

# 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 MΩ in voltage mode 250 Ω 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

<b>Measurement error</b>	<= 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
<b>Temperature drift</b>	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
<b>Recalibration</b>	Factory calibrated
<b>Minimum crosstalk attenuation</b>	80 dB
<b>Common mode rejection</b>	100 dB
<b>Digital value format</b>	- 32768 to + 32767 in maximum user scale +/- 10000 by default
<b>Isolation voltage</b>	1400 V DC between channels and ground 1400 V DC between channels and bus 50 V DC between channels
<b>Measurement resolution</b>	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
<b>Maximum conversion value</b>	+/- 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
<b>MTBF reliability</b>	1700000 H
<b>Operating altitude</b>	0...2000 m 2000...5000 m with derating factor
<b>Status LED</b>	1 LED (green) RUN 1 LED per channel (green) channel diagnostic 1 LED (red) ERR 1 LED (red) I/O
<b>Net weight</b>	0.165 kg
<b>Power consumption in W</b>	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
<b>Current consumption</b>	150 mA at 3.3 V DC 41 mA at 24 V DC

## Environment

<b>Vibration resistance</b>	3 gn
<b>Shock resistance</b>	30 gn
<b>Ambient air temperature for storage</b>	-40...85 °C
<b>Ambient air temperature for operation</b>	0...60 °C
<b>Relative humidity</b>	5...95 % at 55 °C without condensation
<b>IP degree of protection</b>	IP20
<b>Directives</b>	2014/35/EU - low voltage directive 2014/30/EU - electromagnetic compatibility
<b>Product certifications</b>	CE RCM CSA EAC Merchant Navy UL
<b>Standards</b>	EN/IEC 61010-2-201 EN/IEC 61131-2 UL 61010-2-201 CSA C22.2 No 61010-2-201

## Packing Units

<b>Unit Type of Package 1</b>	PCE
<b>Number of Units in Package 1</b>	1
<b>Package 1 Height</b>	5.500 cm
<b>Package 1 Width</b>	11.200 cm
<b>Package 1 Length</b>	12.000 cm
<b>Package 1 Weight</b>	154.000 g
<b>Unit Type of Package 2</b>	S02
<b>Number of Units in Package 2</b>	15
<b>Package 2 Height</b>	15.000 cm
<b>Package 2 Width</b>	30.000 cm
<b>Package 2 Length</b>	40.000 cm
<b>Package 2 Weight</b>	2.644 kg
<b>Unit Type of Package 3</b>	P06
<b>Number of Units in Package 3</b>	240
<b>Package 3 Height</b>	75.000 cm
<b>Package 3 Width</b>	60.000 cm
<b>Package 3 Length</b>	80.000 cm
<b>Package 3 Weight</b>	54.000 kg

## Logistical informations

<b>Country of origin</b>	FR
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## Contractual warranty

<b>Warranty</b>	18 months
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Schneider Electric aims to achieve Net Zero status by 2050 through supply chain partnerships, lower impact materials, and circularity via our ongoing “Use Better, Use Longer, Use Again” campaign to extend product lifetimes and recyclability.

[Environmental Data explained >](#)

[How we assess product sustainability >](#)

### Environmental footprint

Carbon footprint (kg.eq.CO<sub>2</sub> per CR, Total Life cycle) **83**

Environmental Disclosure [Product Environmental Profile](#)

### Use Better

#### Materials and Substances

[EU RoHS Directive](#) Pro-active compliance (Product out of EU RoHS legal scope)

REACH Regulation [REACH Declaration](#)

### Use Again

#### Repack and remanufacture

Circularity Profile [End of Life Information](#)

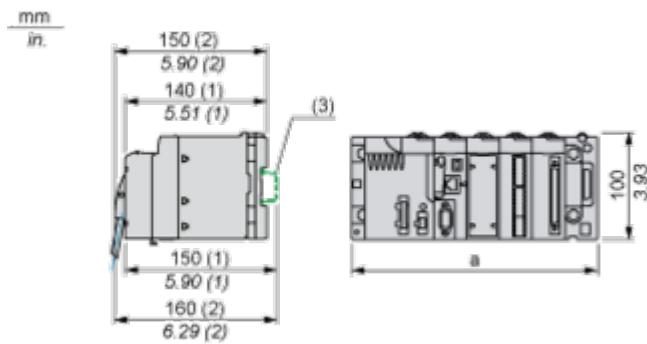
WEEE  The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins

Take-back No

## Dimensions Drawings

Modules Mounted on Racks

## Dimensions



(1) With removable terminal block (cage, screw or spring).

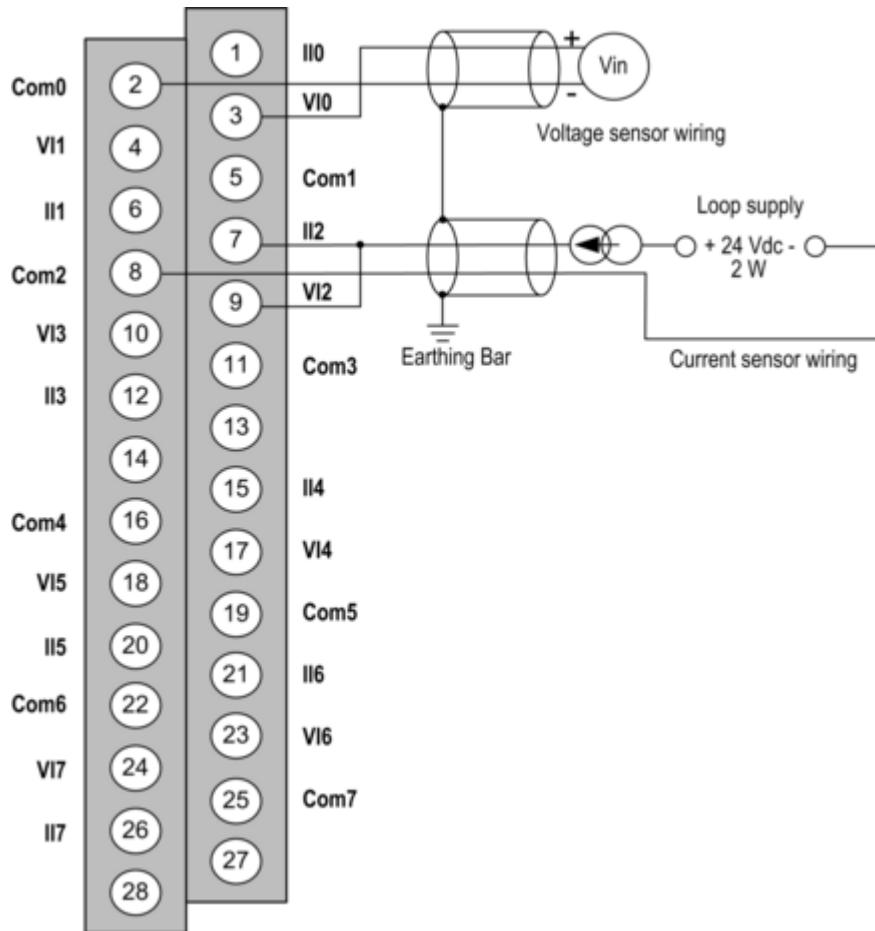
(2) With FCN connector.

(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.