

# TM172PDG42S

## Modicon M172 Performance Display 42 I/Os, Modbus, Solid State Relay

Product availability : Non-Stock - Not normally stocked in distribution facility



Price\* : 538.61 USD



### 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 solid state, isolated SSR with independent common 2 relay outputs SPDT with same common 3 relay outputs SPST with independent common
Discrete output current	0.5 A solid state, isolated 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

\* Price is "List Price" and may be subject to a trade discount – check with your local distributor or retailer for actual price.

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...131 °F (-20...55 °C)
Display type	Backlit LCD - 128 x 64 pixels
Overvoltage category	II
Local signalling	Programmable 1 LED red) Programmable 1 LED yellow) Programmable 1 LED green) Power 1 LED green)
Mounting support	Panel mounting with accessory DIN rail
Maximum Width	5.67 in (144 mm)
Maximum Height	4.33 in (110 mm)
Maximum Depth	2.38 in (60.5 mm)
Net Weight	0.85 lb(US) (0.385 kg)

## Environment

Directives	1907/2006/EC - REACH directive 2006/95/EC - low voltage directive 86/188/EEC - physical agents (noise) directive 2011/65/EU - RoHS directive
Standards	EN/IEC 60730
Product certifications	CURus (pending) CSA (pending) CE EAC (pending)
Ambient air temperature for operation	-4...131 °F (-20...55 °C) 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

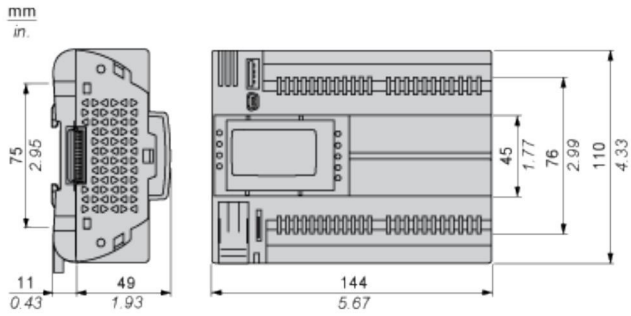
Category	22537 - M171 / M172 HVAC CONTROLLERS
Discount Schedule	PC12
GTIN	03606480894893
Returnability	No
Country of origin	IT

## 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 Carcinogen & Reproductive harm. For more information go to <a href="http://www.p65warnings.ca.gov">www.p65warnings.ca.gov</a>

EU RoHS Directive	Pro-active compliance (Product out of EU RoHS legal scope) <a href="#">EU RoHS Declaration</a>
Mercury free	Yes
RoHS exemption information	<a href="#">Yes</a>
China RoHS Regulation	<a href="#">China RoHS declaration</a>
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.

Dimensions

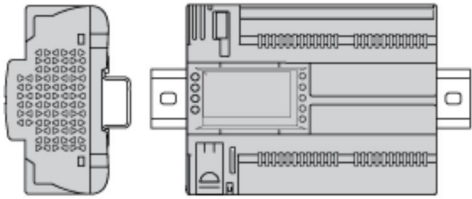


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Mounting Positions

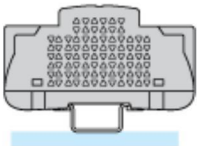
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Correct Mounting Position

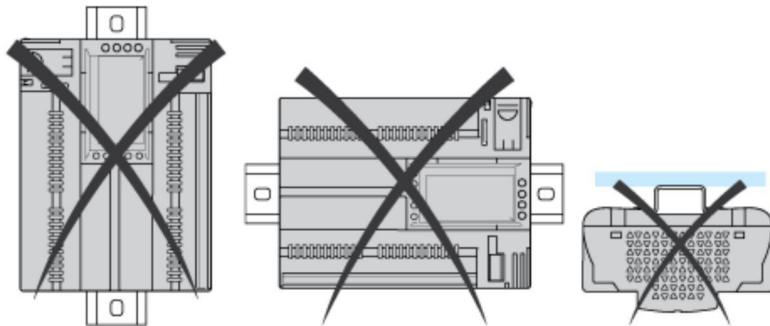


Acceptable Mounting Position

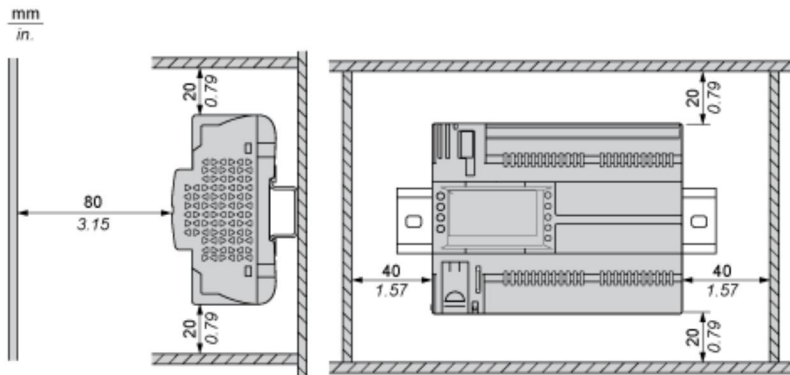
Controller can be mounted horizontally upward with a temperature derating (maximum ambient temperature: 60 °C (140 °F)).



