

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	IEC 61000-4-5 IEC 61000-4-3 IEC 61000-4-2 IEC 60068-2-27 IEC 60730-1 IEC 60068-2-6 Fc UL 60730-1 UL 60730-2-9 IEC 61000-4-4 CAN/CSA-E60730-1 IEC 61000-4-11 IEC 61000-4-6 CSA E60730-2-9 IEC 60730-2-9 UL94 (material V0)
Product Certifications	CSA[RETURN]EAC[RETURN]RCM[RETURN]CE[RETURN]cURus
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
Operating altitude	0...6561.68 ft (0...2000 m)

Ordering and shipping details

Category	22537-M171 / M172 HVAC CONTROLLERS
Discount Schedule	PC12
GTIN	3606480894848
Returnability	No
Country of origin	IT

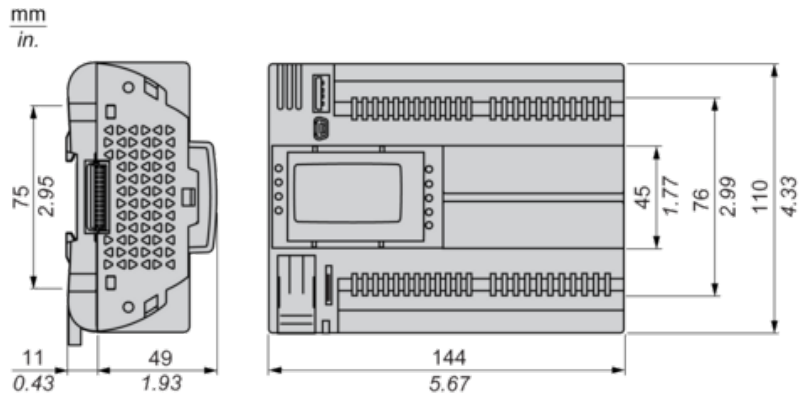
Packing Units

Unit Type of Package 1	PCE
Number of Units in Package 1	1
Package 1 Height	5.20 in (13.200 cm)
Package 1 Width	3.54 in (9.000 cm)
Package 1 Length	7.28 in (18.500 cm)
Package 1 Weight	13.12 oz (372.000 g)
Unit Type of Package 2	S02
Number of Units in Package 2	6
Package 2 Height	5.91 in (15.000 cm)
Package 2 Width	11.81 in (30.000 cm)
Package 2 Length	15.75 in (40.000 cm)
Package 2 Weight	5.40 lb(US) (2.450 kg)

Offer Sustainability

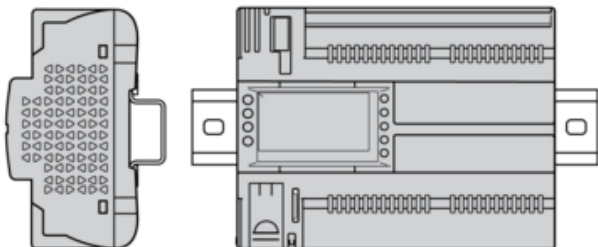
Sustainable offer status	Green Premium product
California proposition 65	WARNING: This product can expose you to chemicals including: Lead and lead compounds, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov
REACH Regulation	REACH Declaration
EU RoHS Directive	Pro-active compliance (Product out of EU RoHS legal scope)
Mercury free	Yes
China RoHS Regulation	China RoHS Declaration
RoHS exemption information	Yes
Environmental Disclosure	Product Environmental Profile
Circularity Profile	End Of Life Information
WEEE	The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins.
Upgradeability	Upgradeable through digital modules and upgraded components

