Product datasheet

Specification





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

TM171PDM27R

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: 420 mA or 010 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 05 V (ratiometric)
	current 420 mA
	impedance 01500 hOhm
	impedance 0300 daOhm
	NTC temperature probe - 50110 °C - resolution: 0.1 °C (extended)
	voltage 010 V
	Pt 1000 temperature probe - 200800 °C - resolution: 0.1 °C
	NTC temperature probe - 40150 °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 +/- 20 % AC/DC 48 V +/- 20 % DC	
Power consumption in W	5 W at 2448 V AC/DC	
Realtime clock	Built-in clock at -1055 °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	-1055 °C conforming to UL 60730-1	
Ambient air temperature for storage	-2085 °C	
Relative humidity	1090 % 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



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Guide to assess a product's sustainability >





Transparency RoHS/REACh

Resource performance



Well-being performance



Mercury Free



Rohs Exemption Information

Yes

Certifications & Standards

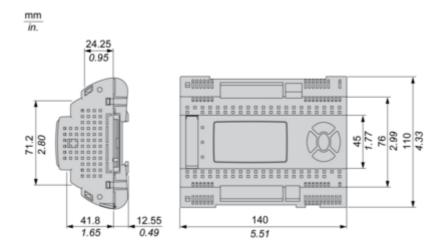
Reach Regulation	REACh Declaration
Eu Rohs Directive	Pro-active compliance (Product out of EU RoHS legal scope)
China Rohs Regulation	China RoHS declaration
Environmental Disclosure	Product Environmental Profile
Weee	The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins
Circularity Profile	End of Life Information

Product datasheet

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Dimensions Drawings

Dimensions

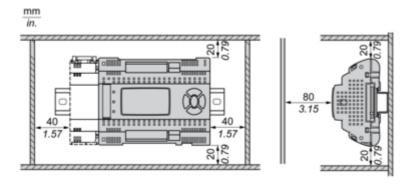


TM171PDM27R

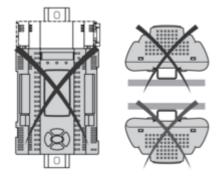
Mounting and Clearance

Mounting and Clearance

Clearance



Misplacement

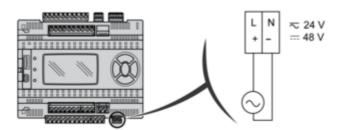


Product datasheet

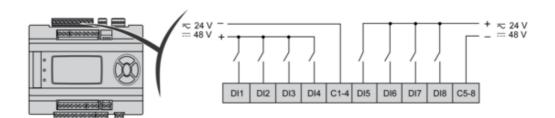
TM171PDM27R

Connections and Schema

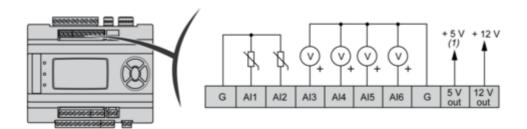
Power Supply



Digital Inputs

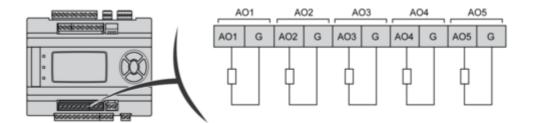


Analog Inputs

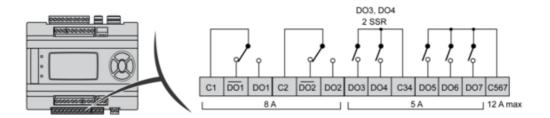


- (1) Max current: 50 mA. **G**: Ground

Analog Outputs

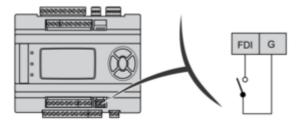


Digital Outputs

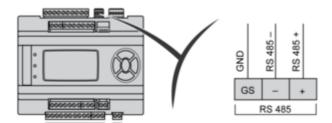


C: common

Fast Digital Input

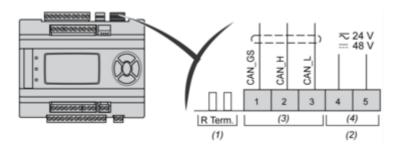


Serial Line Port (RS 485)



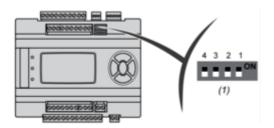
Apply 120 Omega terminal resistance GS serial GND isolated from G

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