



### Main

Range of Product	Modicon M171
Product or Component Type	Controller

### Complementary

Number of port	1 Modbus serial link - RS485
Input/output number	8 total) 4 analog input 2 digital input 2 digital output
Discrete input number	2
Discrete input logic	Sink or source (positive/negative)
Contacts usage	Volt-free contacts
Sensor power supply	5 V DC 12 V DC
Discrete output number	1 open collector 1 SPST
Analogue input number	2 analog input NTC 2 analog input Pt 1000 4...20 mA or 0...5 V or 0...10 V
[Us] rated supply voltage	24 V +/- 10 % AC/DC
Display Type	Without Display
Mounting Support	DIN rail
Width	2.76 in (70.2 mm)
Height	3.43 in (87 mm)
Depth	2.43 in (61.6 mm)

### Environment

Marking	CE
Ambient air temperature for operation	23...122 °F (-5...50 °C)
IP degree of protection	IP20

### Ordering and shipping details

Category	22537-M171 / M172 HVAC CONTROLLERS
Discount Schedule	PC12
GTIN	3606480752902
Returnability	Yes
Country of origin	IT

## Packing Units

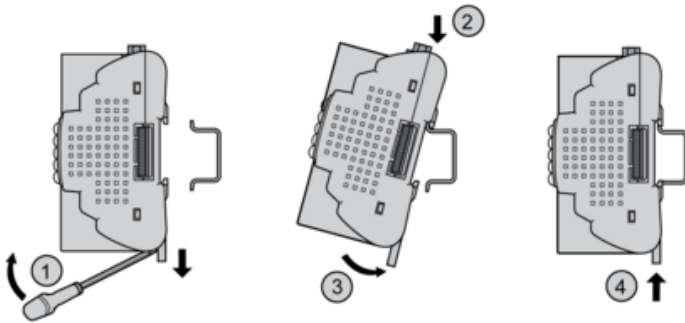
Unit Type of Package 1	PCE
Number of Units in Package 1	1
Package 1 Height	5.31 in (13.500 cm)
Package 1 Width	3.58 in (9.100 cm)
Package 1 Length	7.28 in (18.500 cm)
Package 1 Weight	11.43 oz (324.000 g)
Unit Type of Package 2	S02
Number of Units in Package 2	6
Package 2 Height	5.91 in (15.000 cm)
Package 2 Width	11.81 in (30.000 cm)
Package 2 Length	15.75 in (40.000 cm)
Package 2 Weight	4.71 lb(US) (2.135 kg)

## Offer Sustainability

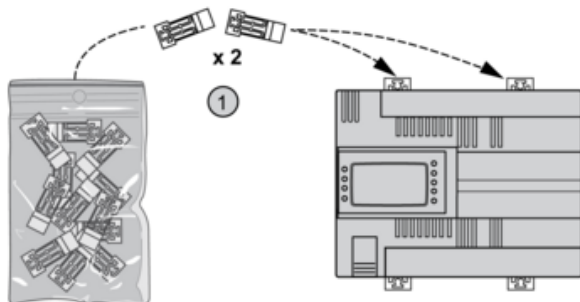
Sustainable offer status	Green Premium product
California proposition 65	WARNING: This product can expose you to chemicals including: Lead and lead compounds, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to <a href="http://www.P65Warnings.ca.gov">www.P65Warnings.ca.gov</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>
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

