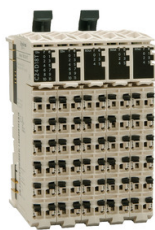


Product data sheet

Specifications



Compact I/O expansion block, Modicon TM5, 8 AI, 8 AO, 0 10 V -12 bits

TM5CAI8O8VL

! Discontinued - Service only

! Discontinued on: Aug 8, 2025

! End-of-service on: Dec 31, 2025

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	Analog input 2 x 4 Analog output 2 x 4
Analogue input number	8
Analogue input range	+/- 10 V
Analogue input resolution	12 bits voltage
Analogue output number	8
Analogue output type	Voltage 8
Analogue output range	+/- 10 V

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 output
Maximum leakage current	5 µA when switched off) output
Protection type	Short-circuit output
Isolation	No insulation between channels 500 Vrms AC insulation between channel and bus
Current consumption	8 mA 5 V DC bus 218 mA 24 V DC input/output
Power dissipation in W	5.25 W
Local signalling	4 LEDs (green) for power supply 4 LEDs (red) for power supply 8 LEDs (yellow) for output status 8 LEDs (green) for input status
Electrical connection	Removable spring terminal block
Surge withstand	0.5 kV differential mode 24 V DC EN/IEC 61000-4-5 1 kV common mode 24 V DC EN/IEC 61000-4-5

Disclaimer: This documentation is not intended as a substitute for and is not to be used for determining suitability or reliability of these products for specific user applications

Mounting support	DIN rail
Net weight	0.55 lb(US) (0.25 kg)

Environment

Standards	UL 508 CSA C22.2 No 142 CSA C22.2 No 213 IEC 61131-2
Product certifications	C-Tick GOST-R UL CSA
Marking	CE
Ambient air temperature for operation	14...122 °F (-10...50 °C) vertical installation) 14...140 °F (-10...60 °C) horizontal installation)
Ambient air temperature for storage	-40...158 °F (-40...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...9842.5 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 EN/IEC 61000-4-2 8 kV in air EN/IEC 61000-4-2
Resistance to electromagnetic fields	0.9 V/yd (1 V/m) 2...2.7 GHz EN/IEC 61000-4-3 9.1 V/yd (10 V/m) 80...2000 MHz EN/IEC 61000-4-3
Resistance to fast transients	1 kV EN/IEC 61000-4-4 I/O) 1 kV EN/IEC 61000-4-4 shielded cable) 2 kV EN/IEC 61000-4-4 power lines)
Electromagnetic compatibility	EN/IEC 61000-4-6
Disturbance radiated/conducted	CISPR 11 zone B - class A

Packing Units

Unit Type of Package 1	PCE
Number of Units in Package 1	1
Package 1 Height	2.8 in (7.0 cm)
Package 1 Width	3.5 in (9.0 cm)
Package 1 Length	4.3 in (11.0 cm)
Package 1 Weight	10.02 oz (284.0 g)
Unit Type of Package 2	S03
Number of Units in Package 2	36
Package 2 Height	11.8 in (30.0 cm)
Package 2 Width	11.8 in (30.0 cm)
Package 2 Length	15.7 in (40.0 cm)
Package 2 Weight	22.540 lb(US) (10.224 kg)

Contractual warranty

Warranty (in months)	18
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Environmental Data

Schneider Electric aims to achieve Net Zero status by 2050 through supply chain partnerships, lower impact materials, and circularity via our ongoing “Use Better, Use Longer, Use Again” campaign to extend product lifetimes and recyclability.

[Environmental Data explained >](#)

[How we assess product sustainability >](#)



Environmental footprint

Environmental Disclosure

[Product Environmental Profile](#)

Use Better



Materials and Substances

EU RoHS Directive

[Compliant By Exemption](#)

REACH Regulation

[Free of Substances of Very High Concern above the threshold](#)

PVC free

Yes

Use Longer



Lifetime extension

Repair

No

Use Again



Repack and remanufacture

Circularity Profile

[End of Life Information](#)

Take-back

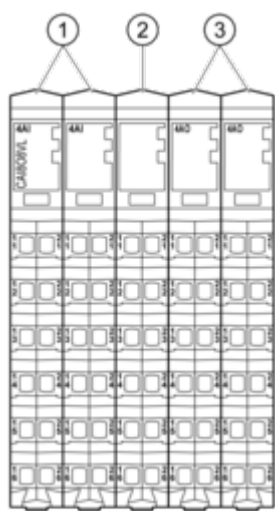
No

WEEE Label

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

Presentation

TM5 Compact I/O Module

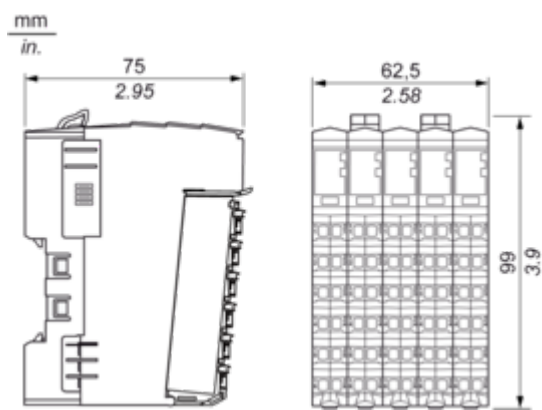


N°	Designation
1	Analog Input electronic module / 4 Analog Inputs
2	Dummy Module
3	Analog Output electronic module / 4 Analog Outputs

