

# Product data sheet

Specifications



## counter module, Modicon TM5, 2 incremental high speed, 100KHz

TM5SE2IC01024

### 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

<b>Standards</b>	UL 508 CSA C22.2 No 142 CSA C22.2 No 213 IEC 61131-2
<b>Product certifications</b>	GOST-R CSA C-Tick 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>	2.000 cm
<b>Package 1 Width</b>	6.000 cm
<b>Package 1 Length</b>	10.500 cm
<b>Package 1 Weight</b>	39.000 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>	4.018 kg

## Contractual warranty

<b>Warranty</b>	18 months
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## Environmental Data

Schneider Electric aims to achieve Net Zero status by 2050 through supply chain partnerships, lower impact materials, and circularity via our ongoing “Use Better, Use Longer, Use Again” campaign to extend product lifetimes and recyclability.

[Environmental Data explained >](#)

[How we assess product sustainability >](#)

### Environmental footprint

[Environmental Disclosure](#)

[Product Environmental Profile](#)

## Use Better

### Materials and Substances

Packaging made with recycled cardboard

No

Packaging without single use plastic

Yes

[EU RoHS Directive](#)

Pro-active compliance (Product out of EU RoHS legal scope)

REACH Regulation

[REACH Declaration](#)

California proposition 65

**WARNING:** This product can expose you to chemicals including: Lead and lead compounds, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to [www.P65Warnings.ca.gov](http://www.P65Warnings.ca.gov)

PVC free

Yes

## Use Again

### Repack and remanufacture

End of life manual availability

[End of Life Information](#)

Take-back

No

WEEE Label

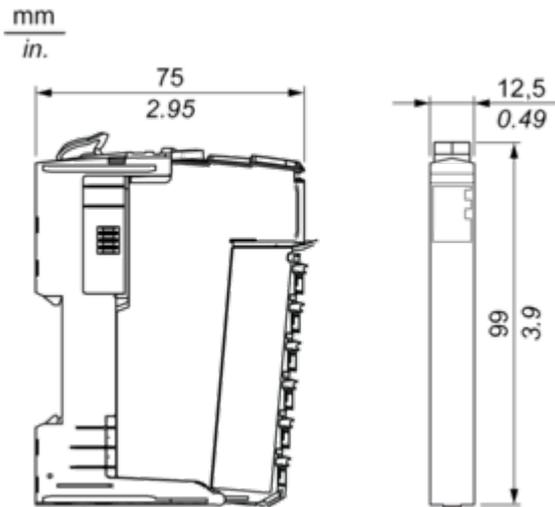
 The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins

Dimensions Drawings

TM5 Slice

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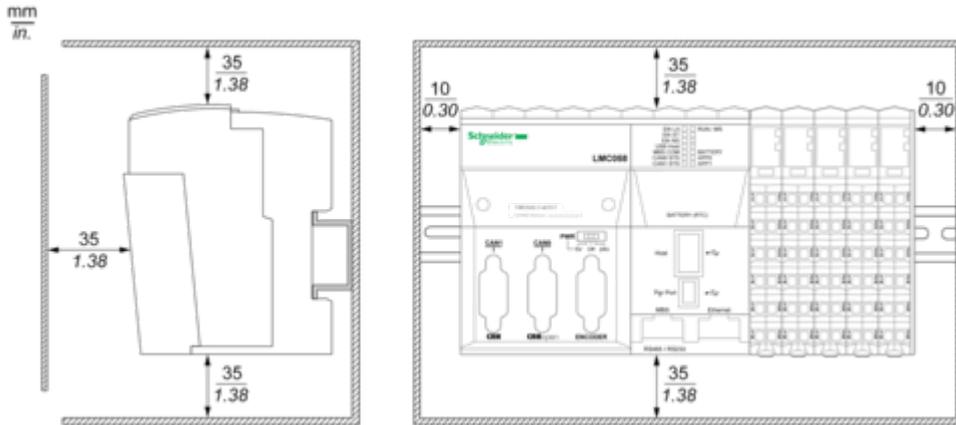
Dimensions



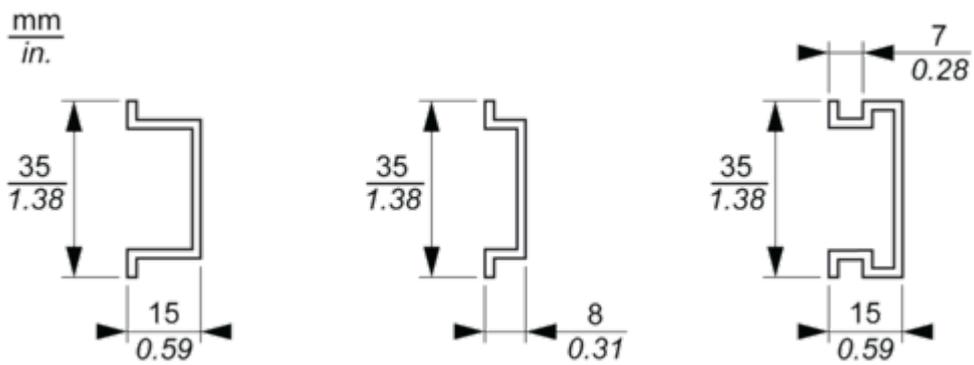
Mounting and Clearance

TM5 System

Spacing Requirements



Mounting on a DIN Rail



Connections and Schema

**TM5 System Wiring Recommendations**

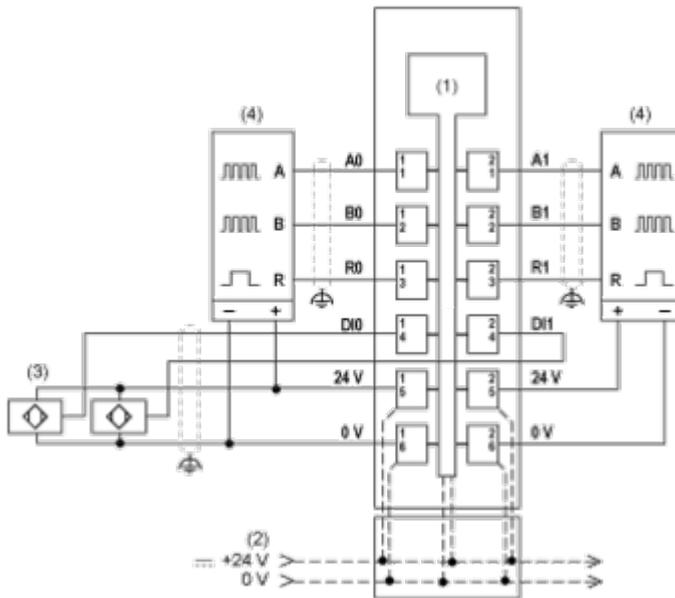
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**Wire Sizes to Use with the Removable Spring Terminal Blocks**

 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 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