Product data sheet

Specifications

counter module, Modicon TM3, high speed, 2 channels HSC, 10 inputs, 8 outputs, screw

TM3XHSC202

Main

Range of product	Modicon TM3
Product or component type	Module hight speed counting
Range compatibility	Modicon M262
[Us] rated supply voltage	24 V DC by external supply (- 15...20 %)
Number of input channels	10
Number of output channels	8
Discrete I/O number	18

Complementary

Current consumption	100 mA at 5 V DC 50 mA at 24 V DC
Counting frequency	200 kHz
Discrete input voltage	24 V DC
Electrical circuit type	Standard input Latch input
Discrete input logic	Sink or source
Output voltage	24 V DC for transistor output
Output voltage limits	30 V DC
Discrete output current	300 mA for fast output (Q0...Q7)
Discrete output logic	Source
Output protection type	Against overload and short-circuits
Reset	Automatic reset
Local signalling	1 LED for I/O 1 LED for RUN 1 LED for ERR
Mounting support	Top hat type TH35-15 rail conforming to IEC 60715 Top hat type TH35-7.5 rail conforming to IEC 60715 plate or panel with fixing kit
Services	HSC simple - functions available: One shot/Modulo HSC main single phase - functions available: One shot/Modulo/Event counting HSC main dual phase - functions available: Modulo/Free-large Period meter - functions available: Edge to Edge, Edge to Opposite
Counting mode	2 main expert function (main counting function, frequency meter, period meter) Max 8 simple counting function
Event management	No event Thresholds < 10 µs
Height	90 mm

Depth	85 mm
Width	39 mm
Net weight	150 g

Environment

Product certifications	cULus IACS E10 RCM CE UKCA EAC
Standards	CSA C22.2 No 142 ANSI/ISA 12-12-01 UL 1604 CSA C22.2 No 213 EN/IEC 61131-2:2007 UL 508 EN/IEC 61010-2-201
Resistance to electrostatic discharge	8 kV in air conforming to EN/IEC 61000-4-2 4 kV on contact conforming to EN/IEC 61000-4-2
Resistance to electromagnetic fields	10 V/m 80 MHz...1 GHz conforming to EN/IEC 61000-4-3 3 V/m 1.4 GHz...2 GHz conforming to EN/IEC 61000-4-3 1 V/m 2 GHz...3 GHz conforming to EN/IEC 61000-4-3
Resistance to fast transients	2 kV for alimentation cable conforming to EN/IEC 61000-4-4 1 kV for Ethernet line conforming to EN/IEC 61000-4-4 1 kV for serial link conforming to EN/IEC 61000-4-4 1 kV for input conforming to EN/IEC 61000-4-4 1 kV for transistor output conforming to EN/IEC 61000-4-4
Resistance to conducted disturbances	10 V 0.15...80 MHz conforming to EN/IEC 61000-4-4
Electromagnetic emission	Conducted emissions - test level: 120...69 dBµV/m QP at 10…150 kHz conforming to EN/IEC 55011 Conducted emissions - test level: 63 dBµV/m QP at 1.5…30 MHz conforming to EN/IEC 55011 Radiated emissions - test level: 40 dBµV/m class A at 30…230 MHz conforming to EN/IEC 55011 Conducted emissions - test level: 79...63 dBµV/m QP at 150…1500 kHz conforming to EN/IEC 55011 Radiated emissions - test level: 47 dBµV/m class A at 230…1000 MHz conforming to EN/IEC 55011
Ambient air temperature for operation	-20…60 °C horizontal installation -20…50 °C vertical installation
Ambient air temperature for storage	-40…85 °C
Relative humidity	10…95 %, without condensation (in operation) 10…95 %, without condensation (in storage)
IP degree of protection	IP20 with protective cover in place
Pollution degree	2
Operating altitude	0...2000 m
Storage altitude	0…3000 m
Vibration resistance	3.5 mm at 2…8.4 Hz on DIN rail 1 gn at 8.4…200 Hz on DIN rail 3.5 mm at 2…8.4 Hz on panel 1 gn at 8.4…200 Hz on panel
Shock resistance	15 gn for 11 ms

Packing Units

Unit Type of Package 1	PCE
Number of Units in Package 1	1

Package 1 Height	7.200 cm
Package 1 Width	10.400 cm
Package 1 Length	12.400 cm
Package 1 Weight	220.000 g
Unit Type of Package 2	S03
Number of Units in Package 2	18
Package 2 Height	30.000 cm
Package 2 Width	30.000 cm
Package 2 Length	40.000 cm
Package 2 Weight	4.700 kg

