



Main

Range of product	Modicon TM5
Product or component type	Analog output module
Analogue output number	4
Analogue output resolution	12 bits + sign, +/- 10 V 12 bits, 0...20 mA

Complementary

Range compatibility	Modicon LMC058 Modicon M258
Product compatibility	Logic controller Motion controller
Analogue output type	Current 0...20 mA Voltage +/- 10 V
Measurement resolution	4.882 mV, +/- 10 V 9.766 µA, 0...20 mA
Colour	White
Response time	<= 1 ms
Minimum output impedance	1 Ohm
Load impedance ohmic	200...500 Ohm (current)
Sampling duration	300 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	0.015 %FS/°C, analogue output type: current 0.015 %FS/°C, analogue output type: voltage
Non-linearity	< 0.005 %FS, analogue output type: current < 0.005 %FS, analogue output type: voltage
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 %
Local signalling	1 LED green for power supply 1 LED red for power supply 4 LEDs yellow for output status
Current consumption	2 mA at 5 V DC bus 63 mA at 24 V DC input/output
Maximum power dissipation in W	1.51 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	CULus GOST-R CSA C-Tick
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	42.9 g
Package 1 Height	2 cm
Package 1 width	6 cm
Package 1 Length	11 cm

Offer Sustainability

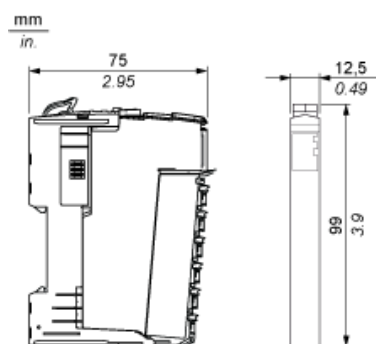
Sustainable offer status	Green Premium product
REACH Regulation	 REACH Declaration
REACH free of SVHC	Yes
EU RoHS Directive	Pro-active compliance (Product out of EU RoHS legal scope)  EU RoHS Declaration
Toxic heavy metal free	Yes
Mercury free	Yes
RoHS exemption information	 Yes
China RoHS Regulation	 China RoHS Declaration
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
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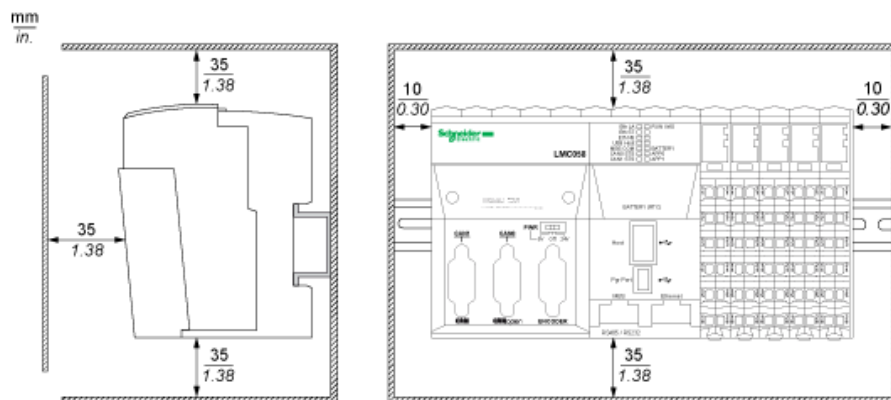
TM5 Slice

Dimensions

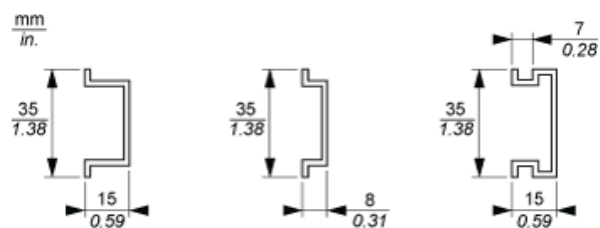


TM5 System

Spacing Requirements



Mounting on a DIN Rail



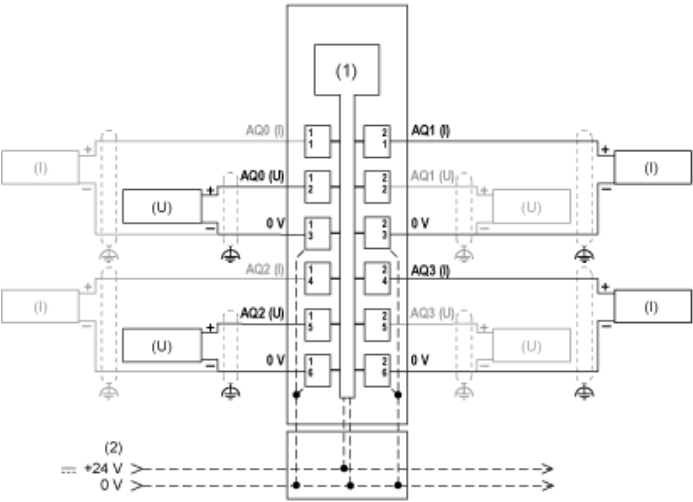
TM5 System Wiring Recommendations

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

Electronic Module 4AO $\pm 10\text{V}/0\text{-}20\text{mA}$ 12 Bits

Wiring Diagram



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