Product data sheet

Specifications

motion controller, Modicon M262, 5ns per instruction, 4 axes, optimized Ethernet, Sercos, machine to plant

TM262M05MESS8T

Product availability: Non-Stock - Not normally stocked in distribution facility

Main

Range of Product	Logic/motion controller - Modicon M262
Product or Component Type	Motion controller
[Us] rated supply voltage	24 V DC - 15...20 %
Discrete I/O number	8
upstream connectivity	Connected machine to plant

Complementary

Supply voltage limits	20.4…28.8 V DC
PLC Power Consumption	82 W
Inrush current	40 A
Number of overvoltage protection	With
Discrete input number	4, discrete input fast input IEC 61131-2 Type 1
Discrete input voltage	24 V
Discrete input voltage type	DC
Discrete input logic	Sink
Voltage state 1 guaranteed	>= 15 V DC
Voltage state 0 guaranteed	<= 5 V DC
Discrete input current	7.5 mA fast input
Input impedance	2.81 kOhm input
Response time	<= 1 µs turn-on, I0...I3 fast input <= 1 µs turn-off, I0...I3 fast input <= 1 µs turn-on, Q0...Q3 fast output <= 1 µs turn-off, Q0...Q3 fast output
Configurable filtering time	0.001 ms fast input 0.002 ms fast input 0.005 ms fast input 0.01 ms fast input 0.05 ms fast input 0.1 ms fast input 0.5 ms fast input 1 ms fast input 4 ms fast input 12 ms fast input
Discrete output number	4 transistor fast output
Discrete output voltage	24 V DC
Discrete output current	0.5 A fast output Q0...Q3)

Price is “List Price” and may be subject to a trade discount – check with your local distributor or retailer for actual price.

Discrete output type	Transistor
Discrete output logic	Source
Output voltage limits	30 V DC
Maximum current per output common	0.5 A Q0...Q3 fast output
Maximum output frequency	300 kHz
Accuracy	+/- 0.1 % 0.02…0.1 kHz fast output +/- 1 % 0.1…1 kHz fast output
Maximum leakage current	10 µA output
Maximum tungsten load	<1.5 W
Protection type	Short-circuit and overload protection with automatic reset Reverse polarity protection Short-circuit protection
Reset time	200 ms automatic reset fast output
Maximum number of I/O expansion module	7TM3 IO module (local I/O-Architecture) 7TM3 IO module (remote I/O-Architecture) 64TM3, TM5 or TM7 IO island (distributed I/O-Architecture)
Execution time for 1 KInstruction	0.005 ms
Memory capacity	32 MB program RAM 32 MB OS/website RAM 192 MB system memory RAM
Data backed up	1 GB built-in flash memory backup of user programs
Data storage equipment	<= 32 GB SDHC card optional)
Backup time	1000 h 77 °F (25 °C)
Application structure	8 event tasks 4 cyclic master tasks 3 cyclic master tasks + 1 freewheeling task 8 external event tasks
Realtime clock	With
Clock drift	<= 10 s/month 77 °F (25 °C)
Cycle time	0.5 ms
Positioning functions	Libraries axes coordinated Libraries axes synchronous Sercos 3 motion bus
Integrated connection type	Ethernet/Sercos 1 RJ45 10/100BASE-T Ethernet 2 2 RJ45 100/1000BASE-T Serial link RJ45 RS232/RS485 1 encoder female SUB-D 15 RS422/SSI Smart communication bus (TMSCO1 only) TM3 IO bus USB type mini B
Transmission rate	115 kbit/s 49.2 ft (15 m) RS485 115 kbit/s 9.8 ft (3 m) RS232 480 Mbit/s 9.8 ft (3 m) USB 10/100 Mbit/s Ethernet1 10/100/1000 Mbit/s Ethernet2

