

# Product datasheet

Specifications



discrete input module, Modicon X80,  
16 inputs, 24V AC or DC, positive or  
negative

BMXDAI1602

## 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

Disclaimer: This documentation is not intended as a substitute for and is not to be used for determining suitability or reliability of these products for specific user applications

Net Weight	0.115 kg
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## 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 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

## Contractual warranty

Warranty	18 months
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# 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 >](#)

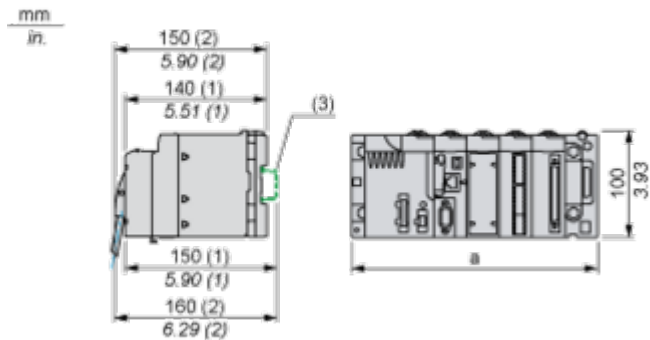
## Well-being performance

 Mercury Free	
 Rohs Exemption Information	<a href="#">Yes</a>
Reach Regulation	<a href="#">REACH Declaration</a>
Eu Rohs Directive	Pro-active compliance (Product out of EU RoHS legal scope)
China Rohs Regulation	<a href="#">China RoHS declaration</a>
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



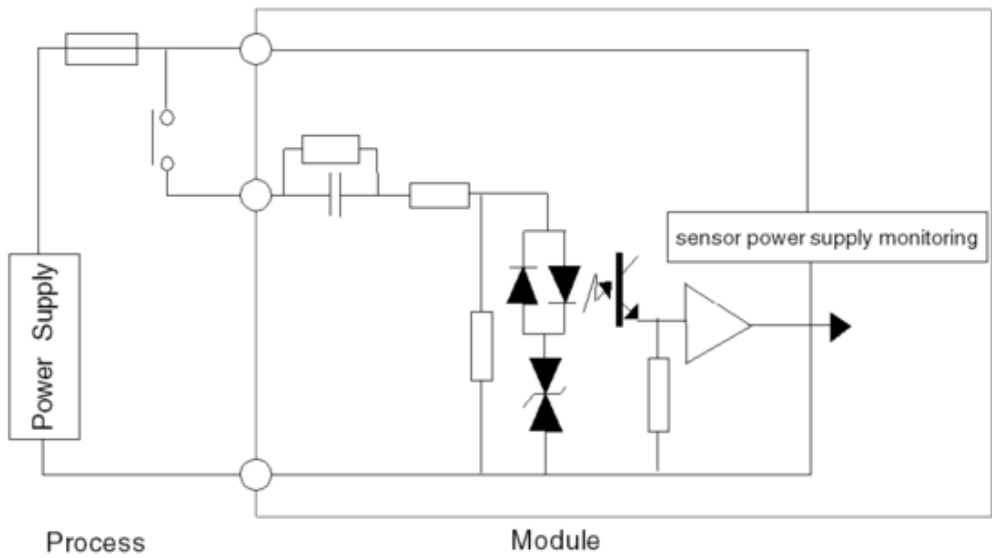
- (1) With removable terminal block (cage, screw or spring).  
(2) With FCN connector.  
(3) On AM1 ED rail: 35 mm wide, 15 mm deep. Only possible with BMXXBP0400/0400H/0600/0600H/0800/0800H rack.

