Product datasheet

Specifications

isolated analog input module X80 - 8 inputs - high speed

Local distributor code:

395510632 BMXAMI0810

EAN Code: 3595864081564

Main

Range of product	Modicon X80
Product or component type	Analog input module
Electrical connection	28 ways 1 connector
Isolation between channels	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 + 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	9 ms for 8 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 0.15 % 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
Minimum crosstalk attenuation	80 dB
Common mode rejection	80 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	0.36 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	900000 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	1.06 W 24 V DC typical 1.50 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 54 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	11.000 cm
Package 1 Length	12.000 cm
Package 1 Weight	159.000 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	2.702 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	49.000 kg

Logistical informations

Country of origin	FR

Contractual warranty

Warranty	18 months

Environmental Data

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.CO2 per CR, Total Life cycle)	113
Environmental Disclosure	Product Environmental Profile

Use Better

Materials and Substances

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

Use Again

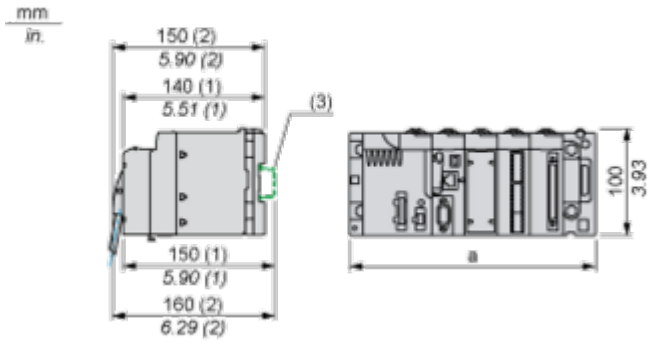
Repack and remanufacture

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

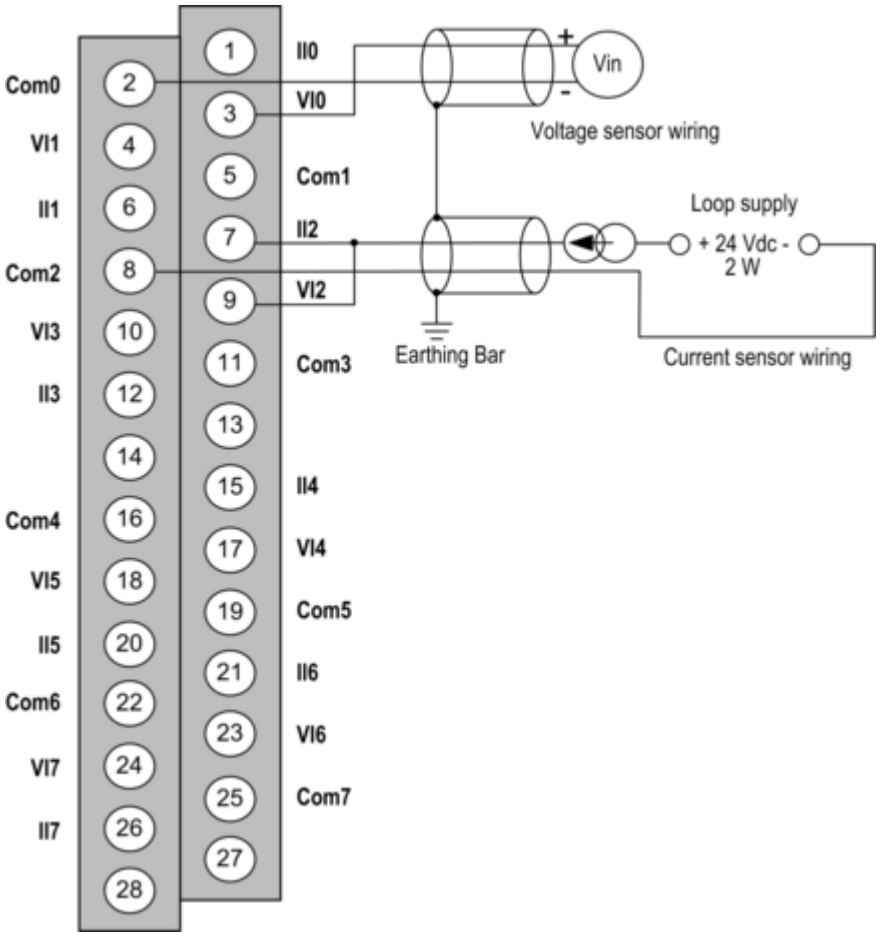


(1) With removable terminal block (cage, screw or spring).
(2) With FCN connector.
(3) On AM1 ED rail: 35 mm wide, 15 mm deep. Only possible with BMXXBP0400/0400H/0600/0600H/0800/0800H rack.

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.