

Product datasheet

Specifications



mixed analog I/O module X80 - 4 inputs - 2 outputs - for severe environment

BMXAMM0600H

Main

Range Of Product	Modicon X80
Product Or Component Type	Mixed analog I/O module
Product Specific Application	For severe environments
Electrical Connection	20 ways 1 connector
Isolation Between Channels	Non isolated
Input Level	High level
Analogue Input Number	4
Analogue Input Type	Current 0...20 mA Current 4...20 mA Voltage +/- 10 V Voltage 0...10 V Voltage 0...5 V Voltage 1...5 V

Complementary

Analogue Input Resolution	12 bits 0...20 mA 12 bits 0...5 V 12 bits 1...5 V 12 bits 4...20 mA 13 bits 0...10 V 14 bits +/- 10 V
Permitted Overload On Inputs	+/- 30 mA 0...20 mA +/- 30 mA 4...20 mA +/- 30 V +/- 10 V +/- 30 V 0...10 V +/- 30 V 0...5 V +/- 30 V 1...5 V
Input Impedance	250 Ohm
Precision Of Internal Conversion Resistor	0.1 % - 15 ppm/°C
Type Of Filter	First order digital filtering by firmware
Fast Read Cycle Time	1 ms + 1 ms x number of channels used
Nominal Read Cycle Time	5 ms for 4 channels

Disclaimer: This documentation is not intended as a substitute for and is not to be used for determining suitability or reliability of these products for specific user applications

Measurement Error	0.25 % of full scale 0...20 mA 25 °C output 0.25 % of full scale 4...20 mA 25 °C output 0.25 % of full scale +/- 10 V 25 °C output 0.25 % of full scale +/- 10 V 25 °C input 0.25 % of full scale 0...10 V 25 °C input 0.25 % of full scale 0...5 V 25 °C input 0.25 % of full scale 1...5 V 25 °C input 0.35 % of full scale 0...20 mA 25 °C input 0.35 % of full scale 4...20 mA 25 °C input ≤ 0.4 % of full scale +/- 10 V - 25...70 °C input ≤ 0.4 % of full scale 0...10 V - 25...70 °C input ≤ 0.4 % of full scale 0...5 V - 25...70 °C input ≤ 0.4 % of full scale 1...5 V - 25...70 °C input ≤ 0.6 % of full scale 0...20 mA - 25...70 °C input ≤ 0.6 % of full scale 4...20 mA - 25...70 °C input ≤ 0.8 % of full scale +/- 10 V - 25...70 °C output ≤ 0.8 % of full scale 0...20 mA - 25...70 °C output ≤ 0.8 % of full scale 4...20 mA - 25...70 °C output
Temperature Drift	100 ppm/°C +/- 10 V output 100 ppm/°C 0...20 mA output 100 ppm/°C 4...20 mA output 30 ppm/°C +/- 10 V input 30 ppm/°C 0...10 V input 30 ppm/°C 0...5 V input 30 ppm/°C 1...5 V input 50 ppm/°C 0...20 mA input 50 ppm/°C 4...20 mA input
Recalibration	Internal on inputs Factory calibrated on outputs
Minimum Crosstalk Attenuation	70 dB
Common Mode Rejection	80 dB
Isolation Voltage	1400 V DC between channels and ground 1400 V DC between channels and bus 750 V DC between group of I/O channels
Output Level	High level
Analogue Output Number	2
Analogue Output Type	Current: 0...20 mA Current: 4...20 mA Voltage: +/- 10 V
Analogue Output Resolution	11 bits, 0...20 mA 11 bits, 4...20 mA 12 bits, +/- 10 V
Conversion Time	≤ 2 ms
Maximum Conversion Value	+/- 11.25 V +/- 10 V output +/- 11.25 V +/- 10 V input 0...30 mA 0...20 mA input 0...30 mA 4...20 mA input +/- 11.25 V 0...10 V input +/- 11.25 V 0...5 V input +/- 11.25 V 1...5 V input 0...24 mA 0...20 mA output 0...24 mA 4...20 mA output
Fallback Mode	Predefined Configurable
Mtbf Reliability	1400000 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	0.155 kg

Power Consumption In W	2.6 W 24 V DC typical 3.2 W 24 V DC maximum 0.35 W 3.3 V DC typical 0.48 W 3.3 V DC maximum
Current Consumption	240 mA at 3.3 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 % 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 ATEX IEC-Ex
Standards	EN/IEC 61010-2-201 EN/IEC 61131-2 UL 61010-2-201 CSA C22.2 No 61010-2-201
Environmental Characteristic	Gas resistant class Gx Gas resistant class 3C4 Dust resistant class 3S4 Sand resistant class 3S4 Salt resistant level 2 Mold growth resistant class 3B2 Fungal spore resistant class 3B2 Hazardous location
Protective Treatment	Conformal coating

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	176.000 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	3.001 kg

Contractual warranty

Warranty

18 months

Sustainability

Green Premium™ label is Schneider Electric’s commitment to delivering products with best-in-class environmental performance. Green Premium promises compliance with the latest regulations, transparency on environmental impacts, as well as circular and low-CO₂ products.