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

Total lifecycle Carbon footprint	79
Environmental Disclosure	Product Environmental Profile

Use Better

Materials and Substances

Packaging made with recycled cardboard	Yes
Packaging without single use plastic	Yes
EU RoHS Directive	Pro-active compliance (Product out of EU RoHS legal scope)
SCIP Number	8b63a3a6-4381-4887-9a7a-c6c37a7e7339
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
PVC free	Yes

Use Again

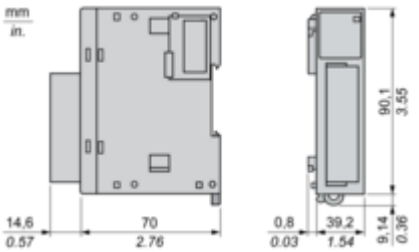
Repack and remanufacture

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

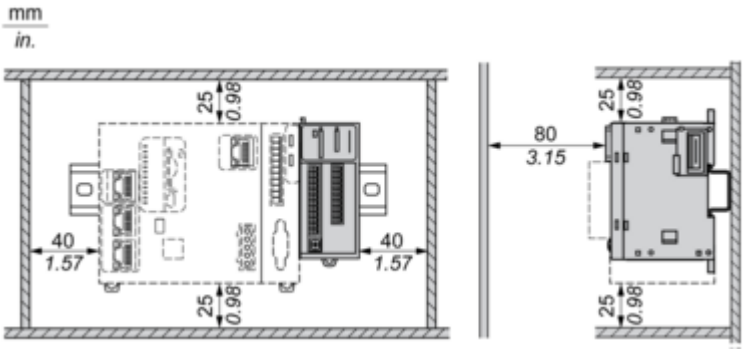
Dimensions

Side and Front Views

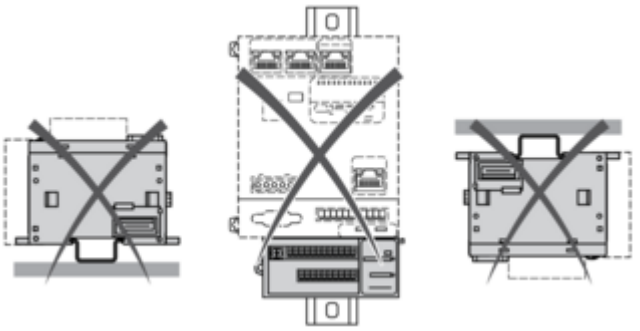


Mounting and Clearance

Spacing Requirements



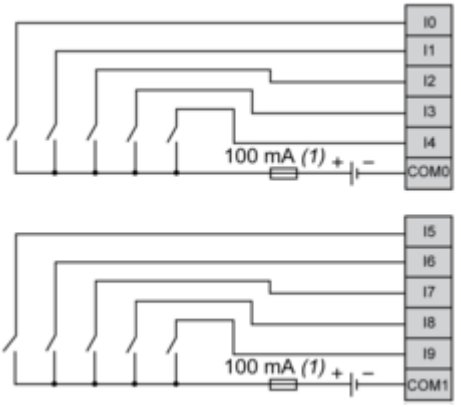
Incorrect Mounting



Connections and Schema

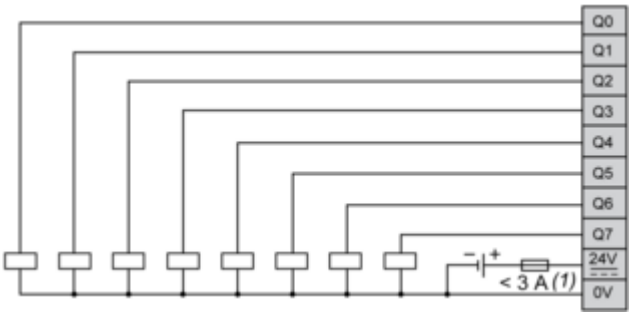
Wiring Diagram

Wiring Inputs



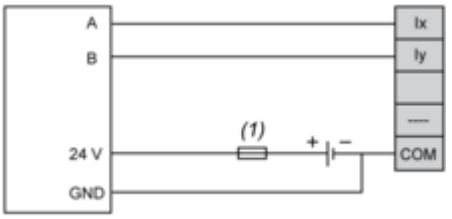
(1) : Type T fuse

Wiring Outputs



(1) : Connect an appropriate type T fuse for the load, not to exceed 3 A

Encoder Wiring



(1) : Refer to the encoder documentation for fuse sizing