

Product datasheet

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 for relay outputs SPST with same common 2 for relay outputs SPST with same common 2 for relay outputs SPDT with independent common
Discrete output current	8 A for relay SPDT 5 A for relay SPST
Analogue input number	2 analog input NTC 4 configurable
Analogue output number	3 voltage/current, range: 0...10 V or 4...20 mA 2 open collector/current, range: 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(s) 5 analog output(s) 8 digital input(s) 7 digital output(s) 1 high-speed counter(s)
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 - resolution: 0.1 °C (extended) voltage 0...10 V Pt 1000 temperature probe - 200...800 °C - resolution: 0.1 °C NTC temperature probe - 40...150 °C - resolution: 0.1 °C
Sensor power supply	5 V DC at 50 mA 12 V DC at 150 mA
[Us] rated supply voltage	24 V AC 48 V
Realtime clock	Without clock at -20...55 °C

Disclaimer: 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

Display type	Without display
Overvoltage category	II
mounting support	DIN rail
Width	140 mm
Height	110 mm
Depth	61.6 mm
net weight	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	-20...55 °C conforming to UL 60730-1
Ambient air temperature for storage	-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	13.000 cm
Package 1 Width	9.100 cm
Package 1 Length	18.500 cm
Package 1 Weight	472.000 g
Unit Type of Package 2	S02
Number of Units in Package 2	6
Package 2 Height	15.000 cm
Package 2 Width	30.000 cm
Package 2 Length	40.000 cm
Package 2 Weight	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

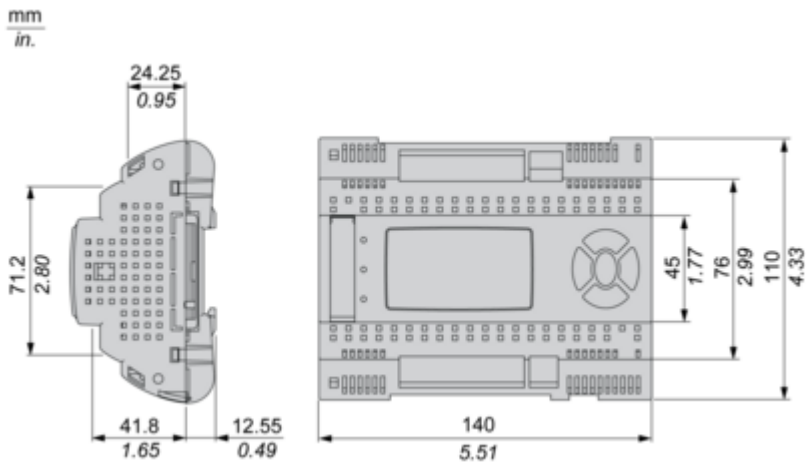
 Rohs Exemption Information [Yes](#)

