Product data sheet

Specifications

analog isolated high level input module, Modicon X80, 4 inputs, 0 to 20mA, 4 to 20mA, 10V positive or negative

BMXAMI0410

Main

Range Of Product	Modicon X80
Product Or Component Type	Analog input module
Electrical Connection	20 ways 1 connector
Isolation Between Channels	Isolated
Input Level	High level
Analogue Input Number	4
Analogue Input Type	Current +/- 20 mA Current 0...20 mA Current 4...20 mA Voltage +/- 10 V Voltage +/- 5 V Voltage 0...10 V Voltage 0...5 V Voltage 1...5 V

Complementary

Analog/Digital Conversion	24 bits
Analogue Input Resolution	16 bits
Permitted Overload On Inputs	+/- 30 V +/- 10 V +/- 30 V +/- 5 V +/- 30 V 0...10 V +/- 30 V 0...5 V +/- 30 V 1...5 V +/- 90 mA +/- 20 mA +/- 90 mA 0...20 mA +/- 90 mA 4...20 mA
Input Impedance	10 MOhm in voltage mode 250 Ohm + 3.6...50 Ohm internal protective resistor in current mode
Precision Of Internal Conversion Resistor	0.1 % - 15 ppm/°C
Type Of Filter	First order digital filtering
Fast Read Cycle Time	1 ms + 1 ms x number of channels used
Nominal Read Cycle Time	5 ms for 4 channels

Measurement Error	<= 0.1 % of full scale +/- 10 V 0...60 °C <= 0.1 % of full scale +/- 5 V 0...60 °C <= 0.1 % of full scale 0...10 V 0...60 °C <= 0.1 % of full scale 0...5 V 0...60 °C <= 0.1 % of full scale 1...5 V 0...60 °C <= 0.3 % of full scale +/- 20 mA 0...60 °C <= 0.3 % of full scale 0...20 mA 0...60 °C <= 0.3 % of full scale 4...20 mA 0...60 °C 0.075 % of full scale +/- 10 V 25 °C 0.075 % of full scale +/- 5 V 25 °C 0.075 % of full scale 0...10 V 25 °C 0.075 % of full scale 0...5 V 25 °C 0.075 % of full scale 1...5 V 25 °C 0.15 % of full scale +/- 20 mA 25 °C 0.15 % of full scale 0...20 mA 25 °C 0.15 % of full scale 4...20 mA 25 °C
Temperature Drift	15 ppm/°C +/- 10 V 15 ppm/°C +/- 5 V 15 ppm/°C 0...10 V 15 ppm/°C 0...5 V 15 ppm/°C 1...5 V 30 ppm/°C +/- 20 mA 30 ppm/°C 0...20 mA 30 ppm/°C 4...20 mA
Recalibration	Internal
Minimum Crosstalk Attenuation	80 dB
Common Mode Rejection	90 dB
Digital Value Format	- 32768 to + 32767 in maximum user scale +/- 10000 by default
Isolation Voltage	300 V DC between channels 1400 V DC between channels and ground 1400 V DC between channels and bus
Measurement Resolution	0.35 mV +/- 10 V 0.35 mV +/- 5 V 0.35 mV 0...10 V 0.35 mV 0...5 V 0.35 mV 1...5 V 0.92 µA +/- 20 mA 0.92 µA 0...20 mA 0.92 µA 4...20 mA
Maximum Conversion Value	+/- 11.4 V +/- 10 V +/- 11.4 V +/- 5 V +/- 11.4 V 0...10 V +/- 11.4 V 0...5 V +/- 11.4 V 1...5 V 0...30 mA +/- 20 mA 0...30 mA 0...20 mA 0...30 mA 4...20 mA
Mtbf Reliability	1200000 H
Operating Altitude	0...2000 m 2000...5000 m with derating factor
Status Led	1 LED (green) RUN 1 LED per channel (green) channel diagnostic 1 LED (red) ERR 1 LED (red) I/O
Net Weight	0.32 lb(US) (0.143 kg)
Power Consumption In W	0.82 W 24 V DC typical 1.30 W 24 V DC maximum 0.32 W 3.3 V DC typical 0.48 W 3.3 V DC maximum
Current Consumption	150 mA 3.3 V DC 45 mA 24 V DC

Environment

Vibration Resistance	3 gn
Shock Resistance	30 gn
Ambient Air Temperature For Storage	-40…185 °F (-40…85 °C)
Ambient Air Temperature For Operation	32…140 °F (0…60 °C)
Relative Humidity	5…95 % 131 °F (55 °C) without condensation
Ip Degree Of Protection	IP20
Directives	2014/35/EU - low voltage directive 2014/30/EU - electromagnetic compatibility
Product Certifications	CE RCM CSA EAC Merchant Navy UL
Standards	EN/IEC 61010-2-201 EN/IEC 61131-2 UL 61010-2-201 CSA C22.2 No 61010-2-201

Packing Units

Unit Type Of Package 1	PCE
Number Of Units In Package 1	1
Package 1 Height	2.20 in (5.600 cm)
Package 1 Width	4.37 in (11.100 cm)
Package 1 Length	4.61 in (11.700 cm)
Package 1 Weight	6.07 oz (172.000 g)
Unit Type Of Package 2	S02
Number Of Units In Package 2	15
Package 2 Height	5.91 in (15.000 cm)
Package 2 Width	11.81 in (30.000 cm)
Package 2 Length	15.75 in (40.000 cm)
Package 2 Weight	6.44 lb(US) (2.923 kg)

Contractual warranty

Warranty	18 months

Sustainability

Green Premium™ label is Schneider Electric's commitment to delivering products with best-in-class environmental performance. Green Premium promises compliance with the latest regulations, transparency on environmental impacts, as well as circular and low-CO_2 products.

