

Product data sheet

Specifications



analog input module Modicon Quantum - 8 I multirange

140AVI03000

! To be discontinued on: 31 December 2022

! To be end-of-service on: 31 December 2030

! To be discontinued

Product availability : Stock - Normally stocked in distribution facility

Main

Range of Product	Modicon Quantum automation platform
Product or Component Type	Analogue input module
Type of filter	Single pole low pass - 3 dB at 847 Hz +/- 20 %

Complementary

Analogue input number	8
Input type	Differential
Addressing requirement	9 input words
Analogue input type	Bipolar current 20 mA Bipolar voltage +/- 10 V Bipolar voltage +/- 5 V Unipolar current 0...20 mA Unipolar voltage 0...10 V Unipolar voltage 0...5 V
Analogue input resolution	16 bits +/- 10 V 16 bits +/- 5 V 16 bits 0...10 V 16 bits 0...20 mA 16 bits 0...5 V 16 bits 20 mA
Linear measuring range	(input range) x 1.024 mA (input range) x 1.024 V
Absolute maximum input	50 V DC 25 mA
Input impedance	> 20 Ohm voltage 250 MOhm +/- 0.03 %
Absolute accuracy error	+/- 0.03 % +/- 0.05 % of full scale maximum
Linearity error	+/- 0.008 %
Accuracy drift according to temperature	+/- 0.0015 % of full scale /°C <= 0.004 % of full scale /°C
Common mode rejection	> - 80 dB 60 Hz
Isolation between channels and bus	500 Vrms AC 60 s 750 V DC
Isolation between channels	135 Vrms AC 200 V DC
Update time	10 ms
Fault type	Broken wire 4...20 mA

Overtacking scale 1...5 V

Marking	CE
Local signalling	for bus communication is present (Active) 1 LED (green) for external fault 1 LED (red) for channel is turned on 8 LEDs (green) for channel fault 8 LEDs (red)
Bus current requirement	280 mA
Power dissipation in W	2.2 W
Module format	Standard
Net weight	0.66 lb(US) (0.3 kg)

Environment

Standards	UL 508 CSA C22.2 No 142
Product certifications	FM Class 1 Division 2 cUL
Resistance to electrostatic discharge	4 kV contact IEC 801-2 8 kV on air IEC 801-2
Resistance to electromagnetic fields	9.14 V/m (10 V/m) 80...1000 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	3595861126619
Nbr. of units in pkg.	1
Package weight(Lbs)	16.23 oz (460 g)
Returnability	Yes
Country of origin	FR

Packing Units

Unit Type of Package 1	PCE
Package 1 Height	1.97 in (5 cm)
Package 1 width	6.38 in (16.2 cm)
Package 1 Length	12.17 in (30.9 cm)
Unit Type of Package 2	S03
Number of Units in Package 2	7
Package 2 Weight	7.94 lb(US) (3.6 kg)
Package 2 Height	11.81 in (30 cm)
Package 2 width	11.81 in (30 cm)
Package 2 Length	15.75 in (40 cm)

Offer Sustainability

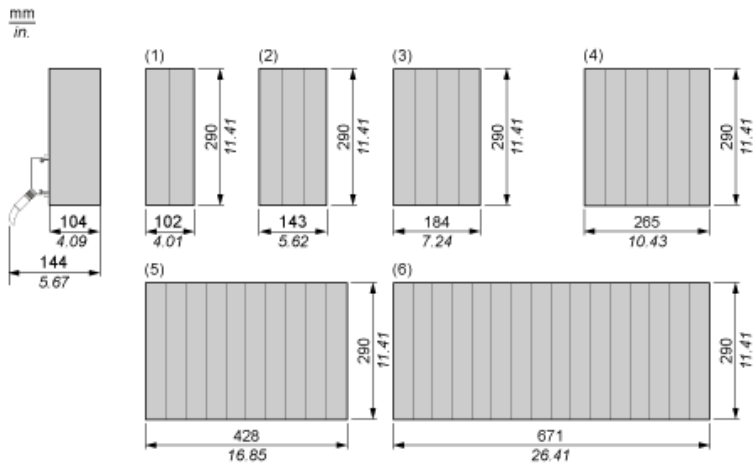
Sustainable offer status	Green Premium product
California proposition 65	WARNING: This product can expose you to chemicals including: Lead and lead compounds, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov
REACH Regulation	REACH Declaration
REACH free of SVHC	Yes
EU RoHS Directive	Pro-active compliance (Product out of EU RoHS legal scope) EU RoHS Declaration
Mercury free	Yes
RoHS exemption information	Yes
China RoHS Regulation	China RoHS declaration
Environmental Disclosure	Product Environmental Profile
Circularity Profile	End of Life Information

Contractual warranty

Warranty	18 months
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Racks for Modules Mounting

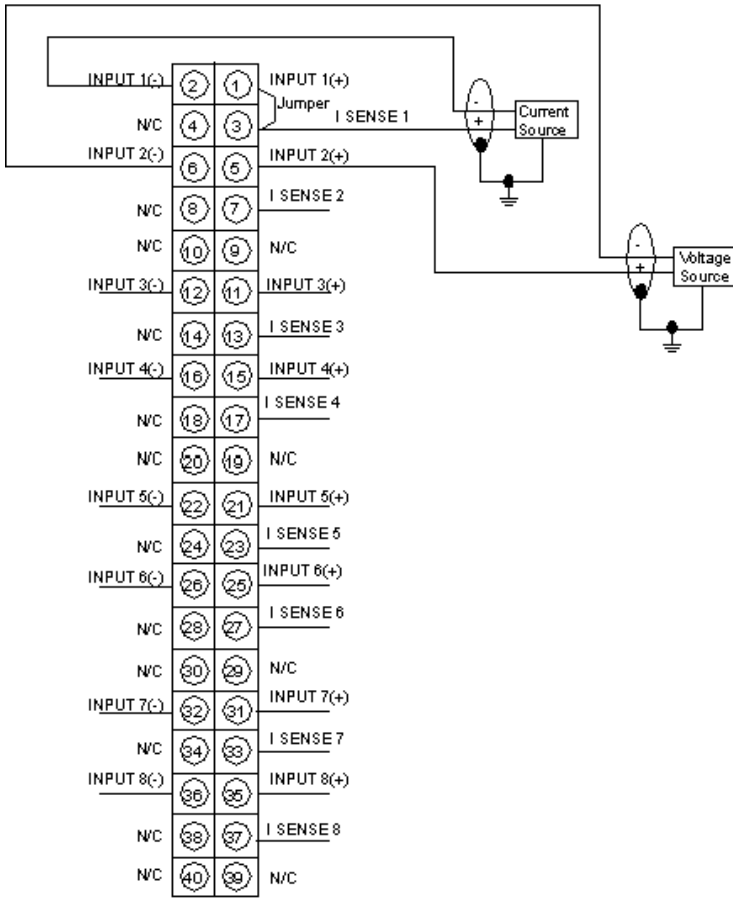
Dimensions of Modules and Racks



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

Analog Input 8-Channel Bipolar Module

Wiring Diagram



N/C Not Connected

Recommended replacement(s)

140AVI03000 is replaced by:

1x



isolated analog input module X80 - 8 inputs - high speed
BMXAMI0810