

### 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	42
Discrete input number	12
Discrete output number	2 relay outputs SPST with same common 2 relay outputs SPST with independent common 2 relay outputs SPDT with same common 3 relay outputs SPST with independent common 3 relay outputs SPST with same common
Discrete output current	1 A relay SPDT 3 A relay SPST
Analogue input number	12 configurable by pair
Analogue output number	4 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	12 analog input 6 analog output 12 digital input 12 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 Direct input 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	Backlit LCD - 128 x 64 pixels
Overvoltage category	II

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.

Local signalling	For programmable 1 LED (red) For programmable 1 LED (yellow) For programmable 1 LED (green) For power 1 LED (green)
Mounting Support	Panel mounting with accessory DIN rail
Width	5.67 in (144 mm)
Height	4.33 in (110 mm)
Depth	2.38 in (60.5 mm)
Net Weight	0.85 lb(US) (0.385 kg)

## Environment

Directives	2006/95/EC - low voltage directive 86/188/EEC - physical agents (noise) directive
Standards	IEC 60730 UL94 (material V0)
Product Certifications	CE[RETURN]EAC[RETURN]CSA[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	3606480894886
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	7.32 in (18.600 cm)
Package 1 Weight	15.73 oz (446.000 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	6.35 lb(US) (2.880 kg)

## Offer Sustainability

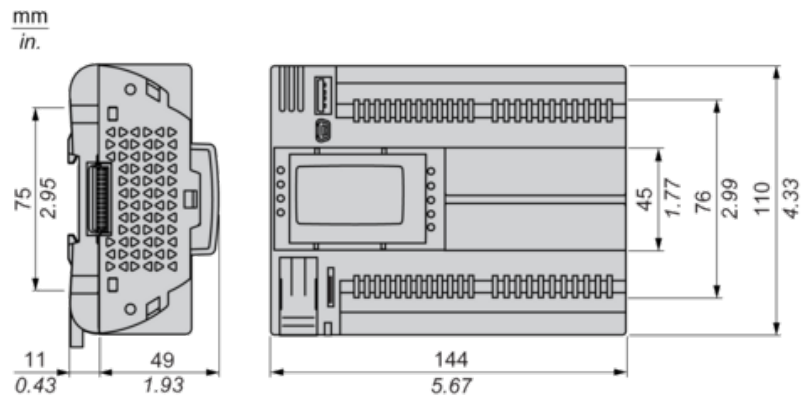
Sustainable offer status	Green Premium product
California proposition 65	WARNING: This product can expose you to chemicals including: Lead and lead compounds, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to <a href="http://www.P65Warnings.ca.gov">www.P65Warnings.ca.gov</a>
REACH Regulation	<a href="#">REACH Declaration</a>
EU RoHS Directive	Pro-active compliance (Product out of EU RoHS legal scope)
Mercury free	Yes
China RoHS Regulation	<a href="#">China RoHS Declaration</a>
RoHS exemption information	<a href="#">Yes</a>

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Environmental Disclosure	<a href="#">Product Environmental Profile</a>
Circularity Profile	<a href="#">End Of Life Information</a>
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

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Dimensions

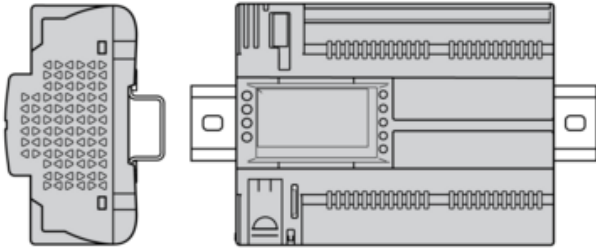


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Mounting Positions

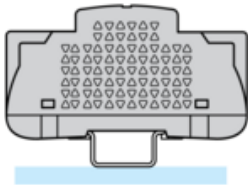
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Correct Mounting Position

