

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

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 for 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

Marking	CE
Local signalling	1 LED (green) for bus communication is present (Active) 1 LED (red) for external fault 8 LEDs (green) for channel is turned on 8 LEDs (red) for channel fault
Bus current requirement	280 mA
Power dissipation in W	2.2 W
Module format	Standard
Net weight	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 conforming to IEC 801-2 8 kV on air conforming to IEC 801-2
Resistance to electromagnetic fields	10 V/m 80...1000 MHz conforming to IEC 801-3
Ambient air temperature for operation	0...60 °C
Ambient air temperature for storage	-40...85 °C
Relative humidity	95 % without condensation
Operating altitude	<= 5000 m

Packing Units

Unit Type of Package 1	PCE
Number of Units in Package 1	1
Package 1 Weight	460 g
Package 1 Height	5 cm
Package 1 width	16.2 cm
Package 1 Length	30.9 cm
Unit Type of Package 2	S03
Number of Units in Package 2	7
Package 2 Weight	3.6 kg
Package 2 Height	30 cm
Package 2 width	30 cm
Package 2 Length	40 cm

Offer Sustainability

Sustainable offer status	Green Premium product
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

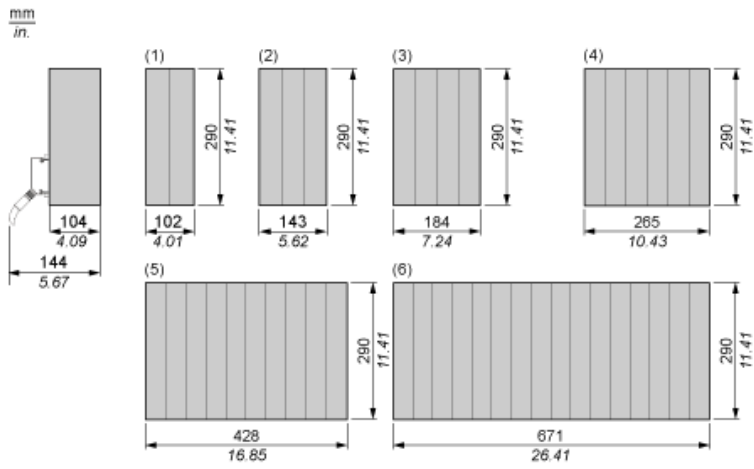
China RoHS Regulation	China RoHS declaration
Environmental Disclosure	Product Environmental Profile
Circularity Profile	End of Life Information
California proposition 65	WARNING: This product can expose you to chemicals including: Lead and lead compounds, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov

Contractual warranty

Warranty	18 months
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Racks for Modules Mounting

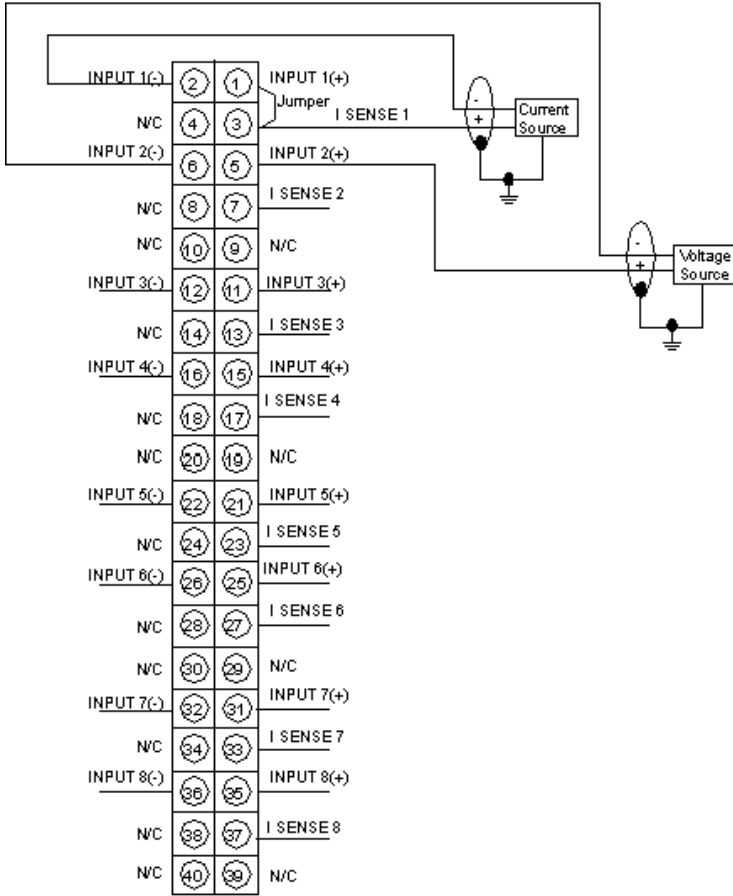
Dimensions of Modules and Racks



- (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