Product data sheet
Characteristics

TM172PBG42R
Controller, Modicon M171/M172/M173, performance, blind, 42 IO, Ethernet, Modbus



Main

Range of product	Modicon M171/M172
Product or component type	Programmable controllers
Product specific application	HVAC and pumping solution
Variant	Programmable
Number of inputs/outputs	42
Discrete input number	12
Discrete output number	5 for relay outputs SPST with same common 2 for relay outputs SPST with independent common 2 for relay outputs SPDT with same common 3 for relay outputs SPST with independent common
Discrete output current	1 A for relay SPDT 3 A for relay SPST
Analogue input number	12 configurable by pair
Analogue output number	4 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	12 analog input(s) 6 analog output(s) 12 digital input(s) 12 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 Impedance 0...300 daOhm Direct input NTC temperature probe - 50...110 °C - resolution: 0.1 °C (extended) Voltage 0...10 V NTC temperature probe - 40...150 °C - resolution: 0.1 °C Current 0...20 mA/4...20 mA PTC temperature probe - 55...150 °C - resolution: 0.1 °C Voltage 0...5 V (absolute or ratiometric) Pt 1000 temperature probe - 200...850 °C - resolution: 0.1 °C
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	15 W at 24 V AC/DC
Realtime clock	Built-in clock at -20…60 °C
Display type	Without display
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	Panel mounting with accessory DIN rail
Width	144 Mm
Height	110 Mm
Depth	60.5 Mm
Net weight	0.385 Kg

Environment

Directives	2006/95/EC - low voltage directive 86/188/EEC - physical agents (noise) directive
Standards	EN/IEC 60730 UL94 (material V0)
Product certifications	EAC[RETURN]cURus[RETURN]CE[RETURN]CSA
Ambient air temperature for operation	-20…60 °C conforming to UL 60730-1 -20…65 °C with derating 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

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	377.000 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	2.582 Kg

Offer Sustainability

Recyclability potential, in %	0
Total lifecycle Carbon footprint	660 kg CO2 eq.
Carbon footprint of the manufacturing phase [A1 to A3]	37.02101742543932
Carbon footprint of the manufacturing phase [A1 to A3]	37 kg CO2 eq.
Carbon footprint of the distribution phase [A4]	0.1562931105123967
Carbon footprint of the distribution phase [A4]	0.2 kg CO2 eq.
Carbon footprint of the installation phase [A5]	0.02976637944179302
Carbon footprint of the installation phase [A5]	0 kg CO2 eq.
Carbon footprint of the use phase [B2, B3, B4, B6]	621.7379964170797
Carbon footprint of the use phase [B2, B3, B4, B6]	622 kg CO2 eq.
Mercury free	Yes
Sustainable packaging	No
Carbon footprint of the end-of-life phase [C1 to C4]	1.037092482472762

Carbon footprint of the end-of-life phase [C1 to C4]	1 kg CO2 eq.
Environmental Disclosure	Product Environmental Profile
Total lifecycle Carbon footprint	660
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
California proposition 65	WARNING: This product can expose you to chemicals including: Lead and lead compounds, wi
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 a

Contractual warranty

Warranty (in months)	18

Product Life Status : End of commerc. announced

TM172PBG42R may be replaced by any of the following products:



TM172PBG42RI

Controller, Modicon M171/M172/M173, performance, blind, 42 IO, Ethernet, isolated

Qty 1

Substitution date: |