



Main

| | |
|------------------------------|--|
| Range of product | Modicon M171/M172 |
| Product or component type | Programmable controllers |
| Product specific application | HVAC and pumping solution |
| Variant | Programmable |
| Total 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 0...10 V 2 voltage/current 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 8 analog input 4 analog output 8 digital output |
| 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 | Impedance 0...1500 hOhm Impedance 0...300 daOhm NTC temperature probe - 50...110 °C 0.1 °C extended) Voltage 0...10 V NTC temperature probe - 40...150 °C 0.1 °C Current 0...20 mA/4...20 mA PTC temperature probe - 55...150 °C 0.1 °C Voltage 0...5 V absolute or ratiometric) Pt 1000 temperature probe - 200...850 °C 0.1 °C |
| Sensor power supply | 5 V DC 50 mA supplied by the controller 24 V DC 150 mA supplied by the controller |
| [Us] rated supply voltage | 24 V +/- 10 % AC 20...38 V DC |
| Power consumption in W | 15 W 24 V AC/DC |
| Realtime clock | Built-in -4...140 °F (-20...60 °C) |
| Display type | Without Display |
| Overvoltage category | II |
| Local signalling | For programmable 1 LED (red) For programmable 1 LED (yellow) For programmable 1 LED (green) For power 1 LED (green) |

The information provided in this documentation contains general descriptions and/or technical characteristics of the performance 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.

| | |
|------------------|---|
| Mounting support | DIN rail Panel mounting with accessory |
| Width | 5.67 in (144 mm) |
| Height | 4.33 in (110 mm) |
| Depth | 2.38 in (60.5 mm) |
| Net Weight | 0.66 lb(US) (0.3 kg) |

Environment

| | |
|---------------------------------------|--|
| Directives | 86/188/EEC - physical agents (noise) directive 2006/95/EC - low voltage directive |
| Standards | EN/IEC 60730 |
| Product certifications | EAC (pending) CE CURus (pending) CSA (pending) |
| Ambient air temperature for operation | -4...140 °F (-20...60 °C) UL 60730-1 -4...149 °F (-20...65 °C) with derating 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 |

Ordering and shipping details

| | |
|-----------------------|--------------------------------------|
| Category | 22537 - M171 / M172 HVAC CONTROLLERS |
| Discount Schedule | PC12 |
| GTIN | 00785901487876 |
| Nbr. of units in pkg. | 1 |
| Package weight(Lbs) | 0.81 lb(US) (0.37 kg) |
| Returnability | No |
| Country of origin | IT |

Packing Units

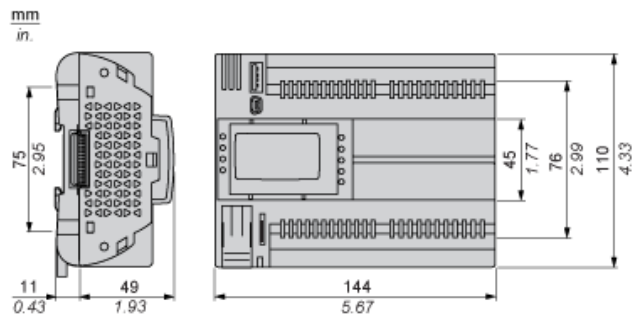
| | |
|------------------------------|------------------------|
| Unit Type of Package 1 | PCE |
| Package 1 Height | 5.20 in (13.2 cm) |
| Package 1 width | 3.54 in (9 cm) |
| Package 1 Length | 7.28 in (18.5 cm) |
| Unit Type of Package 2 | S02 |
| Number of Units in Package 2 | 6 |
| Package 2 Weight | 5.48 lb(US) (2.485 kg) |
| Package 2 Height | 5.91 in (15 cm) |
| Package 2 width | 11.81 in (30 cm) |
| Package 2 Length | 15.75 in (40 cm) |

Offer Sustainability

| | |
|----------------------------|---|
| Sustainable offer status | Green Premium product |
| 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 |
| EU RoHS Directive | Pro-active compliance (Product out of EU RoHS legal scope) EU RoHS Declaration |
| Mercury free | Yes |
| RoHS exemption information | Yes |
| China RoHS Regulation | China RoHS Declaration |
| Environmental Disclosure | Product Environmental Profile |

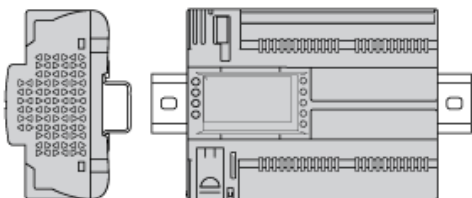
The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins.

