

Product datasheet

Specifications



Controller, Modicon M171/M172/ M173, performance display 27 IO, Modbus

TM171PDM27R

 **Discontinued on:** 14 Dec 2020

 **Discontinued**

EAN Code: 3606480752834

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	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: 4...20 mA or 0...10 V 2 open collector, range: 1 kHz, 12 V, 35 mA

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 1 RS485 - screw terminal block (Modbus serial link)
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 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

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

Sensor power supply	5 V DC at 50 mA 12 V DC at 150 mA
[Us] rated supply voltage	24 V +/- 20 % AC/DC 48 V +/- 20 % DC
Power consumption in W	5 W at 24...48 V AC/DC
Realtime clock	Built-in clock at -10...55 °C
Display type	LCD display - 128 x 64 pixels
Overvoltage category	II
Local signalling	1 LED (red) for programmable 1 LED (yellow) for programmable 1 LED (green) for programmable
Mounting support	Flush mounting
Width	160 mm
Height	96 mm
Depth	10 mm
Net weight	0.32 kg

Environment

Directives	86/188/EEC - physical agents (noise) directive 2006/95/EC - low voltage directive
Standards	EN/IEC 60730
Product certifications	CE CSA cURus EAC
Ambient air temperature for operation	-10...55 °C conforming to UL 60730-1
Ambient air temperature for storage	-20...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	13.0 cm
Package 1 Width	9.1 cm
Package 1 Length	18.5 cm
Package 1 Weight	505.0 g
Unit Type of Package 2	S02
Number of Units in Package 2	6
Package 2 Height	15.0 cm
Package 2 Width	30.0 cm
Package 2 Length	40.0 cm
Package 2 Weight	3.409 kg

Logistical informations

Country of origin	IT
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Contractual warranty

Warranty	18 months
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Environmental Data

Schneider Electric aims to achieve Net Zero status by 2050 through supply chain partnerships, lower impact materials, and circularity via our ongoing “Use Better, Use Longer, Use Again” campaign to extend product lifetimes and recyclability.

[Environmental Data explained >](#)

[How we assess product sustainability >](#)

Environmental footprint	
Carbon footprint (kg.eq.CO2 per CR, Total Life cycle)	669
Environmental Disclosure	Product Environmental Profile

Use Better

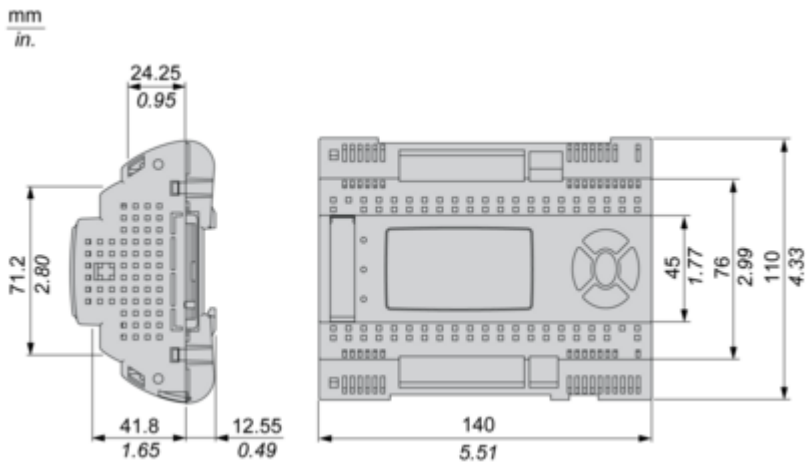
Materials and Substances	
Packaging made with recycled cardboard	No
Packaging without single use plastic	Yes

Use Again

Repack and remanufacture	
Circularity Profile	End of Life Information
Take-back	No

