

# Product datasheet

Specifications



## Counter module, Modicon TM5, 1 HSC incremental, 100 KHz

TM5SE1IC01024

### 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

<b>Standards</b>	IEC 61131-2 CSA C22.2 No 213 CSA C22.2 No 142 UL 508
<b>Product Certifications</b>	CSA C-Tick GOST-R cULus
<b>Ambient Air Temperature For Operation</b>	0...55 °C without derating (horizontal installation) 0...60 °C with derating factor (horizontal installation) 0...50 °C (vertical installation)
<b>Ambient Air Temperature For Storage</b>	-25...70 °C
<b>Relative Humidity</b>	5...95 % without condensation
<b>Ip Degree Of Protection</b>	IP20 conforming to IEC 61131-2
<b>Pollution Degree</b>	2 conforming to IEC 60664
<b>Operating Altitude</b>	0...2000 m
<b>Storage Altitude</b>	0...3000 m
<b>Vibration Resistance</b>	1 gn at 8.4...150 Hz on DIN rail 3.5 mm at 5...8.4 Hz on DIN rail
<b>Shock Resistance</b>	15 gn for 11 ms
<b>Resistance To Electrostatic Discharge</b>	4 kV on contact conforming to IEC 61000-4-2 8 kV in air conforming to IEC 61000-4-2
<b>Resistance To Electromagnetic Fields</b>	1 V/m 2...2.7 GHz conforming to IEC 61000-4-3 10 V/m 80...2000 MHz conforming to IEC 61000-4-3
<b>Resistance To Fast Transients</b>	1 kV (I/O) conforming to IEC 61000-4-4 1 kV (shielded cable) conforming to IEC 61000-4-4 2 kV (power lines) conforming to IEC 61000-4-4
<b>Surge Withstand</b>	0.5 kV differential mode conforming to IEC 61000-4-5 1 kV common mode conforming to IEC 61000-4-5
<b>Electromagnetic Compatibility</b>	EN/IEC 61000-4-6
<b>Disturbance Radiated/Conducted</b>	CISPR 11

## Packing Units

<b>Unit Type Of Package 1</b>	PCE
<b>Number Of Units In Package 1</b>	1
<b>Package 1 Height</b>	1.900 cm
<b>Package 1 Width</b>	5.900 cm
<b>Package 1 Length</b>	10.400 cm
<b>Package 1 Weight</b>	38.000 g
<b>Unit Type Of Package 2</b>	S02
<b>Number Of Units In Package 2</b>	97
<b>Package 2 Height</b>	15.000 cm
<b>Package 2 Width</b>	30.000 cm
<b>Package 2 Length</b>	40.000 cm
<b>Package 2 Weight</b>	4.036 kg

## Contractual warranty

<b>Warranty</b>	12 months
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## Sustainability

**Green Premium™ label** is Schneider Electric's commitment to delivering products with best-in-class environmental performance. Green Premium promises compliance with the latest regulations, transparency on environmental impacts, as well as circular and low-CO<sub>2</sub> products.

**Guide to assessing product sustainability** is a white paper that clarifies global eco-label standards and how to interpret environmental declarations.

[Learn more about Green Premium >](#)

[Guide to assess a product's sustainability >](#)



Transparency RoHS/REACH

## Well-being performance

✓ Reach Free Of Svhc

✓ Toxic Heavy Metal Free

✓ Mercury Free

✓ Rohs Exemption Information Yes

✓ Pvc Free

## Certifications & Standards

**Reach Regulation** [REACH Declaration](#)

**Eu Rohs Directive** Pro-active compliance (Product out of EU RoHS legal scope)  
[EU RoHS Declaration](#)

**China Rohs Regulation** [China RoHS declaration](#)

**Environmental Disclosure** [Product Environmental Profile](#)

**Weee** The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins

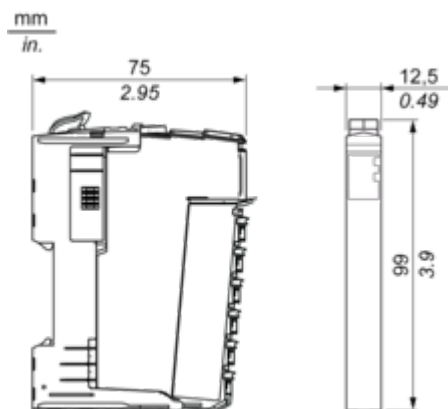
**Circularity Profile** [End of Life Information](#)

Dimensions Drawings

TM5 Slice

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Dimensions

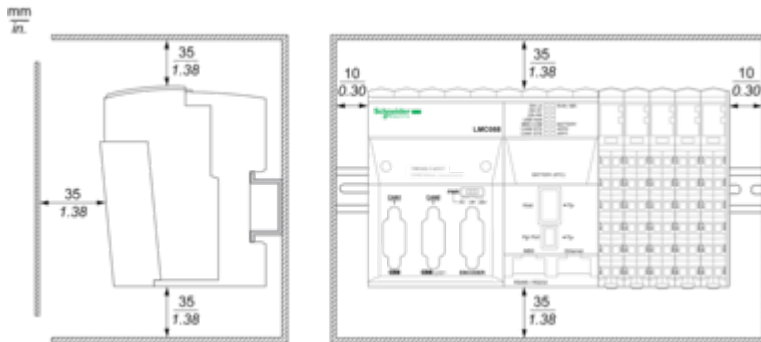


Mounting and Clearance

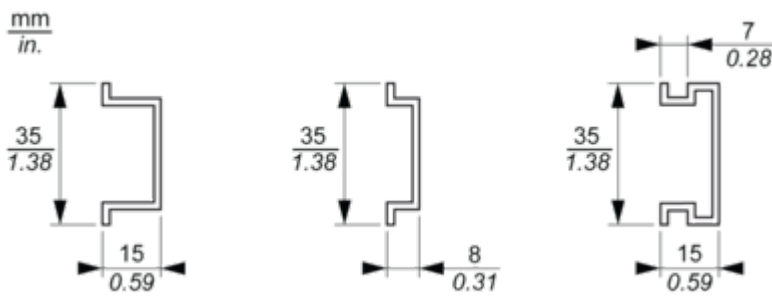
TM5 System

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Spacing Requirements



Mounting on a DIN Rail

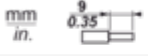






Connections and Schema

**TM5 System Wiring Recommendations**

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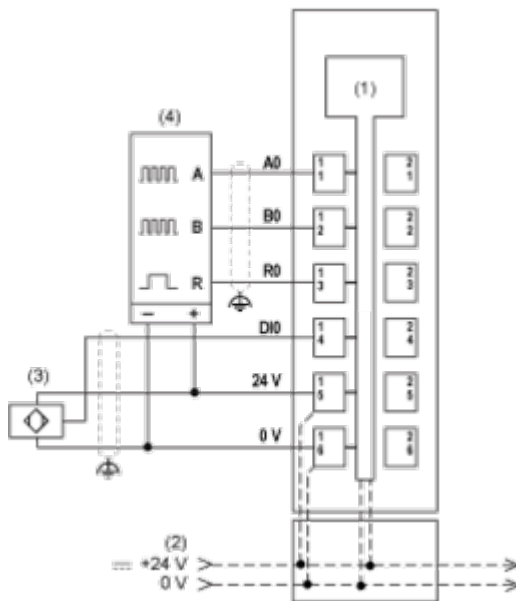
**Wire Sizes to Use with the Removable Spring Terminal Blocks**

 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

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Wiring Diagram



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