



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
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

The information provided in this documentation contains general descriptions and/or technical characteristics of the products contained herein. 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. It is the duty of any such user or integrator to perform the appropriate and complete risk analysis, evaluation and testing of the products with respect to the relevant specific application or use thereof. Neither Schneider Electric Industries SAS nor any of its affiliates or subsidiaries shall be responsible or liable for misuse of the information contained herein.

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
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

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

Package 1 Weight	0.187 kg
Package 1 Height	55.000 mm
Package 1 width	110.000 mm
Package 1 Length	115.000 mm

Offer Sustainability

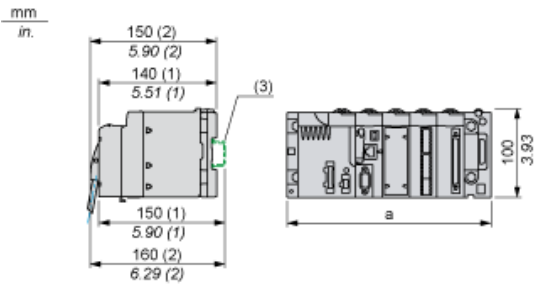
Sustainable offer status	Green Premium product
REACH Regulation	REACH Declaration
REACH free of SVHC	Yes
EU RoHS Directive	Pro-active compliance (Product out of EU RoHS legal scope) EU RoHS Declaration
Mercury free	Yes
RoHS exemption information	Yes
China RoHS Regulation	China RoHS Declaration
Environmental Disclosure	Product Environmental Profile
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

Contractual warranty

Warranty	18 months
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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