Dimensions Drawings

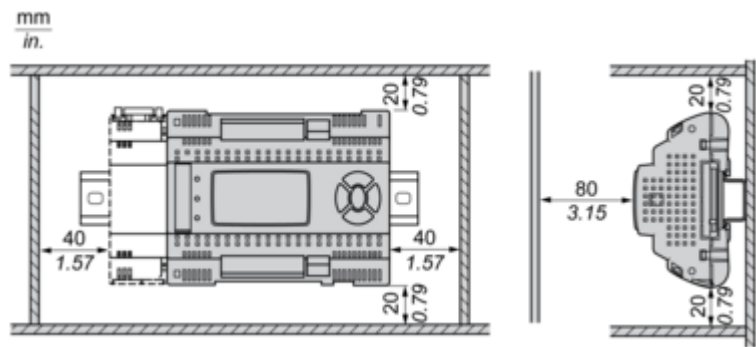
Dimensions



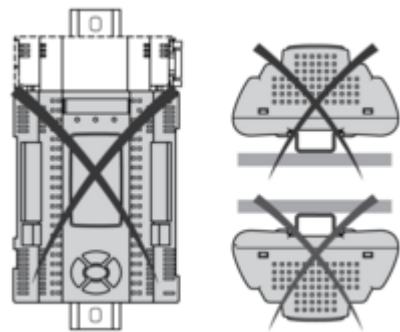
Mounting and Clearance

Mounting and Clearance

Clearance

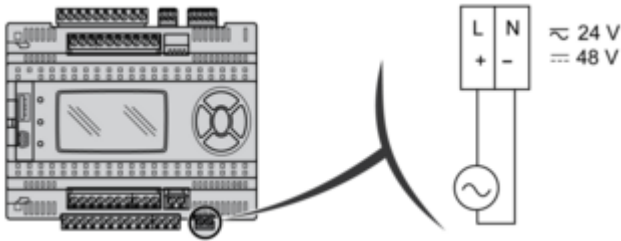


Misplacement

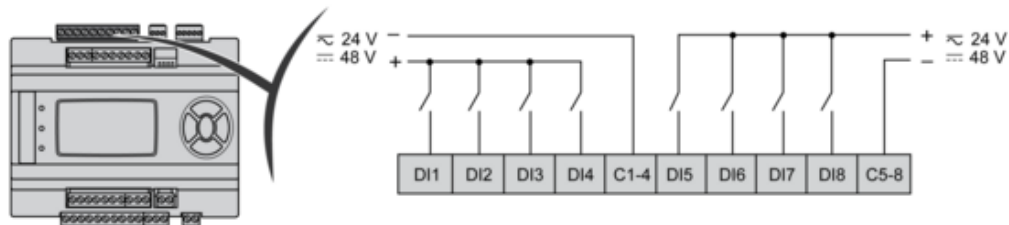


Connections and Schema

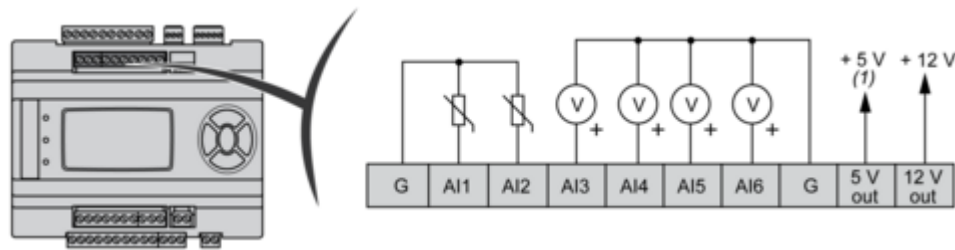
Power Supply



Digital Inputs

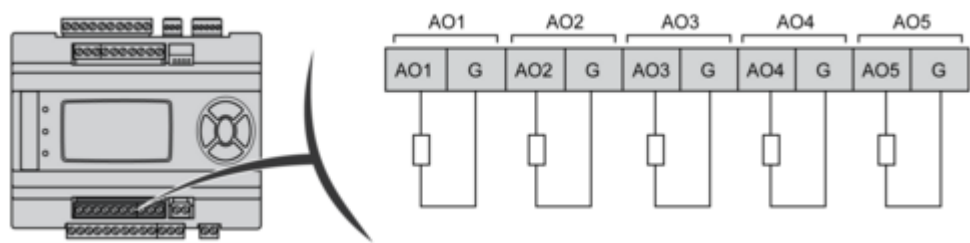


Analog Inputs

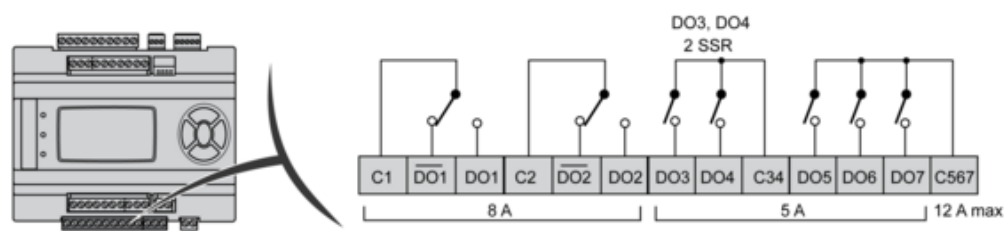


(1) Max current: 50 mA.
G : Ground

Analog Outputs

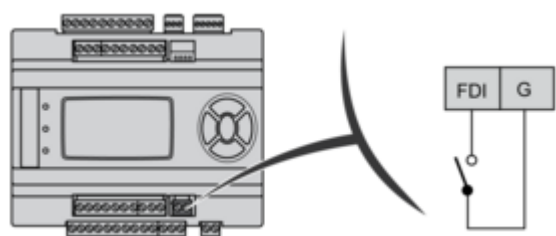


Digital Outputs

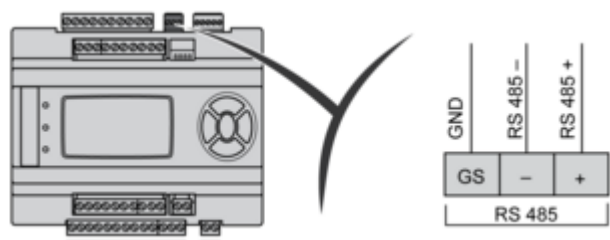


C : common

Fast Digital Input

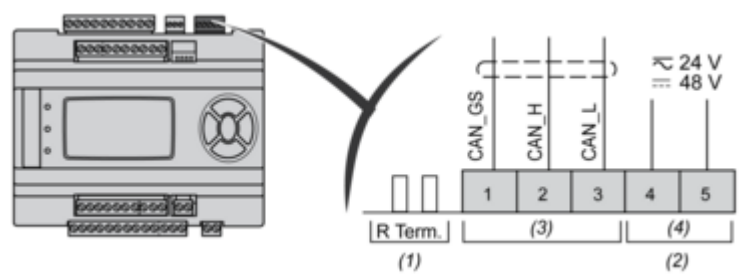


Serial Line Port (RS 485)



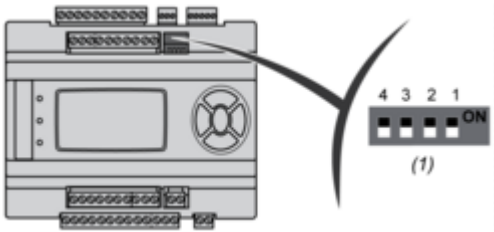
Apply 120 Omega terminal resistance
GS serial GND isolated from G

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