Communication port protocol	EtherNet/IP adapter EtherNet/IP scanner Modbus TCP client/server Modbus TCP IO scanner Modbus TCP NVL Ethernet RSTP Modbus SL client/server Modbus SL IO scanner Modbus SL modem management Machine Expert ASCII manager ASCII modem management Sercos III master
Maximum Number of Connected Devices	EtherNet/IP <64 Modbus TCP <64 Modbus TCP/EtherNet/IP <96
Communication Service	OPC UA server (Encrypt) Web server Web visu TLS 1.2 TLS 1.3 SNTP NTP client/server FTP client/server FTPs server SQL client (remote access) DHCP client DHCP server DNS client POP3s client SMTP client SNMP client/server
Local signalling	for PWR 1 LED (green/red) for RUN 1 LED (green/red) for ERROR (fault) 1 LED (green/red) for stop forced 1 LED (green/red) for I/O error (I/O) 1 LED (green/red) for SD card activity 1 LED (green/orange) for SL activity 1 LED (green/orange) for ETH1 state 1 LED (green/red) for ETH2 state 1 LED (green/red) for EIP MS 1 LED (green/red) for Sercos 1 LED (green/red)
Electrical connection	removable spring terminal block for inputs and outputs removable spring terminal block for connecting the 24 V DC power supply
Product compatibility	External encoder 5/24 V DC no encoder power supply
Maximum cable distance between devices	Shielded cable <9.8 ft (3 m) fast input Shielded cable <9.8 ft (3 m) fast output Unshielded cable <164.04 ft (50 m) input Unshielded cable <164.04 ft (50 m) output Shielded cable <98.4 ft (30 m) RS485 link Shielded cable <49.2 ft (15 m) RS232
Insulation	Between fast input and internal logic 550 V AC Non-insulated between inputs Between output and internal logic 550 V AC Non-insulated between outputs Between input and output 550 V AC Between supply and internal logic 550 V AC Non-insulated between supply and ground
Encoder type	Incremental encoder
Surge withstand	1 kV power lines (DC) common mode IEC 61000-4-5 1 kV shielded cable common mode IEC 61000-4-5 0.5 kV relay output differential mode IEC 61000-4-5 1 kV input common mode IEC 61000-4-5 1 kV transistor output common mode IEC 61000-4-5
Mounting support	Top hat type TH35-15 rail IEC 60715 Top hat type TH35-7.5 rail IEC 60715 plate or panel with fixing kit
Height	3.9 in (100 mm)

Depth	3.5 in (90 mm)
Width	4.9 in (125 mm)
Net Weight	1.48 lb(US) (0.67 kg)

Environment

Standards	UL 61010-1 UL 61010-2-201 CSA C22.2 No 61010-1 CSA C22.2 No 61010-2-201 CSA C22.2 No 213 ANSI/ISA 12-12-01 IEC 61131-2
Product Certifications	CE cULus cULus HazLoc Class I Division 2 CSA 22-2 No 213 RCM EAC Achilles KC
Resistance to electrostatic discharge	4 kV on contact IEC 61000-4-2 8 kV on air IEC 61000-4-2
Resistance to electromagnetic fields	9.1 V/m (10 V/m) 80 MHz...1 GHz IEC 61000-4-3 2.7 V/m (3 V/m) 1.4 GHz...2 GHz IEC 61000-4-3 0.9 V/m (1 V/m) 2 GHz...3 GHz IEC 61000-4-3
Resistance to fast transients	2 kV IEC 61000-4-4 power lines) 1 kV IEC 61000-4-4 Ethernet line) 1 kV IEC 61000-4-4 serial link) 1 kV IEC 61000-4-4 input) 1 kV IEC 61000-4-4 transistor output)
Resistance to conducted disturbances	10 V 0.15...80 MHz IEC 61000-4-4 3 V 0.1...80 MHz 10 V spot frequency (2, 3, 4, 6.2, 8.2, 12.6, 16.5, 18.8, 22, 25 MHz)
Electromagnetic emission	Conducted emissions 120...69 dBµV/m QP power lines)10…150 kHz IEC 55011 Conducted emissions 63 dBµV/m QP power lines)1.5…30 MHz IEC 55011 Radiated emissions 40 dBµV/m30…230 kHz IEC 55011 Conducted emissions 79...63 dBµV/m QP power lines)150…1500 kHz IEC 55011 Radiated emissions230…1000 MHz IEC 55011
Immunity to microbreaks	0.01 ms
Ambient air temperature for operation	-4…140 °F (-20…60 °C) horizontal installation) -4…122 °F (-20…50 °C) vertical installation) -4…113 °F (-20…45 °C) flat mounting)
Ambient Air Temperature for Storage	-40…185 °F (-40…85 °C)
Relative humidity	10…95 %, without condensation in operation) 10…95 %, without condensation in storage)
IP degree of protection	IP20
pollution degree	2
Operating altitude	0...6561.68 ft (0...2000 m)
Storage altitude	0.0000000000…9842.5 ft (0…3000 m)
Vibration resistance	3.5 mm 2…8.4 Hz symmetrical rail 1 gn 8.4…200 Hz symmetrical rail 3.5 mm 2…8.4 Hz panel mounting 1 gn 8.4…200 Hz panel mounting
Shock resistance	15 gn 11 ms

