# BMXDAI1602

discrete input module X80 - 16 inputs - 24V AC/DC positive or negative

Green Premium™ Product

## Main

| | |
|---|---|
| Range of product | Modicon X80 |
| Product or component type | Discrete input module |
| Discrete input number | 16 |
| Discrete input type | Isolated |
| Input type | Resistive |
| Discrete input voltage | 24 V DC, discrete input logic: positive or negative 24 V AC |
| Discrete input current | 3 MA at 24 V AC 3.9 mA at 24 V DC |

## Complementary

| | |
|---|---|
| Input compatibility | With 2-wire/3-wire proximity sensors conforming to IEC 60947-5-2 With 2-wire/3-wire proximity sensors AC conforming to IEC 61131-2 Type 1 |
| Network frequency | 50/60 Hz |
| Network frequency limits | 47…63 Hz |
| Sensor power supply | 20...26 V AC 19...30 V DC |
| Current state 1 guaranteed | >= 2 mA AC >= 2 mA DC |
| Current state 0 guaranteed | <= 1 mA AC <= 0.5 mA DC |
| Input impedance | 6 kOhm |
| Insulation resistance | > 10 MOhm 500 V DC |
| Power dissipation in W | 3 W |
| AC activation response time | 15 ms |
| AC deactivation response time | 20 ms |
| Paralleling of inputs | No |
| Typical current consumption | 76 mA at 3.3 V DC |
| MTBF reliability | 1125000 H |
| Protection type | 1 external fuse per group of channel0.5 A fast blow |
| Voltage detection threshold | < 14 V AC/DC sensor fault > 18 V AC/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

| | |
|---|---|
| IP degree of protection | IP20 |
| Directives | 2014/35/EU - low voltage directive 2014/30/EU - electromagnetic compatibility |
| Dielectric strength | 1500 V AC at 50/60 Hz 1 minute, primary/secondary |
| 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 |
| --- | --- |
| Operating altitude | 0...2000 m<br>2000...5000 m with derating factor |

## Packing Units

| Unit Type of Package 1 | PCE |
| --- | --- |
| Number of Units in Package 1 | 1 |
| Package 1 Height | 5.500 cm |
| Package 1 Width | 11.800 cm |
| Package 1 Length | 12.500 cm |
| Package 1 Weight | 137.000 g |
| Unit Type of Package 2 | S02 |
| Number of Units in Package 2 | 15 |
| Package 2 Height | 15.000 cm |
| Package 2 Width | 30.000 cm |
| Package 2 Length | 40.000 cm |
| Package 2 Weight | 2.374 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

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

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## Modules Mounted on Racks

### Dimensions
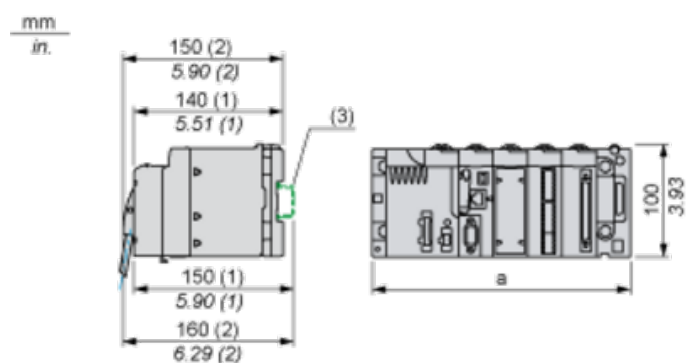


(1) With removable terminal block (cage, screw or spring).

