

# Product datasheet

Specifications



## non-isolated analog input module X80 - 8 inputs - fast speed

Local distributor code:

395510629

BMXAMI0800

EAN Code: 3595864081557

### Main

Range Of Product	Modicon X80
Product Or Component Type	Analog input module
Electrical Connection	28 ways 1 connector
Isolation Between Channels	Non isolated
Input Level	High level
Analogue Input Number	8
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	16 bits
Analogue Input Resolution	15 bits + sign
Permitted Overload On Inputs	+/- 30 mA 0...20 mA +/- 30 mA 4...20 mA +/- 30 V +/- 10 V +/- 30 V +/- 5 V +/- 30 V 0...10 V +/- 30 V 0...5 V +/- 30 V 1...5 V +/- 30 mA +/- 20 mA
Input Impedance	10 MOhm in voltage mode 250 Ohm 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	9 ms for 8 channels

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

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 0.15 % 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 0.075 % of full scale +/- 10 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 0.075 % of full scale +/- 5 V 25 °C
Temperature Drift	30 ppm/°C +/- 10 V 30 ppm/°C +/- 5 V 30 ppm/°C 0...10 V 30 ppm/°C 0...5 V 30 ppm/°C 1...5 V 50 ppm/°C +/- 20 mA 50 ppm/°C 0...20 mA 50 ppm/°C 4...20 mA
Recalibration	Factory calibrated
Minimum Crosstalk Attenuation	80 dB
Common Mode Rejection	100 dB
Digital Value Format	- 32768 to + 32767 in maximum user scale +/- 10000 by default
Isolation Voltage	1400 V DC between channels and ground 1400 V DC between channels and bus 50 V DC between channels
Measurement Resolution	0.36 mV +/- 10 V 0.36 mV 0...10 V 0.36 mV 0...5 V 0.36 mV 1...5 V 0.36 mV +/- 5 V 1.4 µA +/- 20 mA 1.4 µA 0...20 mA 1.4 µA 4...20 mA
Maximum Conversion Value	+/- 11.4 V +/- 10 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 0...30 mA +/- 5 V
Mtbf Reliability	1700000 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	0.165 kg
Power Consumption In W	0.90 W 24 V DC typical 1.10 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 at 3.3 V DC 41 mA at 24 V DC

## Environment

Vibration Resistance	3 gn
Shock Resistance	30 gn
Ambient Air Temperature For Storage	-40...85 °C
Ambient Air Temperature For Operation	0...60 °C
Relative Humidity	5...95 % at 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	5.500 cm
Package 1 Width	11.200 cm
Package 1 Length	12.000 cm
Package 1 Weight	154.000 g
Unit Type Of Package 2	S02
Number Of Units In Package 2	15
Package 2 Height	15.000 cm
Package 2 Width	30.000 cm
Package 2 Length	40.000 cm
Package 2 Weight	2.644 kg
Unit Type Of Package 3	P06
Number Of Units In Package 3	240
Package 3 Height	75.000 cm
Package 3 Width	60.000 cm
Package 3 Length	80.000 cm
Package 3 Weight	54.000 kg

## Contractual warranty

Warranty	18 months
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## 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<sub>2</sub> products.

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

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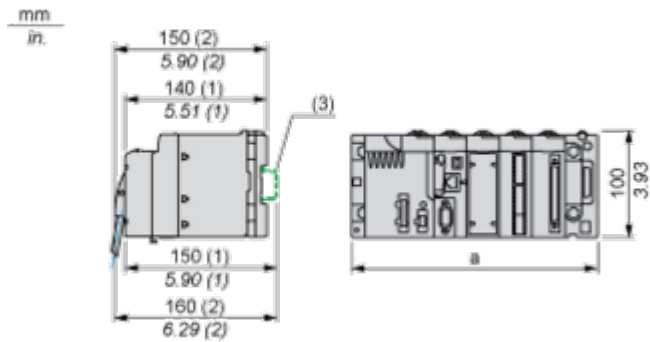
## Well-being performance

 Mercury Free	
 Rohs Exemption Information	<a href="#">Yes</a>
Reach Regulation	<a href="#">REACH Declaration</a>
Eu Rohs Directive	Pro-active compliance (Product out of EU RoHS legal scope)
China Rohs Regulation	<a href="#">China RoHS declaration</a>
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