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

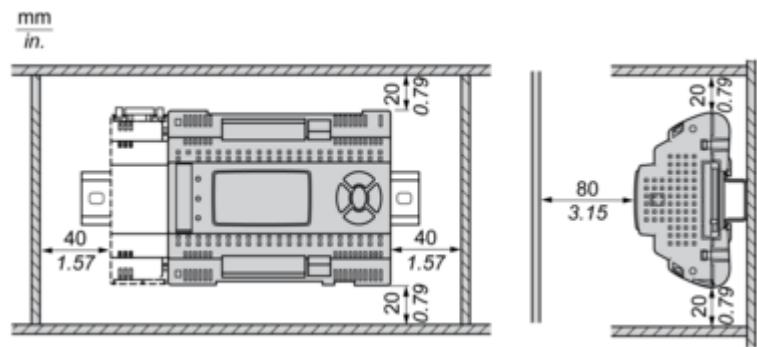
Dimensions



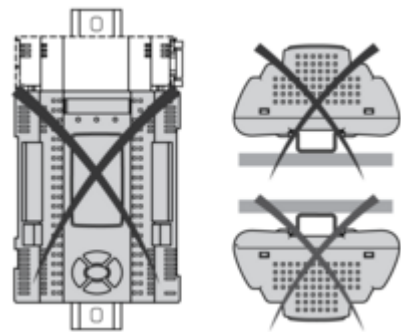
Mounting and Clearance

Mounting and Clearance

Clearance

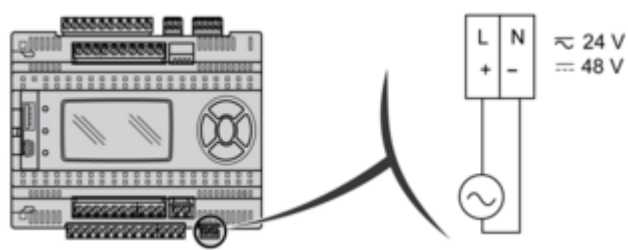


Misplacement

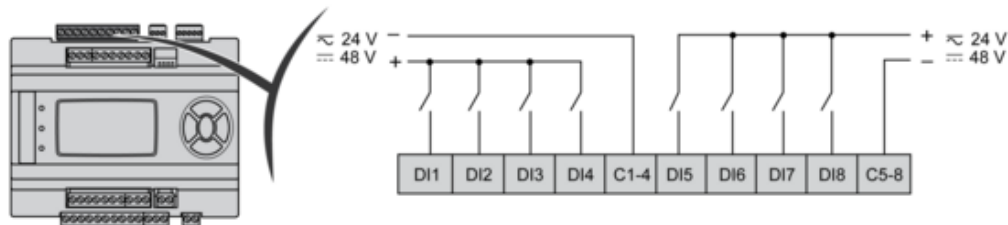


Connections and Schema

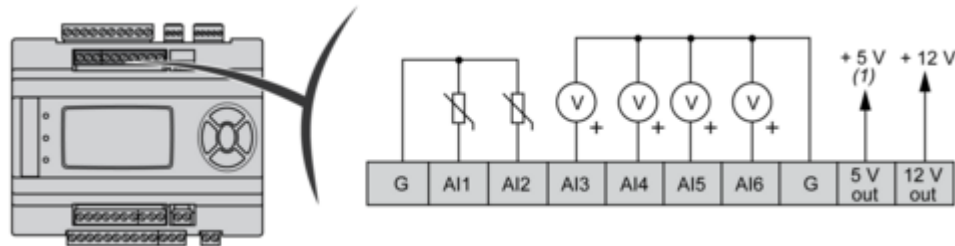
Power Supply



Digital Inputs

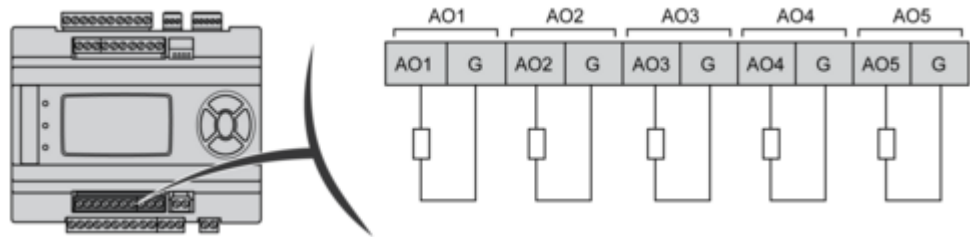


Analog Inputs

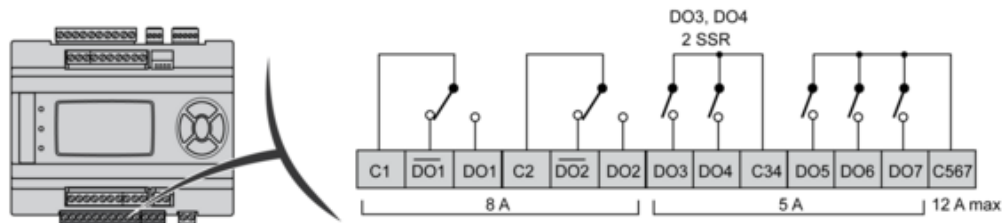


(1) Max current: 50 mA.
G : Ground

Analog Outputs