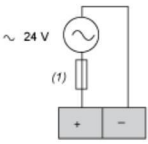
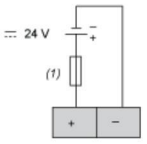
Incorrect Mounting Position



Clearance



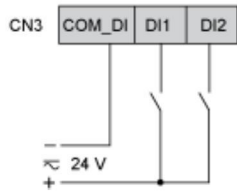
Power Supply

24 Vac	24 Vdc
	

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CN3 Fast Digital Inputs

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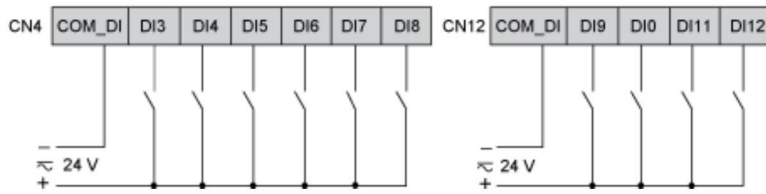




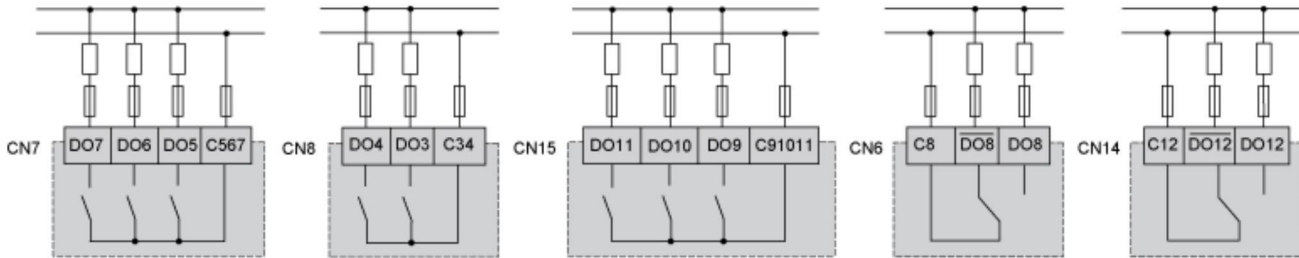
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CN4, CN12 Digital Inputs

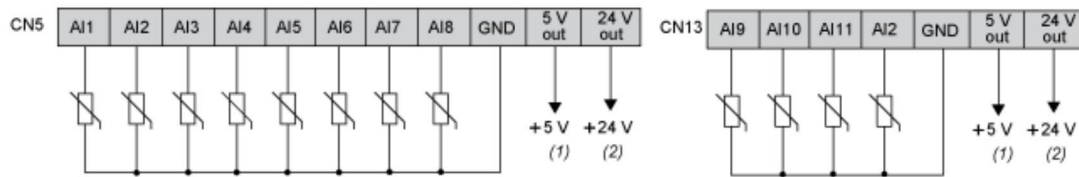
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CN7, CN8, CN15, CN6, CN14 High Voltage Relay SPST Digital Output



CN5, CN13 Analog Inputs

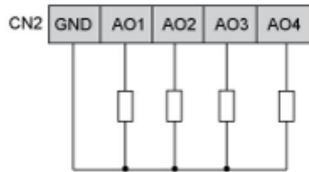


- (1) (CN5 + CN13) Max. current : 50 mA.
- (2) (CN5 + CN13) Max. current : 150 mA.

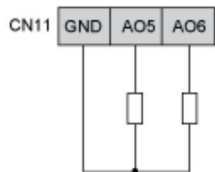
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## CN2, CN11 Analog Outputs

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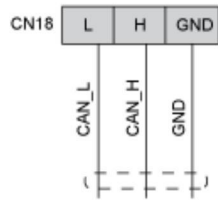
AO3, AO4 can be used also as PWM generator, up to 2kHz.



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CN18 CAN Expansion Bus Port

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CN19, CN1 CAN Expansion Bus Port

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