



Main

Range of product	Modicon M171/M172
Product or component type	Programmable controllers
Product specific application	HVAC
Variant	Programmable
Total inputs/outputs	7
Discrete input number	2
Discrete output number	1For relay outputs SPDT with independent common 2For relay outputs SPST with same common
Discrete output current	3 AFor relay SPST 3 AFor relay SPDT
Analogue input number	2 configurable by pair

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 2 RS485 - screw terminal block (Modbus serial link or BACnet MS/TP) 1 Ethernet - RJ45 (Modbus TCP and BACnet IP with webserver)
Input/Output number	2 digital input(s) 2 analog input(s) 3 digital output(s)
Discrete input logic	Sink or source (positive/negative) up to 2 kHz
Discrete input voltage	24 V AC/DC
Discrete input current	5 mA AC/DC
Input impedance	20 kOhm
Analogue input type	NTC NK103 Beta 3977 temperature probe - 40...137 °C - resolution: 0.1 °C at 10 kOhm (at 25 °C) NTC 103AT-2 Beta 3435 temperature probe - 50...110 °C - resolution: 0.1 °C at 10 kOhm (at 25 °C) Voltage 0...10 V - resolution: 1 digit at > 10 kOhm Voltage 0...5 V - resolution: 1 digit at > 20 kOhm (absolute or ratiometric) Impedance 0...1500 hOhm - resolution: 1 hOhm at 10 kOhm Direct input at 10 kOhm (Dry contact) Impedance 0...300 daOhm - resolution: 1 daOhm at 1500 Ohm

PTC temperature probe - 55...150 °C - resolution: 0.1 °C at 1500 Ohm
 Pt 1000 temperature probe - 200...850 °C - resolution: 0.1 °C at 1500 Ohm
 Current 0...20 mA/4...20 mA - resolution: 1 digit at < 150 Ohm

Measurement accuracy	4...20 mA +/- 1 % of full scale +/- 1 digit 0...10 V +/- 1 % of full scale +/- 1 digit 0...5 V +/- 1 % of full scale +/- 1 digit 0...20 mA 0...4 mA +/- 2 % of full scale +/- 1 digit 0...20 mA 4...20 mA +/- 1 % of full scale +/- 1 digit DaOhm 0...300 daOhm +/- 2.5 daOhm NTC NK103 Beta 3977 -40...+110 °C +/- 1 °C NTC NK103 Beta 3977 110...137 °C +/- 1.9 °C NTC 103AT-2 Beta 3435 - 50...110 °C +/- 1 °C PTC -55...155 °C +/- 1.1 °C Pt 1000 -200...-100 °C +/- 10 °C Pt 1000 -100...-50 °C +/- 2.5 °C Pt 1000 -50...100 °C +/- 1.5 °C Pt 1000 100...400 °C +/- 2.4 °C Pt 1000 400...850 °C +/- 10 °C HOhm 0...750 hOhm +/- 8.5 hOhm HOhm 750 hOhm...1500 hOhm +/- 24 hOhm
Sensor power supply	5 V DC at 40 mA supplied by the controller 24 V DC at 100 mA supplied by the controller
[Us] rated supply voltage	20...38 V DC 24 V +/- 10 % AC
Power consumption in W	10 W at 24 V AC/DC
Realtime clock	Built-in clock <= 30 s/month at -20...60 °C
Display type	Without display
Overvoltage category	II
Local signalling	Programmable: 1 LED (red) Programmable: 1 LED (yellow) Programmable: 1 LED (green) Power: 1 LED (green)
Mounting support	DIN rail Panel mounting with accessory
Width	72 mm
Height	110 mm
Depth	60.5 mm
Product weight	0.175 kg

Environment

Directives	2011/65/EU - RoHS directive 1907/2006/EC - REACH directive 2014/30/EU - electromagnetic compatibility 2014/35/EU - low voltage directive
Standards	EN 60068-2-27 EN 60730-1 EN 60730-2-9 IEC 61000-4-11 IEC 61000-4-2 IEC 61000-4-3 IEC 61000-4-4 IEC 61000-4-5 IEC 61000-4-6 UL 60730-1 UL 60730-2-9 CSA E60730-2-9 CAN/CSA-E60730-1 EN 60068-2-6 Fc
Product certifications	CE CSA cURus RCM EAC
Ambient air temperature for operation	-20...60 °C
Ambient air temperature for storage	-30...70 °C
Relative humidity	5...95 % non-condensing

