

# Product datasheet

Specifications



## Discrete input module X80 - 32 inputs - 12/24 V DC positive/negative

BMXDDI3232

EAN Code: 3606481946706

### Main

Range of product	Modicon X80
Product or component type	Discrete input module
Discrete input number	32
Discrete input type	Isolated
Input type	Current sink (logic positive) Current source (logic negative)
Discrete input voltage	12 V DC, discrete input logic: positive or negative 24 V DC, discrete input logic: positive or negative
Discrete input current	3.3 mA

### Complementary

Input compatibility	With 2-wire/3-wire proximity sensors conforming to IEC 61131-2 type 3
Sensor power supply	19...30 V
Voltage state 1 guaranteed	$\geq 10$ V $\leq -10$ V
Current state 1 guaranteed	$\geq 2$ mA
Voltage state 0 guaranteed	$\leq 5$ V $\geq -5$ V
Current state 0 guaranteed	$\leq 1.5$ mA
Input impedance	7270 Ohm
Insulation resistance	$> 10$ MOhm 500 V DC
Power dissipation in W	4.7 W
DC typical response time	4 ms
DC maximum response time	7 ms
Paralleling of outputs	Yes
Typical current consumption	100 mA at 3.3 V DC
MTBF reliability	2200000 H
Protection type	1 external fuse per group of channel0.5 A fast blow
Voltage detection threshold	$< 14$ V DC sensor fault $> 19$ 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	0.137 kg

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

## 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 1500 V AC at 50/60 Hz 1 minute, between group of channels
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 -25...70 °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	5.600 cm
Package 1 Width	18.200 cm
Package 1 Length	25.800 cm
Package 1 Weight	306.000 g
Unit Type of Package 2	S03
Number of Units in Package 2	10
Package 2 Height	30.000 cm
Package 2 Width	30.000 cm
Package 2 Length	40.000 cm
Package 2 Weight	3.800 kg

## Logistical informations

Country of origin	ID
-------------------	----

## Contractual warranty

Warranty	18 months
----------	-----------

## 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 33

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 43b0fbab-d94b-43e8-be0a-0b39cadd288b

REACH Regulation [REACH Declaration](#)

## Use Again

### Repack and remanufacture

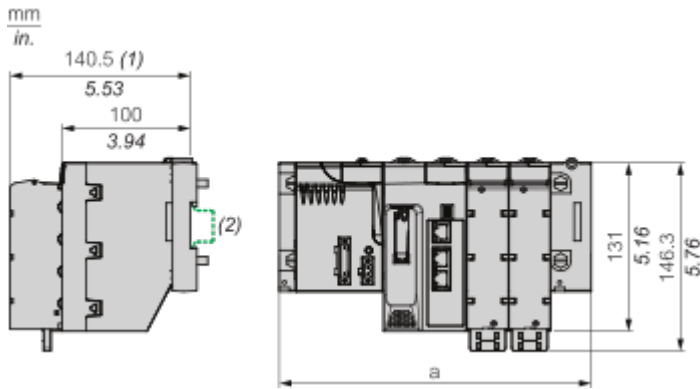
End of life manual availability [End of Life Information](#)

Take-back No

Dimensions Drawings

Modules Mounted on Racks

Dimensions



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

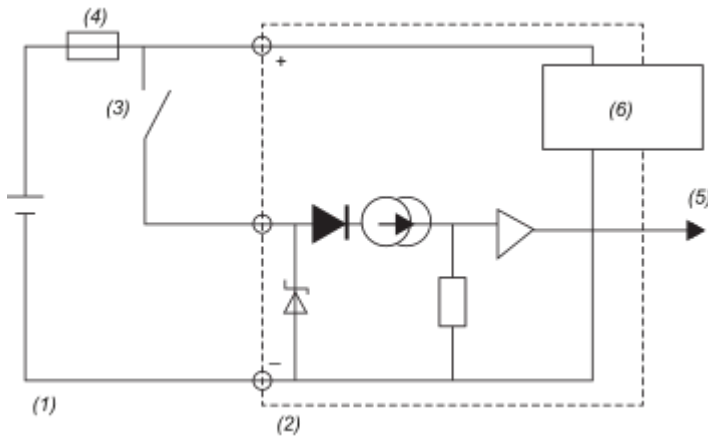
(2) On AM1 ED rail: 35 mm wide, 15 mm deep.

Rack references	a in mm	a in in.
BMXXBP0400 and BMXXBP0400H	242.4	9.54
BMXXBP0600 and BMXXBP0600H	307.6	12.11
BMXXBP0800 and BMXXBP0800H	372.8	14.68
BMXXBP1200 and BMXXBP1200H	503.2	19.81
BMEXP0400 and BMEXP0400H	242.4	9.54
BMEXP0800 and BMEXP0800H	372.8	14.68
BMEXP1200 and BMEXP1200H	503.2	19.81
BMEXP0602 and BMEXP0602H	375.8	14.8
BMEXP1002 and BMEXP1002H	506.2	19.93

