## Product data sheet Characteristics

# 140AMM09000

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





### 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

Complementary			
I/O modularity	6 channels		
Addressing requirement	2 output words		
Analysis in the set	5 input words		
Analogue input number	4		
Analogue input type	Bipolar current +/- 20 mA - resolution: 15 bits DC Bipolar voltage +/- 10 V - resolution: 16 bits DC Bipolar voltage +/- 5 V - resolution: 15 bits DC Unipolar current 020 mA - resolution: 15 bits DC Unipolar offset current 420 mA - resolution: 14 bits DC Unipolar offset voltage 15 V - resolution: 14 bits DC Unipolar voltage 010 V - resolution: 16 bits DC Unipolar voltage 05 V - resolution: 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 060 °C input circuit		
Gain shift	+/- 0.002 of full scale maximum 060 °C input circuit		
Common mode rejection	> 80 dB 50/60 Hz input circuit		
Analogue output number	2		
Analogue output range	420 mA		
Analogue output resolution	12 bits		
Loop voltage	<ul><li>060 V DC with external resistance output circuit</li><li>730 V DC output circuit</li></ul>		
Maximum voltage drop	<30 V DC at 20 mA		
Setting time	900 $\mu s$ to +/- 0.1 % of the final value output circuit		
External power requirement	730 V output circuit		
Absolute accuracy error	+/- 0.004 % of full scale at 060 °C output circuit +/- 0.007 %/°C of full scale maximum at 060 °C output circuit +/- 0.03 % at 25 °C input circuit +/- 0.05 % of full scale maximum at 25 °C input circuit +/- 0.20 % of full scale at 25 °C output circuit		
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	2.4 % over range, and - 9.6 % under range current Monotonic +/- 1 LSB input	
Update time	15 Ms output circuit 320 ms input circuit		

Fault type	Open circuit input/output circuit Overtacking 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	1 LED (green) for bus communication is present (Active) 1 LED (red) for external fault 6 LEDs (green) for channel is turned on 6 LEDs (red) for channel fault	
Bus current requirement	350 mA	
Module format	Standard	
Net weight	0.3 kg	

### **Environment**

LITTIONICIT		
Product certifications	FM Class 1 Division 2[RETURN]C-Tick.1	
Standards	UL 508 CSA C22.2 No 142	
Resistance to electromagnetic fields	10 V/m 802000 MHz conforming to IEC 801-3	
Ambient air temperature for operation	060 °C	
Ambient air temperature for storage	-4085 °C	
Relative humidity	95 % without condensation	
Operating altitude	<= 5000 m	

# Packing Units

PCE
1
5.0 cm
16.4 cm
31.0 cm
461.0 g

## Offer Sustainability

Sustainable offer status	Green Premium product	
REACh free of SVHC	Yes	
EU RoHS Directive	Pro-active compliance (Product out of EU RoHS legal scope) EU RoHS  Declaration	
Mercury free	Yes	
China RoHS Regulation	<sup>™</sup> China RoHS Declaration	
RoHS exemption information	₫Yes	
Circularity Profile	<sup>™</sup> End Of Life Information	
WEEE	The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins	

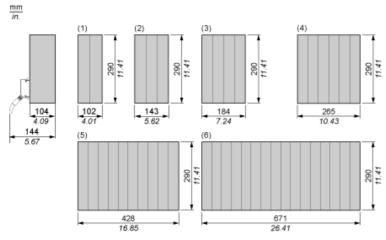
## Contractual warranty

Warranty 18 months	
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# 140AMM09000

## Racks for Modules Mounting

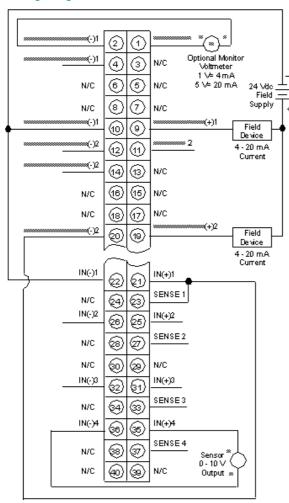
## Dimensions of Modules and Racks



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

## 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.