

# Product data sheet

Specifications



analog non isolated high level IO module, Modicon X80, 4 I, 2 O, 0 to 20mA, 4 to 20mA, 10V positive or negative, 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

<b>Measurement error</b>	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
<b>Temperature drift</b>	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
<b>Recalibration</b>	Internal on inputs Factory calibrated on outputs
<b>Minimum crosstalk attenuation</b>	70 dB
<b>Common mode rejection</b>	80 dB
<b>Isolation voltage</b>	1400 V DC between channels and ground 1400 V DC between channels and bus 750 V DC between group of I/O channels
<b>Output level</b>	High level
<b>Analogue output number</b>	2
<b>Analogue output type</b>	Current: 0...20 mA Current: 4...20 mA Voltage: +/- 10 V
<b>Analogue output resolution</b>	11 bits, 0...20 mA 11 bits, 4...20 mA 12 bits, +/- 10 V
<b>Conversion time</b>	<= 2 ms
<b>Maximum conversion value</b>	+/- 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
<b>Fallback mode</b>	Predefined Configurable
<b>MTBF reliability</b>	1400000 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>	0.155 kg

<b>Power consumption in W</b>	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
<b>Current consumption</b>	240 mA at 3.3 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>	-25...70 °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 ATEX IEC-Ex
<b>Standards</b>	EN/IEC 61010-2-201 EN/IEC 61131-2 UL 61010-2-201 CSA C22.2 No 61010-2-201
<b>Environmental characteristic</b>	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
<b>Protective treatment</b>	Conformal coating

## 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>	11.000 cm
<b>Package 1 Length</b>	12.000 cm
<b>Package 1 Weight</b>	176.000 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>	3.001 kg

## Contractual warranty

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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

Total lifecycle Carbon footprint 175

Environmental Disclosure [Product Environmental Profile](#)

## Use Better

### Materials and Substances

Packaging made with recycled cardboard Yes

Packaging without single use plastic Yes

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

SCIP Number Abf560dc-15c4-469a-a148-87250e453e56

REACH Regulation [REACH Declaration](#)

California proposition 65 **WARNING: This product can expose you to chemicals including: Lead and lead compounds, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to [www.P65Warnings.ca.gov](http://www.P65Warnings.ca.gov)**

## Use Again

### Repack and remanufacture

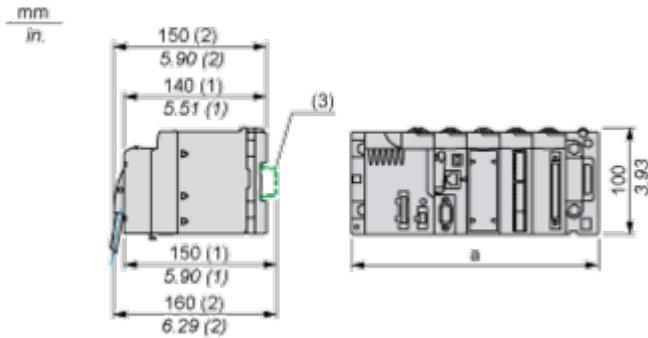
End of life manual availability [End of Life Information](#)

Take-back No

Dimensions Drawings

Modules Mounted on Racks

Dimensions



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

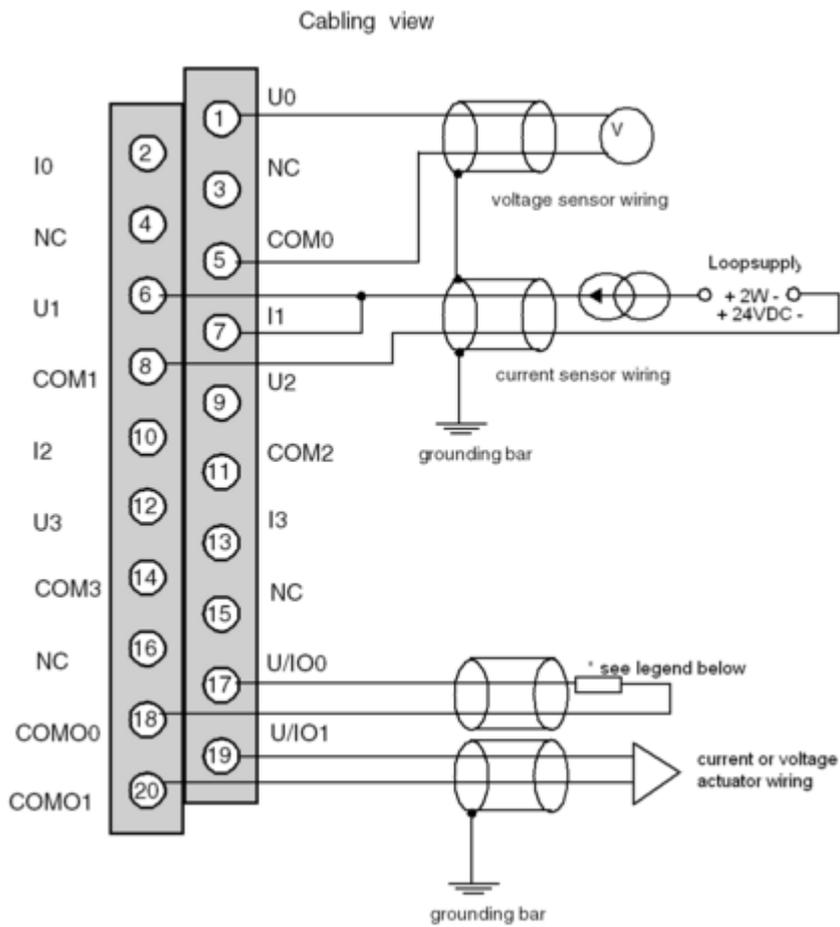
(2) With FCN connector.

(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



**U<sub>x</sub>** + pole input for channel x

**COM<sub>x</sub>** - pole input for channel x

**U/IO<sub>x</sub>** + pole output for channel x

**COMO<sub>x</sub>** - pole output for channel x

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

Image of product / Alternate images

Alternative

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