



### Main

|                            |  |
|----------------------------|--|
| Range of product           | Modicon X80  |
| Product or component type  | Analog input module  |
| Electrical connection      | 28 ways 1 connector  |
| Isolation between channels | Isolated   |
| Input level                | High level   |
| Analogue input number      | 8  |
| Analogue input type        | Current +/- 20 mA<br>Current 0...20 mA<br>Current 4...20 mA<br>Voltage +/- 10 V<br>Voltage +/- 5 V<br>Voltage 0...10 V<br>Voltage 0...5 V<br>Voltage 1...5 V |

### Complementary

|   |   |
|---|---|
| Analog/digital conversion                 | 16 bits   |
| Analogue input resolution                 | 15 bits + sign  |
| Permitted overload on inputs              | +/- 30 mA 0...20 mA<br>+/- 30 mA 4...20 mA<br>+/- 30 V +/- 10 V<br>+/- 30 V +/- 5 V<br>+/- 30 V 0...10 V<br>+/- 30 V 0...5 V<br>+/- 30 V 1...5 V<br>+/- 30 mA +/- 20 mA   |
| Input impedance                           | 10 MOhm in voltage mode<br>250 Ohm + 3.6...50 Ohm internal protective resistor in current mode  |
| Precision of internal conversion resistor | 0.1 % - 15 ppm/°C   |
| Type of filter                            | First order digital filtering   |
| Fast read cycle time                      | 1 ms + 1 ms x number of channels used   |
| Nominal read cycle time                   | 9 ms for 8 channels   |
| Measurement error                         | <= 0.1 % of full scale +/- 10 V 0...60 °C<br><= 0.1 % of full scale +/- 5 V 0...60 °C<br><= 0.1 % of full scale 0...10 V 0...60 °C<br><= 0.1 % of full scale 0...5 V 0...60 °C<br><= 0.1 % of full scale 1...5 V 0...60 °C<br><= 0.3 % of full scale +/- 20 mA 0...60 °C<br><= 0.3 % of full scale 0...20 mA 0...60 °C<br><= 0.3 % of full scale 4...20 mA 0...60 °C<br>0.15 % of full scale +/- 20 mA 25 °C<br>0.15 % of full scale 0...20 mA 25 °C<br>0.15 % of full scale 4...20 mA 25 °C<br>0.075 % of full scale +/- 10 V 25 °C<br>0.075 % of full scale 0...10 V 25 °C<br>0.075 % of full scale 0...5 V 25 °C<br>0.075 % of full scale 1...5 V 25 °C<br>0.075 % of full scale +/- 5 V 25 °C |
| Temperature drift                         | 30 ppm/°C +/- 10 V<br>30 ppm/°C +/- 5 V<br>30 ppm/°C 0...10 V<br>30 ppm/°C 0...5 V<br>30 ppm/°C 1...5 V<br>50 ppm/°C +/- 20 mA<br>50 ppm/°C 0...20 mA<br>50 ppm/°C 4...20 mA  |

The information provided in this documentation contains general descriptions and/or technical characteristics of the performance 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.

|                               |  |
|-------------------------------|--|
| Minimum crosstalk attenuation | 80 dB  |
| Common mode rejection         | 80&nbsp;dB   |
| Digital value format          | - 32768 to + 32767 in maximum user scale<br>+/- 10000 by default   |
| Isolation voltage             | 300 V DC between channels<br>1400 V DC between channels and ground<br>1400 V DC between channels and bus   |
| Measurement resolution        | 0.36 mV +/- 10 V<br>0.36 mV 0...10 V<br>0.36 mV 0...5 V<br>0.36 mV 1...5 V<br>0.36 mV +/- 5 V<br>1.4 µA +/- 20 mA<br>1.4 µA 0...20 mA<br>1.4 µA 4...20 mA                        |
| Maximum conversion value      | +/- 11.4 V +/- 10 V<br>+/- 11.4 V 0...10 V<br>+/- 11.4 V 0...5 V<br>+/- 11.4 V 1...5 V<br>0...30 mA +/- 20 mA<br>0...30 mA 0...20 mA<br>0...30 mA 4...20 mA<br>0...30 mA +/- 5 V |
| Operating altitude            | 0...2000 m<br>2000...5000 m with derating factor   |
| Status LED                    | 1 LED (green)RUN<br>1 LED per channel (green)channel diagnostic<br>1 LED (red)ERR<br>1 LED (red)I/O  |
| Net weight                    | 0.165 kg   |
| Power consumption in W        | 1.06 W 24 V DC typical<br>1.50 W 24 V DC maximum<br>0.32 W 3.3 V DC typical<br>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 | 0...60 °C  |
| Relative humidity                     | 5...95 % at 55 °C without condensation   |
| IP degree of protection               | IP20   |
| Directives                            | 2014/35/EU - low voltage directive<br>2014/30/EU - electromagnetic compatibility   |
| Product certifications                | CE<br>RCM<br>CSA<br>EAC<br>Merchant Navy<br>UL                                     |
| Standards                             | EN/IEC 61010-2-201<br>EN/IEC 61131-2<br>UL 61010-2-201<br>CSA C22.2 No 61010-2-201 |