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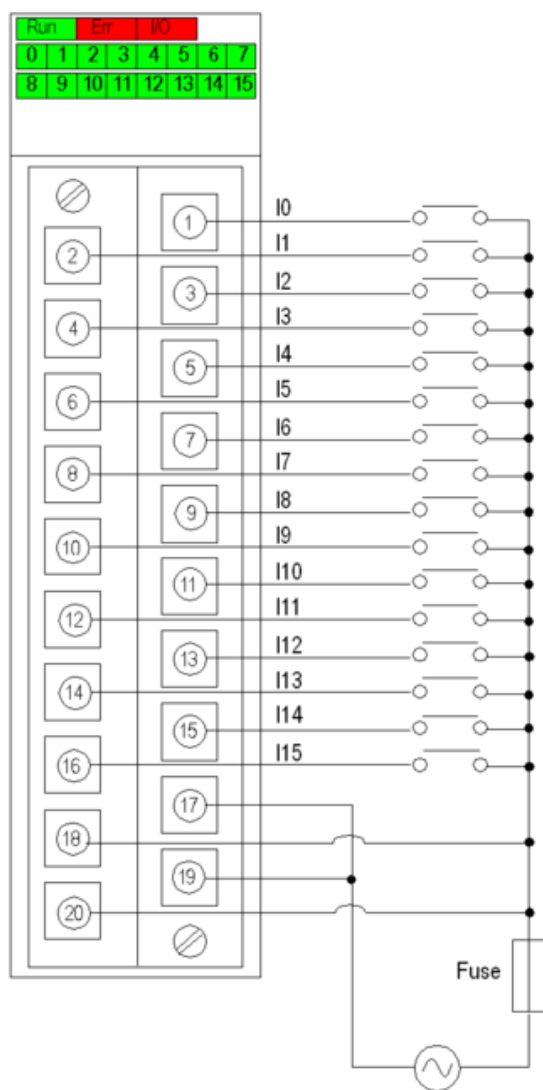
| Rack references | a in mm | a in in. |
|---|---|---|
| BMXXBP0400 and BMXXBP0400H | 242.4 | 09.54 |
| BMXXBP0600 and BMXXBP0600H | 307.6 | 12.11 |
| BMXXBP0800 and BMXXBP0800H | 372.8 | 14.68 |
| BMXXBP1200 and BMXXBP1200H | 503.2 | 19.81 |