Guide to assessing product sustainability is a white paper that clarifies global eco-label standards and how to interpret environmental declarations.

[Learn more about Green Premium >](#)

[Guide to assess a product’s sustainability >](#)



Transparency RoHS/REACH

Well-being performance

 Mercury Free

 RoHS Exemption Information [Yes](#)

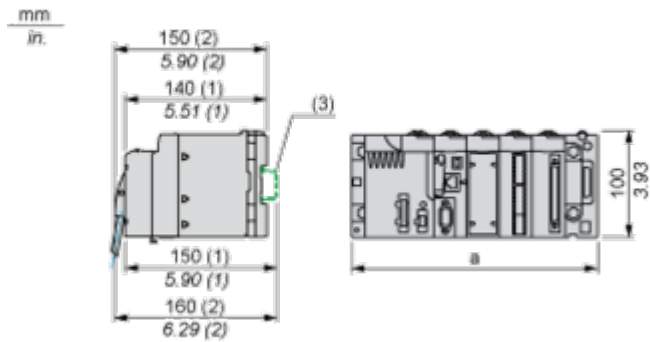
Certifications & Standards

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

Dimensions Drawings

Modules Mounted on Racks

Dimensions

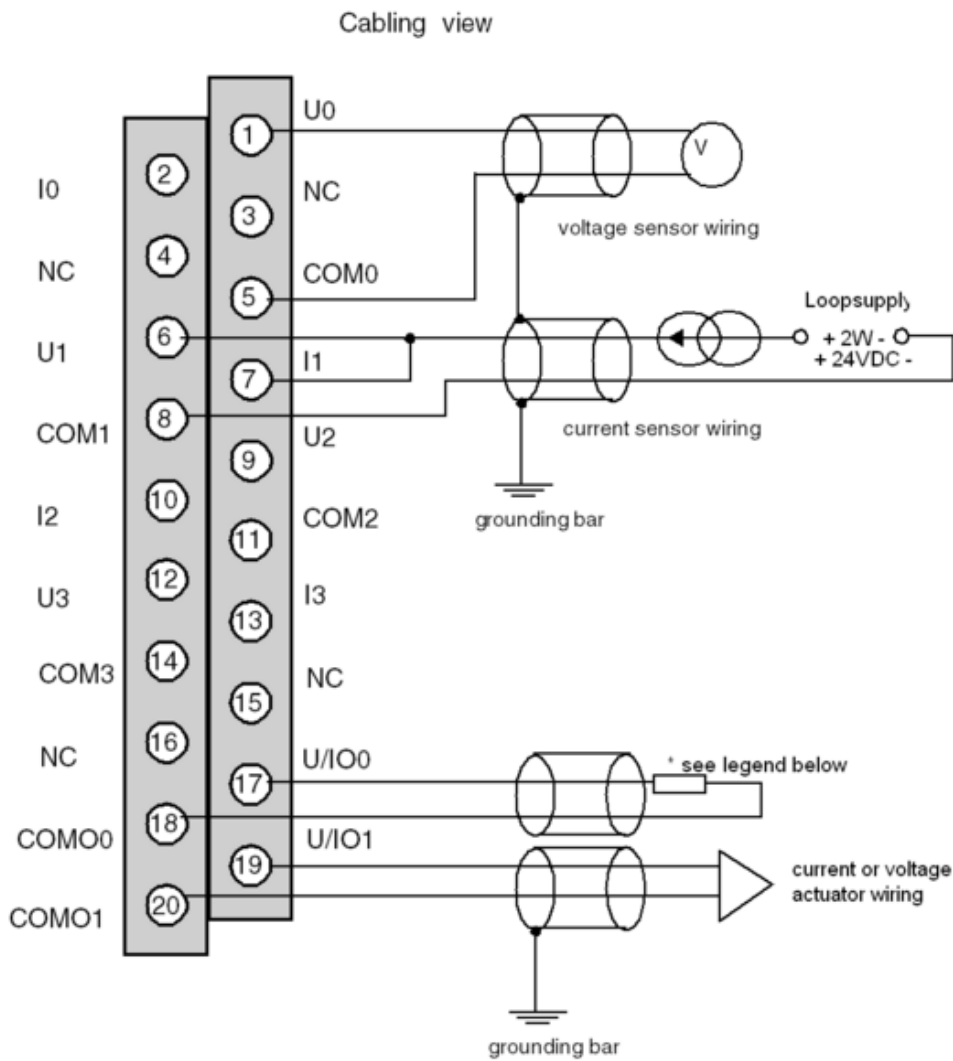


- (1) With removable terminal block (cage, screw or spring).
- (2) With FCN connector.
- (3) On AM1 ED rail: 35 mm wide, 15 mm deep. Only possible with BMXXBP0400/0400H/0600/0600H/0800/0800H rack.

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



Ux + pole input for channel x

COMx - pole input for channel x

U/IOx + pole output for channel x

COM0x - pole output for channel x

* The current loop is self-powered by the output and does not request any external supply.