

# Product datasheet

Specifications



Logic controller. Modicon M262.  
3ns/instruction. Ethernet

TM262L20MESE8T

Price: 34,090.43 ZAR

## Main

|                           |                                                           |
|---------------------------|-----------------------------------------------------------|
| Range Of Product          | Logic/motion controller - Modicon M262                    |
| Product Or Component Type | Logic controller                                          |
| [Us] Rated Supply Voltage | 24 V DC - 15...20 %                                       |
| Discrete I/O Number       | 8                                                         |
| Upstream Connectivity     | IIoT-ready machine to cloud<br>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 conforming to 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 for DC                                                                                                                                                                                                                                            |
| Voltage State 0 Guaranteed       | <= 5 V for DC                                                                                                                                                                                                                                             |
| Discrete Input Current           | 7.5 mA for fast input                                                                                                                                                                                                                                     |
| Input Impedance                  | 2.81 kOhm for input                                                                                                                                                                                                                                       |
| Response Time                    | <= 1 µs turn-on, I0...I3 terminal(s) for fast input<br><= 1 µs turn-off, I0...I3 terminal(s) for fast input<br><= 1 µs turn-on, Q0...Q3 terminal(s) for fast output<br><= 1 µs turn-off, Q0...Q3 terminal(s) for fast output                              |
| Configurable Filtering Time      | 0.001 ms for fast input<br>0.002 ms for fast input<br>0.005 ms for fast input<br>0.01 ms for fast input<br>0.05 ms for fast input<br>0.1 ms for fast input<br>0.5 ms for fast input<br>1 ms for fast input<br>4 ms for fast input<br>12 ms for fast input |
| Discrete Output Number           | 4 transistor fast output                                                                                                                                                                                                                                  |
| Discrete Output Voltage          | 24 V DC                                                                                                                                                                                                                                                   |
| Discrete Output Current          | 0.5 A for fast output (Q0...Q3)                                                                                                                                                                                                                           |

Excluding VAT and subject to change. Please check with your local distributor through "Where to buy"