Mounting and Clearance

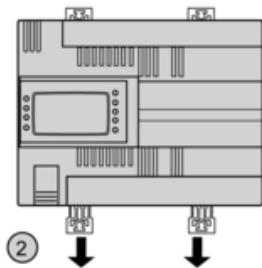
DIN Rail Mounting



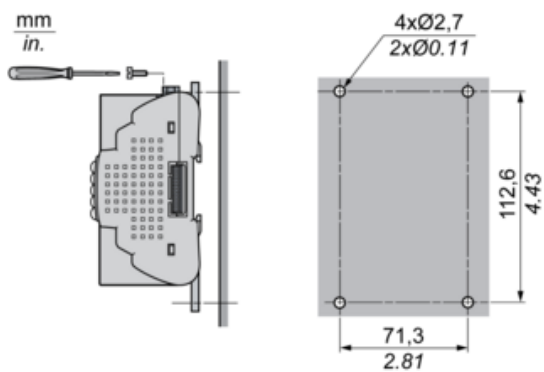
Clips for Panel Mounting



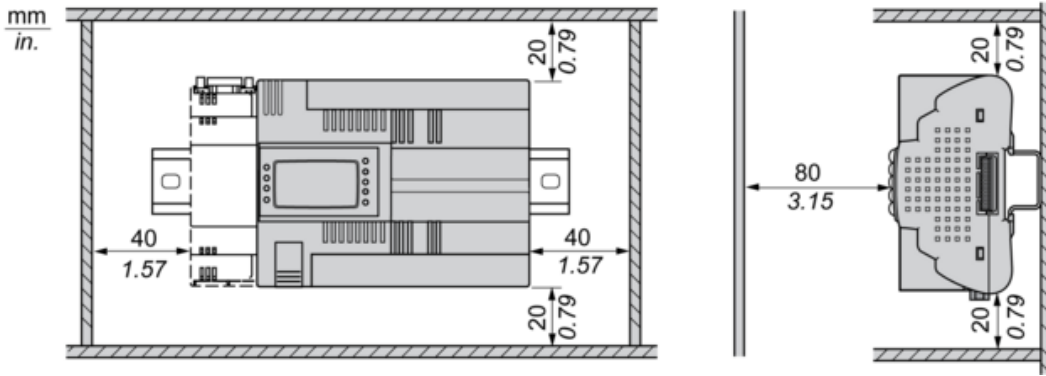
TM172AP12PM



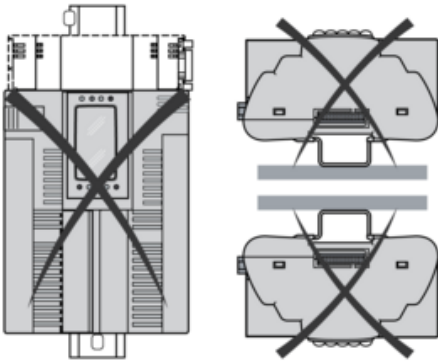
Panel Mounting



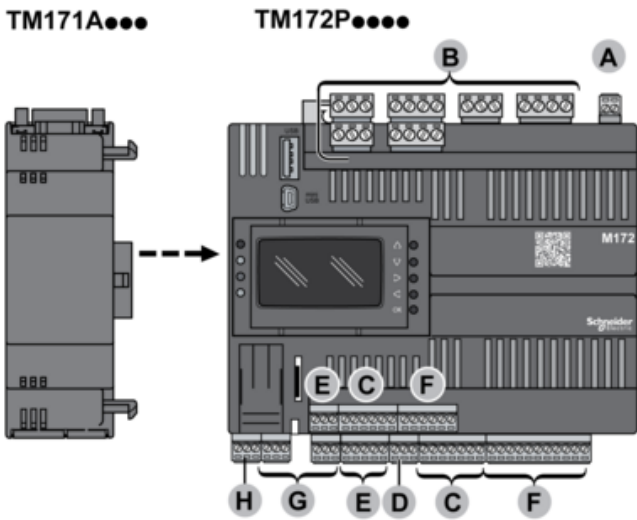
### Clearance



### Incorrect Mounting Position



### Assembling a Module



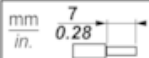








### Wiring Sections and Torque



A, C, D, E, F, G, H

$\frac{9}{0.35}$ mm in.								
mm <sup>2</sup>	0.14...1.5	0.14...1.5	0.25...1.5	0.25...0.5	2 x 0.08...0.5	2 x 0.08...0.75	2 x 0.25...0.34	2 x 0.5
AWG	26...16	26...16	22...16	22...20	2 x 28...20	2 x 28...20	2 x 24...22	2 x 20

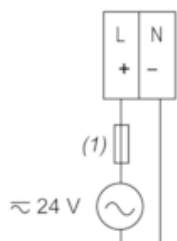
		N•m	0.22...0.25
Ø 2.5 mm (0.1 in.)		lb-in	1.95...2.21

B

								
mm <sup>2</sup>	0.2...2.5	0.2...2.5	0.25...2.5	0.25...2.5	2 x 0.2...1	2 x 0.2...1.5	2 x 0.25...1	2 x 0.5...1.5
AWG	24...14	24...14	22...14	22...14	2 x 24...18	2 x 24...16	2 x 22...18	2 x 20...16

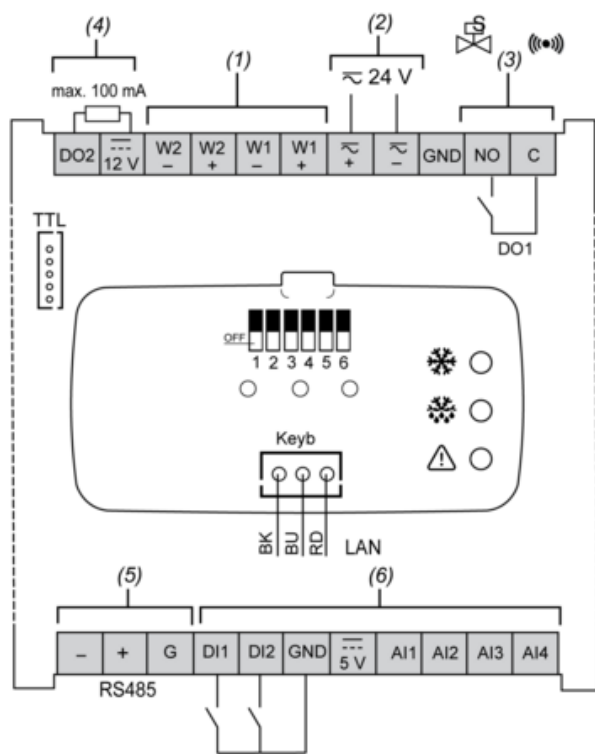
		N•m	0.5...0.6
Ø 3,5 mm (0.14 in.)		lb-in	4.42...5.31

Power Supply



(1) Type T fuse 3,15 A

Wiring Diagram



(1)	Electronic Expansion Valve output
(2)	Power supply 24 V ac/dc
(3)	DO1: Relay output 5 A 250 Vac (Solenoid valve/Alarm) C: Common - NO: Normally Open
(4)	DO2: Open collector (Solenoid valve/Alarm)
(5)	Serial port RS485
(6)	Digital and analog inputs GND - Ground