



Main

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| Range of product | Modicon X80 |
| Product or component type | Discrete input module |
| Product specific application | For severe environments |
| Discrete input number | 16 |
| Discrete input type | Isolated |
| Input type | Current sink (logic positive) |
| Discrete input voltage | 24 V DC, discrete input logic: positive |
| Discrete input current | 3.5 mA |

Complementary

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| Input compatibility | With 2-wire/3-wire proximity sensors conforming to IEC 60947-5-2 With 2-wire/3-wire proximity sensors conforming to IEC 61131-2 type 3 |
| Sensor power supply | 19...30 V 60 °C 21.1...26.4 V 70 °C |
| Current state 1 guaranteed | ≥ 2 mA |
| Current state 0 guaranteed | ≤ 1.5 mA |
| Input impedance | 6800 Ohm |
| Insulation resistance | > 10 MOhm 500 V DC |
| Power dissipation in W | 2.5 W |
| DC typical response time | 4 ms |
| DC maximum response time | 7 ms |
| Paralleling of inputs | Yes |
| Typical current consumption | 76 mA at 3.3 V DC |
| MTBF reliability | 775000 H |
| Protection type | 1 external fuse per group of channel 0.5 A fast blow Reverse polarity protection |
| Voltage detection threshold | < 14 V DC sensor fault > 18 V DC sensor OK |
| Status LED | 1 LED (green) module operating (RUN) 1 LED per channel (green) channel diagnostic 1 LED (red) module error (ERR) 1 LED (red) module I/O |
| Net weight | 0.115 kg |

Environment

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| IP degree of protection | IP20 |
| Directives | 2014/35/EU - low voltage directive 2014/30/EU - electromagnetic compatibility |
| 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 |
| Dielectric strength | 1500 V AC at 50/60 Hz 1 minute, primary/secondary |
| Vibration resistance | 3 gn |
| Shock resistance | 30 gn |

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| 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 |
| Protective treatment | Conformal coating |
| Operating altitude | 0...2000 m 2000...5000 m with derating factor |

Packing Units

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|------------------------------|----------|
| Unit Type of Package 1 | PCE |
| Number of Units in Package 1 | 1 |
| Package 1 Height | 5.5 cm |
| Package 1 Width | 11.0 cm |
| Package 1 Length | 11.5 cm |
| Package 1 Weight | 165.0 g |
| Unit Type of Package 2 | S02 |
| Number of Units in Package 2 | 15 |
| Package 2 Height | 15 cm |
| Package 2 Width | 30 cm |
| Package 2 Length | 40 cm |
| Package 2 Weight | 2.901 kg |
| Unit Type of Package 3 | P06 |
| Number of Units in Package 3 | 240 |
| Package 3 Height | 75.0 cm |
| Package 3 Width | 60.0 cm |
| Package 3 Length | 80.0 cm |
| Package 3 Weight | 59 kg |

Offer Sustainability

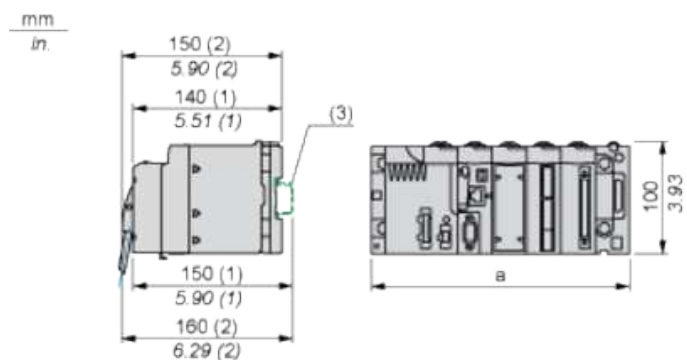
| | |
|----------------------------|---|
| Sustainable offer status | Green Premium product |
| REACH Regulation | REACH Declaration |
| REACH free of SVHC | Yes |
| EU RoHS Directive | Pro-active compliance (Product out of EU RoHS legal scope) EU RoHS Declaration |
| Mercury free | Yes |
| China RoHS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

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| Warranty | 18 months |
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Modules Mounted on Racks

Dimensions



(1) With removable terminal block (cage, screw or spring).