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|                                        |                                                                                                                                                                                                                                                                                  |
|----------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Discrete Output Type                   | Transistor                                                                                                                                                                                                                                                                       |
| Discrete Output Logic                  | Source                                                                                                                                                                                                                                                                           |
| Output Voltage Limits                  | 30 V DC                                                                                                                                                                                                                                                                          |
| Maximum Current Per Output Common      | 0.5 A with Q0...Q3 for fast output                                                                                                                                                                                                                                               |
| Maximum Output Frequency               | 300 kHz                                                                                                                                                                                                                                                                          |
| Accuracy                               | +/- 0.1 % at 0.02...0.1 kHz for fast output<br>+/- 1 % at 0.1...1 kHz for fast output                                                                                                                                                                                            |
| Maximum Leakage Current                | 10 µA for output                                                                                                                                                                                                                                                                 |
| Maximum Tungsten Load                  | <1.5 W                                                                                                                                                                                                                                                                           |
| Protection Type                        | Short-circuit and overload protection with automatic reset<br>Reverse polarity protection<br>Short-circuit protection                                                                                                                                                            |
| Reset Time                             | 200 ms automatic reset fast output                                                                                                                                                                                                                                               |
| Maximum Number Of I/O Expansion Module | 7TM3 IO module (remote I/O-Architecture)<br>7TM3 IO module (local I/O-Architecture)<br>64TM3, TM5 or TM7 IO island (distributed I/O-Architecture)                                                                                                                                |
| Execution Time For 1 Kinstruction      | 0.003 ms                                                                                                                                                                                                                                                                         |
| Memory Capacity                        | 32 MB for program RAM<br>32 MB for OS/website RAM<br>192 MB for system memory RAM                                                                                                                                                                                                |
| Data Backed Up                         | 1 GB built-in flash memory for backup of user programs                                                                                                                                                                                                                           |
| Data Storage Equipment                 | <= 32 GB SDHC card (optional)                                                                                                                                                                                                                                                    |
| Backup Time                            | 1000 h at 25 °C                                                                                                                                                                                                                                                                  |
| Application Structure                  | 8 event tasks<br>4 cyclic master tasks<br>3 cyclic master tasks + 1 freewheeling task<br>8 external event tasks                                                                                                                                                                  |
| Realtime Clock                         | With                                                                                                                                                                                                                                                                             |
| Clock Drift                            | <= 10 s/month at 25 °C                                                                                                                                                                                                                                                           |
| Cycle Time                             | 0.5 ms                                                                                                                                                                                                                                                                           |
| Positioning Functions                  | Libraries axes coordinated function                                                                                                                                                                                                                                              |
| Integrated Connection Type             | Ethernet 1 with RJ45 connector and 10/100BASE-T interface<br>Ethernet 2 with 2 RJ45 connector and 100/1000BASE-T interface<br>Serial link with RJ45 connector and RS232/RS485 interface<br>Smart Communication Bus<br>TM3 IO bus<br>USB type mini B                              |
| Transmission Rate                      | 115 kbit/s for bus length of 15 m for RS485<br>115 kbit/s for bus length of 3 m for RS232<br>480 Mbit/s for bus length of 3 m for USB<br>10/100 Mbit/s for Ethernet1<br>10/100/1000 Mbit/s for Ethernet2                                                                         |
| Communication Port Protocol            | EtherNet/IP adapter<br>EtherNet/IP scanner<br>Modbus TCP client/server<br>Modbus TCP IO scanner<br>Modbus TCP NVL<br>Ethernet RSTP<br>Modbus SL client/server<br>Modbus SL IO scanner<br>Modbus SL modem management<br>Machine Expert<br>ASCII manager<br>ASCII modem management |

|                                        |                                                                                                                                                                                                                                                                                                                                                                                                          |
|----------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Maximum Number Of Connected Devices    | EtherNet/IP: 64<br>Modbus TCP: 64<br>Modbus TCP/EtherNet/IP: 128                                                                                                                                                                                                                                                                                                                                         |
| Communication Service                  | MQTTs<br>OPC UA server (Encrypt)<br>OPC UA client (Encrypt)<br>HTTPs Methods (API)<br>Web server<br>Web visu<br>TLS 1.2<br>TLS 1.3<br>SNTP<br>NTP client/server<br>FTP client/server<br>FTPs server<br>SQL client (remote access)<br>DHCP client<br>DHCP server<br>DNS client<br>POP3s client<br>SMTP client<br>SNMP client/server                                                                       |
| Local Signalling                       | 1 LED (green/red) for PWR<br>1 LED (green/red) for RUN<br>1 LED (green/red) for ERROR (fault)<br>1 LED (green/red) for stop forced<br>1 LED (green/red) for I/O error (I/O)<br>1 LED (green/orange) for SD card activity<br>1 LED (green/orange) for SL activity<br>1 LED (green/red) for ETH1 state<br>1 LED (green/red) for ETH2 state<br>1 LED (green/red) for EIP MS<br>1 LED (green/red) for EIP NS |
| Electrical Connection                  | removable spring terminal blockfor inputs and outputs<br>removable spring terminal blockfor connecting the 24 V DC power supply                                                                                                                                                                                                                                                                          |
| Maximum Cable Distance Between Devices | Shielded cable: <3 m for fast input<br>Shielded cable: <3 m for fast output<br>Unshielded cable: <50 m for input<br>Unshielded cable: <50 m for output<br>Shielded cable: <30 m for RS485 link<br>Shielded cable: <15 m for RS232                                                                                                                                                                        |
| Insulation                             | Between fast input and internal logic at 550 V AC<br>Non-insulated between inputs<br>Between output and internal logic at 550 V AC<br>Non-insulated between outputs<br>Between input and output at 550 V AC<br>Between supply and internal logic at 550 V AC<br>Non-insulated between supply and ground                                                                                                  |
| Surge Withstand                        | 1 kV power lines (DC) common mode conforming to IEC 61000-4-5<br>1 kV shielded cable common mode conforming to IEC 61000-4-5<br>0.5 kV relay output differential mode conforming to IEC 61000-4-5<br>1 kV input common mode conforming to IEC 61000-4-5<br>1 kV transistor output common mode conforming to IEC 61000-4-5                                                                                |
| Mounting Support                       | Top hat type TH35-15 rail conforming to IEC 60715<br>Top hat type TH35-7.5 rail conforming to IEC 60715<br>plate or panel with fixing kit                                                                                                                                                                                                                                                                |
| Height                                 | 100 mm                                                                                                                                                                                                                                                                                                                                                                                                   |
| Depth                                  | 90 mm                                                                                                                                                                                                                                                                                                                                                                                                    |
| Width                                  | 125 mm                                                                                                                                                                                                                                                                                                                                                                                                   |
| Net Weight                             | 0.655 kg                                                                                                                                                                                                                                                                                                                                                                                                 |