Ordering and shipping details

Category	US10MSX22533

Discount Schedule	0MSX
GTIN	3606481024572
Returnability	No
Country of origin	ID

Packing Units

Unit Type of Package 1	PCE
Number of Units in Package 1	1
Package 1 Height	5.43 in (13.800 cm)
Package 1 Width	5.59 in (14.200 cm)
Package 1 Length	7.48 in (19.000 cm)
Package 1 Weight	29.771 oz (844.000 g)
Unit Type of Package 2	S03
Number of Units in Package 2	8
Package 2 Height	11.81 in (30.000 cm)
Package 2 Width	11.81 in (30.000 cm)
Package 2 Length	15.75 in (40.000 cm)
Package 2 Weight	15.939 lb(US) (7.230 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

Carbon footprint (kg CO2 eq, Total Life cycle)	1204
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)
SCIP Number	Aee2b861-0272-4e88-8e3e-89ad0cfa3229
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

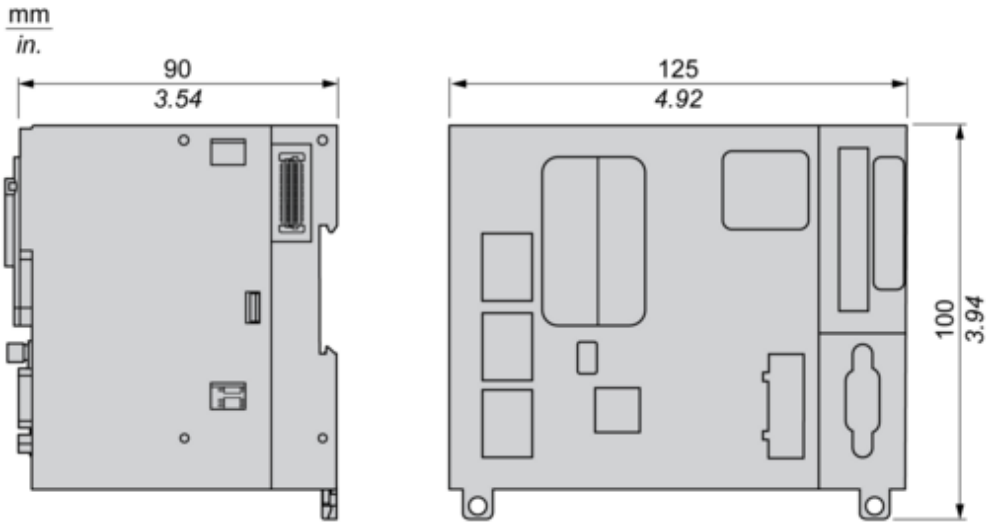
Use Again

Repack and remanufacture

Circularity Profile	End of Life Information
Take-back	No
WEEE	The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins.