Guide to assessing product sustainability is a white paper that clarifies global eco-label standards and how to interpret environmental declarations.

Learn more about Green Premium >

Guide to assess a product's sustainability >

Well-being performance

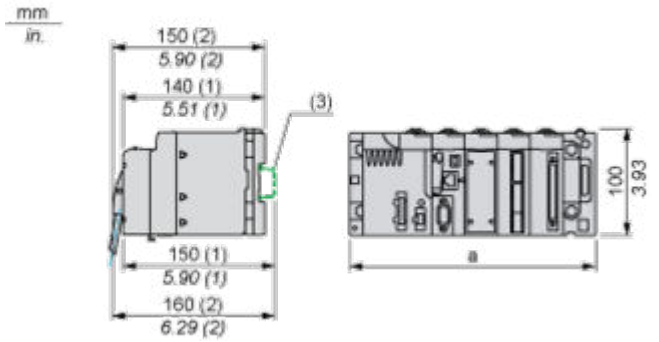
Mercury Free	
Rohs Exemption Information	Yes

Reach Regulation	REACh Declaration
Eu Rohs Directive	Pro-active compliance (Product out of EU RoHS legal scope)
China Rohs Regulation	China RoHS declaration
Weee	The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins

Dimensions Drawings

Modules Mounted on Racks

Dimensions

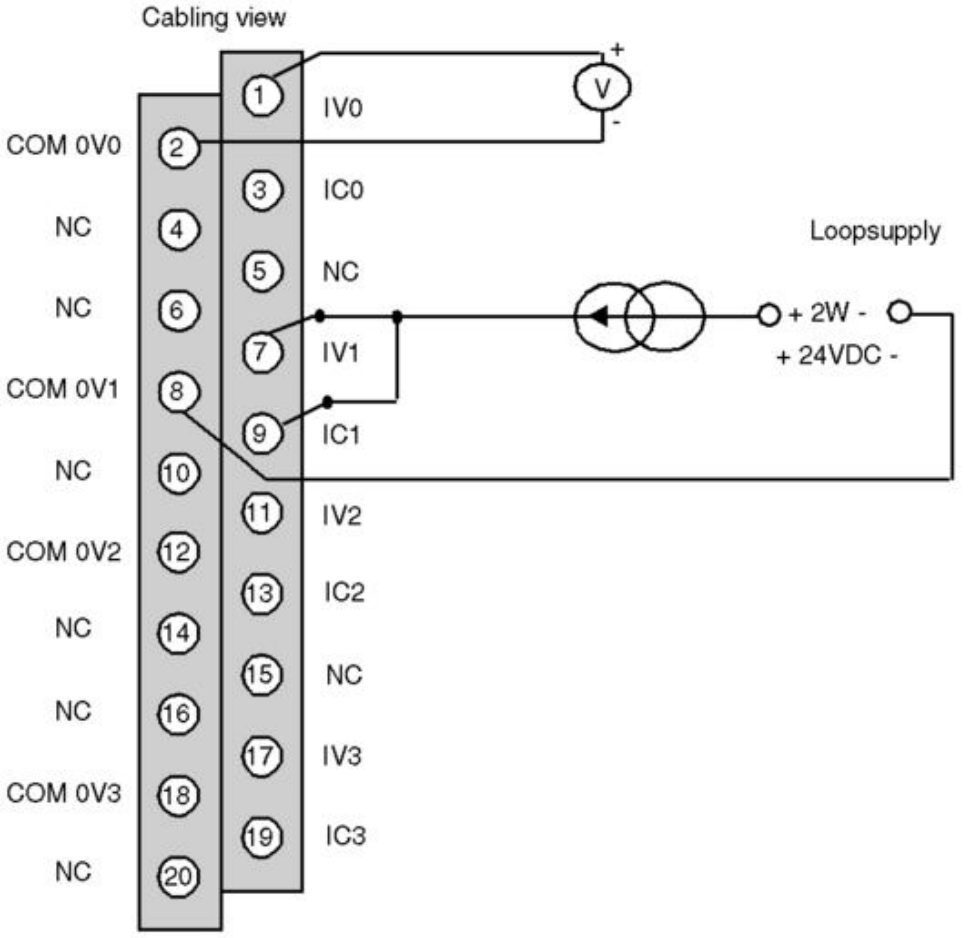


(1) With removable terminal block (cage, screw or spring).
(2) With FCN connector.
(3) On AM1 ED rail: 35 mm wide, 15 mm deep. Only possible with BMXXBP0400/0400H/0600/0600H/0800/0800H rack.

Rack references	a in mm	a in in.
BMXXBP0400 and BMXXBP0400H	242.4	09.54
BMXXBP0600 and BMXXBP0600H	307.6	12.11
BMXXBP0800 and BMXXBP0800H	372.8	14.68
BMXXBP1200 and BMXXBP1200H	503.2	19.81

Connections and Schema

Wiring Diagram



IVx + pole input for channel x
COM 0Vx - pole input for channel x
ICx current reading resistor + input
Channel 0 voltage sensor
Channel 1 2-wire current sensor