

Main

Range of Product	Modicon TM5
Product or Component Type	Compact I/O expansion block
Enclosure Material	Plastic
Color	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	4...20 mA 0...20 mA +/- 10 V
Analogue input resolution	12 bits current 11 bits + sign voltage
Analogue output number	8
Analogue output type	Voltage 4 Current 4
Analogue output range	0...20 mA +/- 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	500 Vrms AC insulation between channel and bus No insulation between channels
Current consumption	8 mA 5 V DC bus 217 mA 24 V DC input/output
Power dissipation in W	5.25 W
Local signalling	For power supply 4 LEDs (green) For power supply 4 LEDs (red) For output status 8 LEDs (yellow) For input status 8 LEDs (green)
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
Mounting Support	DIN rail
Net Weight	0.55 lb(US) (0.25 kg)

The information provided in this documentation contains general descriptions and/or technical characteristics of the performance of the products contained herein. 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. It is the duty of any such user or integrator to perform the appropriate and complete risk analysis, evaluation and testing of the products with respect to the relevant specific application or use thereof. Neither Schneider Electric Industries SAS nor any of its affiliates or subsidiaries shall be responsible or liable for misuse of the information contained herein.

Environment

Standards	CSA C22.2 No 213 UL 508 CSA C22.2 No 142 IEC 61131-2
Product Certifications	C-tick[RETURN]UL[RETURN]GOST-R[RETURN]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...6561.68 ft (0...2000 m)
Storage altitude	0.00...9842.52 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	0.91 V/M (1 V/m) 2...2.7 GHz EN/IEC 61000-4-3 9.14 V/m (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

Ordering and shipping details

Category	22532-M258 PLC
Discount Schedule	PC12
GTIN	3595864145143
Returnability	No
Country of origin	AT

Packing Units

Unit Type of Package 1	PCE
Number of Units in Package 1	1
Package 1 Height	2.76 in (7.0 cm)
Package 1 Width	3.54 in (9.0 cm)
Package 1 Length	4.33 in (11.0 cm)
Package 1 Weight	9.95 oz (282.0 g)
Unit Type of Package 2	S02
Number of Units in Package 2	15
Package 2 Height	5.91 in (15.0 cm)
Package 2 Width	11.81 in (30.0 cm)
Package 2 Length	15.75 in (40.0 cm)
Package 2 Weight	9.33 lb(US) (4.23 kg)

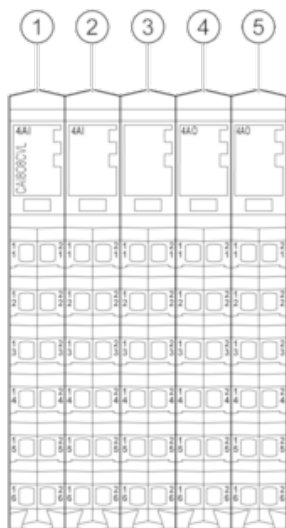
Offer Sustainability

Sustainable offer status	Green Premium product
California proposition 65	WARNING: This product can expose you to chemicals including: Lead and lead compounds, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov
REACH Regulation	REACH Declaration
EU RoHS Directive	Pro-active compliance (Product out of EU RoHS legal scope)
Toxic heavy metal free	Yes
Mercury free	Yes
China RoHS Regulation	China RoHS Declaration
RoHS exemption information	Yes
Environmental Disclosure	Product Environmental Profile
Circularity Profile	End Of Life Information
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
----------	-----------

