Specifications





() Discontinued

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

TM172PBG42R

Discontinued on: Jan 10, 2022

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

Main

Range Of Product	Modicon M171/M172						
Product Or Component Type	Programmable controllers						
Product Specific Application	HVAC and pumping solution						
Variant	Programmable						
Total Inputs/Outputs	2						
Discrete Input Number	12						
Discrete Output Number	5 relay outputs SPST with same common 2 relay outputs SPST with independent common 2 relay outputs SPDT with same common 3 relay outputs SPST with independent common						
Discrete Output Current	1 A relay SPDT 3 A relay SPST						
Analogue Input Number	12 configurable by pair						
Analogue Output Number	4 voltage 010 V 2 voltage/current 420 mA or 010 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 6 analog output 12 digital input 12 digital output						
Discrete Input Logic	C Sink or source (positive/negative)						
iscrete Input Voltage 24 V AC/DC							
Discrete Input Current	2.5 mA						
Input Impedance	10 kOhm						
Analogue Input Type	impedance 01500 hOhm impedance 0300 daOhm direct input NTC temperature probe - 50110 °C 0.1 °C extended) voltage 010 V NTC temperature probe - 40150 °C 0.1 °C current 020 mA/420 mA PTC temperature probe - 55150 °C 0.1 °C voltage 05 V absolute or ratiometric) Pt 1000 temperature probe - 200850 °C 0.1 °C						

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

Sensor Power Supply	5 V DC 50 mA supplied by the controller 24 V DC 150 mA supplied by the controller						
[Us] Rated Supply Voltage	24 V +/- 10 % AC 2038 V DC						
Power Consumption In W	15 W 24 V AC/DC						
Realtime Clock	Built-in clock at -4140 °F (-2060 °C)						
Display Type	Without Display						
Overvoltage Category	II						
Local Signalling	for programmable 1 LED (red) for programmable 1 LED (yellow) for programmable 1 LED (green) for power 1 LED (green)						
Mounting Support	Panel mounting with accessory DIN rail						
Width	5.67 in (144 mm)						
Height	4.33 in (110 mm)						
Depth	2.38 in (60.5 mm)						
Net Weight	0.85 lb(US) (0.385 kg)						

Environment

2006/95/EC - low voltage directive 86/188/EEC - physical agents (noise) directive					
EN/IEC 60730 UL94 (material V0)					
EAC cURus CE CSA					
-4140 °F (-2060 °C) UL 60730-1 -4149 °F (-2065 °C) with derating UL 60730-1					
-22158 °F (-3070 °C)					
595 % non-condensing					
IP20					
2					
06561.68 ft (02000 m)					

Ordering and shipping details

Category	US1PC1222537						
Discount Schedule	PC12						
Gtin	3606480894879						
Returnability	No						
Country Of Origin	IT						

Packing Units

Unit Type Of Package 1	PCE
Number Of Units In Package 1	1
Package 1 Height	5.12 in (13.000 cm)

Package 1 Width	3.58 in (9.100 cm)					
Package 1 Length	7.28 in (18.500 cm)					
Package 1 Weight	14.78 oz (419.000 g)					
Unit Type Of Package 2	S02					
Number Of Units In Package 2	6					
Package 2 Height	5.91 in (15.000 cm)					
Package 2 Width	11.81 in (30.000 cm)					
Package 2 Length	15.75 in (40.000 cm)					
Package 2 Weight	5.97 lb(US) (2.710 kg)					

Sustainability Screen Premium

Green PremiumTM label is Schneider Electric's commitment to delivering products with best-inclass environmental performance. Green Premium promises compliance with the latest regulations, transparency on environmental impacts, as well as circular and low-CO₂ products.

Guide to assessing product sustainability is a white paper that clarifies global eco-label standards and how to interpret environmental declarations.

