

# Product data sheet

Specifications



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

TM171PDM27R

**Product availability: Non-Stock - Not normally stocked in distribution facility**

### 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 relay outputs SPST with same common<br>2 relay outputs SPST with same common<br>2 relay outputs SPDT with independent common |
| Discrete output current      | 8 A relay SPDT<br>5 A relay SPST   |
| Analogue input number        | 2 analog input NTC<br>4 configurable   |
| Analogue output number       | 3 voltage/current 4...20 mA or 0...10 V<br>2 open collector 1 kHz, 12 V, 35 mA   |

### Complementary

|                        |  |
|------------------------|--|
| Number of port         | 1 CAN port - screw terminal block<br>1 USB type A - USB type A female<br>1 USB type mini B - USB device port Mini-B<br>1 RS485 - screw terminal block Modbus serial link)  |
| Input/output number    | 6 analog input<br>5 analog output<br>8 digital input<br>7 digital output<br>1 high-speed counter   |
| Discrete input logic   | Sink or source (positive/negative)   |
| Discrete input voltage | 24 V AC/DC<br>48 V DC  |
| Discrete input current | 2.5 mA   |
| input impedance        | 20 kOhm  |
| Analogue input type    | voltage 0...5 V ratiometric)<br>current 4...20 mA<br>impedance 0...1500 hOhm<br>impedance 0...300 daOhm<br>NTC temperature probe - 50...110 °C 0.1 °C extended)<br>voltage 0...10 V<br>Pt 1000 temperature probe - 200...800 °C 0.1 °C<br>NTC temperature probe - 40...150 °C 0.1 °C |
| Sensor power supply    | 5 V DC 50 mA<br>12 V DC 150 mA   |

Price is "List Price" and may be subject to a trade discount – check with your local distributor or retailer for actual price.

|                           |   |
|---------------------------|---|
| [Us] rated supply voltage | 24 V +/- 20 % AC/DC<br>48 V +/- 20 % DC   |
| Power consumption in W    | 5 W 24...48 V AC/DC   |
| Realtime clock            | Built-in clock at 14...131 °F (-10...55 °C)   |
| Display type              | LCD display - 128 x 64 pixels   |
| Overvoltage category      | II  |
| Local signalling          | for programmable 1 LED (red)<br>for programmable 1 LED (yellow)<br>for programmable 1 LED (green) |
| Mounting Support          | Flush mounting  |
| Width                     | 6.3 in (160 mm)   |
| Height                    | 3.8 in (96 mm)  |
| Depth                     | 0.4 in (10 mm)  |
| Net Weight                | 0.71 lb(US) (0.32 kg)   |

## Environment

|                                       |  |
|---------------------------------------|--|
| Directives                            | 86/188/EEC - physical agents (noise) directive<br>2006/95/EC - low voltage directive |
| Standards                             | EN/IEC 60730   |
| Product Certifications                | CE<br>CSA<br>cURus<br>EAC  |
| Ambient air temperature for operation | 14...131 °F (-10...55 °C) UL 60730-1   |
| Ambient Air Temperature for Storage   | -4...185 °F (-20...85 °C)  |
| Relative humidity                     | 10...90 % non-condensing   |
| IP degree of protection               | IP20   |
| Pollution degree                      | 2  |

## Ordering and shipping details

|                   |               |
|-------------------|---------------|
| Category          | US1PC1222537  |
| Discount Schedule | PC12          |
| GTIN              | 3606480752834 |
| Returnability     | No            |
| Country of origin | IT            |

## Packing Units

|                              |                   |
|------------------------------|-------------------|
| Unit Type of Package 1       | PCE               |
| Number of Units in Package 1 | 1                 |
| Package 1 Height             | 5.12 in (13.0 cm) |
| Package 1 Width              | 3.58 in (9.1 cm)  |
| Package 1 Length             | 7.28 in (18.5 cm) |
| Package 1 Weight             | 17.8 oz (505.0 g) |
| Unit Type of Package 2       | S02               |
| Number of Units in Package 2 | 6                 |

---

|                         |                         |
|-------------------------|-------------------------|
| <b>Package 2 Height</b> | 5.91 in (15.0 cm)       |
| <b>Package 2 Width</b>  | 11.81 in (30.0 cm)      |
| <b>Package 2 Length</b> | 15.75 in (40.0 cm)      |
| <b>Package 2 Weight</b> | 7.516 lb(US) (3.409 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-CO<sub>2</sub> 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 >](#)


[How we assess product sustainability >](#)