Dimensions



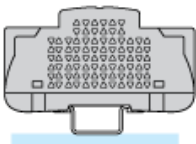
Mounting Positions

Correct Mounting Position

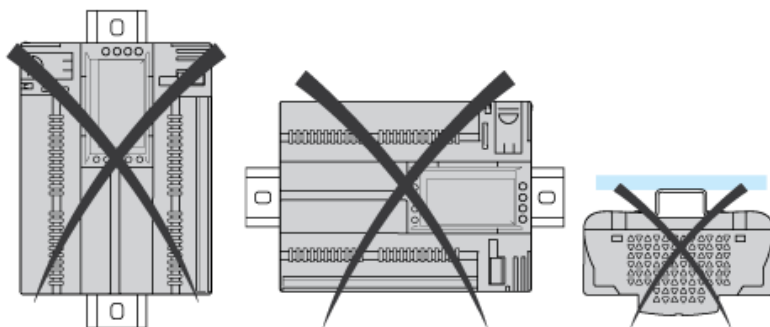


Acceptable Mounting Position

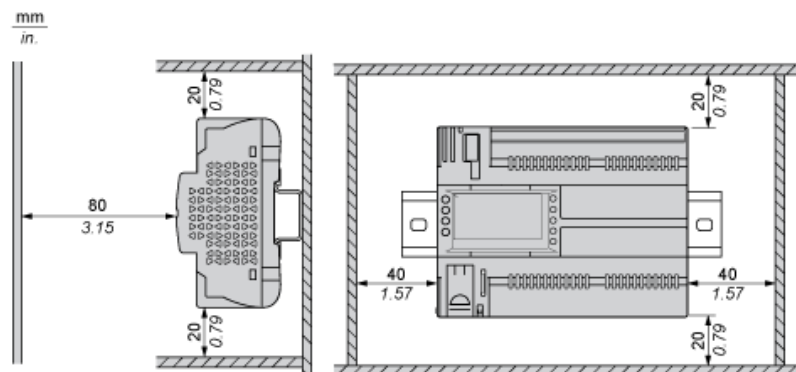
Controller can be mounted horizontally upward with a temperature derating (maximum ambient temperature: 60 °C (140 °F)).



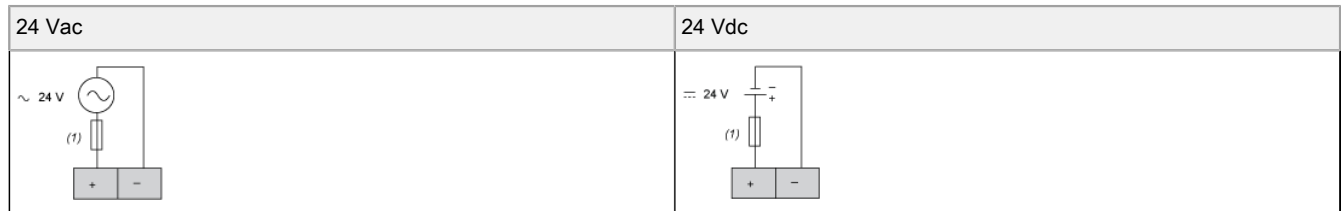
Incorrect Mounting Position



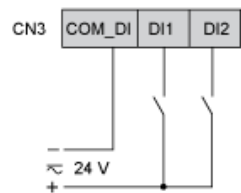
Clearance



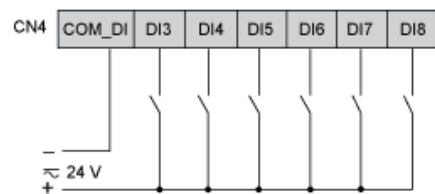
Power Supply



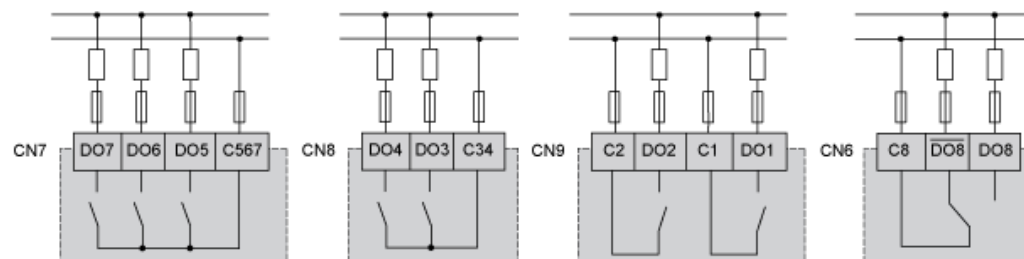
CN3 Fast Digital Inputs



CN4 Digital Inputs



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

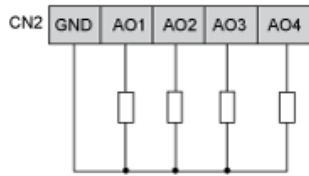


CN5 Analog Inputs



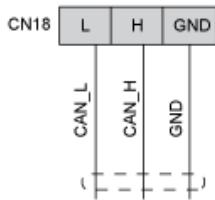
- (1) Max. current : 50 mA.
- (2) Max. current : 150 mA.

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

