



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

BMXAMI0800

## 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 020 mA Current 420 mA Voltage +/- 10 V Voltage -/- 5 V Voltage 010 V Voltage 15 V Voltage 15 V

## **Complementary**

Analog/digital conversion	16 bits
Analogue input resolution	15 bits + sign
Permitted overload on inputs	+/- 30 mA 020 mA
	+/- 30 mA 420 mA
	+/- 30 V +/- 10 V
	+/- 30 V +/- 5 V
	+/- 30 V 010 V
	+/- 30 V 05 V
	+/- 30 V 15 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

Measurement error	<= 0.1 % of full scale +/- 10 V 060 °C
	<= 0.1 % of full scale +/- 5 V 060 °C
	<= 0.1 % of full scale 010 V 060 °C
	<= 0.1 % of full scale 05 V 060 °C
	<= 0.1 % of full scale 15 V 060 °C
	<= 0.3 % of full scale +/- 20 mA 060 °C
	<= 0.3 % of full scale 020 mA 060 °C
	<= 0.3 % of full scale 420 mA 060 °C
	0.15 % of full scale +/- 20 mA 25 °C
	0.15 % of full scale 020 mA 25 °C
	0.15 % of full scale 420 mA 25 °C
	0.075 % of full scale +/- 10 V 25 °C
	0.075 % of full scale 010 V 25 °C
	0.075 % of full scale 05 V 25 °C
	0.075 % of full scale 15 V 25 °C
	0.075 % of full scale +/- 5 V 25 °C
Towns and two dails	
Temperature drift	30 ppm/°C +/- 10 V
	30 ppm/°C +/- 5 V
	30 ppm/°C 010 V
	30 ppm/°C 05 V
	30 ppm/°C 15 V
	50 ppm/°C +/- 20 mA
	50 ppm/°C 020 mA
	50 ppm/°C 420 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
ar a constant of the second of	1400 V DC between channels and bus
	50 V DC between channels
<del></del>	
Measurement resolution	0.36 mV +/- 10 V
	0.36 mV 010 V
	0.36 mV 05 V
	0.36 mV 15 V
	0.36 mV +/- 5 V
	1.4 μA +/- 20 mA
	1.4 μA 020 mA
	1.4 μA 420 mA
Maximum conversion value	+/- 11.4 V +/- 10 V
	+/- 11.4 V 010 V
	+/- 11.4 V 05 V
	+/- 11.4 V 15 V
	030 mA +/- 20 mA
	030 mA 020 mA
	030 mA 420 mA
	030 mA +/- 5 V
MTBF reliability	1700000 H
Operating altitude	02000 m
Operating artifact	20005000 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 IA	0.00 W 24 V DC Amiral
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	-4085 °C
Ambient air temperature for operation	060 °C
Relative humidity	595 % 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

# Sustainability Screen Premium

**Green Premium**<sup>TM</sup> **label** is Schneider Electric's commitment to delivering products with best-inclass 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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Transparency RoHS/REACh

## Well-being performance



Mercury Free



Rohs Exemption Information

Yes

## **Certifications & Standards**

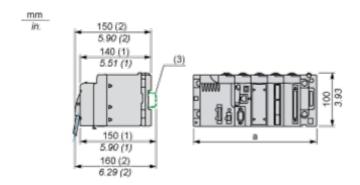
Reach Regulation	REACh Declaration		
Eu Rohs Directive	Pro-active compliance (Product out of EU RoHS legal scope)		
China Rohs Regulation	China RoHS declaration		
Environmental Disclosure	Product Environmental Profile		
Weee	The product must be disposed on European Union markets following specific waste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

### BMXAMI0800

#### **Dimensions Drawings**

### **Modules Mounted on Racks**

#### **Dimensions**

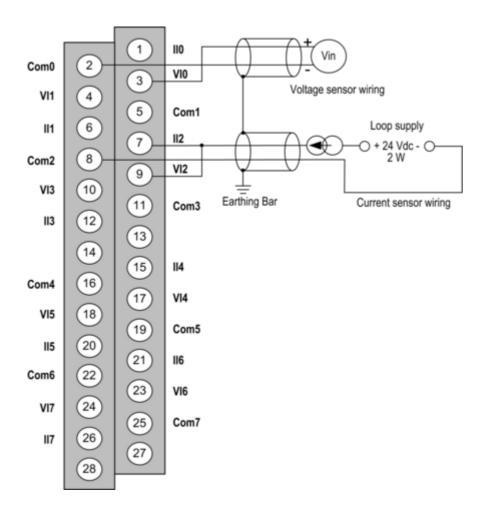


- (1) With removable terminal block (cage, screw or spring).
- (2) With FCN connector.
- (3) On AM1 ED rail: 35 mm wide, 15 mm deep. Only possible with BMXXBP0400/0400H/0600/0600H/0800/0800H rack.

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.