Product data sheet

Specifications

Controller, Modicon M171/M172/M173, optimized display 22 IO, Modbus

TM171ODM22R

Main

Range of product	Modicon M171/M172
Product or component type	Controller
Product specific application	HVAC and pumping solution
Variant	Programmable
Total inputs/outputs	22
Discrete input number	6
Discrete output number	1 for open collector 3 for relay outputs SPST with same common 2 for relay outputs SPST with independent common
Discrete output current	2 A for relay
Analogue input number	2 configurable 3 analog input NTC
Analogue output number	2 PWM/PPM 3 voltage, range: 0...10 V

Complementary

Number of port	1 LAN expansion bus 1 RS485 - screw terminal block (Modbus serial link)
Input/output number	5 analog output(s) 6 digital input(s) 5 analog input(s) 6 digital output(s)
Discrete input logic	Sink or source (positive/negative)
Contacts usage	Volt-free contacts
Analogue input type	voltage 0...5 V (ratiometric) voltage 0...10 V NTC temperature probe - 50...100 °C - resolution: 0.1 °C current 0...20 mA/4...20 mA voltage 0...1 V
Sensor power supply	12 V DC at 85 mA 5 V DC at 20 mA
[Us] rated supply voltage	12...24 V +/- 10 % AC 24 V +/- 10 % DC
Power consumption in W	4 W
Realtime clock	Built-in clock at -20…55 °C
Display type	Four 7-segment display units
Overvoltage category	II

Local signalling	6 LEDs (red)
	5 LEDs (green)
	7 LEDs (amber) for programmable
Mounting support	Flush mounting
Width	74 mm
Height	32 mm
Depth	76 mm
Product weight	0.164 kg

Environment

Directives	2006/95/EC - low voltage directive
	86/188/EEC - physical agents (noise) directive
Standards	EN/IEC 60730
Product certifications	CSA
	EAC
	CE
	cURus
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	270.000 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	1.899 kg

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

Total lifecycle Carbon footprint	**182**
Environmental Disclosure	**Product Environmental Profile**

Use Better

Materials and Substances

Packaging made with recycled cardboard	**Yes**
Packaging without single use plastic	**Yes**
EU RoHS Directive	**Pro-active compliance (Product out of EU RoHS legal scope)**
REACh Regulation	**REACh Declaration**
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**

Use Again

Repack and remanufacture

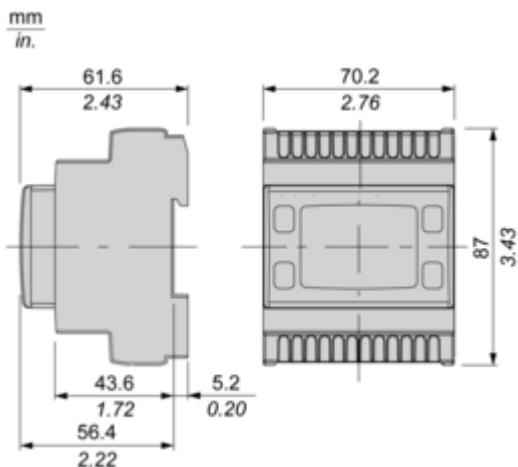|	
End of life manual availability	**End of Life Information**
Take-back	**No**
WEEE Label	**The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins**

Dimensions Drawings

Dimensions
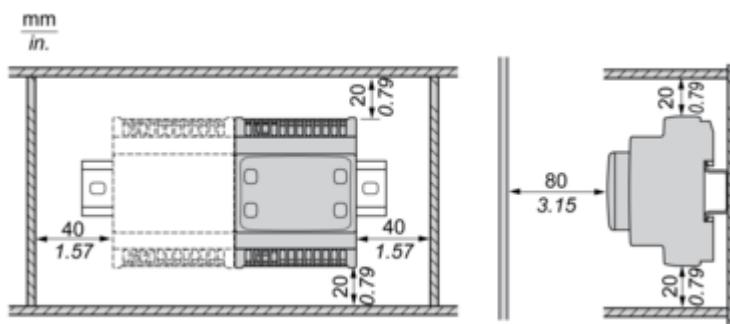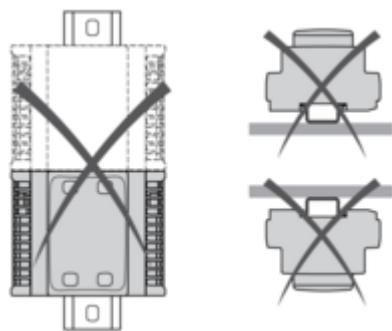
mm
_in._

61.6
2.43

70.2
2.76

87
3.43

43.6
1.72

5.2
0.20
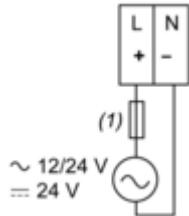
56.4
2.22

Mounting and Clearance

Mounting and Clearance
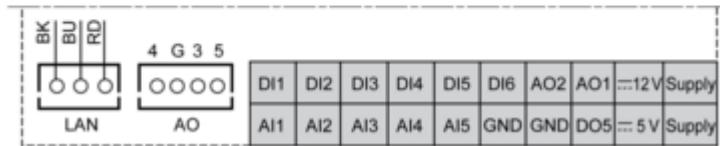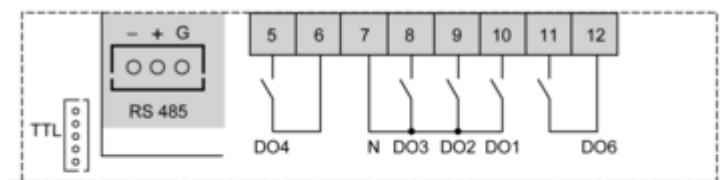
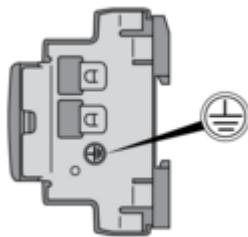### Clearance

Misplacement

Connections and Schema

Power Supply

(1) Type T fuse (Controller: 1.25 A , Expansion: 1 A)

Wiring Diagram

N : Neutral
GND : Ground
BK : Black
BU : Blue
RD : Red
AI : Analogue input
AO : Analogue output
DI : Digital input
DO : Digital output