



Main

Range of product	Modicon X80
Product or component type	Analog input module
Product specific application	For severe environments
Electrical connection	1 connector 20 ways
Input output isolation	Isolated
Input level	High level
Analogue input number	4
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	24 bits
Analogue input resolution	16 bits
Input impedance	10 MOhm
Permitted overload on inputs	+/- 30 V +/- 10 V +/- 30 V +/- 5 V +/- 30 V 0...10 V +/- 30 V 0...5 V +/- 30 V 1...5 V +/- 90 mA +/- 20 mA +/- 90 mA 0...20 mA +/- 90 mA 4...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	5 ms for 4 channels
Measurement error	<= 0.2 % of full scale +/- 10 V - 25...70 °C <= 0.2 % of full scale +/- 5 V - 25...70 °C <= 0.2 % of full scale 0...10 V - 25...70 °C <= 0.2 % of full scale 0...5 V - 25...70 °C <= 0.2 % of full scale 1...5 V - 25...70 °C <= 0.55 % of full scale +/- 20 mA - 25...70 °C <= 0.55 % of full scale 0...20 mA - 25...70 °C <= 0.55 % of full scale 4...20 mA - 25...70 °C 0.075 % of full scale +/- 10 V 25 °C 0.075 % of full scale +/- 5 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 0.15 % 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
Temperature drift	15 ppm/°C +/- 10 V 15 ppm/°C +/- 5 V 15 ppm/°C 0...10 V 15 ppm/°C 0...5 V 15 ppm/°C 1...5 V 30 ppm/°C +/- 20 mA 30 ppm/°C 0...20 mA 30 ppm/°C 4...20 mA
Recalibration	Internal

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Common mode between channels	120 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 1400 V DC between channels and bus
Measurement resolution	0.35 mV +/- 10 V 0.35 mV +/- 5 V 0.35 mV 0...10 V 0.35 mV 0...5 V 0.35 mV 1...5 V 0.92 µA +/- 20 mA 0.92 µA 0...20 mA 0.92 µA 4...20 mA
Maximum conversion value	+/- 11.4 V +/- 10 V +/- 11.4 V +/- 5 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
Status LED	1 LED green RUN 1 LED per channel green channel diagnostic 1 LED red ERR 1 LED red I/O
Product weight	0.32 lb(US) (0.143 kg)
Current consumption	150 mA at 3.3 V DC 45 mA at 24 V DC

Environment

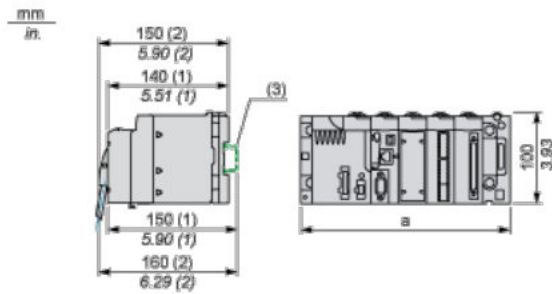
vibration resistance	3 gn
shock resistance	30 gn
ambient air temperature for storage	-40...185 °F (-40...85 °C)
ambient air temperature for operation	-13...158 °F (-25...70 °C)
relative humidity	5...95 % 55 °C without condensation
IP degree of protection	IP20
product certifications	ATEX CE CSA UL RCM 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...6561.68 ft (0...2000 m) 2000...5000 m (with derating factor)

Offer Sustainability

Green Premium product	Green Premium product
Compliant - since 0911 - Schneider Electric declaration of conformity	Compliant - since 0911 - Schneider Electric declaration of conformity
Reference not containing SVHC above the threshold	Reference not containing SVHC above the threshold
Available	Available
Available	Available

Modules Mounted on Racks

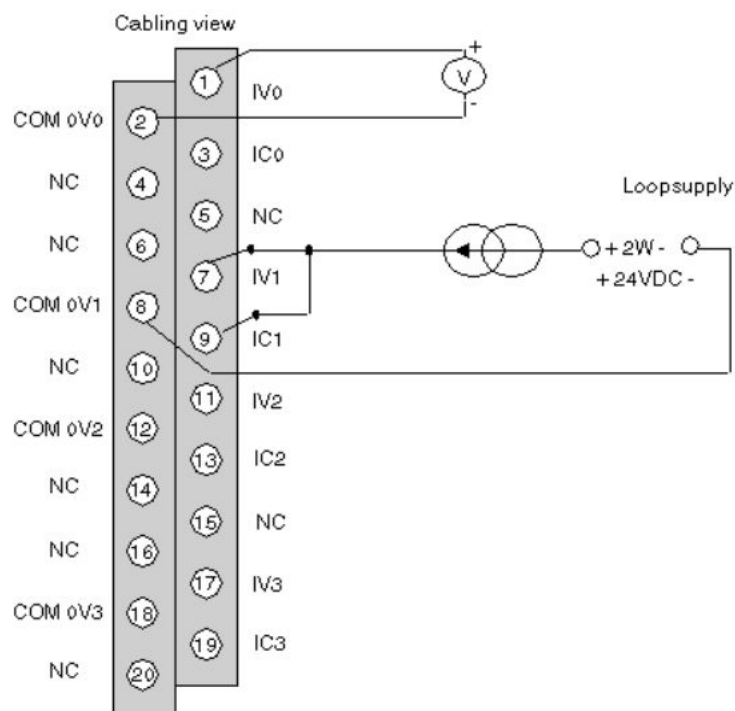
Dimensions



- (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



IVx + pole input for channel x

COM 0Vx- pole input for channel x

ICx current reading resistor + input

Channelvoltage sensor

0

Channel2-wire current sensor

1