Product data sheet

Specifications

Controller, Modicon M171/M172/M173, flush mounted, 22 IO, 2 RS485, solid state relay

TM173OFM22S

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

Main

Range of Product	Modicon M171/M172/M173
Product or Component Type	Programmable controllers
Product Specific Application	HVAC and pumping solution
Variant	Programmable
Total inputs/outputs	22
Discrete input number	6
Discrete output number	3 relay outputs SPST with same common 2 solid state, isolated SPST with independent common
Discrete output current	5 A relay SPST 0.5 A solid state, isolated
Analogue input number	6 configurable by pair 1 configurable
Analogue output number	1 voltage/current 0…10 V or 4…20 mA 3 voltage 0...10 V or PWM (10Hz...2 kHz)

Complementary

Number of port	1 USB type C - screw terminal block 2 RS485 1 display port - screw terminal block Modbus serial link) 1 communication module port - TTL connector
Input/output number	6 digital input 5 digital output 7 analog input 4 analog output
Discrete input logic	Sink or source (positive/negative)
Contacts usage	Volt-free contacts
Discrete input voltage	24 V AC/DC
Discrete input current	2.5 mA
Input impedance	20 kOhm
Analogue input type	NTC 103AT-2 Beta 3435 temperature probe - 50...100 °C 0.1 °C 10 kOhm Pt 1000 temperature probe - 50...400 °C 0.1 °C 2 kOhm voltage 0...10 V 0.001 V > 10 kOhm voltage 0...5 V 0.001 V 110 kOhm current 4...20 mA 13 bits 100 Ohm direct input > 10 kOhm

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

Measurement accuracy	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 - 100...-50 °C +/- 5 °C
	Pt 1000 - 50...100 °C +/- 1 °C
	Pt 1000 100…400 °C +/- 5 °C
	0...20 mA 0...4 mA +/- 2 % of full scale +/- 1 digit
	0...20 mA 4...20 mA +/- 1 % of full scale +/- 1 digit
	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
	HOhm 0...1500 hOhm +/- 8.5 hOhm
	DaOhm 0...300 daOhm +/- 2.5 daOhm
Sensor power supply	5 V DC 50 mA supplied by the controller
	24 V DC 125 mA supplied by the controller
[Us] rated supply voltage	24 V +/- 10 % AC
	20...38 V DC
Power consumption in W	10 W 24 V AC/DC
Realtime clock	Built-in clock, clock drift <= 30 s/month at -4…149 °F (-20…65 °C)
Display type	LED
Memory Type	1 MB flash
	380 kB RAM
Overvoltage category	II
Local signalling	1 LED (green) for USB pendrive download status
Mounting Support	Panel mounting with accessory
	DIN rail
Width	3.2 in (80.5 mm)
Height	1.4 in (34.5 mm)
Depth	3.3 in (82.7 mm)
Net Weight	0.2282 lb(US) (0.1035 kg)

Environment

Directives	2014/30/EU - electromagnetic compatibility
	2014/35/EU - low voltage directive
Standards	CAN/CSA-E60730-1
	CSA E60730-2-9
	EN 60068-2-27
	EN 60068-2-6 Fc
	EN 60730-1
	EN 60730-2-9
	UL 60730-1
	UL 60730-2-9
	IEC 61000-4-2
	IEC 61000-4-3
	IEC 61000-4-4
	IEC 61000-4-5
	IEC 61000-4-6
	IEC 61000-4-11
	UL94 (material V0)
Product Certifications	EAC (pending)
	CE
	cURus
	CSA
	RCM (pending)
Ambient air temperature for operation	-4…149 °F (-20…65 °C) UL 60730-1
	EN 60730-1
	EN 60730-2-9
Ambient Air Temperature for Storage	-22…158 °F (-30…70 °C)

Relative humidity	5…95 % non-condensing
IP degree of protection	IP65 conforming to EN/IEC 60730
Pollution degree	2
Operating altitude	0...6561.68 ft (0...2000 m)

Ordering and shipping details

Category	US1PC1222537
Discount Schedule	PC12
GTIN	3606487045588
Returnability	No
Country of origin	IT

Packing Units

Unit Type of Package 1	PCE
Nbr. of units in pkg.	1
Package 1 Height	2.756 in (7.000 cm)
Package 1 Width	3.622 in (9.200 cm)
Package 1 Length	5.197 in (13.200 cm)
Package weight(Lbs)	6.737 oz (191.000 g)
Unit Type of Package 2	S02
Number of Units in Package 2	15
Package 2 Height	5.906 in (15.000 cm)
Package 2 Width	11.811 in (30.000 cm)
Package 2 Length	15.748 in (40.000 cm)
Package 2 Weight	6.956 lb(US) (3.155 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

Carbon footprint (kg CO2 eq, Total Life cycle)	**255**
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)**
SCIP Number	**4549fe6c-7ae3-49e1-a5a8-d6c3d1ca3e52**
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 Longer