Dimensions



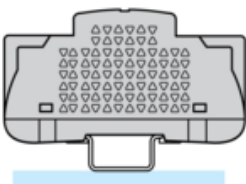
Mounting Positions

Correct Mounting Position

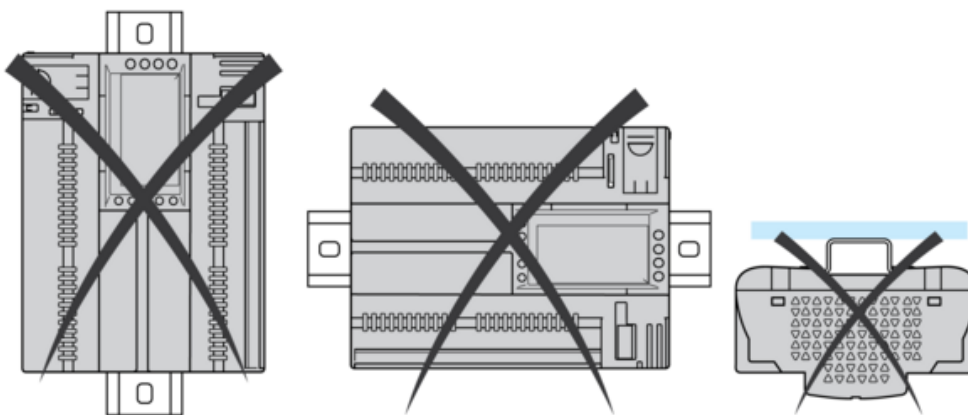


Acceptable Mounting Position

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

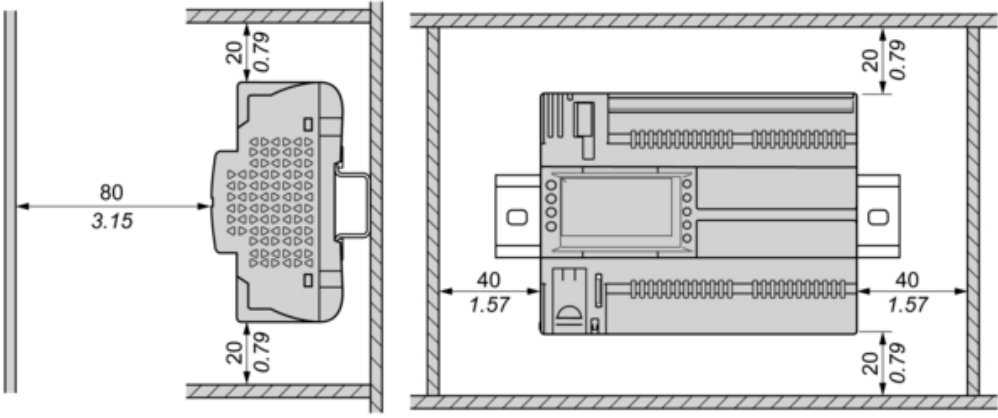


Incorrect Mounting Position

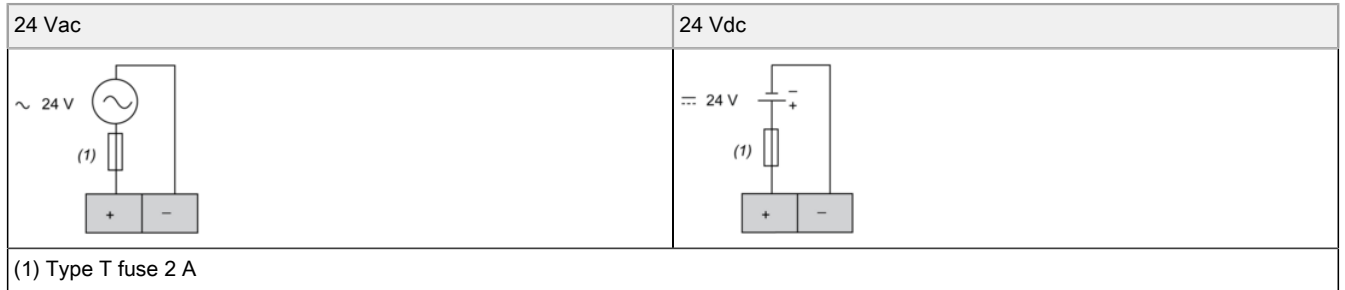


Clearance

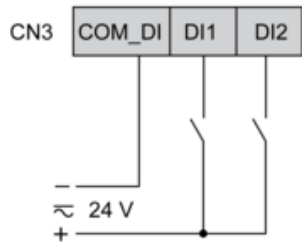
mm
in.



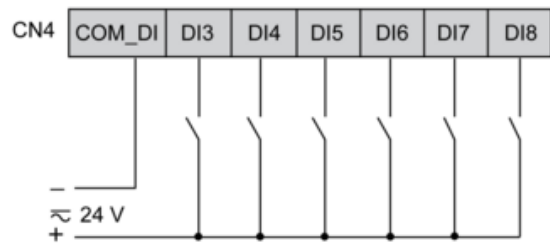
Power Supply



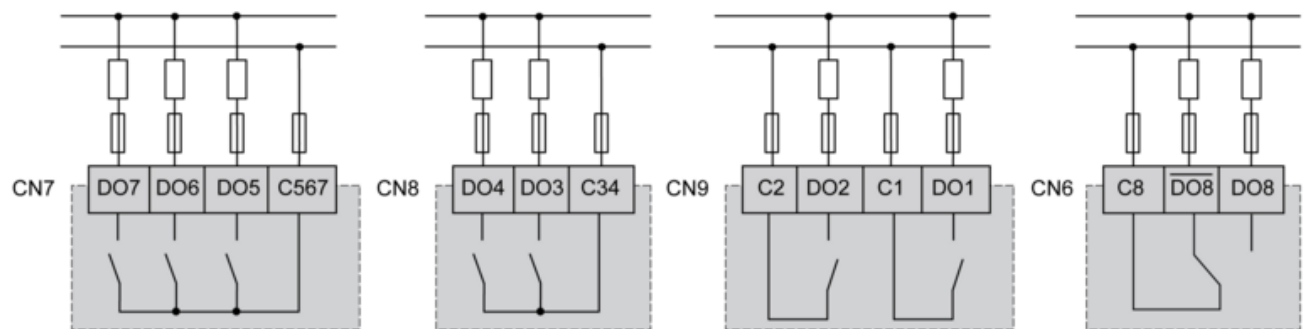
CN3 Fast Digital Inputs



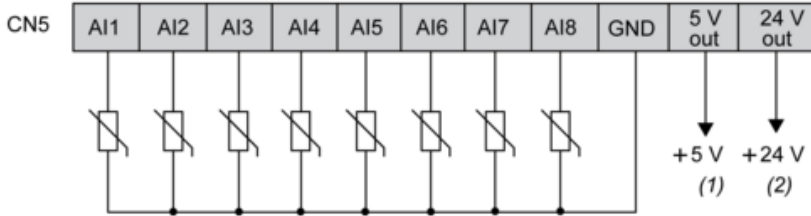
CN4 Digital Inputs



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

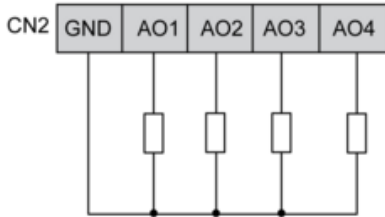


CN5 Analog Inputs



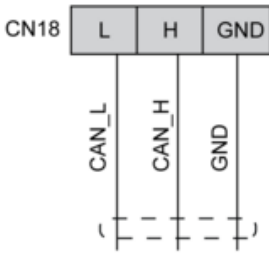
- (1) Max. current : 50 mA.
- (2) Max. current : 150 mA.

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