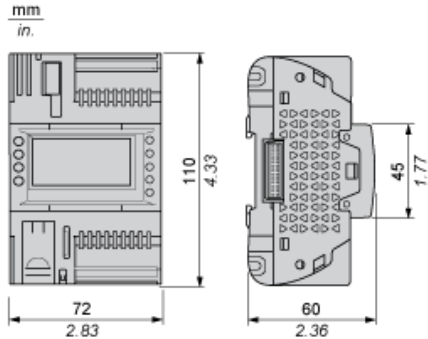
IP degree of protection	IP20
Pollution degree	2

Offer Sustainability

Sustainable offer status	Green Premium product
RoHS (date code: YYWW)	Compliant - since 1806 - Schneider Electric declaration of conformity Schneider Electric declaration of conformity
REACH	Reference not containing SVHC above the threshold Reference not containing SVHC above the threshold
Product environmental profile	Available Product Environmental Profile
Product end of life instructions	Available End of Life Information

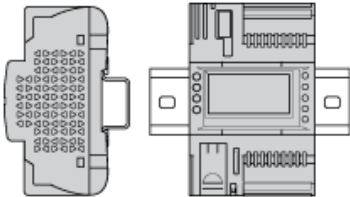
Dimensions Drawings

Dimensions

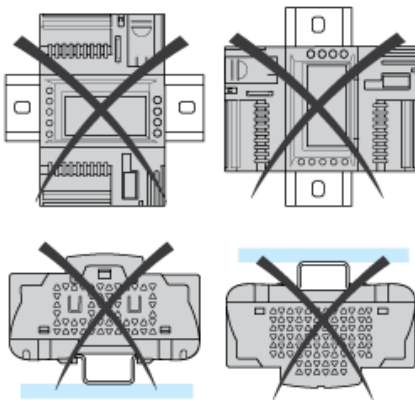


Mounting Positions

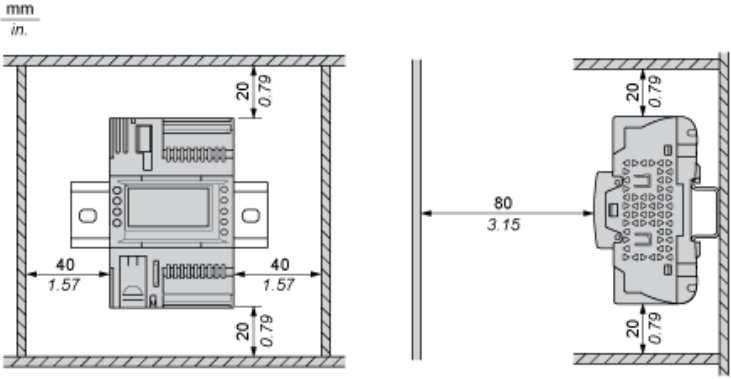
Correct Mounting Position



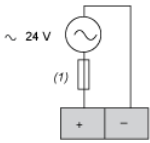
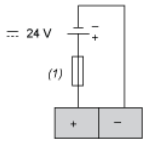
Incorrect Mounting Position



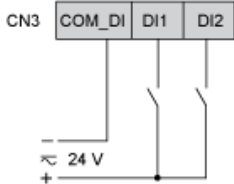
Clearance



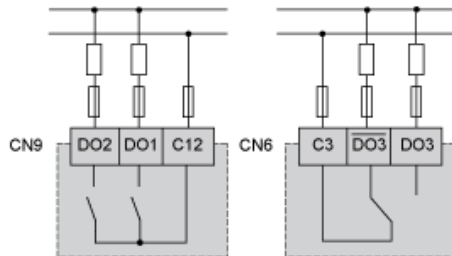
Power Supply

24 Vac	24 Vdc
	

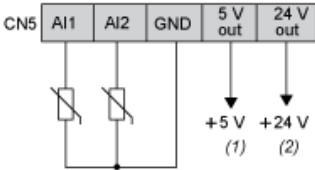
CN3 Fast Digital Inputs



CN9, CN6 High Voltage Relay SPST Digital Output

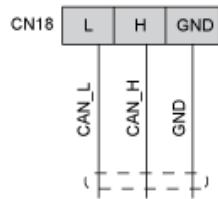


CN5 Analog Inputs

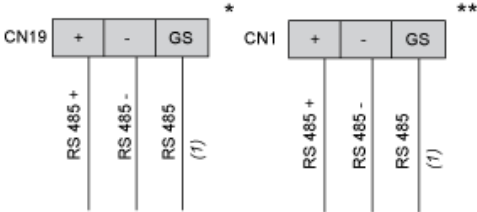


- (1) Max. current : 50 mA.
- (2) Max. current : 100 mA.

CN18 CAN Expansion Bus Port



CN19, CN1 RS485 Bus Port



- (1) Signal reference
- * RS485-1 Modbus SL
- ** RS485-2 Modbus SL or BACnet MS/TP