



### Main

Range of product	Modicon TM5
Product or component type	Counter module
Product specific application	Downcounting Frequency generator Upcounting Period measurement Frequency meter Axis following with encoder
Function of module	2 x 24 V DC auxiliary inputs 24 V DC encoder power supply
Discrete input number	1
Counting frequency	100 kHz
Encoder type	1 incremental encoder

### 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	1 incremental encoder (24 V)
Isolation	500 Vrms AC insulation between channel and bus
Discrete input logic	Sink
Discrete input voltage	24 V DC
Discrete input current	3.3 mA at 24 V
Input resistance	7.19 kOhm
Current consumption	2 mA at 5 V DC bus 58 mA at 24 V DC input/output
Maximum power dissipation in W	1.41 W
Marking	CE
Net weight	0.025 kg

### Environment

Standards	IEC 61131-2 CSA C22.2 No 213 CSA C22.2 No 142 UL 508
Product certifications	CSA C-Tick GOST-R 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

Package 1 Weight	0.038 kg
Package 1 Height	19.000 mm
Package 1 width	59.000 mm
Package 1 Length	104.000 mm

## Offer Sustainability

Sustainable offer status	Green Premium product
REACH Regulation	<a href="#">REACH Declaration</a>
REACH free of SVHC	Yes
EU RoHS Directive	Pro-active compliance (Product out of EU RoHS legal scope) <a href="#">EU RoHS Declaration</a>
Toxic heavy metal free	Yes
Mercury free	Yes
RoHS exemption information	<a href="#">Yes</a>
China RoHS Regulation	<a href="#">China RoHS Declaration</a>
Environmental Disclosure	<a href="#">Product Environmental Profile</a>
Circularity Profile	<a href="#">End Of Life Information</a>
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

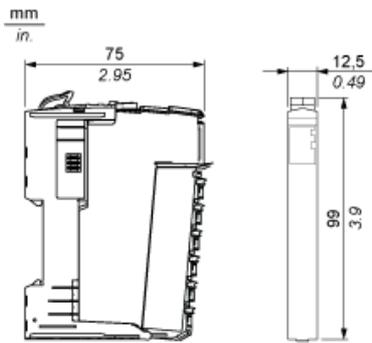
Warranty	18 months
----------	-----------

---

TM5 Slice

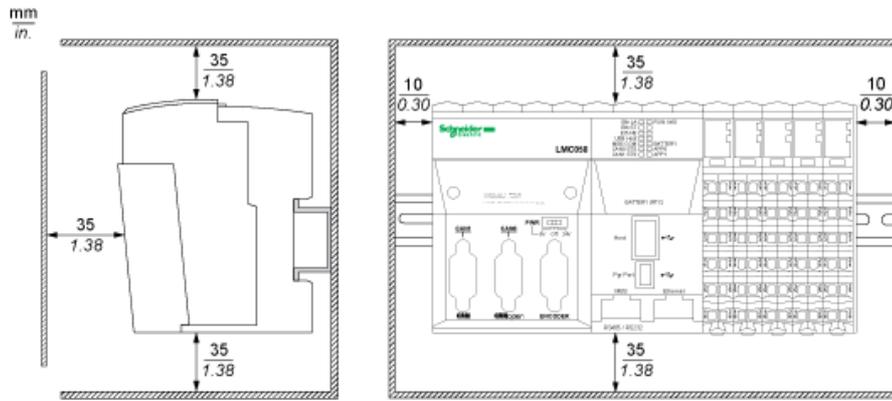
---

Dimensions

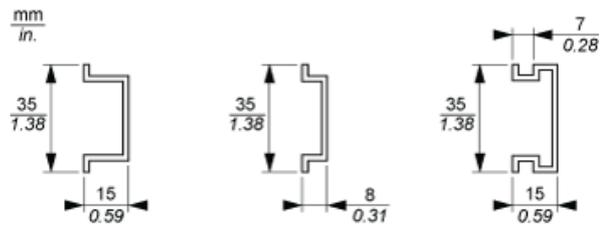


TM5 System

Spacing Requirements



Mounting on a DIN Rail



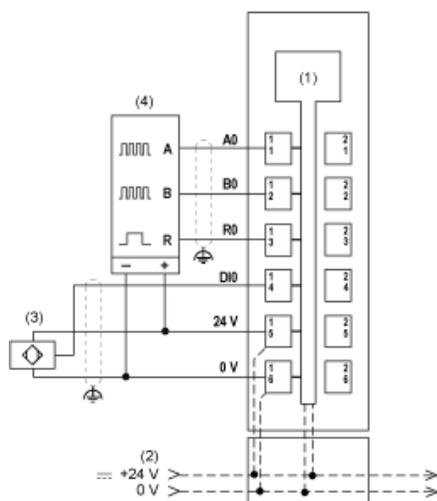
TM5 System Wiring Recommendations

Wire Sizes to Use with the Removable Spring Terminal Blocks

mm in.				
mm <sup>2</sup>	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 1 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