

Product data sheet

Specifications



analog input output module Modicon Quantum - 4 I - 2 O

140AMM09000C

-  **Discontinued on:** May 11, 2021
-  **To be end-of-service on:** Dec 31, 2029

 **Discontinued**

Main

Range Of Product	Modicon Quantum automation platform
Product Or Component Type	Input/output analog module
Type Of Filter	Single pole low pass - 3 dB at 21 Hz +/- 20 % input circuit

Complementary

I/O Modularity	6 channels
Addressing Requirement	2 output words 5 input words
Analogue Input Number	4
Analogue Input Type	Bipolar current +/- 20 mA 15 bits DC Bipolar voltage +/- 10 V 16 bits DC Bipolar voltage +/- 5 V 15 bits DC Unipolar current 0...20 mA 15 bits DC Unipolar offset current 4...20 mA 14 bits DC Unipolar offset voltage 1...5 V 14 bits DC Unipolar voltage 0...10 V 16 bits DC Unipolar voltage 0...5 V 15 bits DC
Absolute Maximum Input	+/- 25 mA current +/- 50 V voltage
Input Impedance	> 10 MOhm voltage > 250 Ohm current
Offset	+/- 0.0014 % of full scale maximum/°C 0...60 °C input circuit
Gain Shift	+/- 0.002 of full scale maximum 0...60 °C input circuit
Common Mode Rejection	> 80 dB 50/60 Hz input circuit
Analogue Output Number	2
Analogue Output Range	4...20 mA
Analogue Output Resolution	12 bits
Loop Voltage	0...60 V DC with external resistance output circuit 7...30 V DC output circuit
Maximum Voltage Drop	<30 V DC 20 mA
Setting Time	900 µs to +/- 0.1 % of the final value output circuit
External Power Requirement	7...30 V output circuit
Absolute Accuracy Error	+/- 0.004 % of full scale 32...140 °F (0...60 °C) output circuit +/- 0.007 %/°C of full scale maximum 32...140 °F (0...60 °C) output circuit +/- 0.03 % 77 °F (25 °C) input circuit +/- 0.05 % of full scale maximum 77 °F (25 °C) input circuit +/- 0.20 % of full scale 77 °F (25 °C) output circuit

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

Disclaimer: 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

Linearity	2.4 % over and under range voltage 2.4 % over range, and - 9.6 % under range current Monotonic +/- 1 LSB input Monotonic +/- 1 LSB output
Update Time	15 ms output circuit 320 ms input circuit
Fault Type	Open circuit input/output circuit Overtaking scale (unipolar) input circuit Status byte output circuit
Isolation Between Channels	500 V AC for 1 minute 750 V DC for 1 minute
Isolation Between Channels And Bus	500 V AC for 1 minute 750 V DC for 1 minute
Isolation Between Input Channel And Output Channel	500 V for 1 minute 750 V for 1 minute
Marking	CE
Local Signalling	for bus communication is present (Active) 1 LED (green) for external fault 1 LED (red) for channel is turned on 6 LEDs (green) for channel fault 6 LEDs (red)
Bus Current Requirement	350 mA
Module Format	Standard
Net Weight	0.66 lb(US) (0.3 kg)

Environment

Protective Treatment	Conformal coating Humiseal 1A33
Product Certifications	FM Class 1 Division 2 C-Tick.1
Standards	UL 508 CSA C22.2 No 142
Resistance To Electromagnetic Fields	9.14 V/m (10 V/m) 80...2000 MHz IEC 801-3
Ambient Air Temperature For Operation	32...140 °F (0...60 °C)
Ambient Air Temperature For Storage	-40...185 °F (-40...85 °C)
Relative Humidity	95 % without condensation
Operating Altitude	<= 16404.2 ft (5000 m)

Ordering and shipping details

Category	18155-QUANTUM I/O & POWER SUPPLIES
Discount Schedule	PC21
Gtin	3595861136199
Returnability	No
Country Of Origin	FR

Packing Units

Unit Type Of Package 1	PCE
Number Of Units In Package 1	1
Package 1 Height	1.97 in (5.0 cm)
Package 1 Width	6.50 in (16.5 cm)

Package 1 Length	12.40 in (31.5 cm)
Package 1 Weight	16.79 oz (476.0 g)
Unit Type Of Package 2	S02
Number Of Units In Package 2	2
Package 2 Height	5.91 in (15.0 cm)
Package 2 Width	11.81 in (30.0 cm)
Package 2 Length	15.75 in (40.0 cm)
Package 2 Weight	33.58 oz (952.0 g)