## Environment

|                                       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
|---------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Standards                             | UL 61010-1<br>UL 61010-2-201<br>CSA C22.2 No 61010-1<br>CSA C22.2 No 61010-2-201<br>CSA C22.2 No 213<br>ANSI/ISA 12-12-01<br>IEC 61131-2                                                                                                                                                                                                                                                                                                                                                   |
| Product Certifications                | CE<br>cULus<br>cULus HazLoc Class I Division 2 CSA 22-2 No 213<br>RCM<br>EAC<br>Achilles<br>KC                                                                                                                                                                                                                                                                                                                                                                                             |
| Resistance To Electrostatic Discharge | 4 kV on contact conforming to IEC 61000-4-2<br>8 kV on air conforming to IEC 61000-4-2                                                                                                                                                                                                                                                                                                                                                                                                     |
| Resistance To Electromagnetic Fields  | 10 V/m 80 MHz...1 GHz conforming to IEC 61000-4-3<br>3 V/m 1.4 GHz...2 GHz conforming to IEC 61000-4-3<br>1 V/m 2 GHz...3 GHz conforming to IEC 61000-4-3                                                                                                                                                                                                                                                                                                                                  |
| Resistance To Fast Transients         | 2 kV (power lines) conforming to IEC 61000-4-4<br>1 kV (Ethernet line) conforming to IEC 61000-4-4<br>1 kV (serial link) conforming to IEC 61000-4-4<br>1 kV (input) conforming to IEC 61000-4-4<br>1 kV (transistor output) conforming to IEC 61000-4-4                                                                                                                                                                                                                                   |
| Resistance To Conducted Disturbances  | 10 V 0.15...80 MHz conforming to IEC 61000-4-4<br>3 V 0.1...80 MHz<br>10 V spot frequency (2, 3, 4, 6.2, 8.2, 12.6, 16.5, 18.8, 22, 25 MHz)                                                                                                                                                                                                                                                                                                                                                |
| Electromagnetic Emission              | Conducted emissions - test level: 120...69 dBµV/m QP ( power lines) at 10...150 kHz conforming to IEC 55011<br>Conducted emissions - test level: 63 dBµV/m QP ( power lines) at 1.5...30 MHz conforming to IEC 55011<br>Radiated emissions - test level: 40 dBµV/m at 30...230 kHz conforming to IEC 55011<br>Conducted emissions - test level: 79...63 dBµV/m QP ( power lines) at 150...1500 kHz conforming to IEC 55011<br>Radiated emissions at 230...1000 MHz conforming to IEC 55011 |
| Immunity To Microbreaks               | 0.01 ms                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| Ambient Air Temperature For Operation | -20...60 °C (horizontal installation)<br>-20...50 °C (vertical installation)<br>-20...45 °C (flat mounting)                                                                                                                                                                                                                                                                                                                                                                                |
| Ambient Air Temperature For Storage   | -40...85 °C                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| Relative Humidity                     | 10...95 %, without condensation (in operation)<br>10...95 %, without condensation (in storage)                                                                                                                                                                                                                                                                                                                                                                                             |
| Ip Degree Of Protection               | IP20                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| Pollution Degree                      | 2                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| Operating Altitude                    | 0...2000 m                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| Storage Altitude                      | 0...3000 m                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| Vibration Resistance                  | 3.5 mm at 2...8.4 Hz on symmetrical rail<br>1 gn at 8.4...200 Hz on symmetrical rail<br>3.5 mm at 2...8.4 Hz on panel mounting<br>1 gn at 8.4...200 Hz on panel mounting                                                                                                                                                                                                                                                                                                                   |
| 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             | 14.0 cm |
| Package 1 Width              | 13.5 cm |

