



Main

Range of product	Modicon X80
Product or component type	Mixed analog I/O module
Electrical connection	1 connector 20 ways
Input output isolation	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
Internal conversion resistor	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 0.25 % of full scale 4...20 mA 25 °C <= 0.35 % of full scale +/- 10 V 0...60 °C <= 0.35 % of full scale 0...10 V 0...60 °C <= 0.35 % of full scale 0...5 V 0...60 °C <= 0.35 % of full scale 1...5 V 0...60 °C <= 0.5 % of full scale 0...20 mA 0...60 °C <= 0.5 % of full scale 4...20 mA 0...60 °C <= 0.6 % of full scale +/- 10 V 0...60 °C <= 0.6 % of full scale 0...20 mA 0...60 °C <= 0.6 % of full scale 4...20 mA 0...60 °C 0.25 % of full scale 0...10 V 25 °C 0.25 % of full scale 0...5 V 25 °C 0.25 % of full scale 1...5 V 25 °C 0.35 % of full scale 0...20 mA 25 °C 0.35 % of full scale 4...20 mA 25 °C 0.25 % of full scale +/- 10 V +/- 10 V 25 °C
Temperature drift	100 ppm/°C +/- 10 V 100 ppm/°C 0...20 mA 100 ppm/°C 4...20 mA 30 ppm/°C +/- 10 V 30 ppm/°C 0...10 V 30 ppm/°C 0...5 V 30 ppm/°C 1...5 V 50 ppm/°C 0...20 mA 50 ppm/°C 4...20 mA
Recalibration	Factory calibrated on outputs Internal on inputs
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 0...10 V +/- 11.25 V 0...5 V +/- 11.25 V 1...5 V 0...24 mA 0...20 mA 0...24 mA 4...20 mA 0...30 mA 0...20 mA 0...30 mA 4...20 mA +/- 11.25 V +/- 10 V +/- 10 V
Fallback mode	Predefined Configurable
Status LED	1 LED green RUN 1 LED per channel green channel diagnostic 1 LED red ERR 1 LED red I/O
Product weight	0.155 kg
Current consumption	150 mA at 3.3 V DC 130 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	0...60 °C
Relative humidity	5...95 % without condensation
IP degree of protection	IP20
Product certifications	CSA

	RCM UL EAC CE Merchant Navy
Standards	EN/IEC 61010-2-201 CSA C22.2 No 61010-2-201 UL 61010-2-201 EN/IEC 61131-2
Protective treatment	TC
Operating altitude	0...2000 m 2000...5000 m (with derating factor)

Offer Sustainability

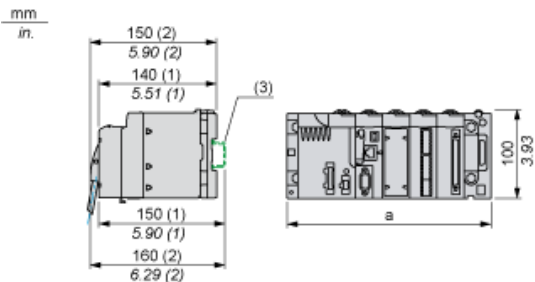
Sustainable offer status	Green Premium product
RoHS (date code: YYWW)	Compliant - since 0805 - Schneider Electric declaration of conformity  Schneider Electric declaration of conformity
REACH	Reference not containing SVHC above the threshold Reference not containing SVHC above the threshold
Product environmental profile	Available  End of life manual
Product end of life instructions	Available

Contractual warranty

Warranty period	18 months
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Modules Mounted on Racks

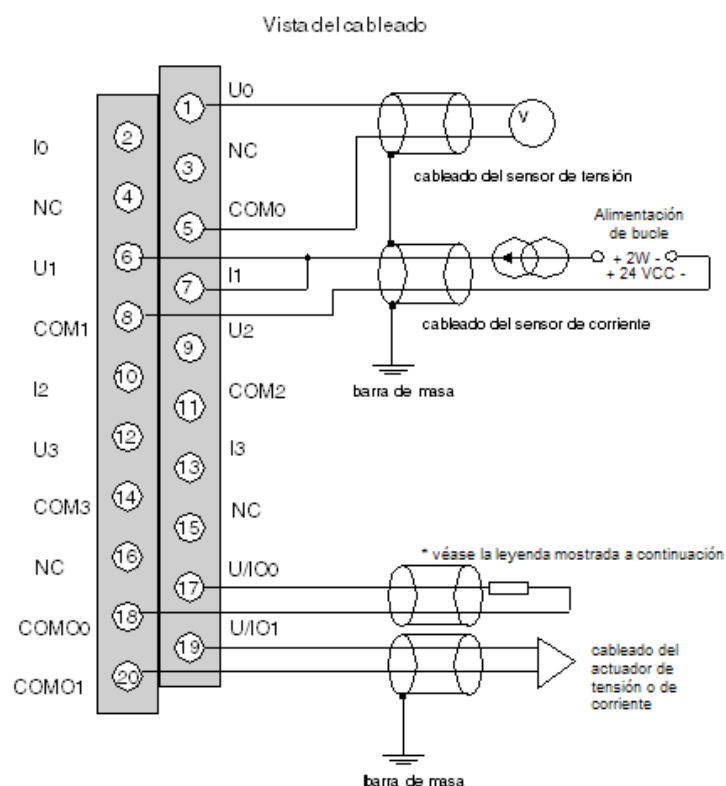
Dimensions



- (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



Ux + pole input for channel x

COMx - pole input for channel x

U/IOx + pole output for channel x

COMOx - pole output for channel x

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