

### Main

Range of product	Modicon X80
Product or component type	Mixed analog I/O module
Electrical connection	1 connector 20 ways
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
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 % 55 °C without condensation
IP degree of protection	IP20
Directives	2014/30/EU - electromagnetic compatibility

2014/35/EU - low voltage directive  
2012/19/EU - WEEE directive

Product certifications	CSA UL RCM CE EAC Merchant Navy
Standards	EN 61000-6-2 EN 61000-6-4 EN 61131-2 EN 61010-2-201
Protective treatment	TC
Operating altitude	0...2000 m 2000...5000 m (with derating factor)

### Offer Sustainability

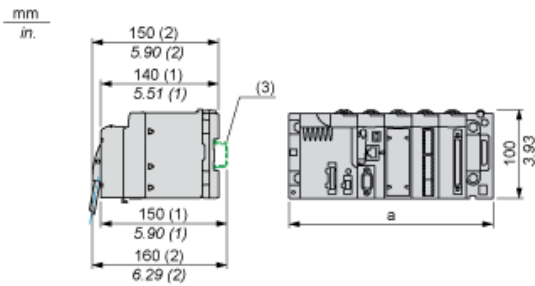
Sustainable offer status	Green Premium product
RoHS (date code: YYWW)	Compliant - since 0805 - Schneider Electric declaration of conformity <a href="#">Schneider Electric declaration of conformity</a>
REACH	Reference not containing SVHC above the threshold <a href="#">Reference not containing SVHC above the threshold</a>
Product environmental profile	Available <a href="#">Product Environmental Profile</a>
Product end of life instructions	Available <a href="#">End of Life Information</a>

### Contractual warranty

Warranty period	18 months
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Modules Mounted on Racks

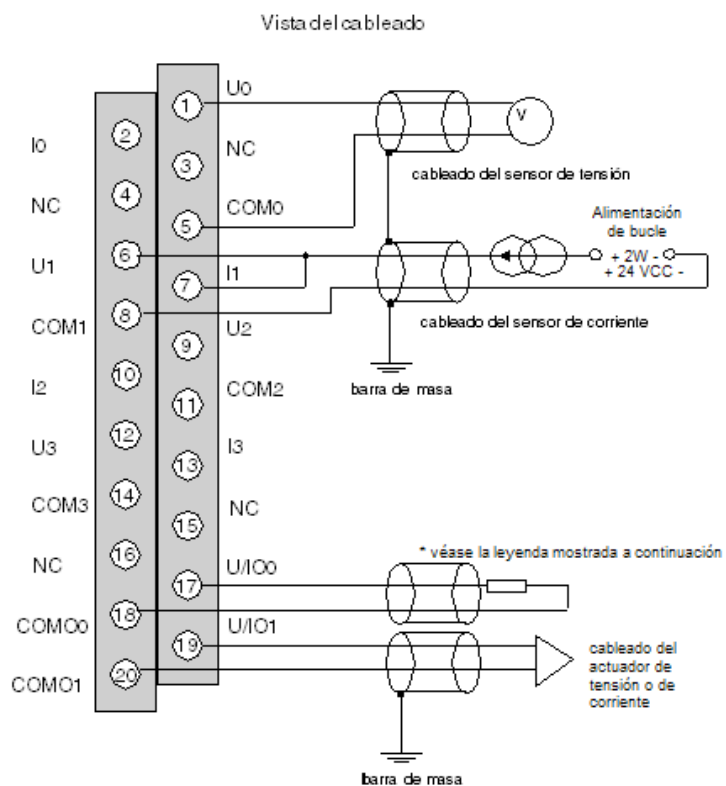
Dimensions



- (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.