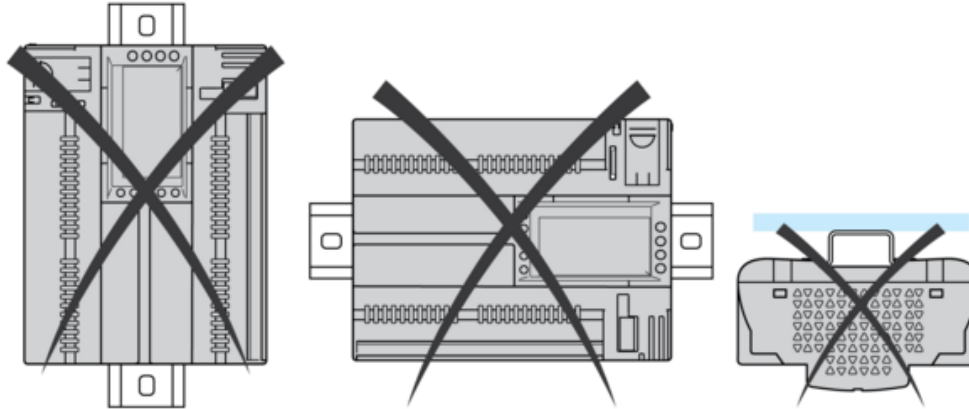


Acceptable Mounting Position

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



Incorrect Mounting Position

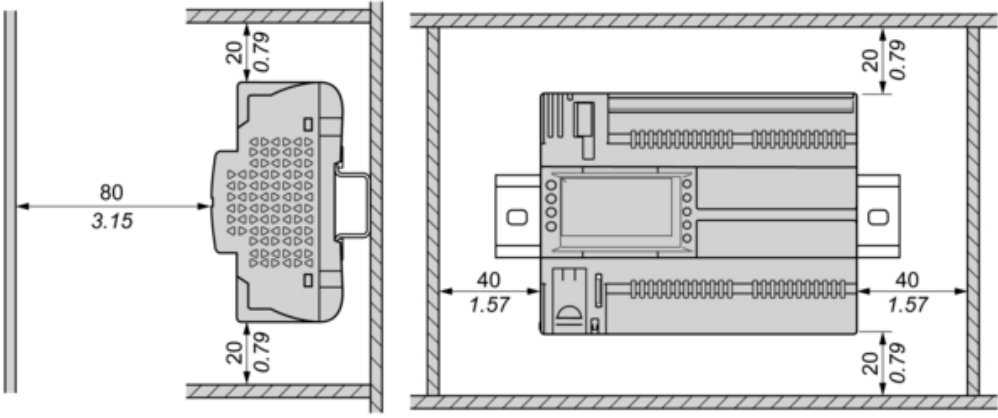


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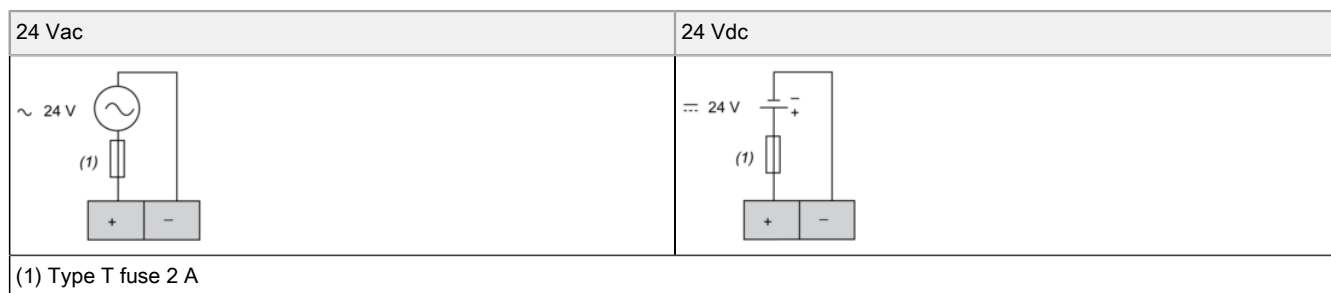
Clearance

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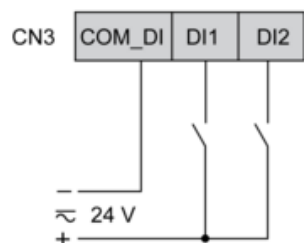
mm  
in.