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

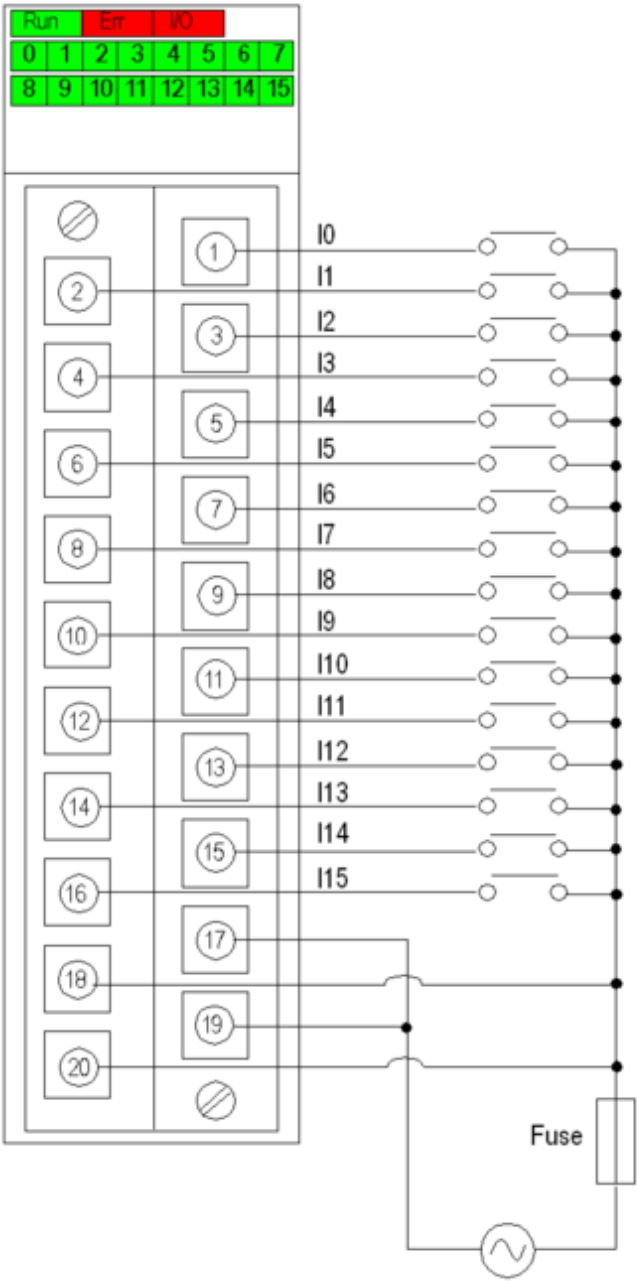
Connections and Schema

Connecting the Module

Input Circuit Diagram

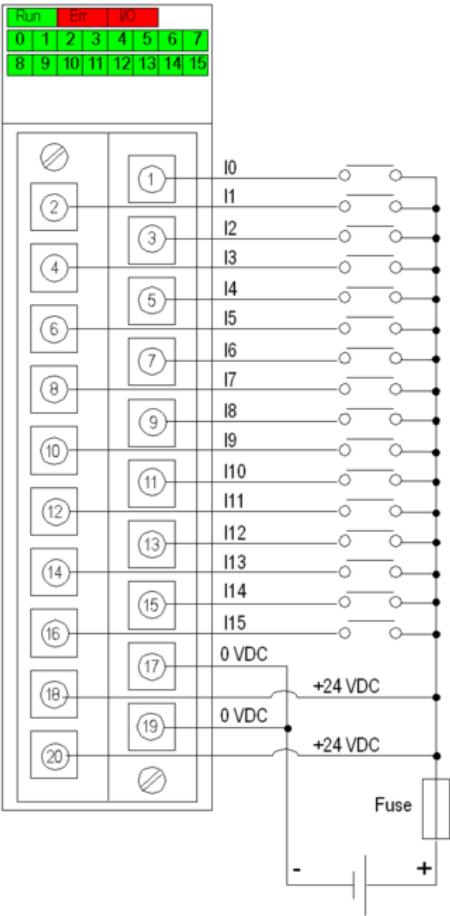


Module Connection (AC Power Supply)

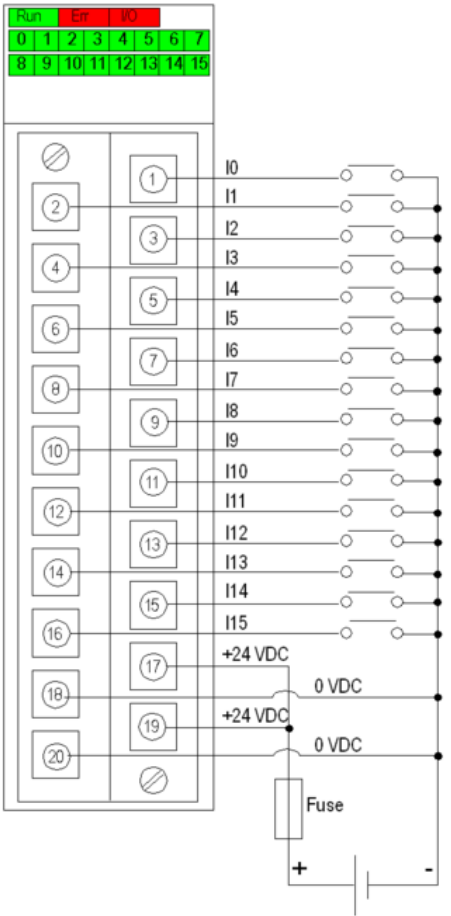


power supply 24 VAC  
fuse fast blow fuse of 0.5 A

Module Connection (DC Power Supply)



Positive Logic Wiring



Negative Logic Wiring

power supply 24 VDC  
fuse fast blow fuse of 0.5 A