

# Product data sheet

Specifications



discrete mixed IO module, Modicon X80, 16 inputs, 16 outputs, 24V DC positive

BMXDDM3202K

## Main

|                           |                               |
|---------------------------|-------------------------------|
| Range Of Product          | Modicon X80                   |
| Product Or Component Type | Discrete I/O module           |
| Discrete Input Number     | 16                            |
| Input Type                | Current sink (logic positive) |
| Discrete Input Voltage    | 24 V DC positive              |
| Discrete Input Current    | 2.5 mA                        |
| Discrete Output Number    | 16                            |
| Discrete Output Type      | Solid state                   |
| Discrete Output Voltage   | 24 V 19...30 V DC             |
| Discrete Output Current   | 0.1 A                         |

## Complementary

|                             |   |
|-----------------------------|---|
| Input Compatibility         | With 2-wire/3-wire proximity sensors IEC 60947-5-2<br>With 2-wire/3-wire proximity sensors IEC 61131-2 Type 1 |
| Sensor Power Supply         | 19...30 V   |
| Current State 1 Guaranteed  | $\geq 2$ mA   |
| Current State 0 Guaranteed  | $\leq 0.5$ mA   |
| Current Per Channel         | 0.125 A   |
| Maximum Current Per Module  | 3.2 A   |
| Maximum Leakage Current     | 0.1 mA at state 0   |
| Maximum Voltage Drop        | $< 1.5$ V at state 1  |
| Input Impedance             | 9600 Ohm  |
| Insulation Resistance       | $> 10$ MOhm 500 V DC  |
| Power Dissipation In W      | 4 W   |
| Dc Typical Response Time    | 4 ms  |
| Dc Maximum Response Time    | 7 ms  |
| Response Time On Output     | 1.2 ms  |
| Paralleling Of Outputs      | Yes : 3 maximum   |
| Typical Current Consumption | 69 mA 24 V DC<br>125 mA 3.3 V DC  |
| Current Consumption         | $\leq 104$ mA 24 V DC<br>$\leq 166$ mA 3.3 V DC   |
| Mtbf Reliability            | 430000 H  |

|  |   |
|--|---|
| <b>Protection Type</b>                 | 1 external fuse per group of input channel 0.5 A fast blow<br>overvoltage protection on output<br>reverse polarity protection on input<br>reverse polarity protection on output |
| <b>Output Overload Protection</b>      | With electronic circuit breaker 0.125 A < I <sub>d</sub> < 0.185 A<br>With current limiter  |
| <b>Output Overvoltage Protection</b>   | With transil diode  |
| <b>Output Short-Circuit Protection</b> | With 2 A external fuse  |
| <b>Reverse Polarity Protection</b>     | Reverse mounted diode   |
| <b>Voltage Detection Threshold</b>     | < 14 V DC preactuator fault<br>< 14 V DC sensor fault<br>> 18 V DC preactuator OK<br>> 18 V DC sensor OK  |
| <b>Maximum Tungsten Load</b>           | 1.2 W   |
| <b>Switching Frequency</b>             | 0.5/LI <sup>2</sup> Hz  |
| <b>Maximum Overload Time</b>           | 15 ms   |
| <b>Load Impedance Ohmic</b>            | <= 220 Ohm  |
| <b>Status Led</b>                      | 1 LED (green) module operating (RUN)<br>1 LED per channel (green) channel diagnostic<br>1 LED (red) module error (ERR)<br>1 LED (red) module I/O                                |
| <b>Net Weight</b>                      | 0.24 lb(US) (0.11 kg)   |

## Environment

|  |  |
|--|--|
| <b>Ip Degree Of Protection</b>               | IP20   |
| <b>Directives</b>                            | 2014/35/EU - low voltage directive<br>2014/30/EU - electromagnetic compatibility   |
| <b>Dielectric Strength</b>                   | 1500 V AC 50/60 Hz 1 minute, output/ground<br>1500 V AC 50/60 Hz 1 minute, output/internal logic<br>1500 V AC 50/60 Hz 1 minute, primary/secondary<br>500 V DC 1 minute, between group of inputs and outputs |
| <b>Vibration Resistance</b>                  | 3 gn   |
| <b>Shock Resistance</b>                      | 30 gn  |
| <b>Ambient Air Temperature For Storage</b>   | -40...185 °F (-40...85 °C)   |
| <b>Ambient Air Temperature For Operation</b> | 32...140 °F (0...60 °C)  |
| <b>Relative Humidity</b>                     | 5...95 % 131 °F (55 °C) without condensation   |
| <b>Operating Altitude</b>                    | 0...2000 m<br>2000...5000 m with derating factor   |

