

Main

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|------------------------------|--|
| Range of product | Modicon M171/M172 |
| Product or component type | Programmable controllers |
| Product specific application | HVAC and pumping solution |
| Variant | Programmable |
| Number of inputs/outputs | 28 |
| Discrete input number | 8 |
| Discrete output number | 1 relay outputs SPDT with independent common 3 relay outputs SPST with same common 2 relay outputs SPST with same common 2 relay outputs SPST with independent common |
| Discrete output current | 1 A relay SPDT 3 A relay SPST |
| Analogue input number | 8 configurable by pair |
| Analogue output number | 2 voltage, range: 0...10 V 2 voltage/current, range: 4...20 mA or 0...10 V or PWM (2 kHz) |

Complementary

| | |
|---------------------------|--|
| Number of port | 1 CAN port - screw terminal block 1 USB type A - USB type A female 1 USB type mini B - USB device port Mini-B 2 RS485 - screw terminal block (Modbus serial link or BACnet MS/TP) 1 Ethernet - RJ45 (Modbus TCP and BACnet IP with webserver) |
| Input/output number | 8 digital input(s) 8 analog input(s) 4 analog output(s) 8 digital output(s) |
| Discrete input logic | Sink or source (positive/negative) |
| Discrete input voltage | 24 V AC/DC |
| Discrete input current | 2.5 mA |
| Input impedance | 20 kOhm |
| Analogue input type | Voltage 0...10 V Current 0...20 mA/4...20 mA Impedance 0...1500 hOhm Impedance 0...300 daOhm Voltage 0...5 V (absolute or ratiometric) PTC temperature probe - 55...150 °C - res.: 0.1 °C NTC temperature probe - 50...110 °C - res.: 0.1 °C (extended) NTC temperature probe - 40...150 °C - res.: 0.1 °C Pt 1000 temperature probe - 200...850 °C - res.: 0.1 °C |
| Sensor power supply | 5 V DC at 50 mA (supplied by the controller) 24 V DC at 150 mA (supplied by the controller) |
| [Us] rated supply voltage | 20...38 V DC 24 V +/- 10 % AC |
| Power consumption in W | 15 W at 24 V AC/DC |
| Realtime clock | Built-in realtime clock at -4...140 °F (-20...60 °C) |
| Display type | Without display |
| Overvoltage category | II |
| Local signalling | 1 LED red programmable 1 LED yellow programmable 1 LED green programmable 1 LED green power |
| Mounting support | DIN rail Panel mounting with accessory |
| Width | 5.67 in (144 mm) |

The information provided in this documentation contains general descriptions and/or technical characteristics of the products contained herein. This documentation is not intended as a substitute for and is not to be used for determining suitability or reliability of these products for specific user applications. It is the duty of any such user or integrator to perform the appropriate and complete risk analysis, evaluation and testing of the products with respect to the relevant specific application or use thereof. Neither Schneider Electric Industries SAS nor any of its affiliates or subsidiaries shall be responsible or liable for misuse of the information contained herein.

| | |
|----------------|----------------------|
| Height | 4.33 in (110 mm) |
| Depth | 2.38 in (60.5 mm) |
| Product weight | 0.66 lb(US) (0.3 kg) |

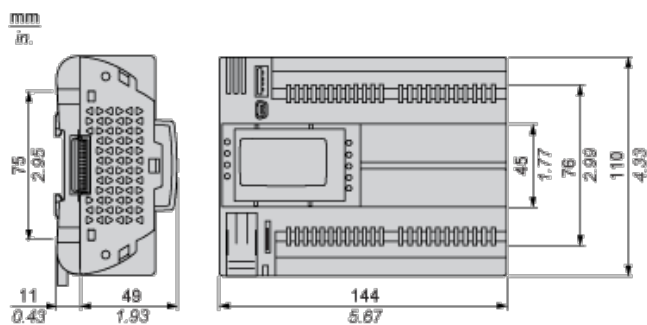
Environment

| | |
|---------------------------------------|---|
| directives | 2006/95/EC - low voltage directive 86/188/EEC - physical agents (noise) directive 2011/65/EU - RoHS directive 1907/2006/EC - REACH directive |
| standards | EN/IEC 60730 |
| product certifications | CE CSA (pending) EAC (pending) CURus (pending) |
| ambient air temperature for operation | -4...140 °F (-20...60 °C) conforming to UL 60730-1 -4...149 °F (-20...65 °C) with derating conforming to UL 60730-1 |
| ambient air temperature for storage | -22...158 °F (-30...70 °C) |
| relative humidity | 5...95 % non-condensing |
| IP degree of protection | IP20 |
| pollution degree | 2 |

Offer Sustainability

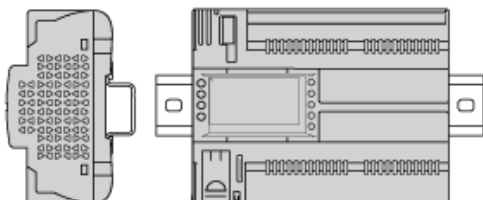
| | |
|---|---|
| Green Premium product | Green Premium product |
| Compliant - since 1530 - Schneider Electric declaration of conformity | Compliant - since 1530 - Schneider Electric declaration of conformity |
| Reference not containing SVHC above the threshold | Reference not containing SVHC above the threshold |
| Available | Available |
| Available | Available |
| WARNING: This product can expose you to chemicals including: | 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. | 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 | For more information go to www.p65warnings.ca.gov |