# BMXDAI1602

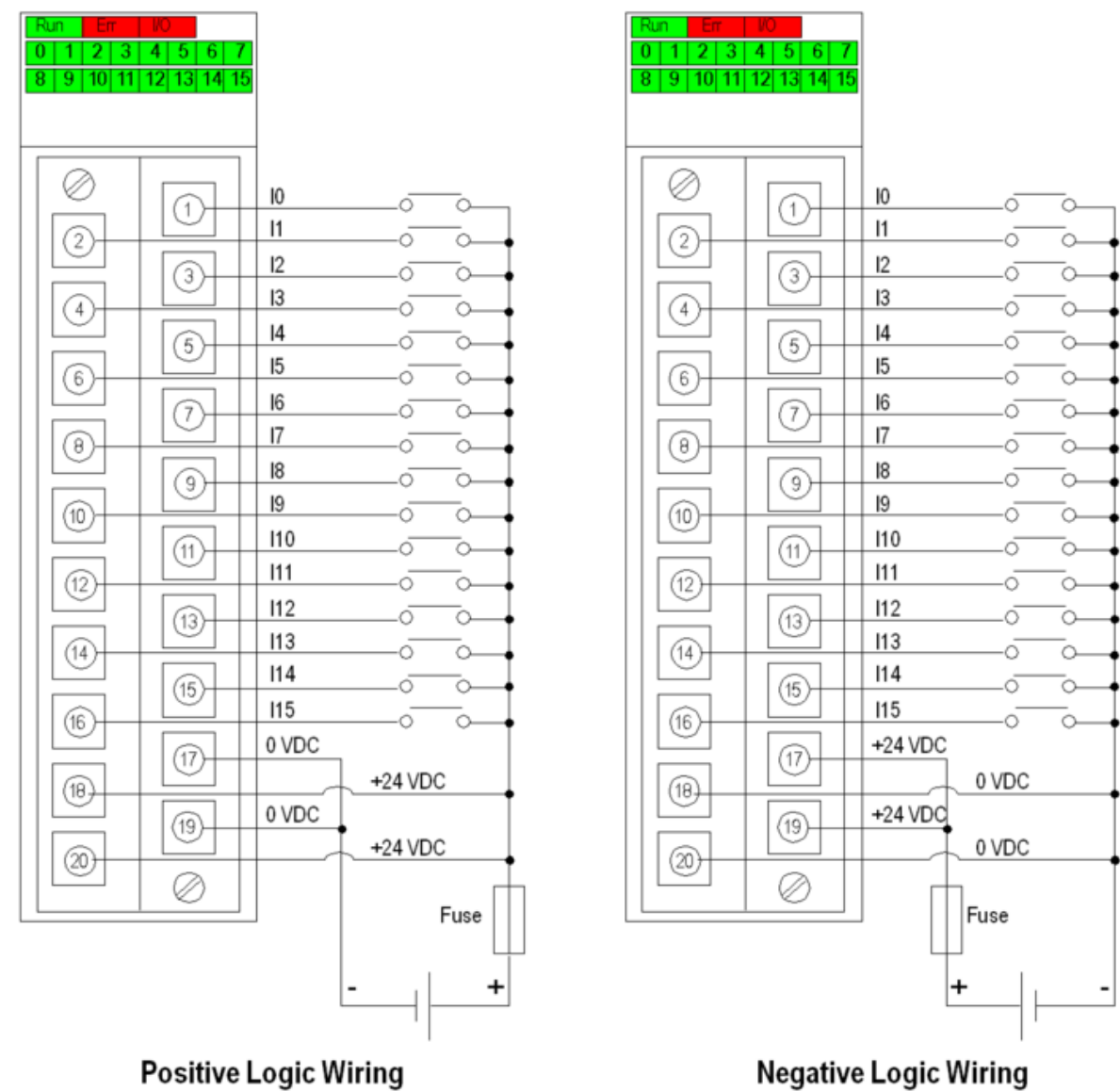## Connecting the Module

### Input Circuit Diagram



Process          Module
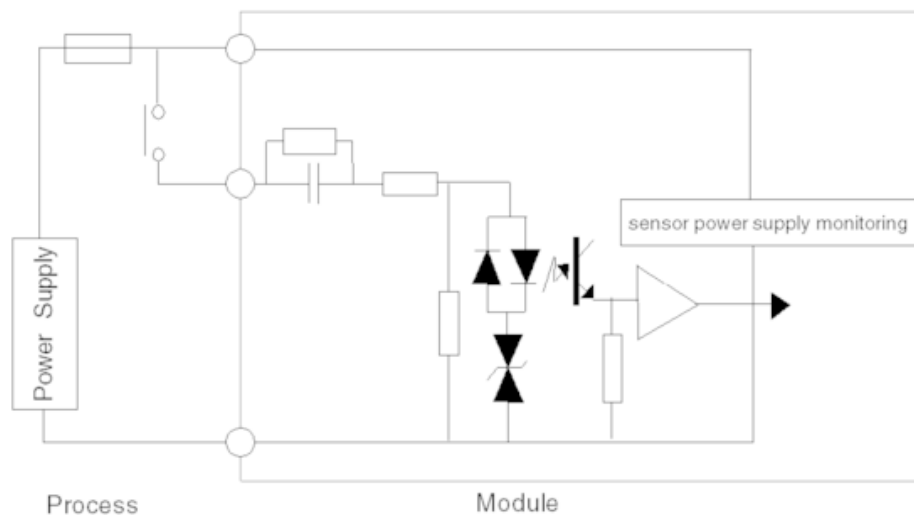
## Module Connection (AC Power Supply)



power supply 24 VAC
fuse fast blow fuse of 0.5 A

## Module Connection (DC Power Supply)



**Positive Logic Wiring**

**Negative Logic Wiring**

power supply 24 VDC
fuse fast blow fuse of 0.5 A

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