-4-6
Disturbance radiated/conducted	CISPR 11 zone B - class A

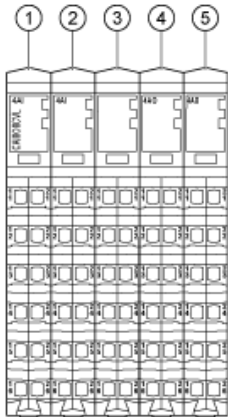
Offer Sustainability

Sustainable offer status	Green Premium product
RoHS (date code: YYWW)	Compliant Schneider Electric declaration of conformity
REACH	Reference not containing SVHC above the threshold Reference not containing SVHC above the threshold
Product environmental profile	Available Product Environmental Profile
Product end of life instructions	Available End of Life Information

Contractual warranty

Warranty period	18 months
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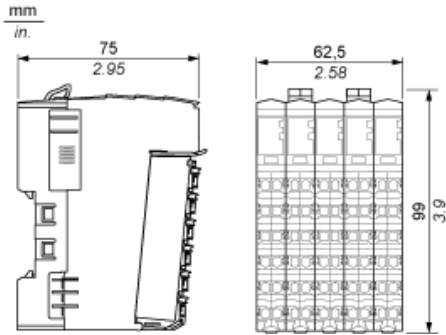
TM5 Compact I/O Module



N°	Designation
1	Analog Input electronic module / 4 Analog Inputs
2	Analog Input electronic module / 4 Analog Inputs
3	Dummy Module
4	Analog Output electronic module / 4 Analog Outputs
5	Analog Output electronic module / 4 Analog Outputs

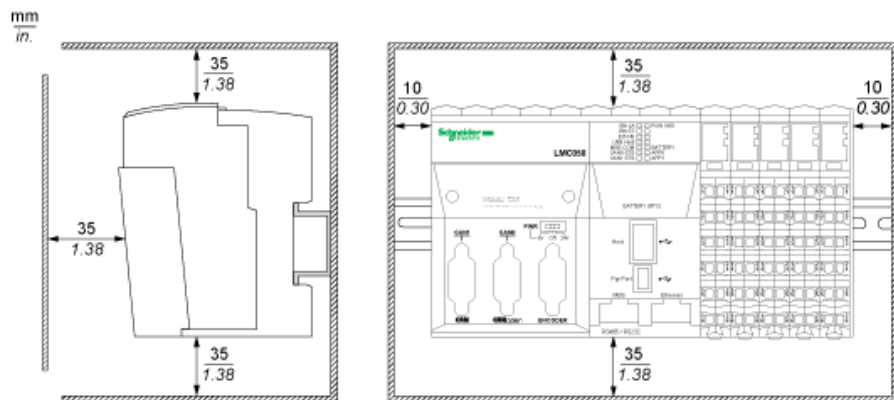
Compact I/O Module

Dimensions

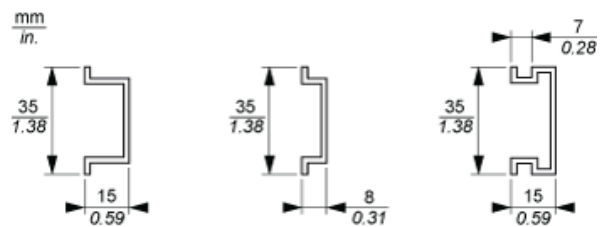


TM5 System

Spacing Requirements



Mounting on a DIN Rail



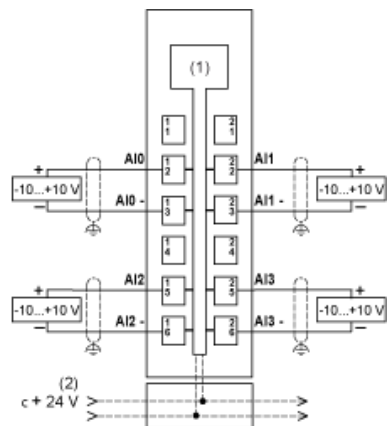
TM5 System Wiring Recommendations

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

Analog Input 4AI ± 10 V

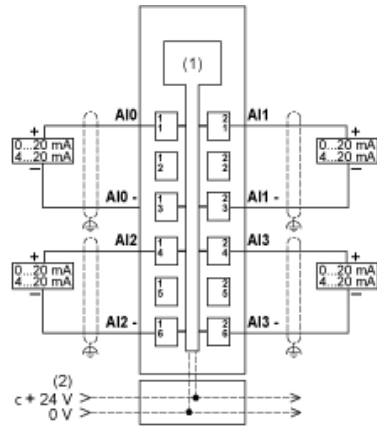
Wiring Diagram



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

Analog Input 4AI 0-20 mA / 4-20 mA

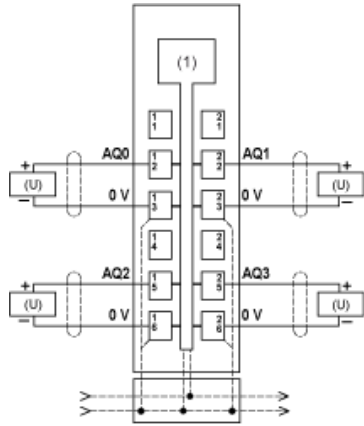
Wiring Diagram



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

Analog Output 4AO ± 10 V

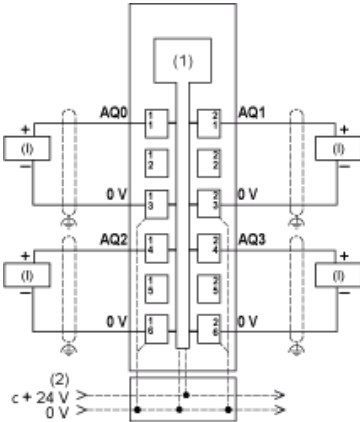
Wiring Diagram



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

Analog Output 4AO 0-20 mA

Wiring Diagram



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