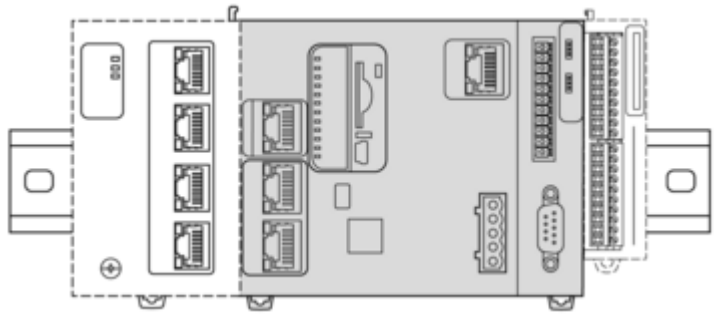
Dimensions Drawings

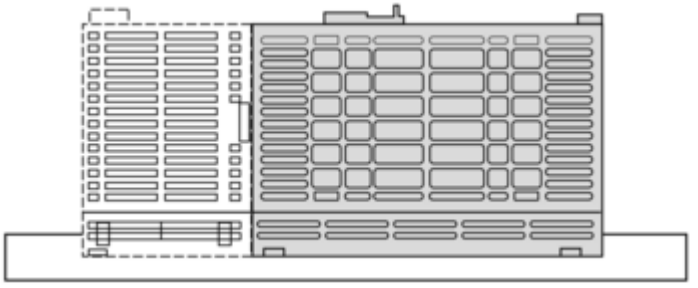
Side and Front Views



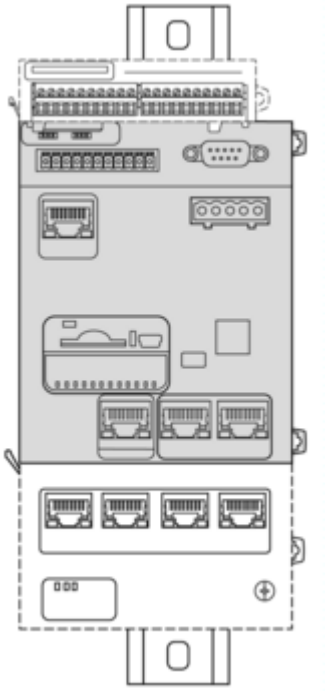
Mounting and Clearance

Correct Mounting Position

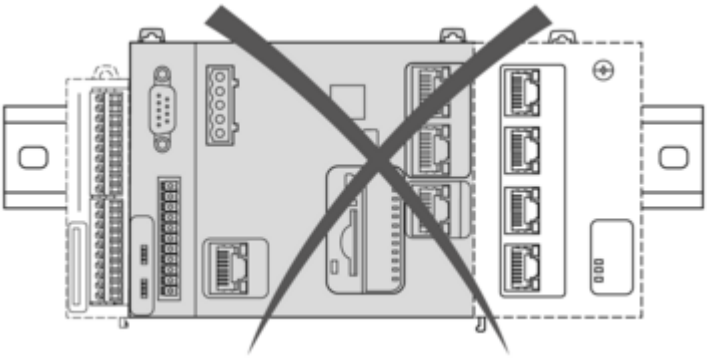