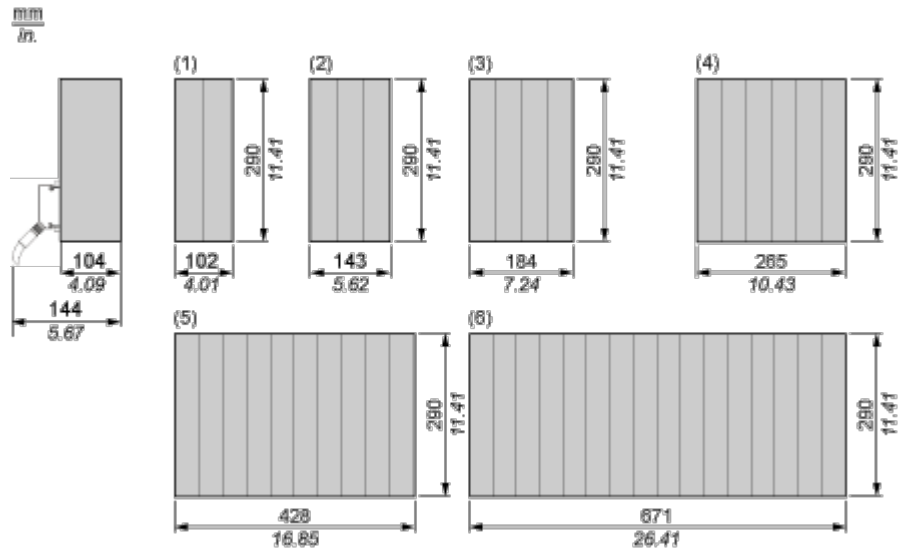
Contractual warranty

Warranty	18 months
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Dimensions Drawings

Racks for Modules Mounting

Dimensions of Modules and Racks

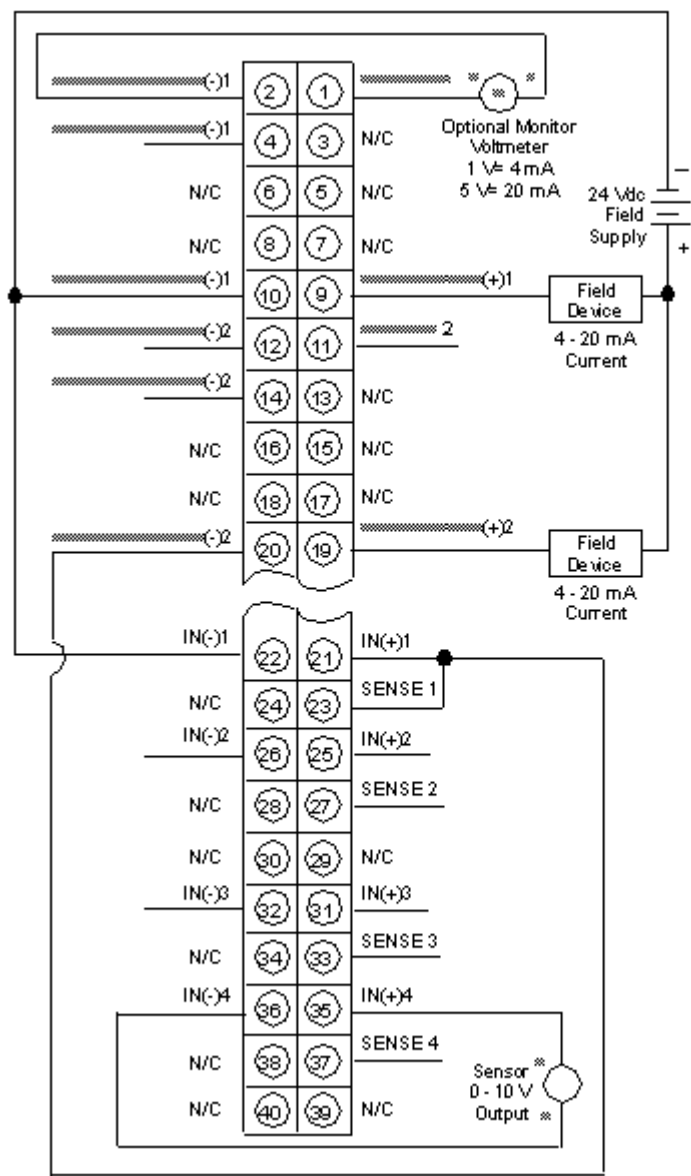


- (1) 2 slots
- (2) 3 slots
- (3) 4 slots
- (4) 6 slots
- (5) 10 slots
- (6) 16 slots

Connections and Schema

Analog Input/Output Module

Wiring Diagram



N/C Not Connected

- Jumpers are required between IN (+) and SENSE terminals for all current input ranges.
- Pins 1 ... 20 are outputs.
Pins 21 ... 40 are inputs.
- For Inputs, the maximum channel to channel working voltage cannot exceed 30 Vdc.