|                              |         |
|------------------------------|---------|
| Package 1 Length             | 18.5 cm |
| Package 1 Weight             | 823.0 g |
| Unit Type Of Package 2       | S03     |
| Number Of Units In Package 2 | 8       |
| Package 2 Height             | 30 cm   |
| Package 2 Width              | 30 cm   |
| Package 2 Length             | 40 cm   |
| Package 2 Weight             | 7.2 kg  |
| Unit Type Of Package 3       | P06     |
| Number Of Units In Package 3 | 64      |
| Package 3 Height             | 75.0 cm |
| Package 3 Width              | 40.0 cm |
| Package 3 Length             | 80.0 cm |
| Package 3 Weight             | 68 kg   |

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

|   |                            |     |
|---|----------------------------|-----|
| ✓ | Mercury Free               |     |
| ✓ | Rohs Exemption Information | Yes |
| ✓ | Pvc Free                   |     |

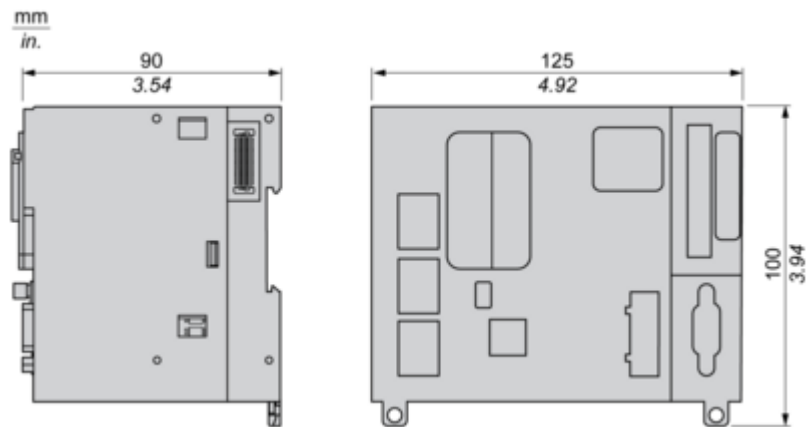
Certifications & Standards

|                          |                                                                                                                             |
|--------------------------|-----------------------------------------------------------------------------------------------------------------------------|
| Reach Regulation         | <a href="#">REACH Declaration</a>                                                                                           |
| Eu Rohs Directive        | Pro-active compliance (Product out of EU RoHS legal scope)                                                                  |
| China Rohs Regulation    | <a href="#">China RoHS declaration</a>                                                                                      |
| Environmental Disclosure | <a href="#">Product Environmental Profile</a>                                                                               |
| Weee                     | The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins |
| Circularity Profile      | <a href="#">End of Life Information</a>                                                                                     |