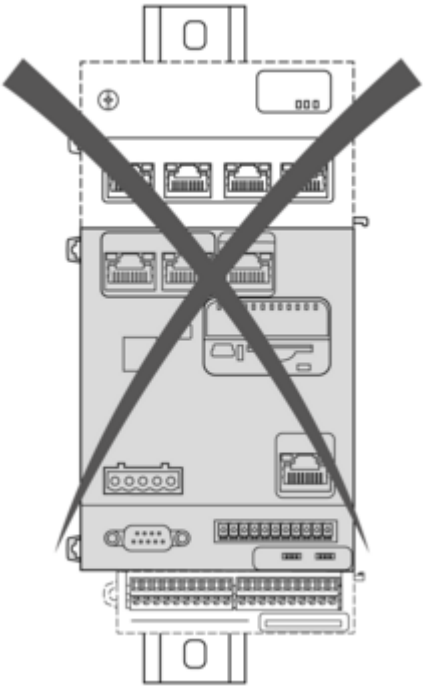


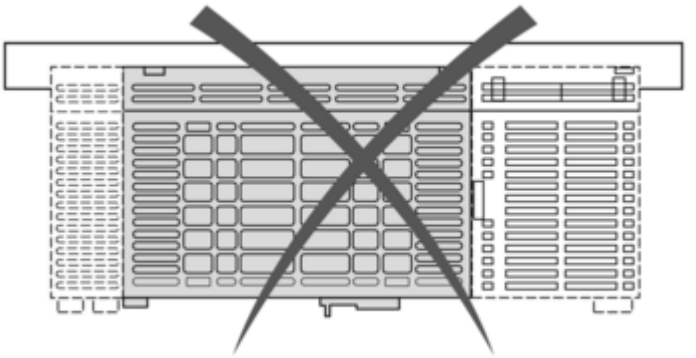
Acceptable Mounting Position



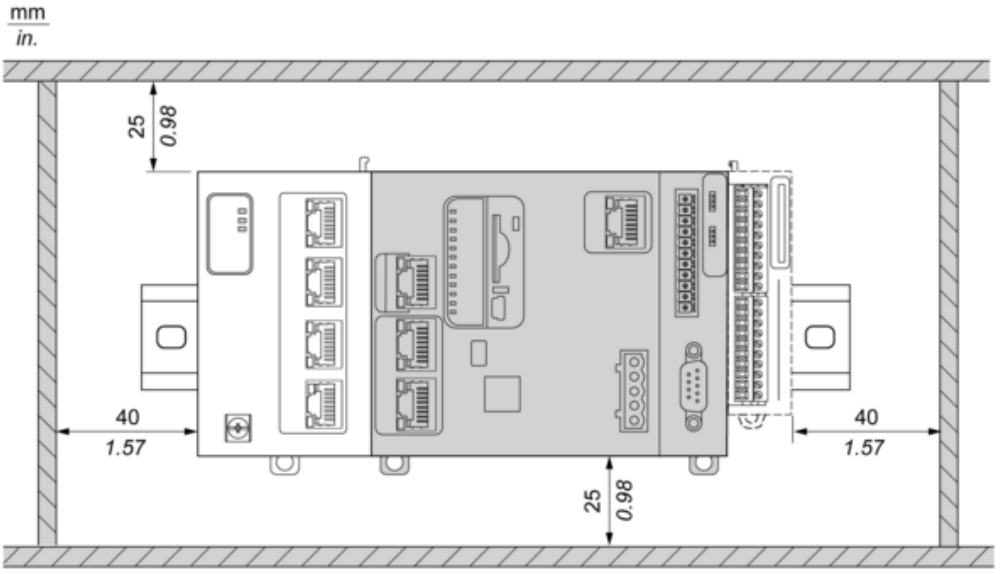
Incorrect Mounting Positions

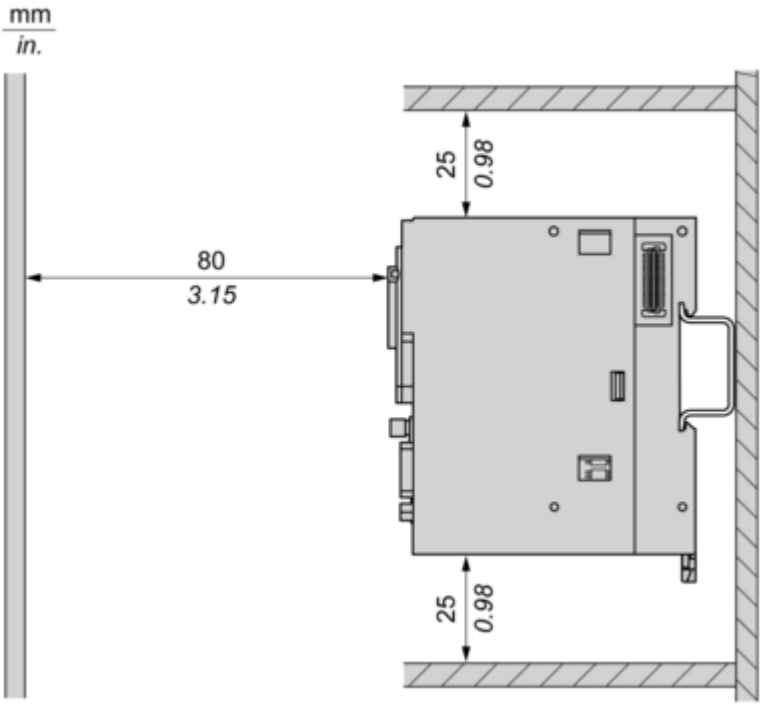






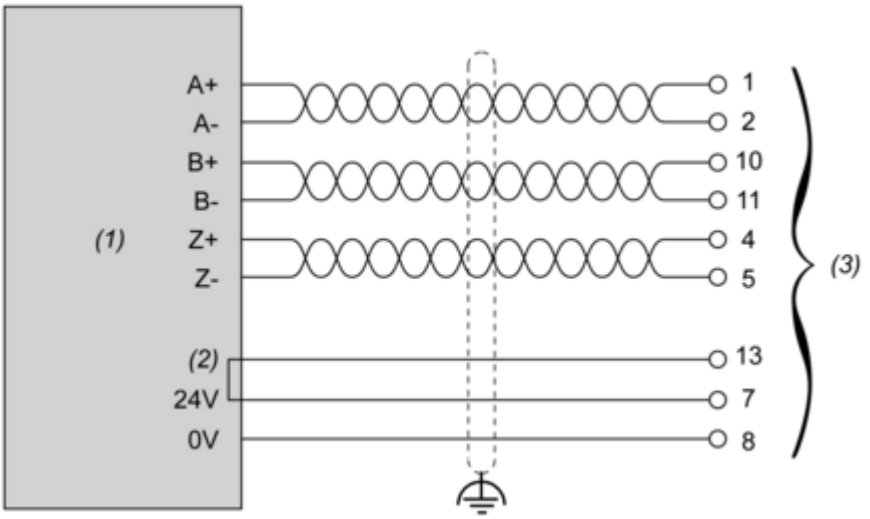
Minimum Clearances