## Packing Units

|                                     |                     |
|-------------------------------------|---------------------|
| <b>Unit Type Of Package 1</b>       | PCE                 |
| <b>Number Of Units In Package 1</b> | 1                   |
| <b>Package 1 Height</b>             | 2.17 in (5.500 cm)  |
| <b>Package 1 Width</b>              | 4.53 in (11.500 cm) |
| <b>Package 1 Length</b>             | 4.61 in (11.700 cm) |
| <b>Package 1 Weight</b>             | 4.73 oz (134.000 g) |
| <b>Unit Type Of Package 2</b>       | S02                 |
| <b>Number Of Units In Package 2</b> | 15                  |

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|                         |                        |
|-------------------------|------------------------|
| <b>Package 2 Height</b> | 5.91 in (15.000 cm)    |
| <b>Package 2 Width</b>  | 11.81 in (30.000 cm)   |
| <b>Package 2 Length</b> | 15.75 in (40.000 cm)   |
| <b>Package 2 Weight</b> | 5.19 lb(US) (2.355 kg) |

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## **Contractual warranty**

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|                 |           |
|-----------------|-----------|
| <b>Warranty</b> | 18 months |
|-----------------|-----------|

## Sustainability


**Green Premium™ label** is Schneider Electric's commitment to delivering products with best-in-class environmental performance. Green Premium promises compliance with the latest regulations, transparency on environmental impacts, as well as circular and low-CO<sub>2</sub> products.


**Guide to assessing product sustainability** is a white paper that clarifies global eco-label standards and how to interpret environmental declarations.

[Learn more about Green Premium >](#)

[Guide to assess a product's sustainability >](#)

## Well-being performance

 Mercury Free

 Rohs Exemption Information [Yes](#)

**Reach Regulation** [REACH Declaration](#)

**Eu Rohs Directive** Pro-active compliance (Product out of EU RoHS legal scope)

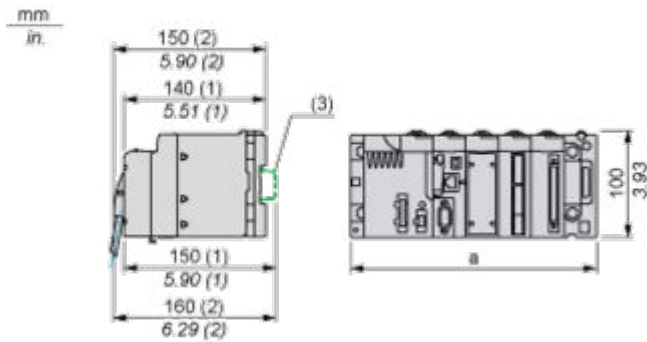
**China Rohs Regulation** [China RoHS declaration](#)

**Weee** The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins

Dimensions Drawings

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.

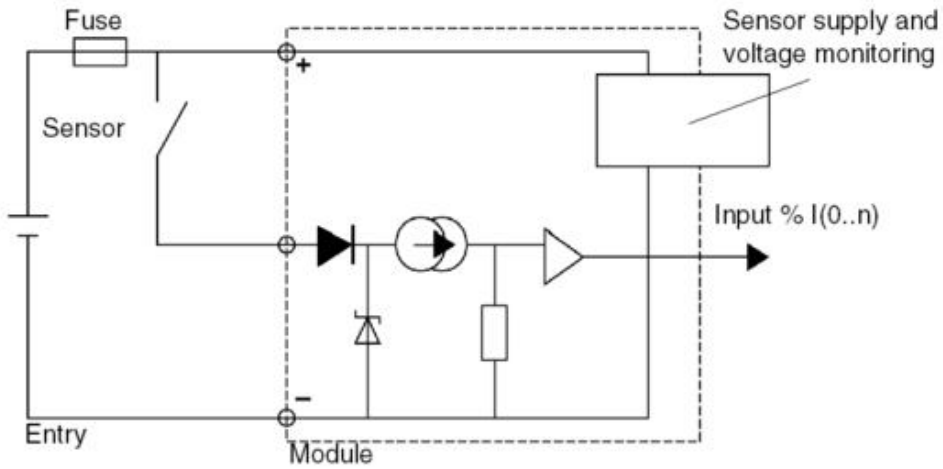
| Rack references            | a in mm | a in in. |
|----------------------------|---------|----------|
| BMXXBP0400 and BMXXBP0400H | 242.4   | 09.54    |
| BMXXBP0600 and BMXXBP0600H | 307.6   | 12.11    |
| BMXXBP0800 and BMXXBP0800H | 372.8   | 14.68    |
| BMXXBP1200 and BMXXBP1200H | 503.2   |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