Dimensions Drawings

Side and Front Views

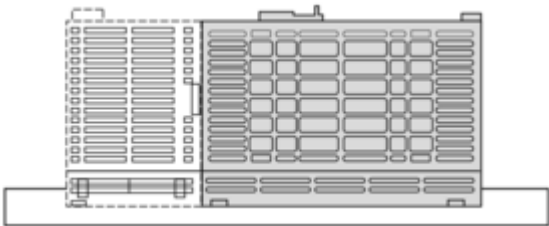
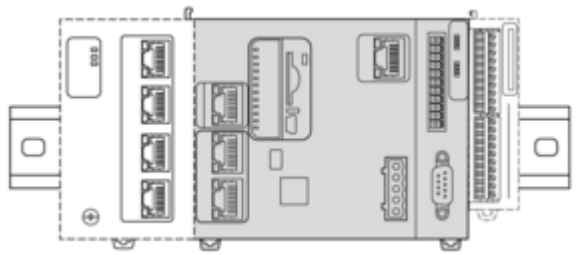
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Mounting and Clearance

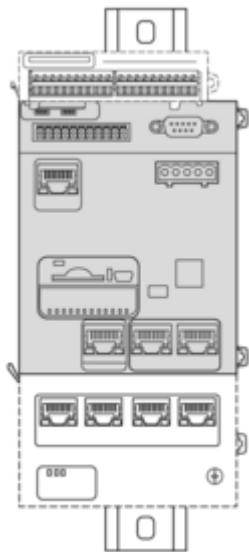
Correct Mounting Position

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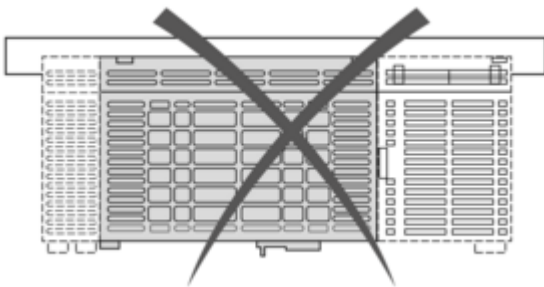
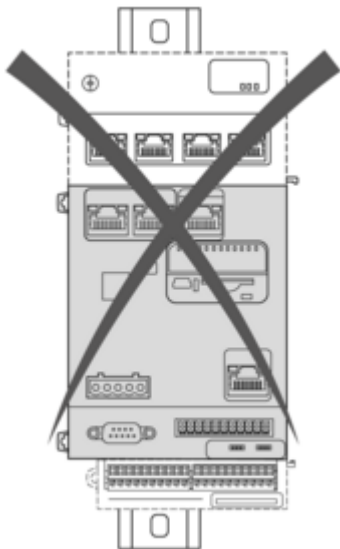
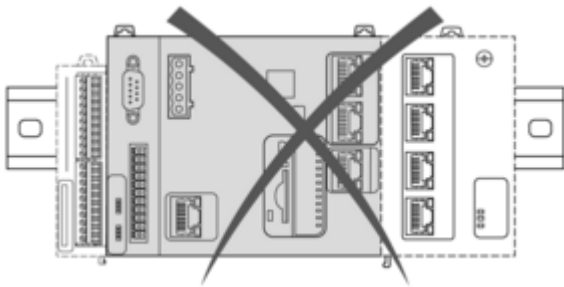
Acceptable Mounting Position

