



Main

Range of product	Modicon TM5
Product or component type	Counter module
Product specific application	Period measurement Frequency generator Frequency meter Downcounting Upcounting Axis following with encoder
Function of module	2 x 24 V DC auxiliary inputs 24 V DC encoder power supply
Discrete input number	2
Counting frequency	100 kHz
Encoder type	2 incremental encoders

Complementary

Range compatibility	Modicon LMC058 Modicon M258
Product compatibility	Logic controller Motion controller
Counter inputs resolution	16 bits/32 bits
Maximum cycle time	2 ms
Input compatibility	2 incremental encoders (24 V)
Isolation	500 Vrms AC insulation between channel and bus
Discrete input logic	Sink
Discrete input voltage	24 V DC
Discrete input current	1.3 mA at 24 V
Input resistance	18.4 kOhm
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	UL 508 CSA C22.2 No 142 CSA C22.2 No 213 IEC 61131-2
Product certifications	GOST-R CSA C-Tick cULus
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	39.0 g
Package 1 Height	2.0 cm
Package 1 width	6.0 cm
Package 1 Length	10.5 cm
Unit Type of Package 2	S02
Number of Units in Package 2	97
Package 2 Weight	4.018 kg
Package 2 Height	15.0 cm
Package 2 width	30.0 cm
Package 2 Length	40.0 cm

Offer Sustainability

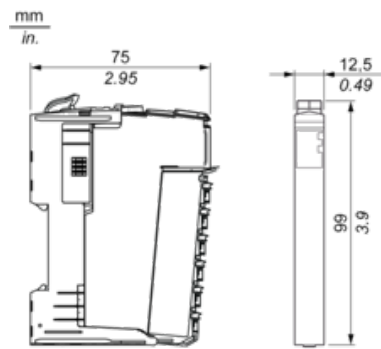
Sustainable offer status	Green Premium product
REACH Regulation	REACH Declaration
REACH free of SVHC	Yes
EU RoHS Directive	Pro-active compliance (Product out of EU RoHS legal scope) EU RoHS Declaration
Toxic heavy metal free	Yes
Mercury free	Yes
RoHS exemption information	Yes
China RoHS Regulation	China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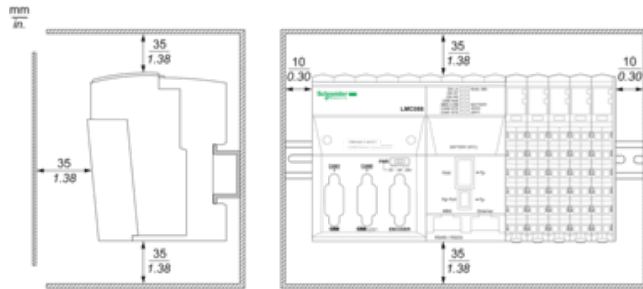
TM5 Slice

Dimensions

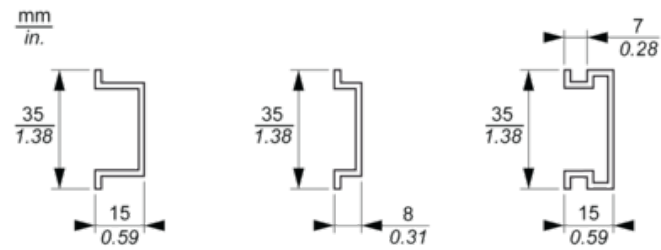


TM5 System

Spacing Requirements







Mounting on a DIN Rail



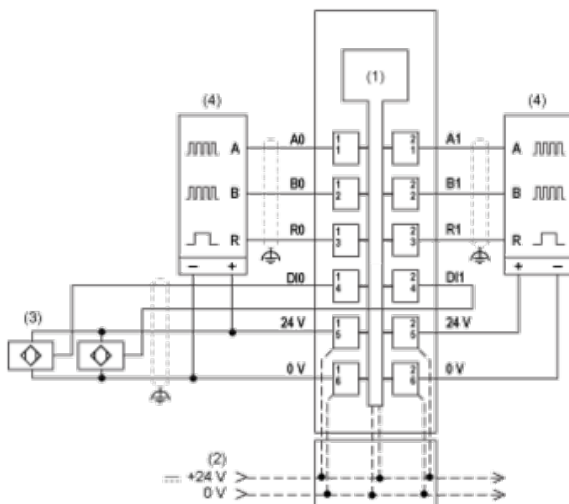
TM5 System Wiring Recommendations

Wire Sizes to Use with the Removable Spring Terminal Blocks

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

Electronic Module 2 HSC INC 100 KHz

Wiring Diagram



- (1) Internal electronics
- (2) 24 Vdc I/O power segment integrated into bus base
- (3) 3-wire sensor
- (4) Encoder