



Main

Range of product	Modicon TM5
Product or component type	Discrete output module
Discrete output number	16
Discrete output type	Transistor

Complementary

Range compatibility	Modicon LMC058 PacDrive LMC motion controller Modicon M258
Product compatibility	PacDrive LMC Pro Motion controller PacDrive LMC Pro 2 PacDrive LMC Eco Logic controller
Output voltage	24 V DC
Output voltage limits	20.4...28.8 V
Discrete output logic	Source
Current per channel	0.5 A
Maximum current per output common	8 A
Colour	White
Peak output current	3 A
Switching frequency	<= 500 Hz resistive load
Response time	<= 300 µs from state 0 to state 1 for output <= 300 µs from state 1 to state 0 for output
Maximum leakage current	5 µA when switched off
Protection type	Reverse polarity protection Overload protection Short-circuit protection
Isolation	No insulation between channels 500 Vrms AC insulation between channel and bus
Maximum voltage drop	<2 V at 500 mA for sensor supply <0.1 V at 500 mA for output
Maximum supply current for sensors	500 mA
Current consumption	56 mA at 5 V DC bus 40 mA at 24 V DC input/output
Local signalling	1 LED green/red for power supply 16 LEDs yellow for output status
Electrical connection	1 wire
Marking	CE
Net weight	0.025 kg

Environment

Standards	IEC 61131-2 UL 508 CSA C22.2 No 213 CSA C22.2 No 142
Product certifications	CSA CULus C-Tick GOST-R
Ambient air temperature for operation	-10...55 °C without derating (horizontal installation) -10...60 °C with derating factor (horizontal installation) -10...50 °C (vertical 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 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
Electromagnetic compatibility	Electrostatic discharge immunity test, 4 kV on contact conforming to EN/IEC 61000-4-2 Electrostatic discharge immunity test, 8 kV in air conforming to EN/IEC 61000-4-2 Susceptibility to electromagnetic fields, 1 V/m 2...2.7 GHz conforming to EN/IEC 61000-4-3 Susceptibility to electromagnetic fields, 10 V/m 80...2000 MHz conforming to EN/IEC 61000-4-3 Electrical fast transient/burst immunity test, 1 kV I/O conforming to EN/IEC 61000-4-4 Electrical fast transient/burst immunity test, 1 kV shielded cable conforming to EN/IEC 61000-4-4 Electrical fast transient/burst immunity test, 2 kV power lines conforming to EN/IEC 61000-4-4 1.2/50 µs shock waves immunity test, 0.5 kV differential mode conforming to EN/IEC 61000-4-5 1.2/50 µs shock waves immunity test, 1 kV common mode conforming to EN/IEC 61000-4-5 Conducted RF disturbances conforming to EN/IEC 61000-4-6 Conducted and radiated emissions conforming to CISPR 11

Packing Units

Unit Type of Package 1	PCE
Number of Units in Package 1	1
Package 1 Weight	40 g
Package 1 Height	2 cm
Package 1 width	6 cm
Package 1 Length	10.5 cm

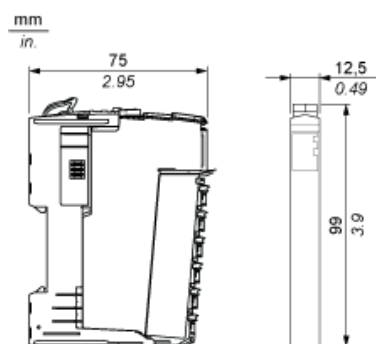
Offer Sustainability

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

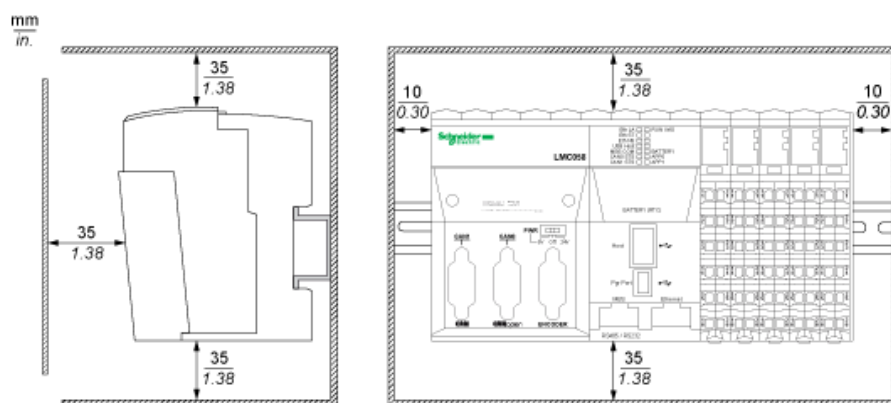
TM5 Slice

Dimensions

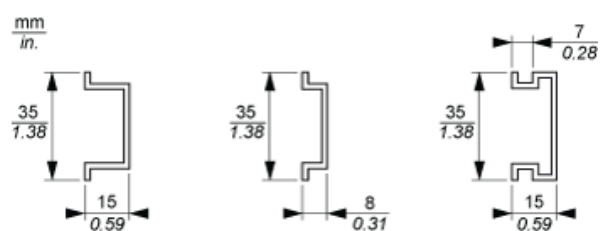


TM5 System

Spacing Requirements



Mounting on a DIN Rail



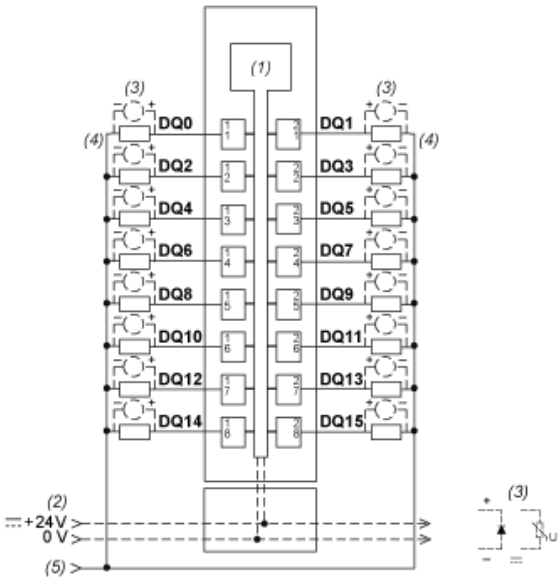
TM5 System Wiring Recommendations

Wire Sizes to Use with the Removable Spring Terminal Blocks

$\frac{\text{mm}}{\text{in.}}$ 			
mm ²	0,08...1,5	0,25...1,5	0,25...0,75
AWG	28...16	24...16	24...20

Electronic Module 16DO 24 Vdc Tr 0.5 A 1 Wire

Wiring Diagrams



- (1) Internal electronics
- (2) 24 Vdc I/O power segment integrated into the bus bases
- (3) Inductive load protection
- (4) 2-wire load
- (5) 0 Vdc I/O power by external connection