

Product data sheet

Specifications



Expansion module, Modicon M171/M172/M173, performance, 27 IO

TM171EP27R

Main

Range Of Product	Modicon M171/M172
Product Or Component Type	Additional I/O module
Product Specific Application	HVAC and pumping solution
Total Inputs/Outputs	27
Discrete Input Number	8
Discrete Output Number	3 relay outputs SPST with same common 2 relay outputs SPST with same common 2 relay outputs SPDT with independent common
Discrete Output Current	8 A relay SPDT 5 A relay SPST
Analogue Input Number	2 analog input NTC 4 configurable
Analogue Output Number	3 voltage/current 0...10 V or 4...20 mA 2 open collector/current 1 kHz, 12 V, 35 mA or 4...20 mA

Complementary

Number Of Port	1 CAN port - screw terminal block
Input/Output Number	6 analog input 5 analog output 8 digital input 7 digital output 1 high-speed counter
Discrete Input Logic	Sink or source (positive/negative)
Discrete Input Voltage	24 V AC/DC 48 V DC
Discrete Input Current	2.5 mA
Input Impedance	20 kOhm
Analogue Input Type	voltage 0...5 V ratiometric) current 4...20 mA impedance 0...1500 hOhm impedance 0...300 daOhm direct input NTC temperature probe - 50...110 °C 0.1 °C extended) voltage 0...10 V Pt 1000 temperature probe - 200...800 °C 0.1 °C NTC temperature probe - 40...150 °C 0.1 °C
Sensor Power Supply	5 V DC 50 mA 12 V DC 150 mA
[Us] Rated Supply Voltage	24 V AC 48 V
Realtime Clock	Without clock at -4...131 °F (-20...55 °C)

Display Type	Without display
Overvoltage Category	II
Mounting Support	DIN rail
Width	5.51 in (140 mm)
Height	4.33 in (110 mm)
Depth	2.43 in (61.6 mm)
Net Weight	0.42 lb(US) (0.19 kg)

Environment

Directives	86/188/EEC - physical agents (noise) directive 2006/95/EC - low voltage directive
Standards	EN/IEC 60730
Product Certifications	CE cURus EAC CSA
Ambient Air Temperature For Operation	-4...131 °F (-20...55 °C) UL 60730-1
Ambient Air Temperature For Storage	-40...185 °F (-40...85 °C)
Relative Humidity	10...90 % non-condensing
Ip Degree Of Protection	IP20
Pollution Degree	2

Packing Units

Unit Type Of Package 1	PCE
Number Of Units In Package 1	1
Package 1 Height	5.12 in (13.000 cm)
Package 1 Width	3.58 in (9.100 cm)
Package 1 Length	7.28 in (18.500 cm)
Package 1 Weight	16.65 oz (472.000 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	6.74 lb(US) (3.055 kg)

Sustainability

Green Premium™ label is Schneider Electric's commitment to delivering products with best-in-class environmental performance. Green Premium promises compliance with the latest regulations, transparency on environmental impacts, as well as circular and low-CO₂ products.

Guide to assessing product sustainability is a white paper that clarifies global eco-label standards and how to interpret environmental declarations.

[Learn more about Green Premium >](#)

[Guide to assess a product's sustainability >](#)



Transparency RoHS/REACH

Resource performance

✓ Upgradeable Through Digital Modules
And Upgraded Components

Well-being performance

✓ Mercury Free

✓ Rohs Exemption Information Yes

Certifications & Standards

Reach Regulation [REACH Declaration](#)

Eu Rohs Directive Pro-active compliance (Product out of EU RoHS legal scope)

China Rohs Regulation [China RoHS declaration](#)

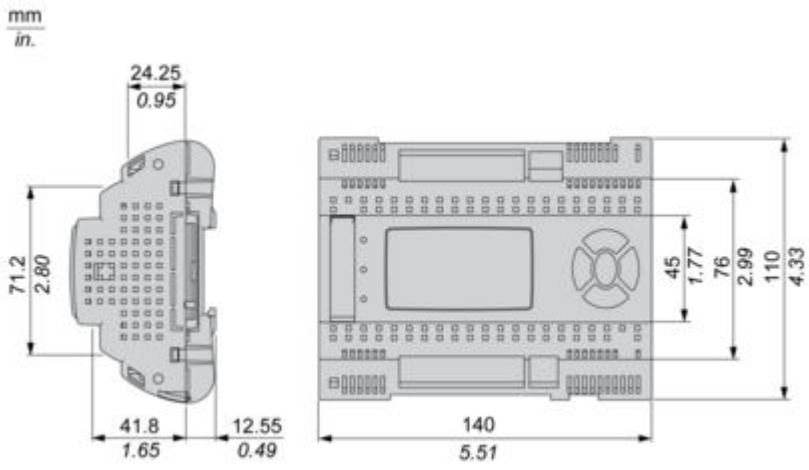
Environmental Disclosure [Product Environmental Profile](#)