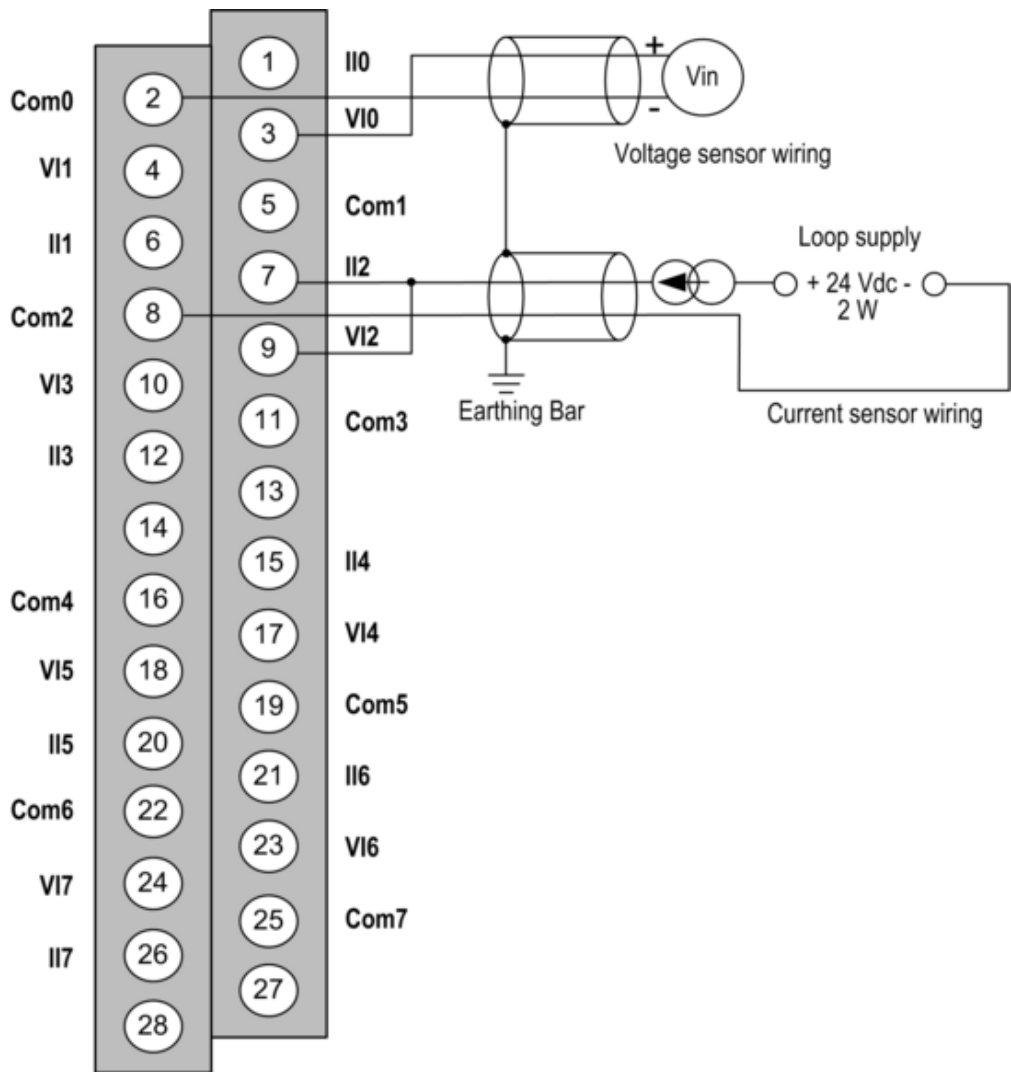


- (1) With removable terminal block (cage, screw or spring).  
(2) With FCN connector.  
(3) On AM1 ED rail: 35 mm wide, 15 mm deep. Only possible with BMXXBP0400/0400H/0600/0600H/0800/0800H rack.

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



VIx + pole input for channel x.  
COMx - pole input for channel x, COMx are connected together internally.  
IIx current reading resistor + input.  
Channel 0 voltage sensor.  
Channel 1 2-wire current sensor.