



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	Temperature probe, input range: - 200...600 °C (Pt 1000) Temperature probe, input range: - 200...850 °C (Pt 100) Temperature probe, input range: - 60...180 °C (Ni 100/Ni 1000) Thermocouple, input range: 0...2315 °C for thermocouple C Thermocouple, input range: - 200...800 °C for thermocouple E Thermocouple, input range: - 200...1300 °C for thermocouple N Thermocouple, input range: - 200...400 °C for thermocouple T Thermocouple, input range: 0...1820 °C for thermocouple B Thermocouple, input range: 0...1760 °C for thermocouple S Thermocouple, input range: 0...1760 °C for thermocouple R Thermocouple, input range: - 200...1300 °C for thermocouple K Thermocouple, input range: - 200...1000 °C for thermocouple J
Analogue input resolution	14 bits
Input impedance	≥ 1 MOhm
LSB value	0.1 °C
Sampling duration	250 ms (temperature probe) 125 ms (thermocouple)
Absolute accuracy error	+/- 0.1 % of full scale (Pt 100/Pt 1000, Ni 100/ Ni 1000) at 25 °C +/- 0.4 % of full scale for thermocouple N at ≤ 0 °C +/- 0.4 % of full scale for thermocouple E at ≤ 0 °C +/- 0.4 % of full scale for thermocouple T at ≤ 0 °C +/- 0.4 % of full scale for thermocouple K at ≤ 0 °C +/- 0.4 % of full scale for thermocouple J at ≤ 0 °C +/- 0.1 % of full scale for thermocouple N at 25 °C +/- 0.1 % of full scale for thermocouple E at 25 °C +/- 0.1 % of full scale for thermocouple T at 25 °C +/- 0.1 % of full scale for thermocouple K at 25 °C +/- 0.1 % of full scale for thermocouple J at 25 °C +/- 0.1 % of full scale for thermocouple C at 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 length	≤ 30 m twisted shielded pairs cable (input)
Insulation	Non-insulated between analogue input and internal logic
Height	41 mm
Depth	15 mm
Width	35 mm
Product weight	0.015 kg

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Environment

Immunity to microbreaks

10 ms