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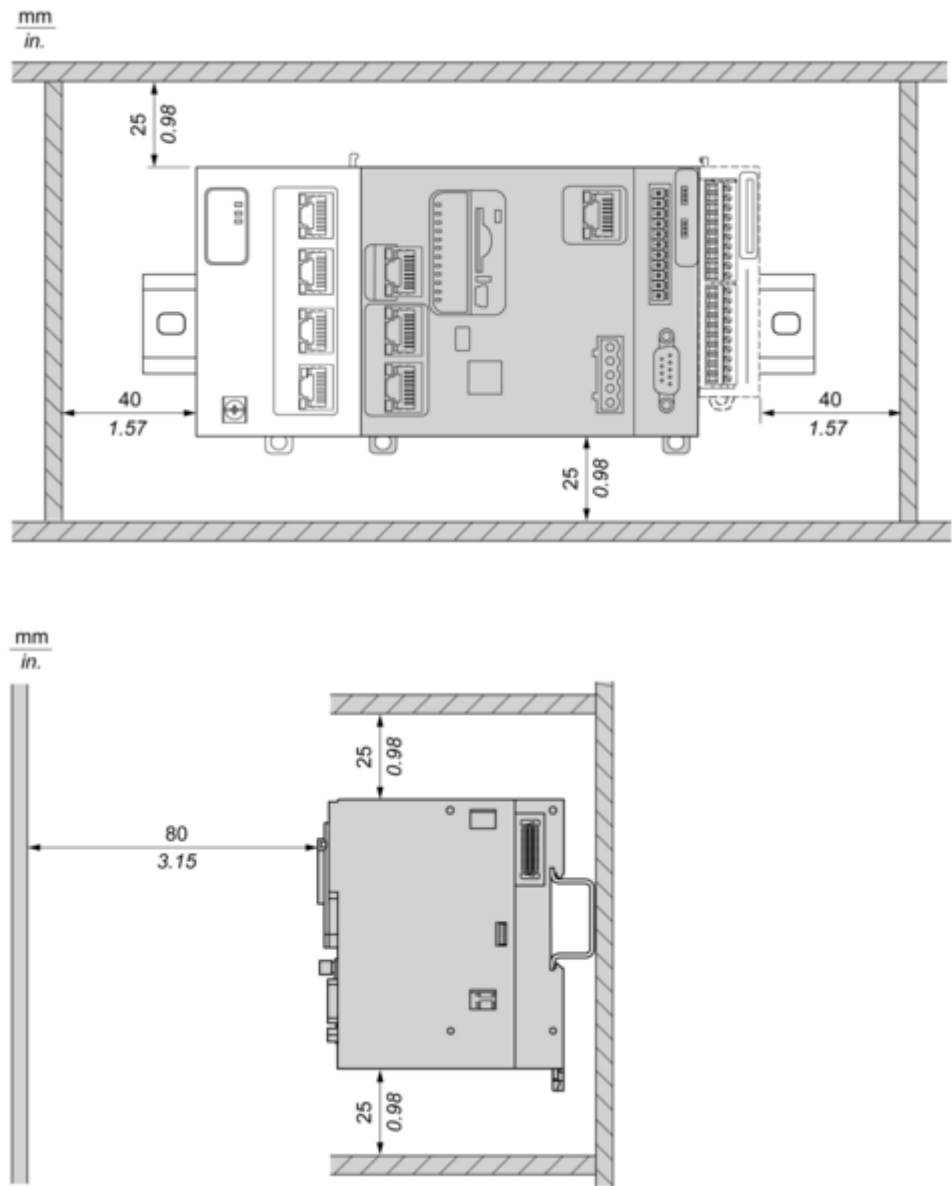