Transparency RoHS/REACH

## 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](#)

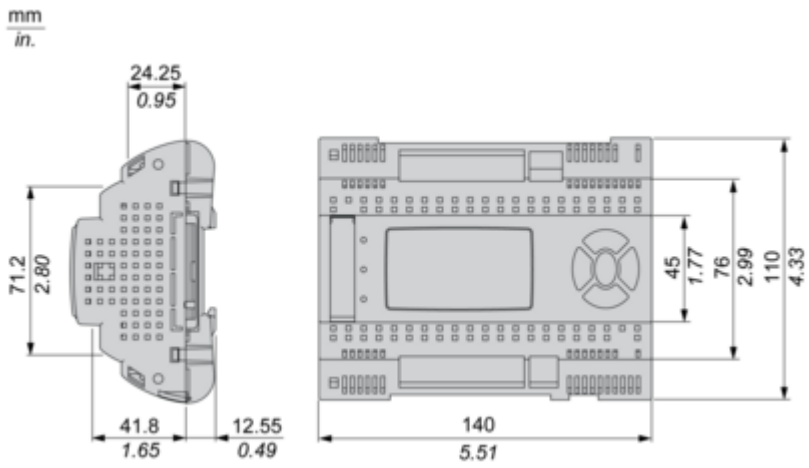
**Circularity Profile** [End of Life Information](#)