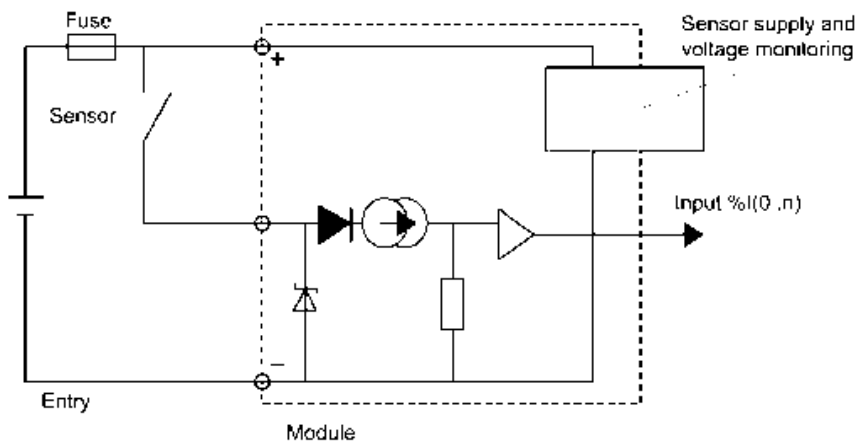
(2) With FCN connector.

(3) On AM1 ED rail: 35 mm wide, 15 mm deep. Only possible with BMXXBP0400/0400H/0600/0600H/0800/0800H rack.

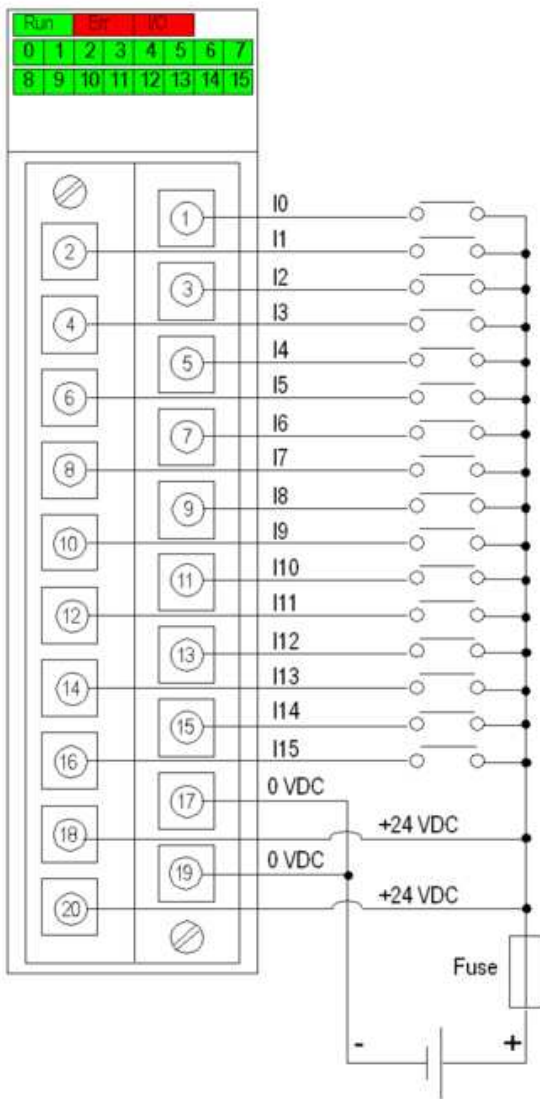
| Rack references | a in mm | a in in. |
|----------------------------|---------|----------|
| BMXXBP0400 and BMXXBP0400H | 242.4 | 09.54 |
| BMXXBP0600 and BMXXBP0600H | 307.6 | 12.11 |
| BMXXBP0800 and BMXXBP0800H | 372.8 | 14.68 |
| BMXXBP1200 and BMXXBP1200H | 503.2 | 19.81 |

Connecting the Module

Input Circuit Diagram



Module Connection



power supply 24 VDC
fuse fast blow fuse of 0.5 A