## Packing Units

|                              |          |
|------------------------------|----------|
| Unit Type of Package 1       | PCE      |
| Number of Units in Package 1 | 1        |
| Package 1 Weight             | 162 g    |
| Package 1 Height             | 5.6 cm   |
| Package 1 width              | 11.4 cm  |
| Package 1 Length             | 12 cm    |
| Unit Type of Package 2       | S02      |
| Number of Units in Package 2 | 15       |
| Package 2 Weight             | 2.745 kg |

|                  |       |
|------------------|-------|
| Package 2 Height | 15 cm |
| Package 2 width  | 30 cm |
| Package 2 Length | 40 cm |

### Offer Sustainability

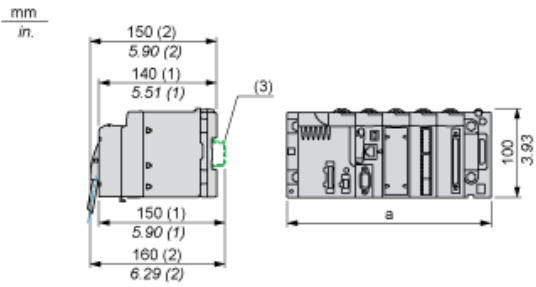
|                            |   |
|----------------------------|---|
| Sustainable offer status   | Green Premium product   |
| REACH Regulation           | <a href="#">REACH Declaration</a>   |
| REACH free of SVHC         | Yes   |
| EU RoHS Directive          | Pro-active compliance (Product out of EU RoHS legal scope) <a href="#">EU RoHS Declaration</a>                              |
| Mercury free               | Yes   |
| RoHS exemption information | <a href="#">Yes</a>   |
| China RoHS Regulation      | <a href="#">China RoHS Declaration</a>  |
| Environmental Disclosure   | <a href="#">Product Environmental Profile</a>   |
| Circularity Profile        | <a href="#">End Of Life Information</a>   |
| 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 |
|----------|-----------|

Modules Mounted on Racks

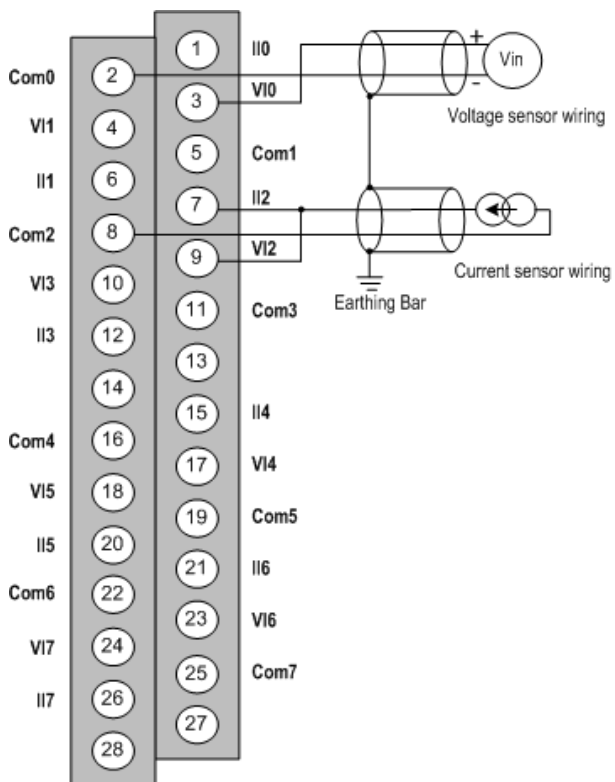
Dimensions



- (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



VIx + pole input for channel x  
 COM x pole input for channel x  
 IIx current reading resistor + input  
 Channel voltage sensor  
 0  
 Channel wire current sensor  
 1