Dimensions Drawings

Compact I/O Module

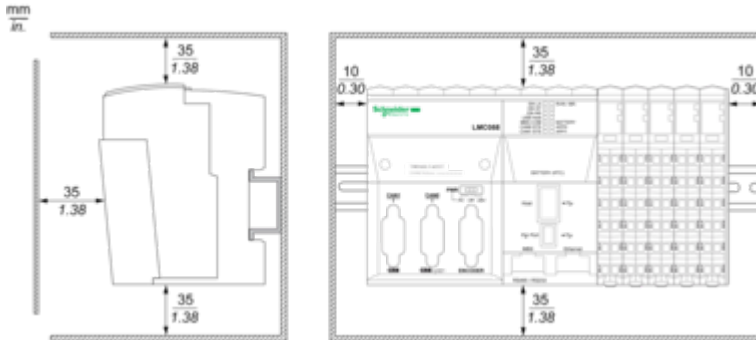
Dimensions



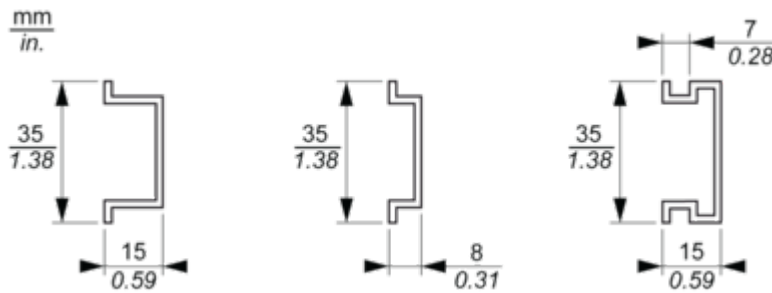
Mounting and Clearance

TM5 System

Spacing Requirements



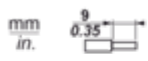
Mounting on a DIN Rail



Connections and Schema

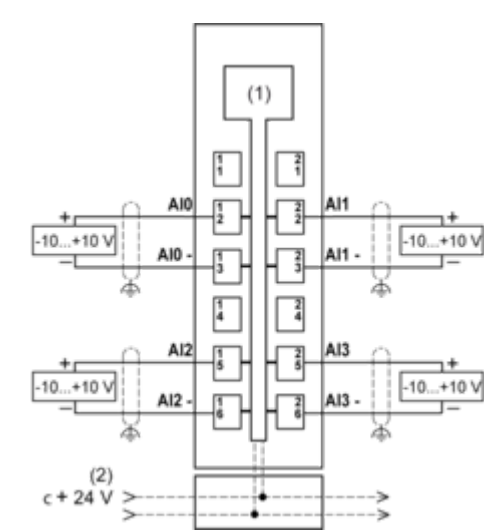
TM5 System Wiring Recommendations

Wire Sizes to Use with the Removable Spring Terminal Blocks

				
mm 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

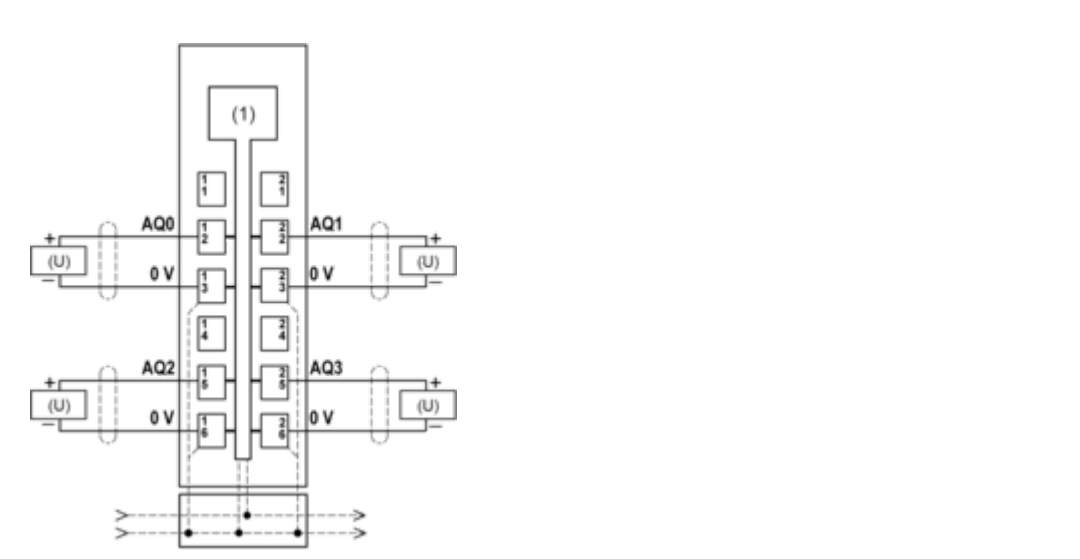
Wiring Diagram



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

Analog Output 4AO ±10 V

Wiring Diagram



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