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

Circularity Profile [End of Life Information](#)

Dimensions Drawings

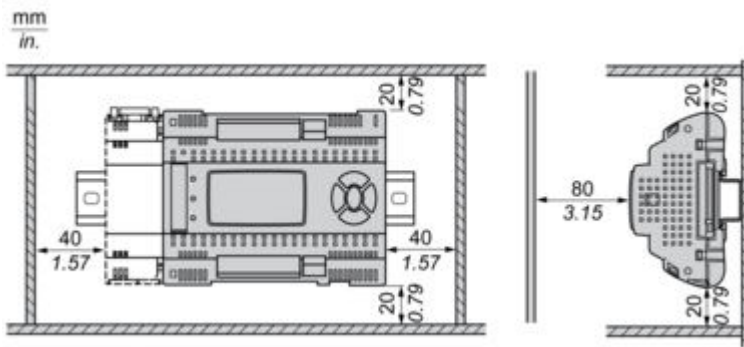
Dimensions



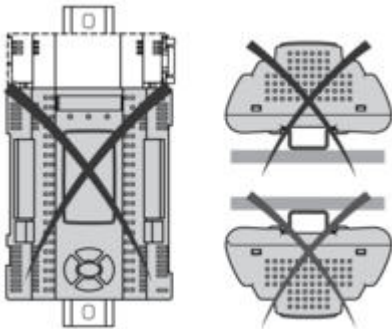
Mounting and Clearance

Mounting and Clearance

Clearance

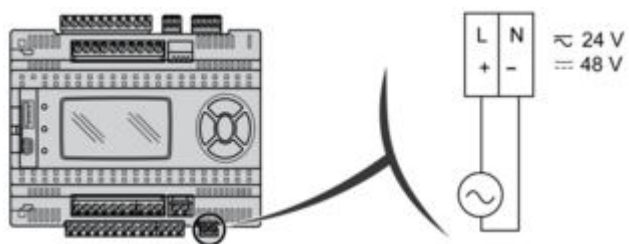


Misplacement

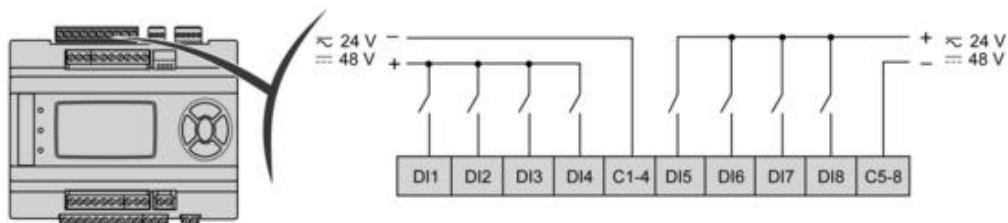


Connections and Schema

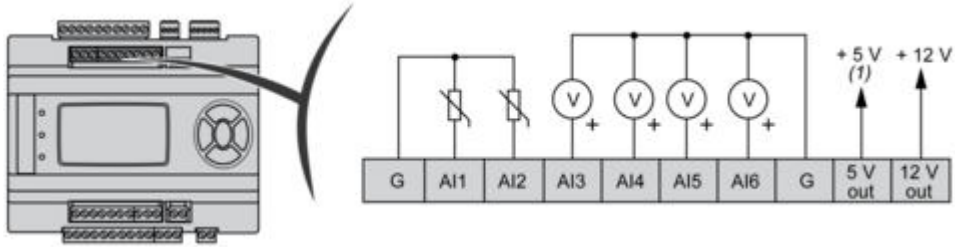
Power Supply



Digital Inputs

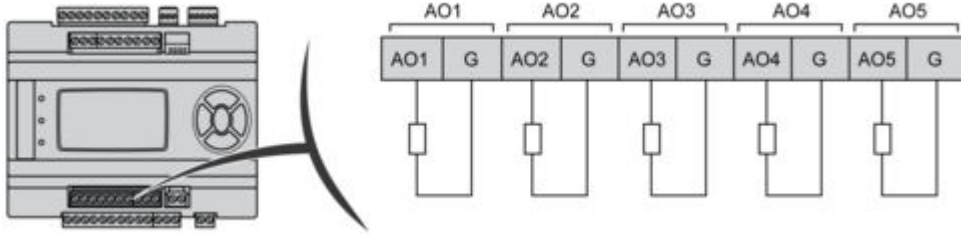


Analog Inputs

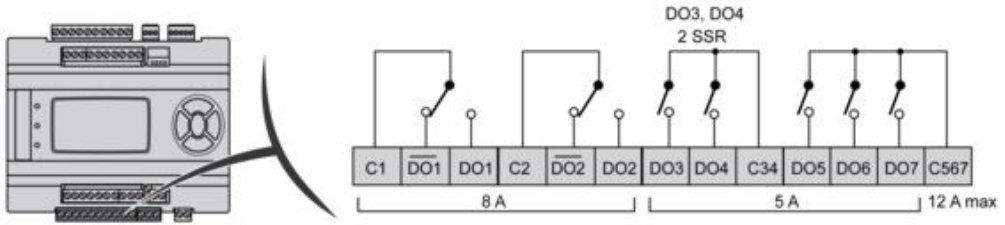


(1) Max current: 50 mA.