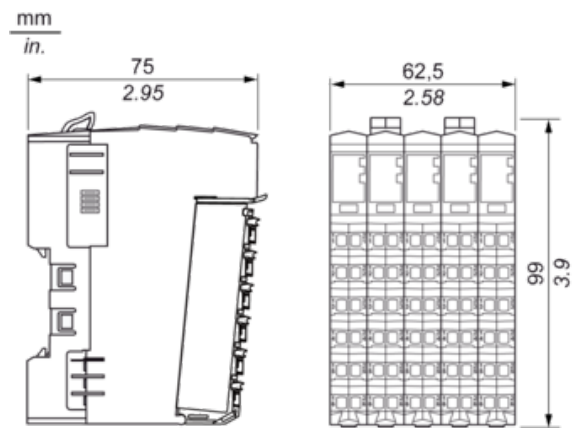
TM5 Compact I/O Module



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

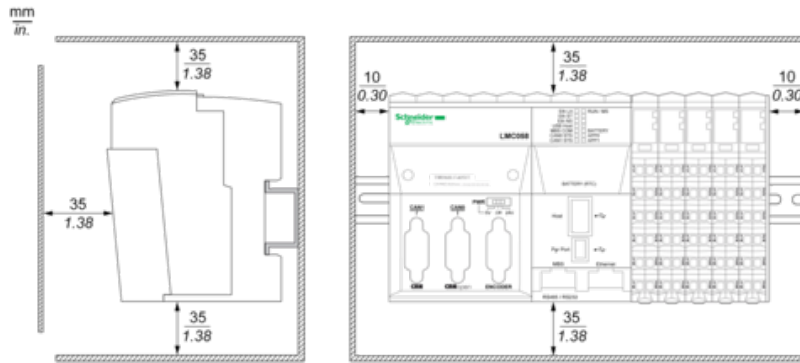
Compact I/O Module

Dimensions

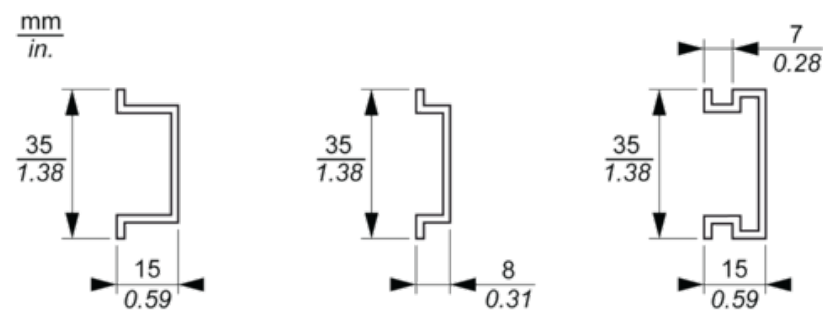


TM5 System

Spacing Requirements








Mounting on a DIN Rail



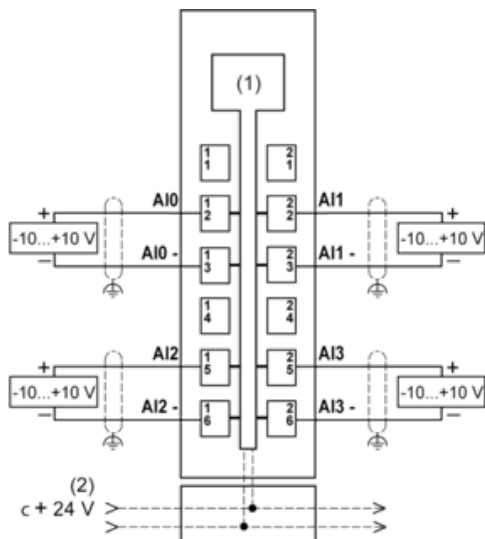
TM5 System Wiring Recommendations

Wire Sizes to Use with the Removable Spring Terminal Blocks

$\frac{\text{mm}}{\text{in.}}$ 				
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

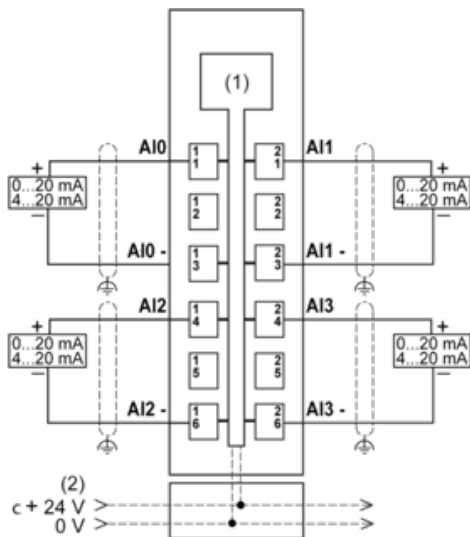
Wiring Diagram



- 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

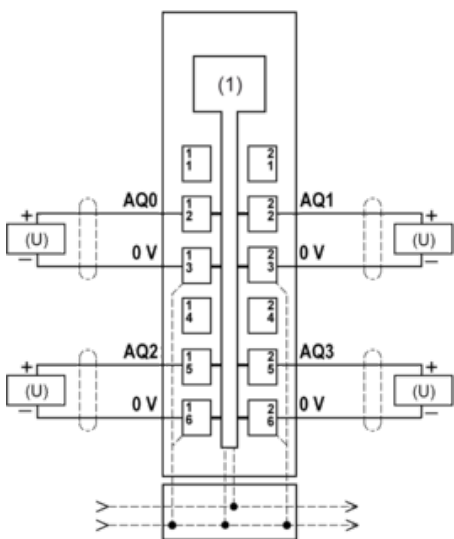
Wiring Diagram



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

Analogue Output 4AO ±10 V

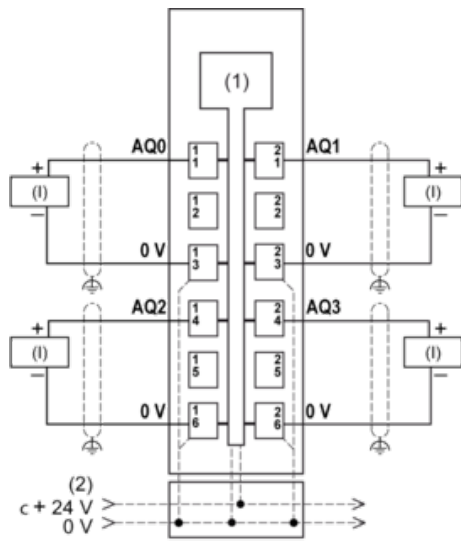
Wiring Diagram



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

Analogue Output 4AO 0-20 mA

Wiring Diagram



1 Internal electronics

2 24 Vdc I/O power segment integrated into the bus bases

I Current