

# Product datasheet

Specifications



## discrete input module X80 - 16 inputs - 48V DC current sink (logic positive)

Local distributor code:  
393393178

BMXDDI1603H

EAN Code: 3595864025728

### Main

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	48 V DC, discrete input logic: positive
Discrete Input Current	2.5 mA

### 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 1
Sensor Power Supply	36...60 V 60 °C 42.2...52.8 V 70 °C
Current State 1 Guaranteed	>= 2 mA
Current State 0 Guaranteed	<= 0.5 mA
Input Impedance	19200 Ohm
Insulation Resistance	> 10 MOhm 500 V DC
Power Dissipation In W	3.6 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	777000 H
Protection Type	1 external fuse per group of channel0.5 A fast blow reverse polarity protection
Voltage Detection Threshold	< 24 V DC sensor fault > 36 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

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

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
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

Unit Type Of Package 1	PCE
Number Of Units In Package 1	1
Package 1 Height	5.0 cm
Package 1 Width	11.0 cm
Package 1 Length	12.0 cm
Package 1 Weight	155.0 g
Unit Type Of Package 2	S02
Number Of Units In Package 2	15
Package 2 Height	15.0 cm
Package 2 Width	30.0 cm
Package 2 Length	40.0 cm
Package 2 Weight	2.788 kg

## Contractual warranty

Warranty	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 >](#)

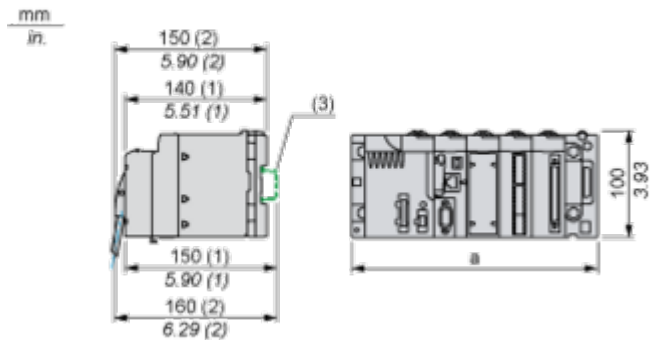
## Well-being performance

 Mercury Free	
 Rohs Exemption Information	<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



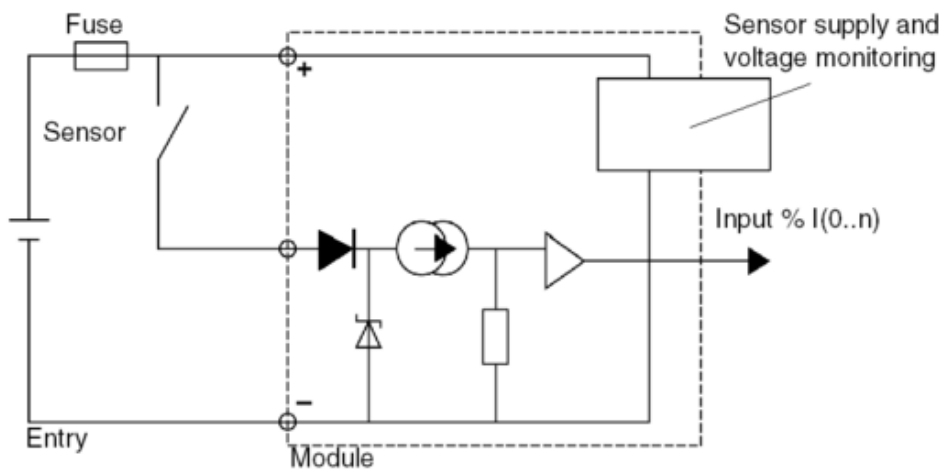
- (1) With removable terminal block (cage, screw or spring).  
(2) With FCN connector.  
(3) On AM1 ED rail: 35 mm wide, 15 mm deep. Only possible with BMXXBP0400/0400H/0600/0600H/0800/0800H rack.

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

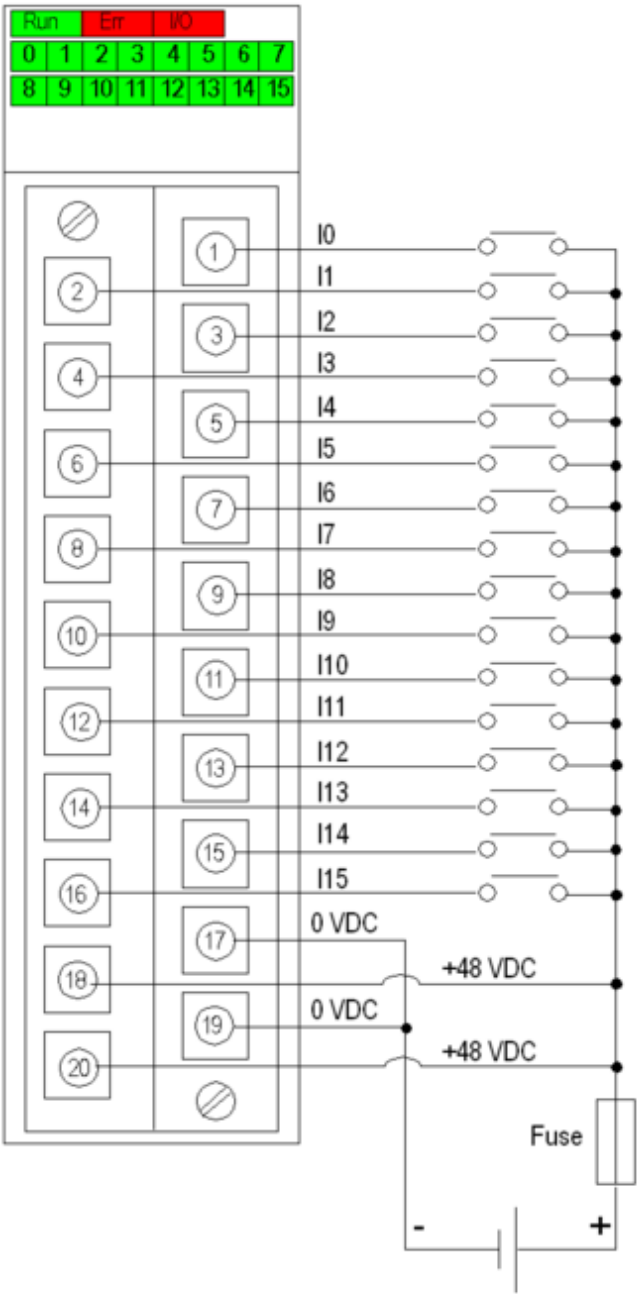
Connections and Schema

Connecting the Module

Input Circuit Diagram



Module Connection



power supply 48 VDC  
fuse fast blow fuse of 0.5 A