



Main

Range of product	Modicon M221
Product or component type	Analogue input cartridge
Product compatibility	Modicon M221C
Analogue input number	2

Complementary

Analogue input type	Thermocouple, input range: - 200...1000 °C thermocouple J Thermocouple, input range: - 200...1300 °C thermocouple K Thermocouple, input range: 0...1760 °C thermocouple R Thermocouple, input range: 0...1760 °C thermocouple S Thermocouple, input range: 0...1820 °C thermocouple B Thermocouple, input range: - 200...400 °C thermocouple T Thermocouple, input range: - 200...1300 °C thermocouple N Thermocouple, input range: - 200...800 °C thermocouple E Thermocouple, input range: 0...2315 °C thermocouple C Temperature probe, input range: - 60...180 °C (Ni 100/Ni 1000) Temperature probe, input range: - 200...850 °C (Pt 100) Temperature probe, input range: - 200...600 °C (Pt 1000)
Analogue input resolution	14 bits
LSB value	0.1 °C
Sampling duration	125 ms (thermocouple) 250 ms (temperature probe)
Absolute accuracy error	+/- 0.1 % of full scale Pt 100/Pt 1000, Ni 100/ Ni 1000 25 °C +/- 0.4 % of full scale thermocouple K - 200...0 °C 25 °C +/- 0.1 % of full scale thermocouple K 0...1300 °C 25 °C +/- 0.4 % of full scale thermocouple J - 200...0 °C 25 °C +/- 0.1 % of full scale thermocouple J 0...1000 °C 25 °C +/- 0.4 % of full scale thermocouple E - 200...0 °C 25 °C +/- 0.1 % of full scale thermocouple E 0...800 °C 25 °C +/- 0.4 % of full scale thermocouple T - 200...0 °C 25 °C +/- 0.1 % of full scale thermocouple T 0...400 °C 25 °C +/- 0.4 % of full scale thermocouple N - 200...0 °C 25 °C +/- 0.1 % of full scale thermocouple N 0...1300 °C 25 °C +/- 6 °C thermocouple R, S 0...200 °C 25 °C +/- 0.1 % of full scale thermocouple R, S 200...1760 °C 25 °C +/- 0.1 % of full scale thermocouple C 0...2315 °C 25 °C
Temperature drift	+/- 0.02 %FS/°C
Repeat accuracy	+/- 0.5 %FS
Non-linearity	+/- 0.01 %FS
Cross talk	<= 1 LSB
Type of cable	Twisted shielded pairs cable
Electrical connection	2 screw terminal blocks (pitch 3.81 mm) 1.5 mm ² 3 for inputs
Cable distance between devices	Twisted shielded pairs cable: 30 m for input
Insulation	Non-insulated between analogue input and internal logic
Height	1.61 in (41 mm)
Depth	0.59 in (15 mm)
Width	1.38 in (35 mm)
Product weight	0.03 lb(US) (0.015 kg)
Input impedance	>= 1 MOhm

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Environment

immunity to microbreaks	10 ms
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Reference not containing SVHC above the threshold	Reference not containing SVHC above the threshold
Available	Available
Available	Available
WARNING: This product can expose you to chemicals including:	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.	Lead and lead compounds, which is known to the State of California to cause cancer and birth defects or other reproductive harm.
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