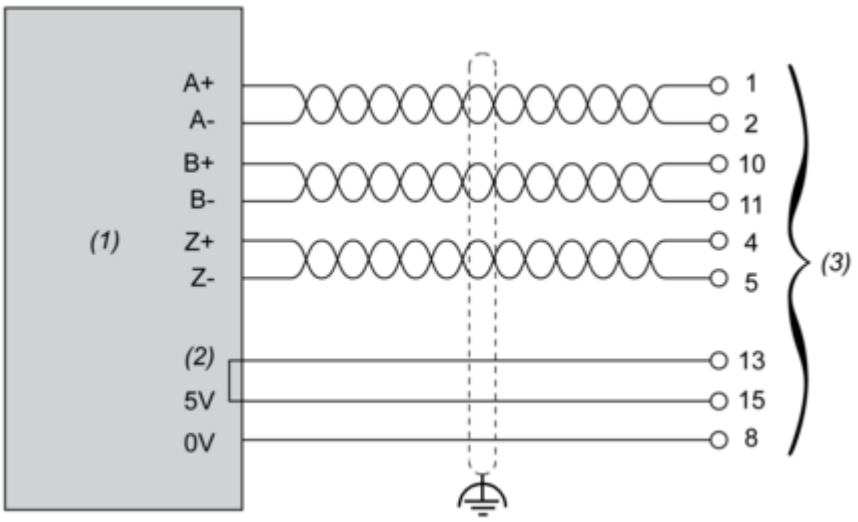
Connections and Schema

Encoder RS422 / 24 VDC



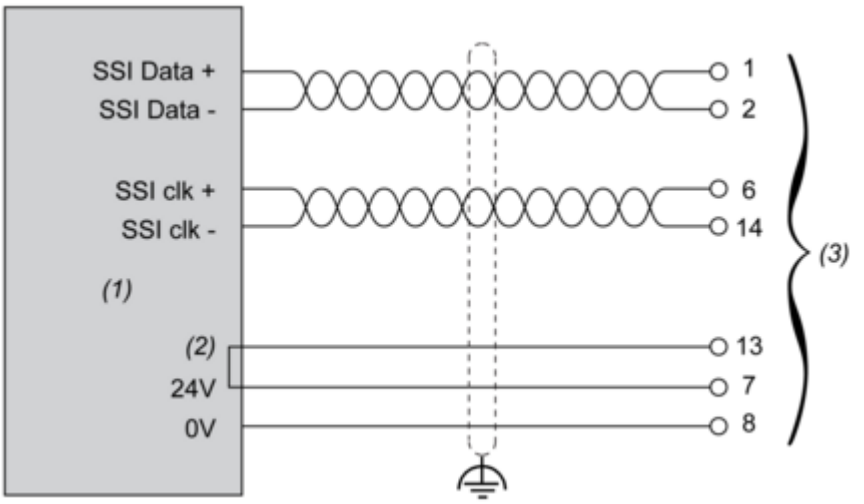
(1) Encoder
(2) Return Option
(3) Encoder Sub-D

Encoder RS422 / 5 VDC or Push Pull



(1) Encoder
(2) Return Option
(3) Encoder Sub-D