**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 [www.P65Warnings.ca.gov](http://www.P65Warnings.ca.gov)

Dimensions Drawings

Dimensions

---

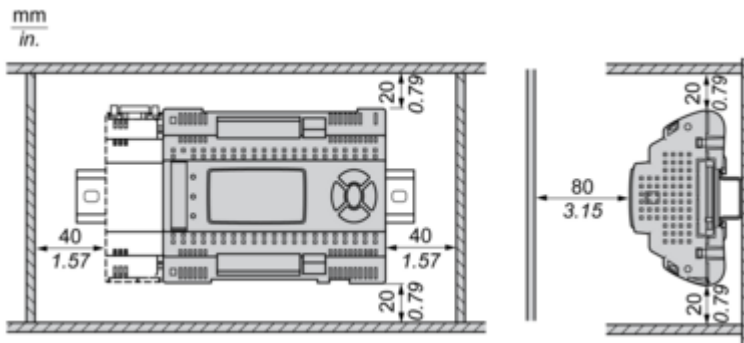


Mounting and Clearance

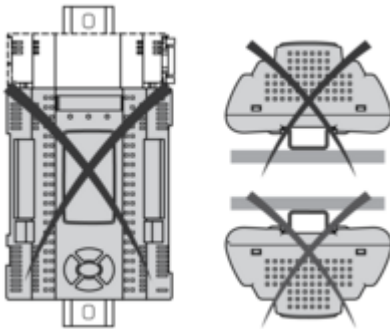
Mounting and Clearance

---

Clearance



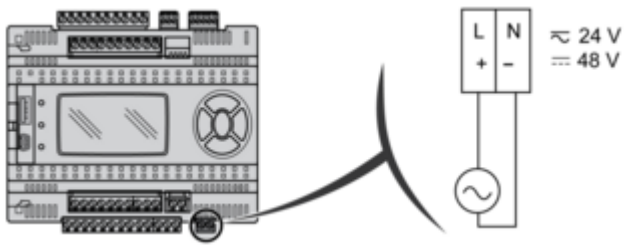
Misplacement



Connections and Schema

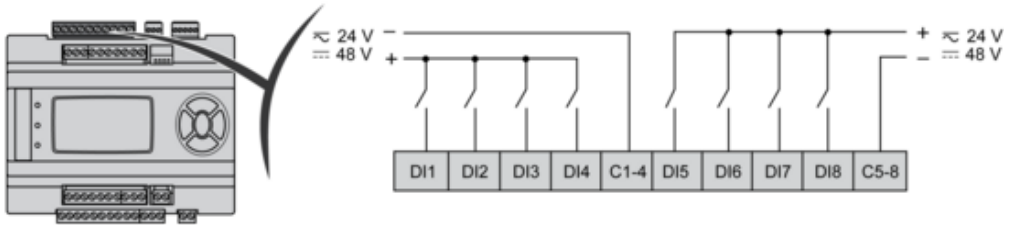
Power Supply

---



Digital Inputs

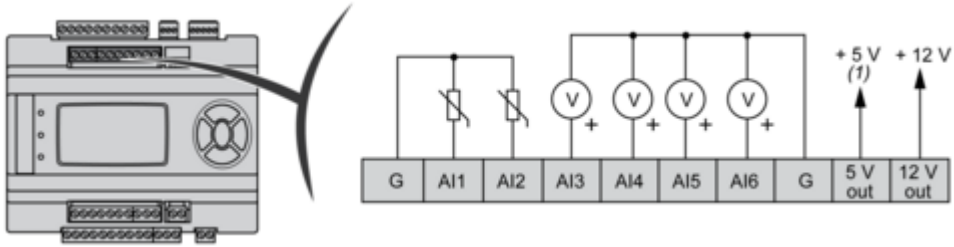
---





Analog Inputs

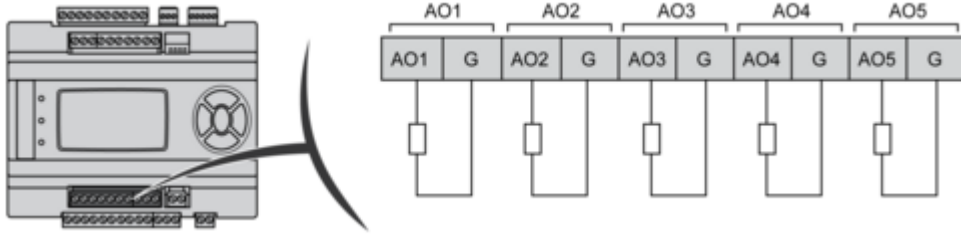
---



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

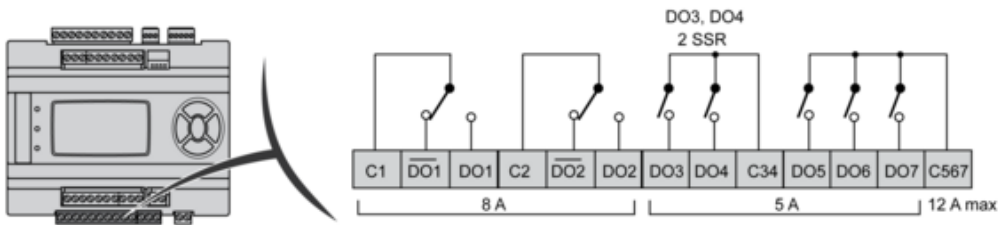
Analog Outputs

---



Digital Outputs

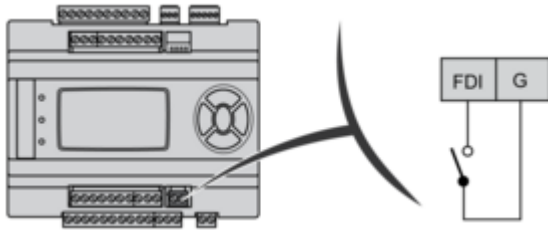
---



C : common

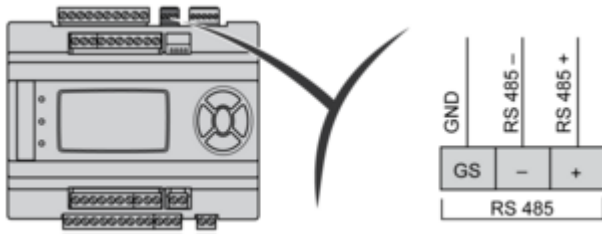
Fast Digital Input

---



Serial Line Port (RS 485)

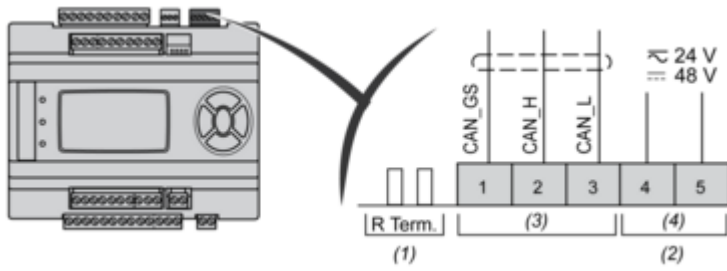
---



Apply 120 Ohm terminal resistance  
GS serial GND isolated from G

CAN Expansion Bus

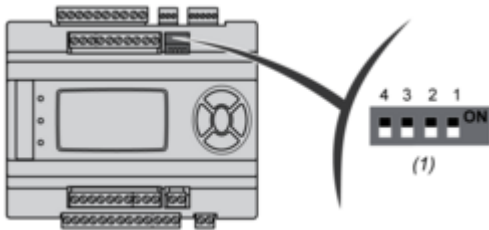
---



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

4 DipSwitches

---



(1) 4 DIP SWITCH  
LOW Address