

## Main

Range of product	Twido
Product or component type	Analogue I/O module
Analogue input number	2
Analogue input type	Temperature probe -100...+500 °C temperature probe: Pt 100 3 wires differential Thermocouple -200...+760 °C thermocouple J differential Thermocouple -270...+1370 °C thermocouple K differential Thermocouple -270...+400 °C thermocouple T differential
Analogue input resolution	12 bits
Analogue output number	1
Analogue output type	Current: 4...20 mA Voltage: 0...10 V
Analogue output resolution	12 bits
I/O connection	Removable screw terminal block
Cross talk	<= 2 LSB

## Complementary

Input level	Low level
LSB value	0.1 °C , analogue input type: thermocouple , thermocouple T 0.15 °K , analogue input type: temperature probe 0.3 °C , analogue input type: thermocouple , thermocouple J 0.325 °C , analogue input type: thermocouple , thermocouple K 2.5 mV voltage 4.8 µA current
Input impedance	≤ 250 Ohm thermocouple source ≤ 5 Ohm temperature probe source
Load type	Resistive
Load impedance ohmic	≤ 300 Ohm of current source ≥ 2000 Ohm of voltage source
Stabilisation time	20 ms
Conversion time	20 ms + 1 controller cycle time
Sampling duration	≤ 50 ms
Sampling repetition time	50 ms
Acquisition period	500 ms + 1 controller cycle time
Measurement error	0.2 % +/- 4 °C of full scale thermocouple J at 25 °C 0.2 % +/- 4 °C of full scale thermocouple K at 25 °C 0.2 % +/- 4 °C of full scale thermocouple T at 25 °C +/- 0.2 % of full scale Pt at 25 °C +/- 0.2 % of full scale 0...10 V at 25 °C +/- 0.2 % of full scale 4...20 mA at 25 °C
Temperature coefficient	+/-0.006 %FS/°C , analogue input type: thermocouple +/-0.006 %FS/°C , analogue input type: temperature probe +/-0.015 %FS/°C , analogue output type: voltage +/-0.015 %FS/°C , analogue output type: current
Repeat accuracy	+/-0.5 %FS
Non-linearity	+/- 0.2 %FS , analogue input type: thermocouple +/- 0.2 %FS , analogue input type: temperature probe +/- 0.2 %FS , analogue output type: voltage +/- 0.2 %FS , analogue output type: current

The information provided in this documentation contains general descriptions and/or technical characteristics of the performance of the products contained herein. This documentation is not intended as a substitute for and is not to be used for determining suitability or reliability of these products for specific user applications. It is the duty of any such user or integrator to perform the appropriate and complete risk analysis, evaluation and testing of the products with respect to the relevant specific application or use thereof. Neither Schneider Electric Industries SAS nor any of its affiliates or subsidiaries shall be responsible or liable for misuse of the information contained herein.

Output error	+/- 1 %FS
Output ripple	<= 1 LSB
Total error	+/- 1 %FS , analogue input type: thermocouple +/- 1 %FS , analogue input type: temperature probe +/- 1 %FS , analogue output type: voltage +/- 1 %FS , analogue output type: current
Common mode rejection	-50 dB
Type of cable	Shielded twisted pair
Insulation between channel and internal logic	Photocoupler
Supply	External supply
[Us] rated supply voltage	24 V DC
Supply voltage limits	20.4...28.8 V
Current consumption	50 mA at 5 V DC 60 mA at 24 V DC
Marking	CE
Product weight	0.085 kg

## Environment

Dielectric strength	500 V between the I/O and the supply circuit
Product certifications	CSA UL
IP degree of protection	IP20
Ambient air temperature for operation	0...55 °C
Ambient air temperature for storage	-25...70 °C
RoHS EUR conformity date	0630
RoHS EUR status	Compliant