

# Product data sheet

Specifications



## discrete mixed IO module, Modicon X80, 8 inputs, 8 outputs, 24V DC positive

BMXDDM16022

### Main

Range of product	Modicon X80
Product or component type	Discrete I/O module
Discrete input number	8
Input type	Current sink (logic positive)
Discrete input voltage	24 V DC, discrete input logic: positive
Discrete input current	3.5 mA
Discrete output number	8
Discrete output type	Solid state
Discrete output voltage	24 V 19...30 V DC
Discrete output current	0.5 A

### Complementary

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
Current state 1 guaranteed	$\geq 3$ mA
Current state 0 guaranteed	$\leq 1.5$ mA
Current per channel	0.625 A
Maximum current per module	5 A
Maximum leakage current	0.5 mA at state 0
Maximum voltage drop	$< 1.2$ V at state 1
Input impedance	6800 Ohm
Insulation resistance	$> 10$ MOhm 500 V DC
Power dissipation in W	3.7 W
DC typical response time	4 ms
DC maximum response time	7 ms
Response time on output	1.2 ms
Paralleling of outputs	Yes : 2 maximum
Typical current consumption	79 mA at 3.3 V DC 59 mA at 24 V DC
Current consumption	$\leq 111$ mA at 3.3 V DC $\leq 67$ mA at 24 V DC
MTBF reliability	450000 H

<b>Protection type</b>	1 external fuse per group of input channel 0.5 A fast blow overvoltage protection on output reverse polarity protection on input reverse polarity protection on output
<b>Output overload protection</b>	With current limiter With electronic circuit breaker $1.5 I_n < I_d < 2 I_n$
<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 < 14 V DC sensor fault > 18 V DC preactuator OK > 18 V DC sensor OK
<b>Maximum tungsten load</b>	6 W
<b>Switching frequency</b>	0.5/LI <sup>2</sup> Hz
<b>Maximum overload time</b>	15 ms
<b>Load impedance ohmic</b>	>= 48 Ohm
<b>Status LED</b>	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
<b>Net weight</b>	0.115 kg

## Environment

<b>IP degree of protection</b>	IP20
<b>Directives</b>	2014/35/EU - low voltage directive 2014/30/EU - electromagnetic compatibility
<b>Dielectric strength</b>	1500 V AC at 50/60 Hz 1 minute, output/ground 1500 V AC at 50/60 Hz 1 minute, output/internal logic 1500 V AC at 50/60 Hz 1 minute, primary/secondary 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...85 °C
<b>Ambient air temperature for operation</b>	0...60 °C
<b>Relative humidity</b>	5...95 % at 55 °C without condensation
<b>Operating altitude</b>	0...2000 m 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>	5.500 cm
<b>Package 1 Width</b>	11.000 cm
<b>Package 1 Length</b>	11.700 cm
<b>Package 1 Weight</b>	142.000 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>	15.000 cm
<b>Package 2 Width</b>	30.000 cm
<b>Package 2 Length</b>	40.000 cm
<b>Package 2 Weight</b>	2.490 kg

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## **Contractual warranty**

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<b>Warranty</b>	18 months
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## Environmental Data

Schneider Electric aims to achieve Net Zero status by 2050 through supply chain partnerships, lower impact materials, and circularity via our ongoing “Use Better, Use Longer, Use Again” campaign to extend product lifetimes and recyclability.

[Environmental Data explained >](#)

[How we assess product sustainability >](#)

### Environmental footprint

Total lifecycle Carbon footprint 32

Environmental Disclosure [Product Environmental Profile](#)

## Use Better

### Materials and Substances

Packaging made with recycled cardboard Yes

Packaging without single use plastic Yes

[EU RoHS Directive](#) Pro-active compliance (Product out of EU RoHS legal scope)

SCIP Number 59505052-8ead-46e6-bc82-9cffb526d03c

REACH Regulation [REACH Declaration](#)

California proposition 65 **WARNING:** This product can expose you to chemicals including: Lead and lead compounds, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to [www.P65Warnings.ca.gov](http://www.P65Warnings.ca.gov)

## Use Again

### Repack and remanufacture

End of life manual availability [End of Life Information](#)

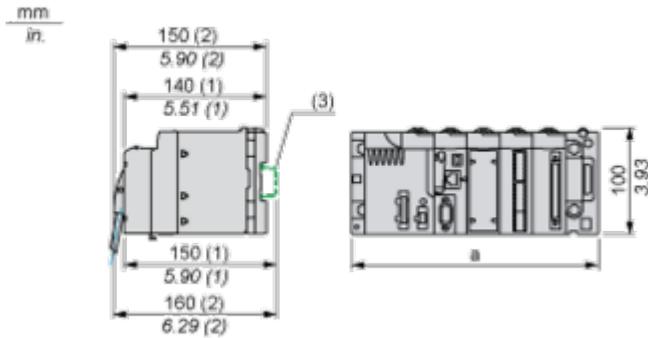
Take-back No

Dimensions Drawings

Modules Mounted on Racks

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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.