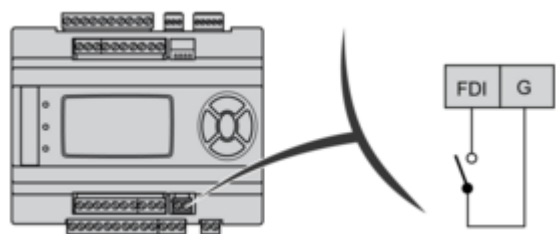


Digital Outputs

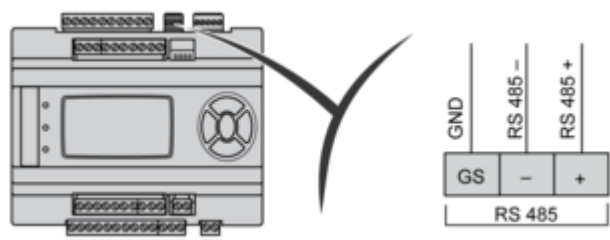


C : common

Fast Digital Input

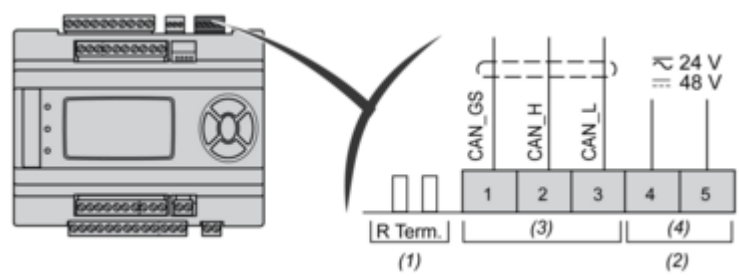


Serial Line Port (RS 485)



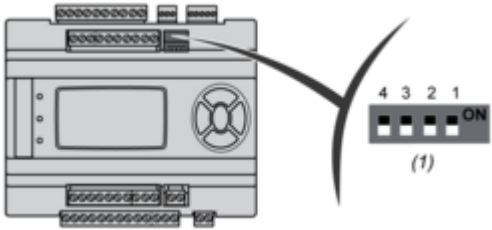
Apply 120 Omega terminal resistance
GS serial GND isolated from G

CAN Expansion Bus



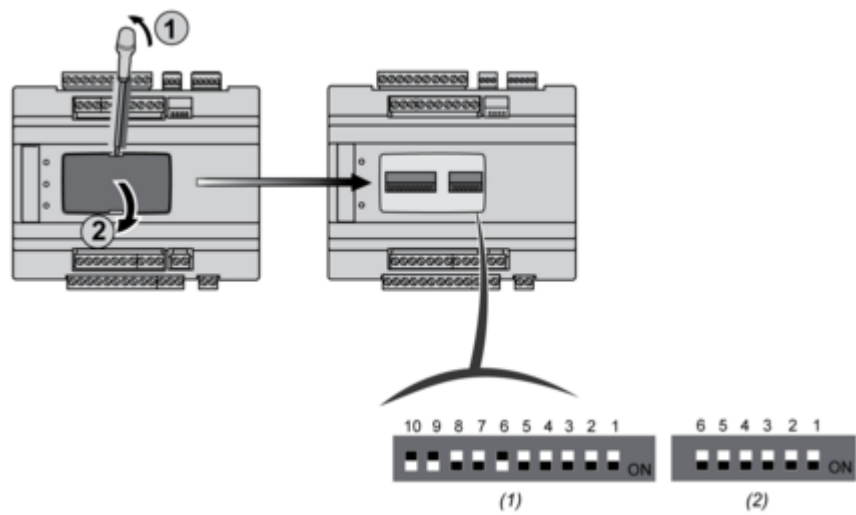
- (1) CAN terminal resistance
- (2) Output for remote keyboard
- (3) CANOPEN
- (4) Power Out

4 DipSwitches



(1) 4 DIP SWITCH
LOW Address

6 - 10 DipSwitches



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