

TM172PDG28SI

Controller, Modicon M171/M172/M173,
performance display 28 IO, Ethernet, solid state
relay

Local Stock Code: On Stock



Main

Range of product	Modicon M171/M172
Product or component type	Programmable controllers
Product specific application	HVAC control
Variant	Programmable
Number of inputs/outputs	28
Discrete input number	8
Discrete output number	1 for relay outputs SPDT with independent common 3 for relay outputs SPST with same common 2 for relay outputs SPST with same common 2 for solid state, isolated SSR with independent common
Discrete output current	3 A for relay SPDT 3 A for relay SPST 0.5 A for solid state, isolated
Analogue input number	8 configurable by pair
Analogue output number	2 voltage, range: 0...10 V 2 voltage/current, range: 4...20 mA or 0...10 V or PWM (2 kHz)

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	8 digital input(s) 8 analog input(s) 4 analog output(s) 8 digital output(s)
Discrete input logic	Sink or source (positive/negative)
Discrete input voltage	24 V AC/DC
Discrete input current	2.5 MA
Input impedance	10 kOhm

Analogue input type	Impedance 0...1500 hOhm - resolution: 1 hOhm at 10 kOhm Impedance 0...300 daOhm - resolution: 1 daOhm at 2 kOhm NTC 103AT-2 Beta 3435 temperature probe - 50...110 °C - resolution: 0.1 °C at 10 kOhm Voltage 0...10 V - resolution: 1 digit at > 10 kOhm NTC NK103 Beta 3977 temperature probe - 40...137 °C - resolution: 0.1 °C at 10 kOhm (extended) Current 0...20 mA/4...20 mA - resolution: 1 digit at < 150 Ohm PTC temperature probe - 55...150 °C - resolution: 0.1 °C at 2 kOhm Voltage 0...5 V - resolution: 1 digit at > 20 kOhm (absolute or ratiometric) Pt 1000 temperature probe - 200...850 °C - resolution: 0.1 °C at 2 kOhm direct input at > 10 kOhm
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 - 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 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 at 50 mA supplied by the controller 24 V DC at 150 mA supplied by the controller
[Us] rated supply voltage	24 V +/- 10 % AC 20...38 V DC
Power consumption in W	12 W at 24 V AC/DC
Realtime clock	Built-in clock, clock drift <= 30 s/month at -20...65 °C
Display type	Backlit LCD - 128 x 64 pixels
Overvoltage category	II
Local signalling	1 LED (red) for programmable 1 LED (yellow) for programmable 1 LED (green) for programmable 1 LED (green) for power
Mounting support	DIN rail Panel mounting with accessory
Width	144 Mm
Height	110 Mm
Depth	60.5 Mm
Product weight	0.3 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[RETURN]CE[RETURN]cURus[RETURN]CSA[RETURN]RCM
Ambient air temperature for operation	-20...65 °C conforming to UL 60730-1 -20...55 °C horizontal conforming to UL 60730-1
Ambient air temperature for storage	-30...70 °C
Relative humidity	5...95 % non-condensing
IP degree of protection	IP20
Pollution degree	2
Operating altitude	0...2000 m

Ordering and shipping details

Category	US1PC1222537
Discount Schedule	PC12
GTIN	3606489729509
Returnability	Yes
Country of origin	IT

Packing Units

Unit Type of Package 1	PCE
Number of Units in Package 1	1
Package 1 Height	13.500 Cm
Package 1 Width	9.000 Cm
Package 1 Length	19.000 Cm
Package 1 Weight	422.000 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	2.686 Kg

Offer Sustainability

Recyclability potential, in %	0
California proposition 65	WARNING: This product can expose you to chemicals including: Lead and lead compounds, which
Total lifecycle Carbon footprint	536 kg CO2 eq.
Carbon footprint of the manufacturing phase [A1 to A3]	37.15307812969177
Carbon footprint of the manufacturing phase [A1 to A3]	37 kg CO2 eq.
Carbon footprint of the distribution phase [A4]	0.1568506364714183

Carbon footprint of the distribution phase [A4]	0.2 kg CO2 eq.
Carbon footprint of the installation phase [A5]	0.02987256153254852
Carbon footprint of the installation phase [A5]	0 kg CO2 eq.
Carbon footprint of the use phase [B2, B3, B4, B6]	497.3903971336638
Carbon footprint of the use phase [B2, B3, B4, B6]	497 kg CO2 eq.
Mercury free	Yes
Sustainable packaging	No
Carbon footprint of the end-of-life phase [C1 to C4]	1.040791980032118
Carbon footprint of the end-of-life phase [C1 to C4]	1 kg CO2 eq.
Environmental Disclosure	Product Environmental Profile
Total lifecycle Carbon footprint	536
Packaging made with recycled cardboard	Yes
Packaging without single use plastic	No
SCIP Number	2c365b3a-5b0a-48fd-acc7-751c89a723a2
REACH Regulation	Reference contains Substances of Very High Concern above the threshold ↗
EU RoHS Directive	Compliant By Exemption ↗
Updatability	Yes
End of life manual availability	End Of Life Information
Removable battery	Yes
Take-back	No
WEEE Label	The product must be disposed on European Union markets following specific waste collection and never

Contractual warranty

Warranty (in months)	18
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Product Life Status : **Commercialised**