G : Ground

Analog Outputs

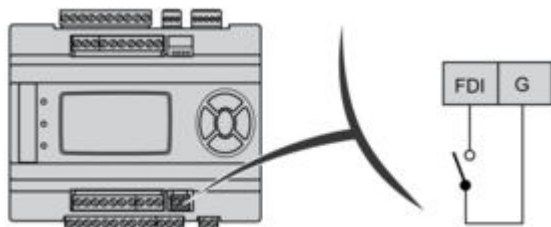


Digital Outputs

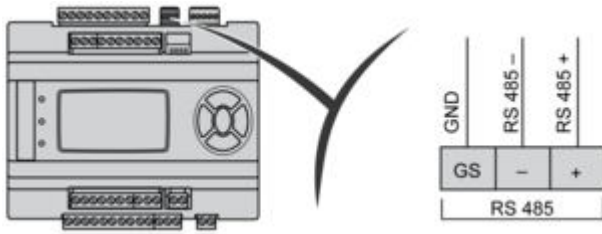


C : common

Fast Digital Input

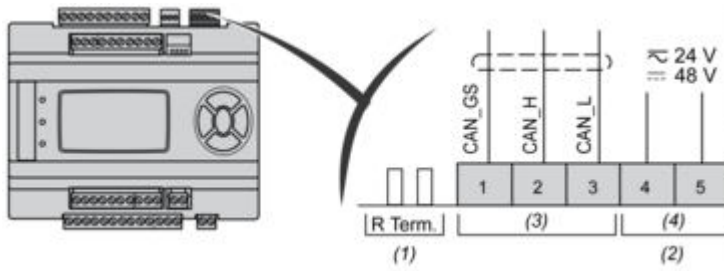


Serial Line Port (RS 485)



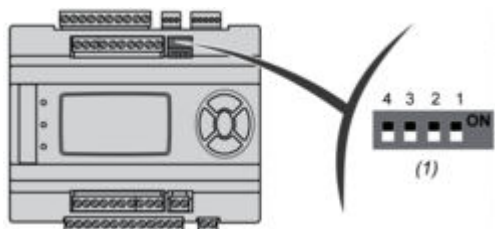
Apply 120 Ohm terminal resistance
GS serial GND isolated from G

CAN Expansion Bus



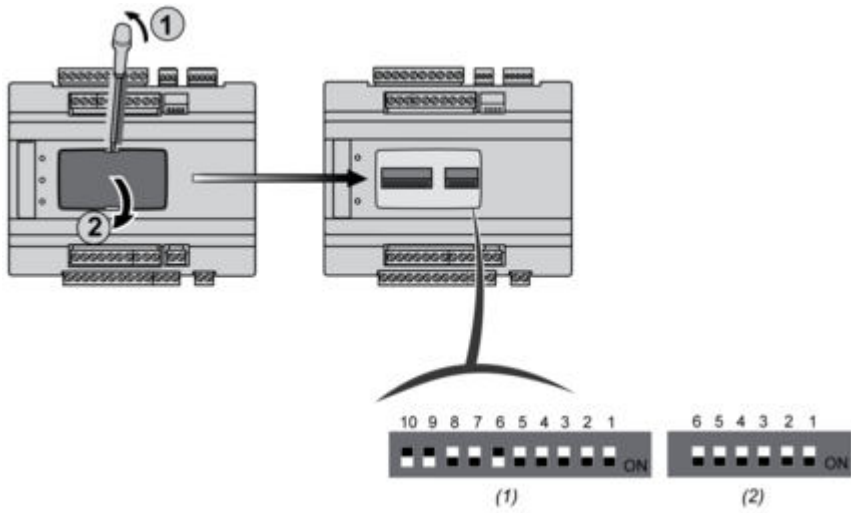
- (1) CAN terminal resistance
- (2) Output for remote keyboard
- (3) CANOPEN
- (4) Power Out

4 DipSwitches



(1) 4 DIP SWITCH
LOW Address

6 - 10 DipSwitches



- (1) 10 DIP SWITCH
- (2) 6 DIP SWITCH