Learn more about Green Premium >

Guide to assess a product's sustainability >



Transparency RoHS/REACh

Resource performance

Upgradeable Through Digital Modules And Upgraded Components

Well-being performance



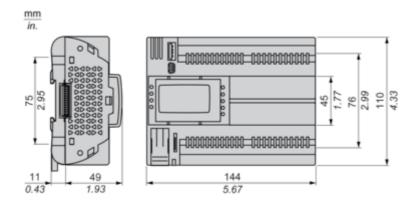
Rohs Exemption Information Yes

Certifications & Standards

Reach Regulation	REACh Declaration						
Eu Rohs Directive	Pro-active compliance (Product out of EU RoHS legal scope)						
China Rohs Regulation	China RoHS declaration						
Environmental Disclosure	Product Environmental Profile						
Weee	The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins.						
Circularity Profile	End of Life Information						
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						

Dimensions Drawings

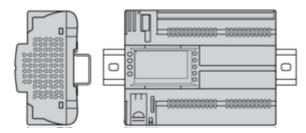
Dimensions



Mounting and Clearance

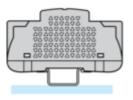
Mounting Positions

Correct Mounting Position

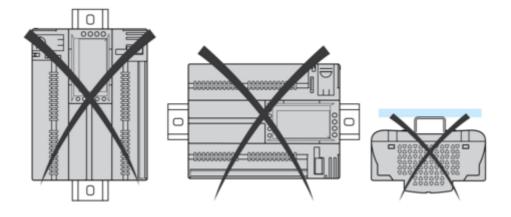


Acceptable Mounting Position

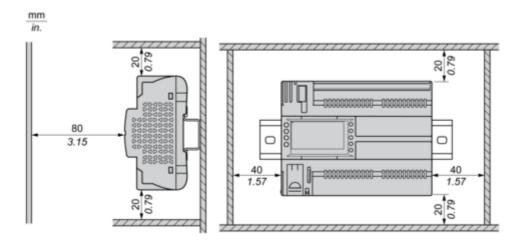
Controller can be mounted horizontally upward with a temperature derating (maximum ambient temperature: 60 $^\circ C$ (140 $^\circ F)).$



Incorrect Mounting Position

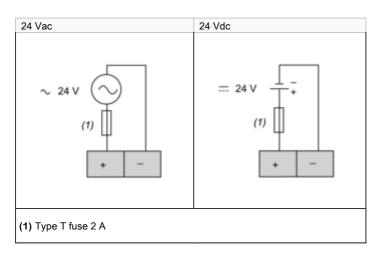


Clearance

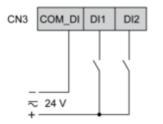


Connections and Schema

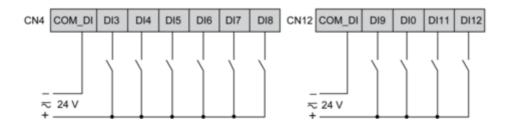
Power Supply

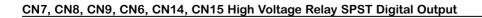


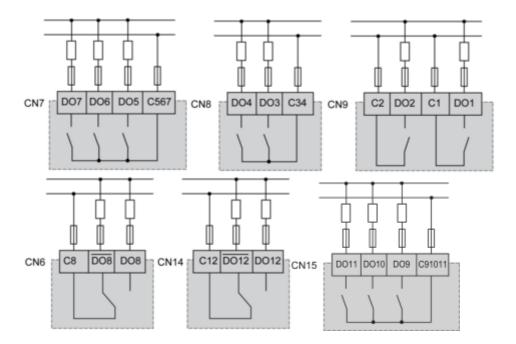
CN3 Fast Digital Inputs



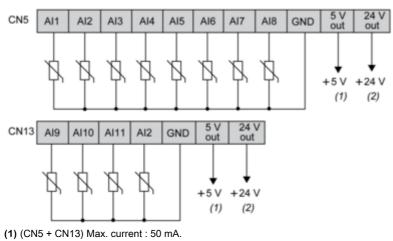
CN4, CN12 Digital Inputs





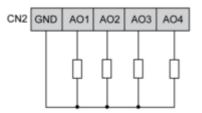


CN5, CN13 Analog Inputs

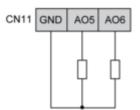


(2) (CN5 + CN13) Max. current : 150 mA.

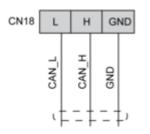
CN2, CN11 Analog Outputs



AO3, AO4 can be used also as PWM generator, up to 2kHz.



CN18 CAN Expansion Bus Port



CN19, CN1 CAN Expansion Bus Port

CN19	+		G	ND	CN1	+	-		GND	
	RS 485 +	RS 485 -	GND		-	RS 485 +	RS 485 -		GND	