BMXAMI0810H

isolated analog input module

Green Premium™ Product

Main

Range of product	Modicon X80
Product or component type	Analog input module
Product specific application	For severe environments
Electrical connection	1 connector 28 ways
Input output isolation	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
Input impedance	10 MOhm
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
Internal conversion resistor	250 Ohm
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	<= 0.2 % of full scale +/- 10 V - 25...70 °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 0.08 % of full scale +/- 10 V 25 °C 0.08 % of full scale 0...10 V 25 °C 0.08 % of full scale 0...5 V 25 °C 0.08 % of full scale 1...5 V 25 °C 0.08 % of full scale +/- 5 V 25 °C <= 0.1 % of full scale +/- 10 V - 25...70 °C <= 0.1 % of full scale +/- 5 V - 25...70 °C <= 0.1 % of full scale 0...10 V - 25...70 °C <= 0.1 % of full scale 0...5 V - 25...70 °C <= 0.1 % of full scale 1...5 V - 25...70 °C <= 0.3 % of full scale +/- 20 mA - 25...70 °C <= 0.3 % of full scale 0...20 mA - 25...70 °C <= 0.3 % of full scale 4...20 mA - 25...70 °C
Temperature drift	30 ppm/°C 50 ppm/°C
Common mode between channels	>= 80 dB
Digital value format	+/- 10000 by default +/- 32000 in user scale
Isolation voltage	300 V DC between channels 1400 V DC between channels and ground

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|	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
Status LED	1 LED green RUN 1 LED per channel green channel diagnostic 1 LED red ERR 1 LED red I/O
Product weight	0.175 kg
Current consumption	150 mA at 3.3 V DC 45 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	-25...70 °C
relative humidity	5...95 % 55 °C without condensation
IP degree of protection	IP20
product certifications	ATEX CE CSA UL RCM IEC-Ex Merchant Navy EAC
standards	EN/IEC 61131-2 EN/IEC 61010-2-201 UL 61010-2-201 CSA C22.2 No 61010-2-201
protective treatment	Conformal coating Humiseal 1A33 TC
environmental characteristic	Corrosion resistance Dust resistant
operating altitude	0...2000 m 2000...5000 m (with derating factor)

Offer Sustainability

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Sustainable offer status	Green Premium product
RoHS (date code: YYWW)	Compliant - since 1206 - Schneider Electric declaration of conformity
REACh	Reference not containing SVHC above the threshold
Product environmental profile	Available
Product end of life instructions	Available

Modules Mounted on Racks

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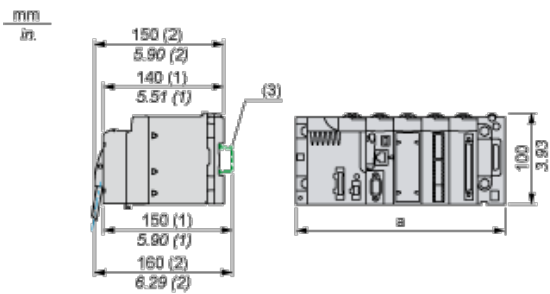
(1) With removable terminal block (cage, screw or spring).

(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

Wiring Diagram
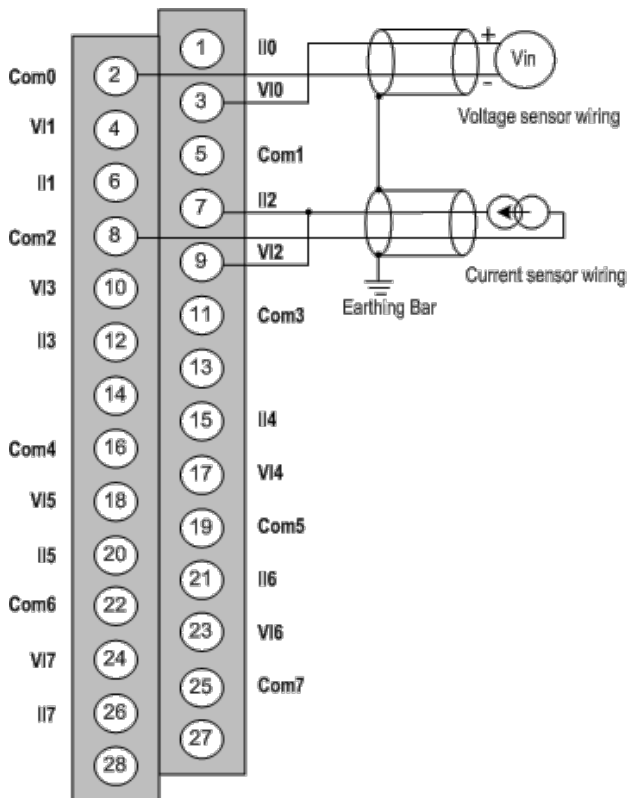
VIx + pole input for channel x

COM x - pole input for channel x

IIx current reading resistor + input

Channel 0 voltage sensor

Channel 1 2-wire current sensor