



Main

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|---------------------------|--|
| Range of product | Modicon X80 |
| Product or component type | Analog input module |
| Electrical connection | 1 connector 28 ways |
| Input output isolation | Non isolated |
| Input level | High level |
| Analogue input number | 8 |
| Analogue input type | Current +/- 20 mA Current 0...20 mA Current 4...20 mA Voltage +/- 10 V Voltage +/- 5 V Voltage 0...10 V Voltage 0...5 V Voltage 1...5 V |

Complementary

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|---|---|
| Analog/Digital conversion | 16 bits |
| Analogue input resolution | 15 bits + sign |
| Input impedance | 10 MOhm |
| Permitted overload on inputs | +/- 30 mA 0...20 mA +/- 30 mA 4...20 mA +/- 30 V +/- 10 V +/- 30 V +/- 5 V +/- 30 V 0...10 V +/- 30 V 0...5 V +/- 30 V 1...5 V +/- 30 mA +/- 20 mA |
| Internal conversion resistor | 250 Ohm |
| 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 |

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|------------------------------|---|
| Measurement error | <= 0.1 % of full scale +/- 10 V 0...60 °C <= 0.1 % of full scale +/- 5 V 0...60 °C <= 0.1 % of full scale 0...10 V 0...60 °C <= 0.1 % of full scale 0...5 V 0...60 °C <= 0.1 % of full scale 1...5 V 0...60 °C <= 0.3 % of full scale +/- 20 mA 0...60 °C <= 0.3 % of full scale 0...20 mA 0...60 °C <= 0.3 % of full scale 4...20 mA 0...60 °C 0.15 % of full scale +/- 20 mA 25 °C 0.15 % of full scale 0...20 mA 25 °C 0.15 % of full scale 4...20 mA 25 °C 0.08 % of full scale +/- 10 V 25 °C 0.08 % of full scale 0...10 V 25 °C 0.08 % of full scale 0...5 V 25 °C 0.08 % of full scale 1...5 V 25 °C 0.08 % of full scale +/- 5 V 25 °C <= 0.2 % of full scale +/- 10 V 0...60 °C |
| Temperature drift | 30 ppm/°C 50 ppm/°C |
| Recalibration | Factory calibrated |
| Common mode between channels | >= 120 dB |
| Digital value format | +/- 10000 by default +/- 32000 in user scale |
| Isolation voltage | 1400 V DC between channels and ground 1400 V DC between channels and bus 50 V DC between channels |
| Measurement resolution | 0.36 mV +/- 10 V 0.36 mV 0...10 V 0.36 mV 0...5 V 0.36 mV 1...5 V 0.36 mV +/- 5 V 1.4 µA +/- 20 mA 1.4 µA 0...20 mA 1.4 µA 4...20 mA |
| Maximum conversion value | +/- 11.4 V +/- 10 V +/- 11.4 V 0...10 V +/- 11.4 V 0...5 V +/- 11.4 V 1...5 V 0...30 mA +/- 20 mA 0...30 mA 0...20 mA 0...30 mA 4...20 mA 0...30 mA +/- 5 V |
| Status LED | 1 LED green RUN 1 LED per channel green channel diagnostic 1 LED red ERR 1 LED red I/O |
| Product weight | 0.165 kg |
| Current consumption | 30 mA at 24 V DC 150 mA at 3.3 V DC |

Environment

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|---------------------------------------|--|
| 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 |
| Product certifications | CE CSA UL RCM Merchant Navy EAC |
| Standards | EN/IEC 61131-2 EN/IEC 61010-2-201 UL 61010-2-201 |

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|----------------------|--|
| Protective treatment | TC |
| Operating altitude | 0...2000 m 2000...5000 m (with derating factor) |

Offer Sustainability

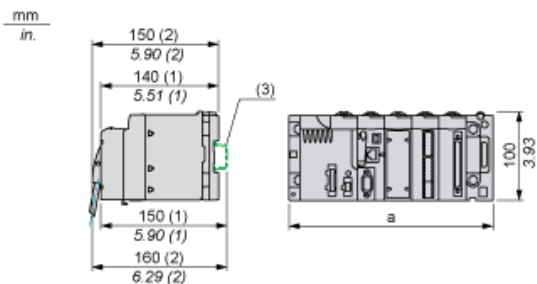
| | |
|----------------------------------|---|
| Sustainable offer status | Green Premium product |
| RoHS (date code: YYWW) | Compliant - since 0901 - Schneider Electric declaration of conformity Schneider Electric declaration of conformity |
| REACH | Reference not containing SVHC above the threshold Reference not containing SVHC above the threshold |
| Product environmental profile | Available Product environmental |
| Product end of life instructions | Available End of life manual |

Contractual warranty

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|-----------------|-----------|
| Warranty period | 18 months |
|-----------------|-----------|

Modules Mounted on Racks

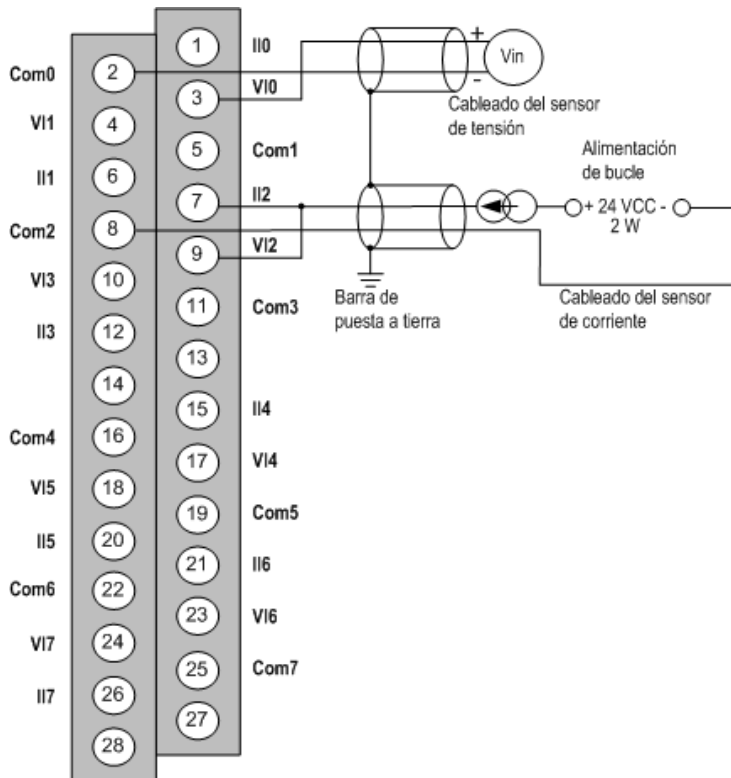
Dimensions



- (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.
 COMx - pole input for channel x, COMx are connected together internally.
 IIx current reading resistor + input.
 Channel 0 voltage sensor.
 Channel 12-wire current sensor.