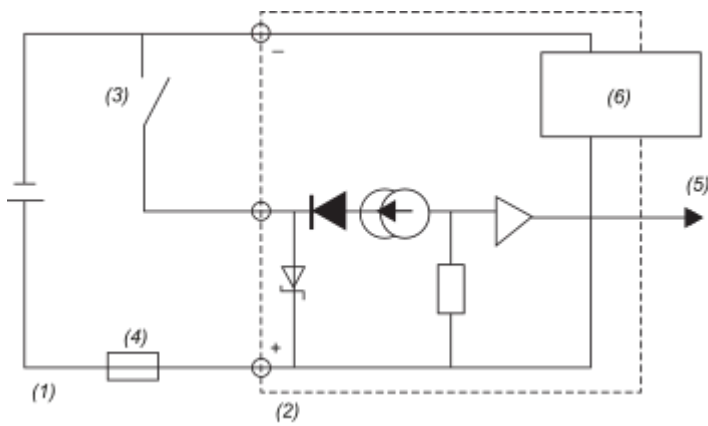
Connections and Schema

Connecting the Module

Input Circuit Diagram

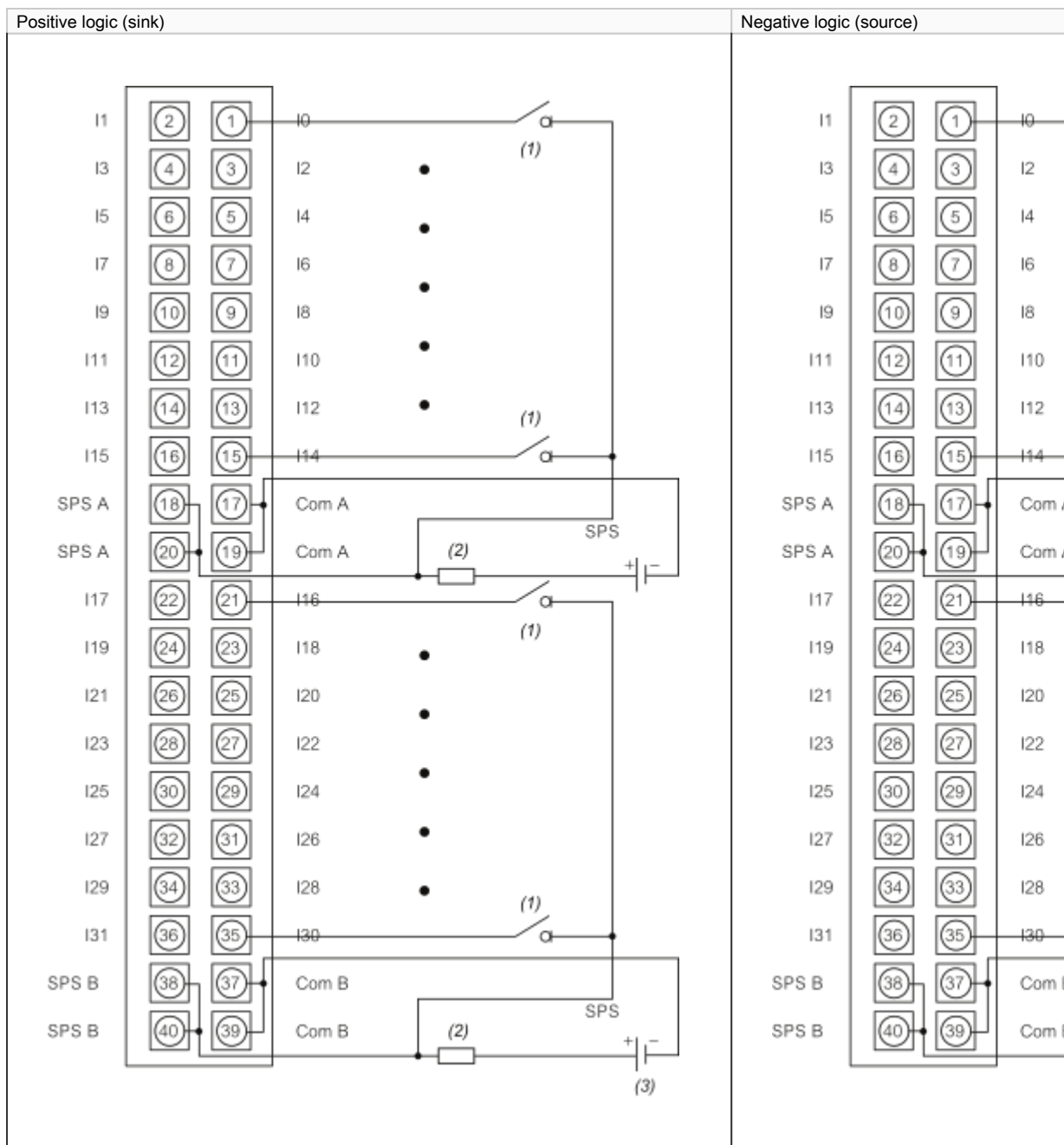


The following diagram shows the circuit of a direct current input (negative logic).



- (1) Entry
- (2) Module
- (3) Sensor
- (4) Fuse
- (5) Input % I(0...n)
- (6) Sensor supply and voltage monitoring

Module Connection



(1) Sensor

(2) Fuse : fast-blow fuse of 0.5A

(3) 12 VDC/24 VDC

SPS: Sensor power supply

Image of product / Alternate images

Alternative

---