Dimensions



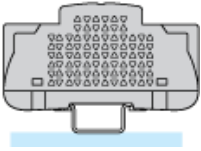
Mounting Positions

Correct Mounting Position

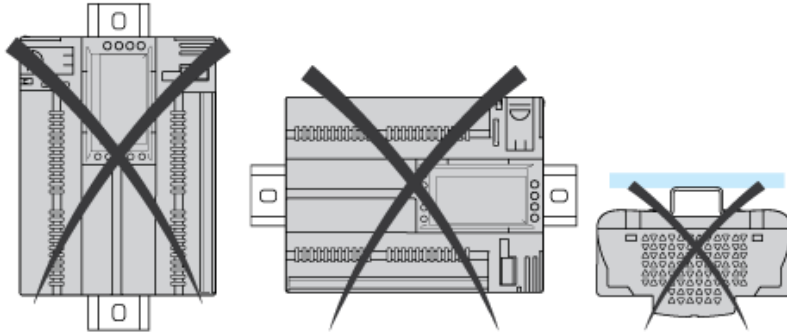


Acceptable Mounting Position

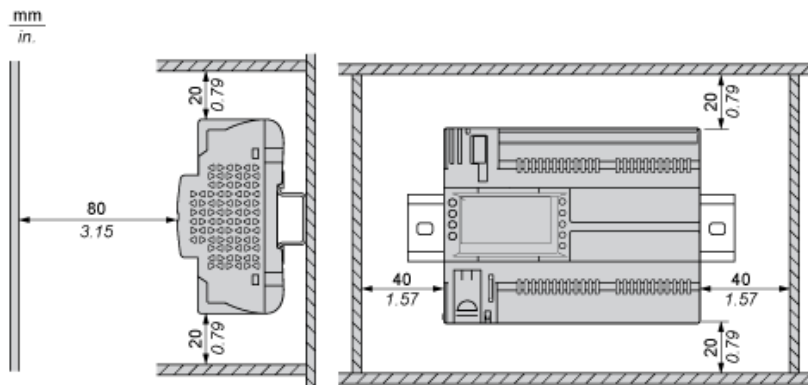
Controller can be mounted horizontally upward with a temperature derating (maximum ambient temperature: 60 °C (140 °F)).



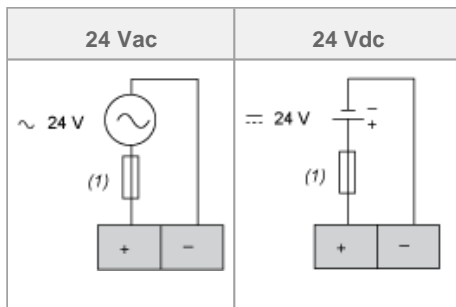
Incorrect Mounting Position



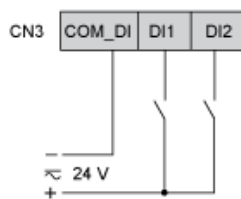
Clearance



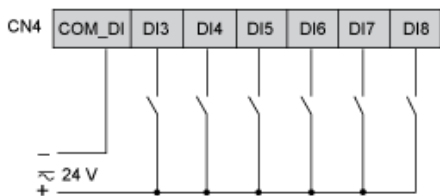
Power Supply



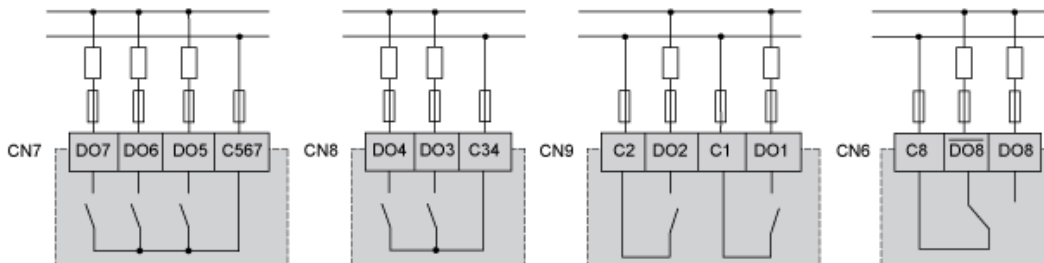
CN3 Fast Digital Inputs



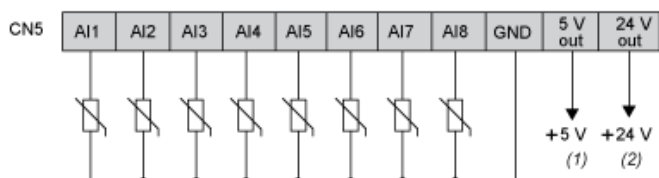
CN4 Digital Inputs



CN7, CN8, CN9, CN6 High Voltage Relay SPST Digital Output



CN5 Analog Inputs



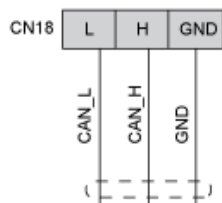
- (1) Max. current : 50 mA.
- (2) Max. current : 150 mA.

CN2 Analog Outputs



AO3, AO4 can be used also as PWM generator, up to 2kHz.

CN18 CAN Expansion Bus Port



CN19, CN1 CAN Expansion Bus Port

