

Product data sheet

Specifications



discrete input module, Modicon X80, 16 inputs, 48V DC positive

BMXDDI1603

Main

Range of product	Modicon X80
Product or component type	Discrete input module
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
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

IP degree of protection	IP20
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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	5.700 cm
Package 1 Width	11.700 cm
Package 1 Length	11.700 cm
Package 1 Weight	158.000 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	2.849 kg

Contractual warranty

Warranty	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 34

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 3377ad7c-3df3-40dc-a26f-b9807ced8c10

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

Use Again

Repack and remanufacture

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

Take-back No

Dimensions Drawings

Modules Mounted on Racks

Dimensions



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

(2) With FCN connector.

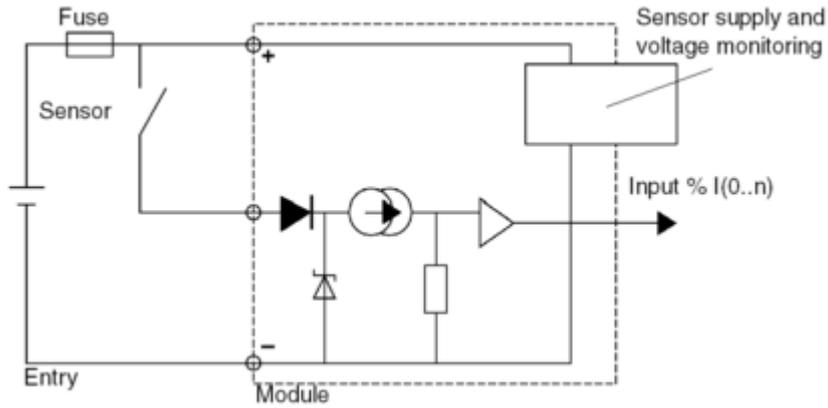
(3) On AM1 ED rail: 35 mm wide, 15 mm deep. Only possible with BMXXBP0400/0400H/0600/0600H/0800/0800H rack.

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

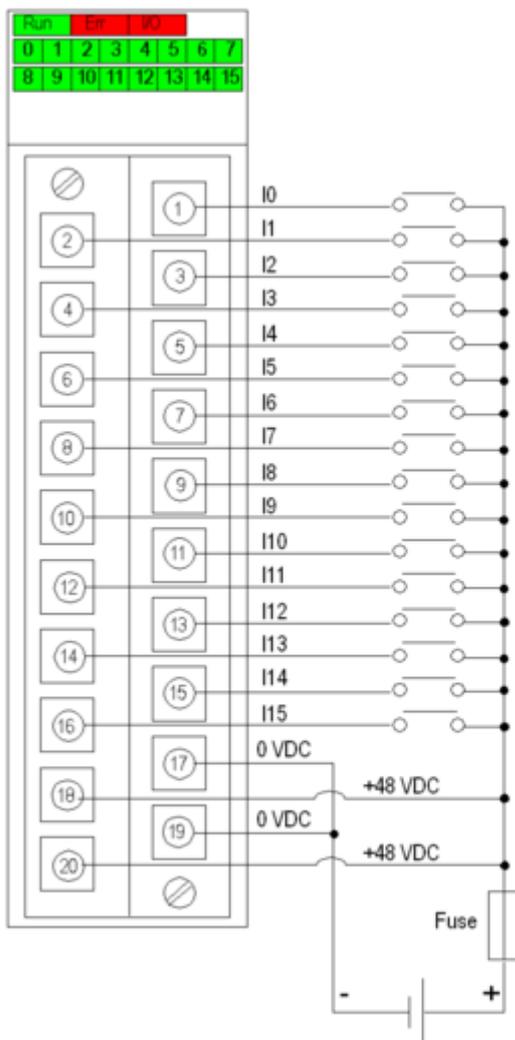
Connections and Schema

Connecting the Module

Input Circuit Diagram



Module Connection



power supply 48 VDC
fuse fast blow fuse of 0.5 A

Image of product / Alternate images

Alternative