⏱ Lifetime extension

Upgradeability	**Yes**

Use Again

↻ Repack and remanufacture

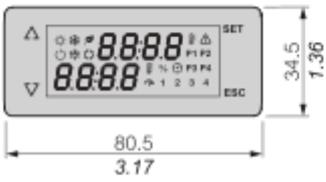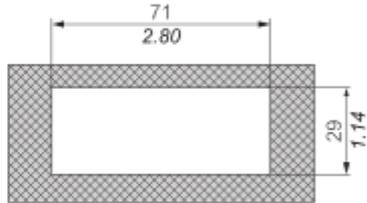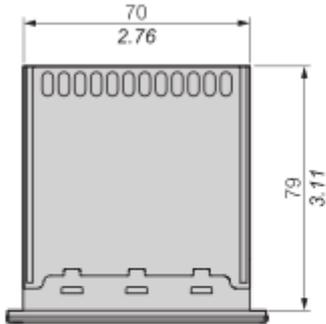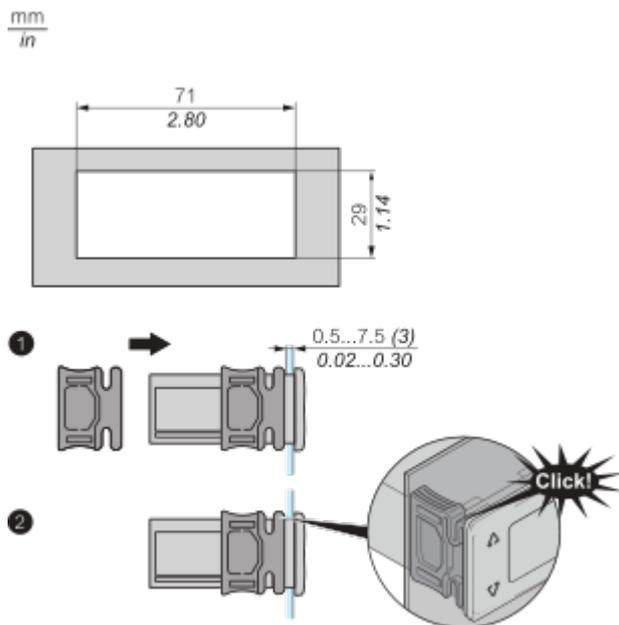|	
Recyclability potential, in %	**0**
Circularity Profile	**End of Life Information**
Take-back	**No**
WEEE Label	**The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins.**

Dimensions Drawings

Dimensions

$\dfrac{mm}{in}$
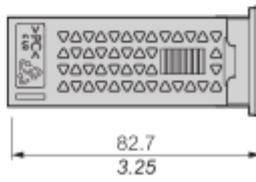
Mounting and Clearance
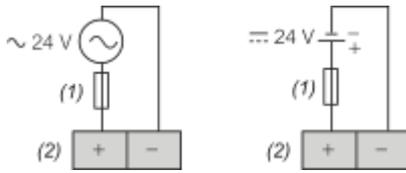
Mounting

(1) Insert the device
(2) Secure it with the special brackets provided
(3) Front panel only (tested in accordance with EN 60529 with a steel sheet 2 mm (0.08 in.) thick ±10 %)
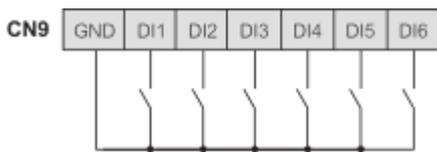
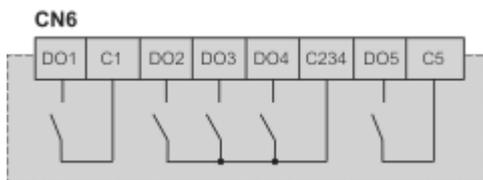Connections and Schema

Wiring

Power supply

(1) Type T fuse 1.25 A
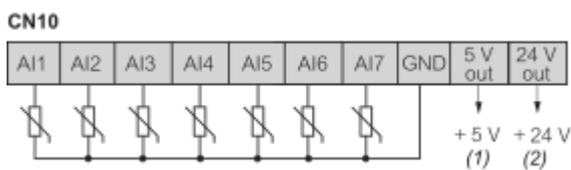**(2)** Power Supply

Digital input
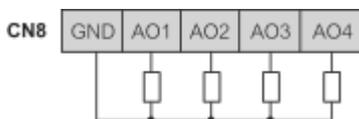

Digital output

DO1, DO5: SSR 0.5 A 240 Vac
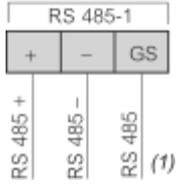**DO2, DO3, DO4:** relay SPST 3 A 250 Vac

Analog inputs

(1) Max. current : 50 mA.
(2) Max. current : 125 mA.

Analog Output

RS 485 port

RS 485-2		
+	−	GS
RS 485 +	RS 485 −	RS 485

(1)

RS 485-1		
+	−	GS
RS 485 +	RS 485 −	RS 485

(1)

(1) Signal Reference

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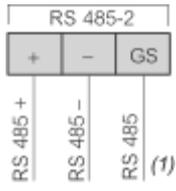
Image of product / Alternate images

Alternative