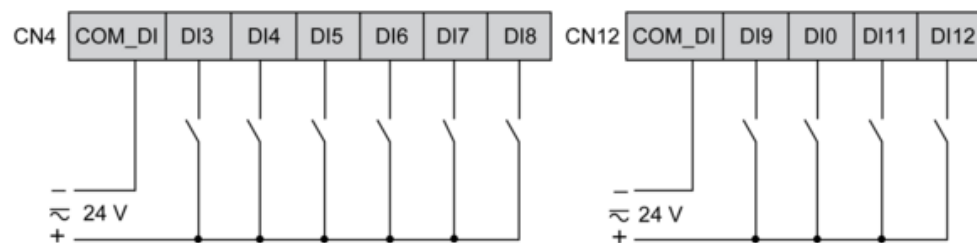
Power Supply



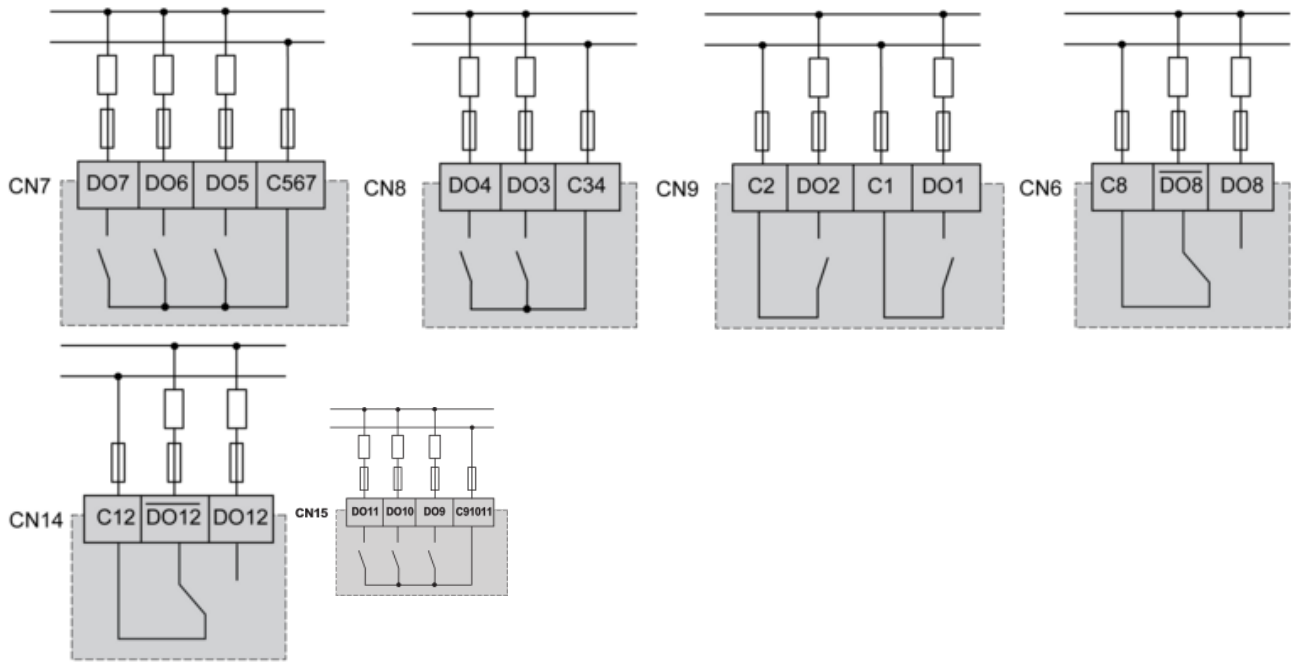
CN3 Fast Digital Inputs



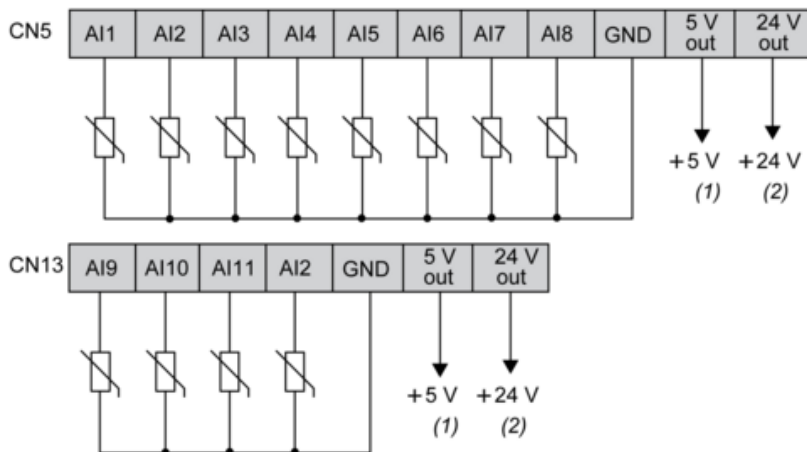
CN4, CN12 Digital Inputs



CN7, CN8, CN9, CN6, CN14, CN15 High Voltage Relay SPST Digital Output



### CN5, CN13 Analog Inputs

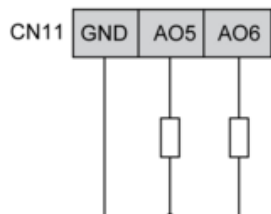


- (1) (CN5 + CN13) Max. current : 50 mA.
- (2) (CN5 + CN13) Max. current : 150 mA.

### CN2, CN11 Analog Outputs

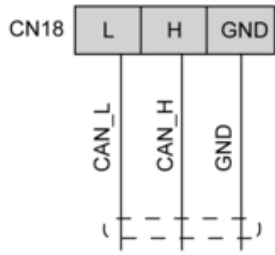


AO3, AO4 can be used also as PWM generator, up to 2kHz.



## CN18 CAN Expansion Bus Port

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## CN19, CN1 CAN Expansion Bus Port

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