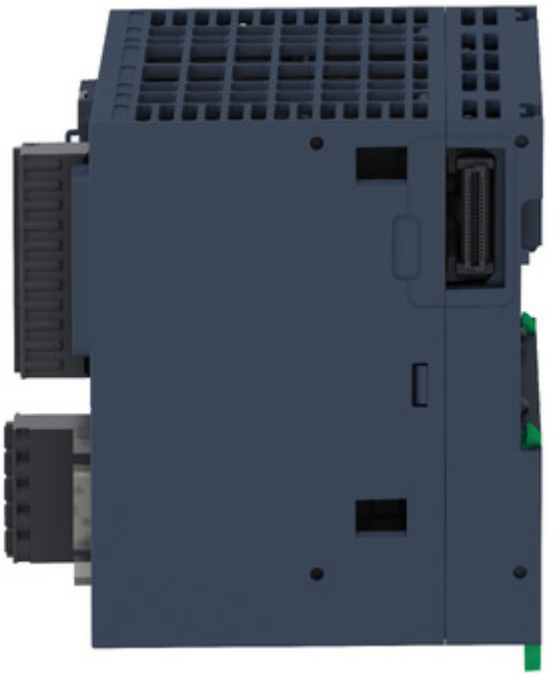
Encoder SSI

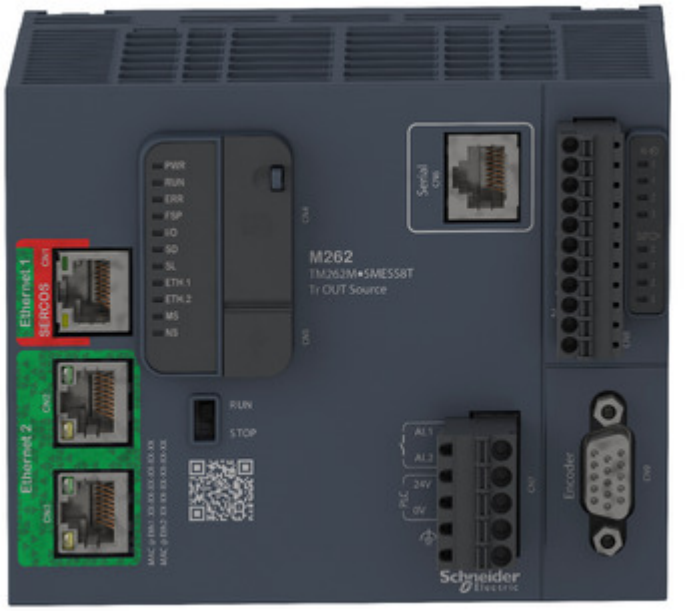


(1) Encoder
(2) Return Option
(3) Encoder Sub-D

Image of product / Alternate images

Alternative






Modicon
TM262M•5MESS8T
PLC
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Bar Code