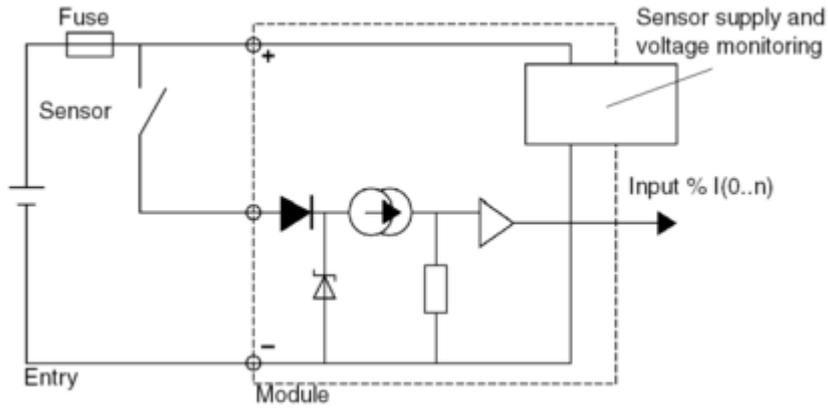
Rack references	a in mm	a in in.
BMXXBP0400 and BMXXBP0400H	242.4	09.54
BMXXBP0600 and BMXXBP0600H	307.6	12.11
BMXXBP0800 and BMXXBP0800H	372.8	14.68
BMXXBP1200 and BMXXBP1200H	503.2	19.81

Connections and Schema

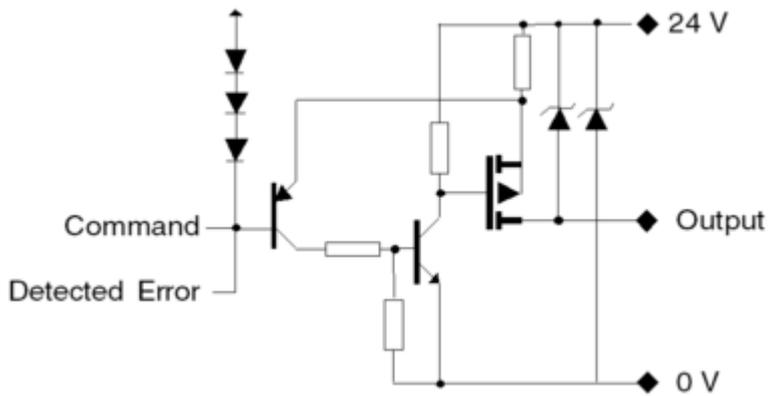
Connecting the Module

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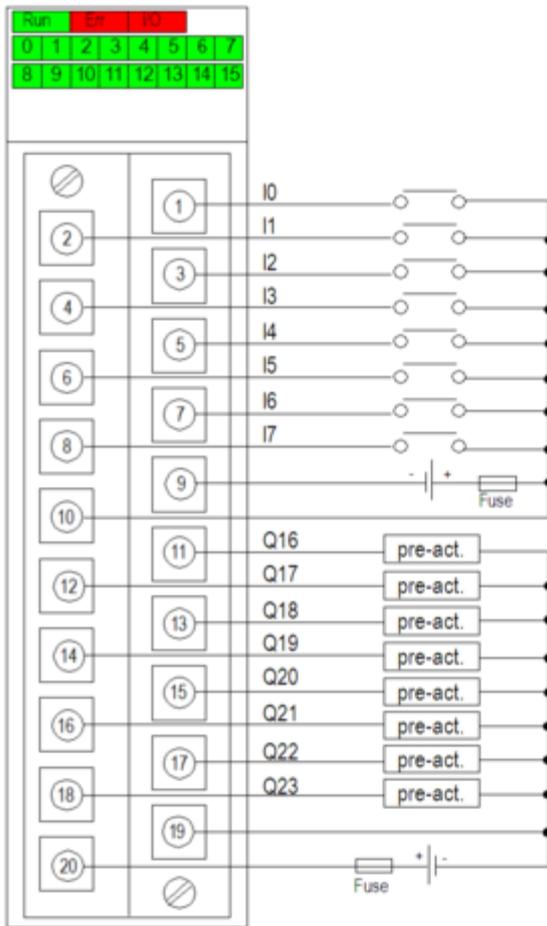
Input Circuit Diagram



Output Circuit Diagram



Module Connection



**power supply** 24 VDC

**input fuse** fast blow fuse of 0.5 A

**output fuse** fast blow fuse of 6.3 A

**pre-act** pre-actuator

Image of product / Alternate images

Alternative

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