Connections and Schema

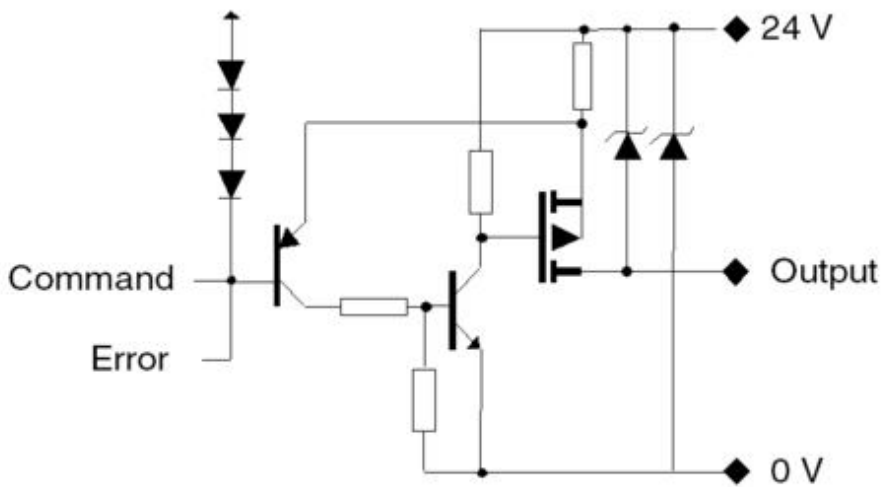
Connecting the Module

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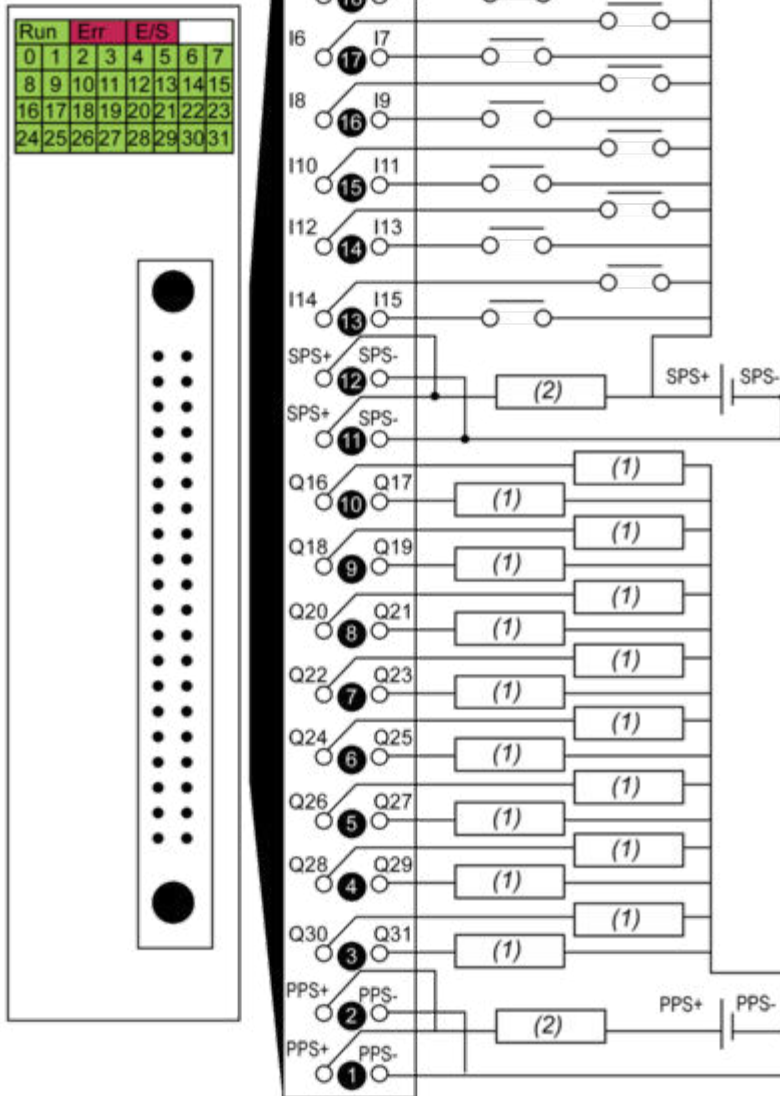
Input Circuit Diagram



Output Circuit Diagram



Module Connection



- (1) pre-actuator
- (2) fuse
- power supply 24 VDC
- input fuse fast blow fuse of 0.5 A
- output fuse fast blow fuse of 2 A
- SPS sensor power supply
- PPS pre-actuator power supply