Incorrect Mounting Positions

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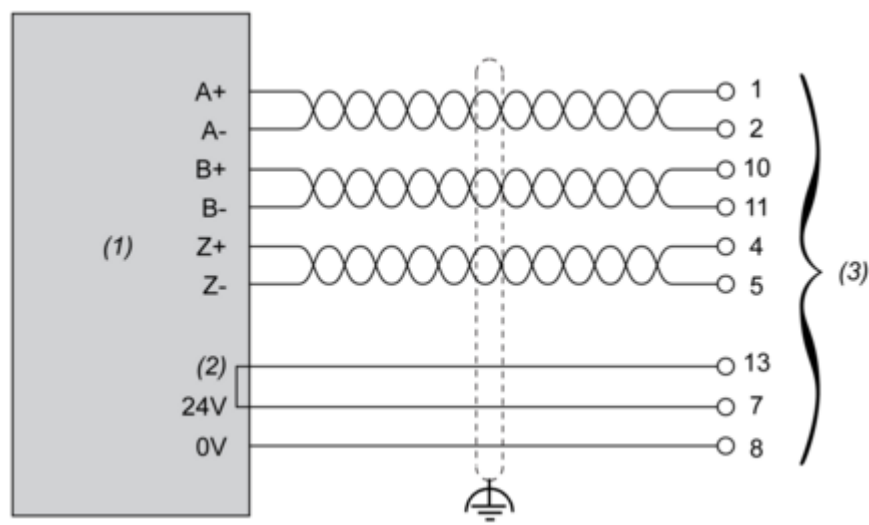


Minimum Clearances



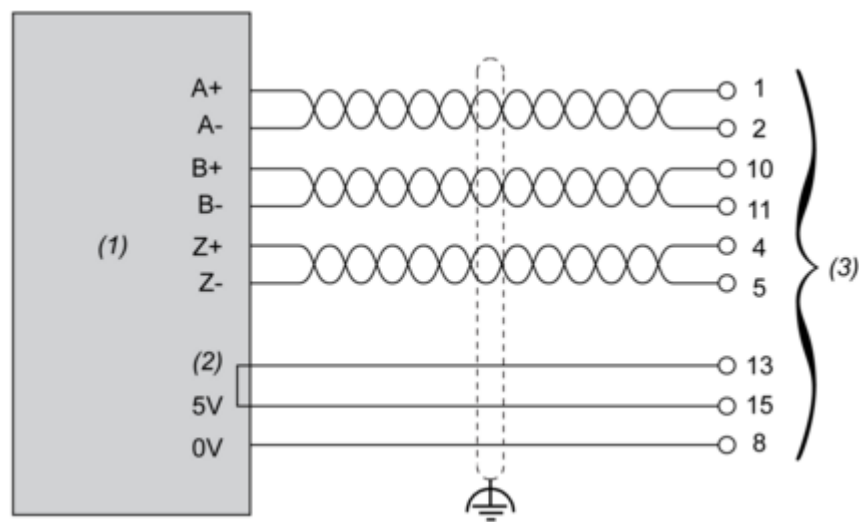
Connections and Schema

Encoder RS422 / 24 VDC



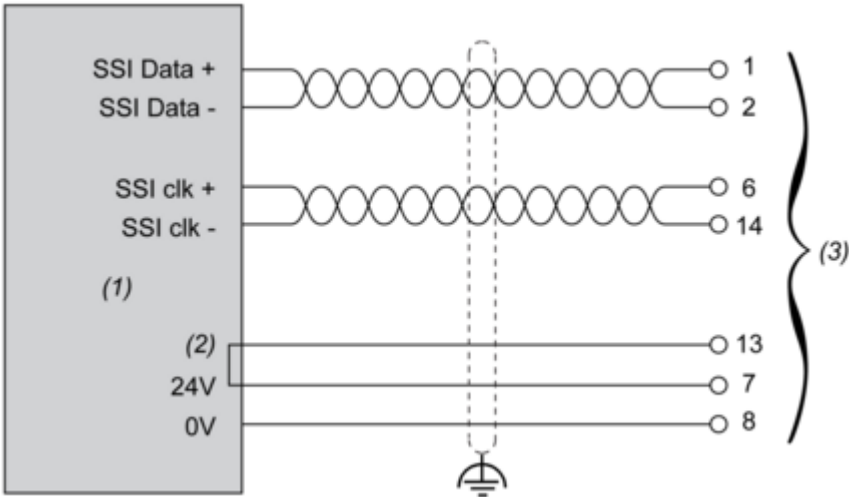
- (1) Encoder
- (2) Return Option
- (3) Encoder Sub-D

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