Product data sheet

Specifications



Discrete input module, Modicon X80, 32 inputs, 24V DC positive, for severe environments

BMXDDI3202KH

Product availability: Stock - Normally stocked in distribution facility

Main

Range of Product	Modicon X80
Product or Component Type	Discrete input module
Device Application	Industrial application in severe environment
Discrete input number	32
Discrete input voltage	24 V DCisolated
Discrete input logic	Positive logic (sink)

Complementary

Discrete input number	32 isolated conforming to IEC 60947-5-2 at 24 V DC 32 isolated conforming to IEC 61131-2 type 3 at 24 V DC
Input wiring mode	2 or 3 wires
Discrete input current	2.5 mA at 24 V DC
Voltage state 0 guaranteed	< 5 V
Current state 1 guaranteed	>= 2 mA
Current state 0 guaranteed	<= 0.5 mA
Input impedance	9600 Ohm
Paralleling of inputs	No
Input protection type	Reverse polarity protection
Insulation resistance	> 10 MOhm 500 V DC
DC typical response time	4 ms
DC maximum response time	7 ms
Sensor power supply	19…30 V
Typical current consumption	121 mA DC
Current consumption	160 mA 3.3 V DC
Power dissipation in W	3.9 W
Isolation between channels and bus	1500 V for 1 minute
MTBF reliability	905000 H
Voltage detection threshold	< 14 V DC sensor fault > 18 V DC sensor OK
Local signalling	1 LED (green) for module operating (RUN) 1 LED per channel (green) for channel diagnostic 1 LED (red) for module error (ERR) 1 LED (red) for module I/O
Height	5.3 in (134.6 mm)

Price is “List Price” and may be subject to a trade discount – check with your local distributor or retailer for actual price.

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

Width	1.3 in (32 mm)
Depth	3.4 in (86 mm)
Product Weight	0.247 lb(US) (0.112 kg)

Environment

IP Degree of Protection	IP20
Protective treatment	Conformal coating
Marking	CE UKCA CULus RCM EAC
Product certifications	ATEX zone 2 IECEx zone 2 CCC Ex zone 2 (pending) CULus HazLoc
Standards	IEC 61131-2
Directives	2014/35/EU - low voltage directive 2014/30/EU - electromagnetic compatibility
Dielectric strength	1500 V AC 50/60 Hz 1 minute, primary/secondary 500 V DC 1 minute, between group of channels
Ambient air temperature for operation	-13…158 °F (-25…70 °C)
Relative humidity	5…95 % -13…158 °F (-25…70 °C) without condensation
Operating altitude	0...6561.68 ft (0...2000 m) 2000...5000 m with derating
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

Ordering and shipping details

Category	US1PC3418160
Discount Schedule	PC34
GTIN	3606480927805
Returnability	Yes
Country of origin	US

Packing Units

Unit Type of Package 1	PCE
Nbr. of units in pkg.	1
Package 1 Height	2.165 in (5.500 cm)
Package 1 Width	4.331 in (11.000 cm)
Package 1 Length	4.646 in (11.800 cm)
Package weight(Lbs)	5.362 oz (152.000 g)
Unit Type of Package 2	S02
Number of Units in Package 2	15

Package 2 Height	5.906 in (15.000 cm)
Package 2 Width	11.811 in (30.000 cm)
Package 2 Length	15.748 in (40.000 cm)
Package 2 Weight	5.743 lb(US) (2.605 kg)

Contractual warranty

Warranty (in months)	18

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	**42 kg CO2 eq.**
Carbon footprint of the manufacturing phase [A1 to A3]	**21 kg CO2 eq.**
Carbon footprint of the distribution phase [A4]	**0 kg CO2 eq.**
Carbon footprint of the installation phase [A5]	**0 kg CO2 eq.**
Carbon footprint of the use phase [B2, B3, B4, B6]	**21 kg CO2 eq.**
Carbon footprint of the end-of-life phase [C1 to C4]	**0.3 kg CO2 eq.**
Environmental Disclosure	Product Environmental Profile

Use Better

Materials and Substances

Packaging made with recycled cardboard	**Yes**
Packaging without single use plastic	**Yes**
SCIP Number	**43b0fbab-d94b-43e8-be0a-0b39cadd288b**
EU RoHS Directive	Compliant By Exemption
REACh Regulation	Reference contains Substances of Very High Concern above the threshold
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 Longer

Lifetime extension

Repair	**No**

Use Again

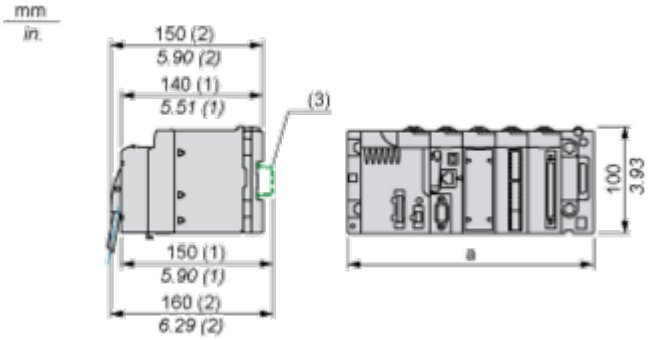
Repack and remanufacture

Recyclability potential, in %	**3**
Circularity Profile	End of Life Information
Take-back	**No**

Dimensions Drawings

Modules Mounted on Racks

Dimensions



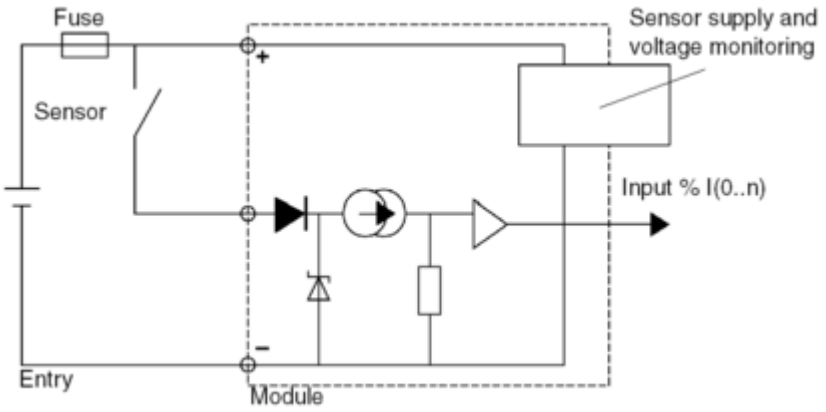
(1) With removable terminal block (cage, screw or spring).
(2) With FCN connector.
(3) On AM1 ED rail: 35 mm wide, 15 mm deep. Only possible with BMXXBP0400/0400H/0600/0600H/0800/0800H rack.

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

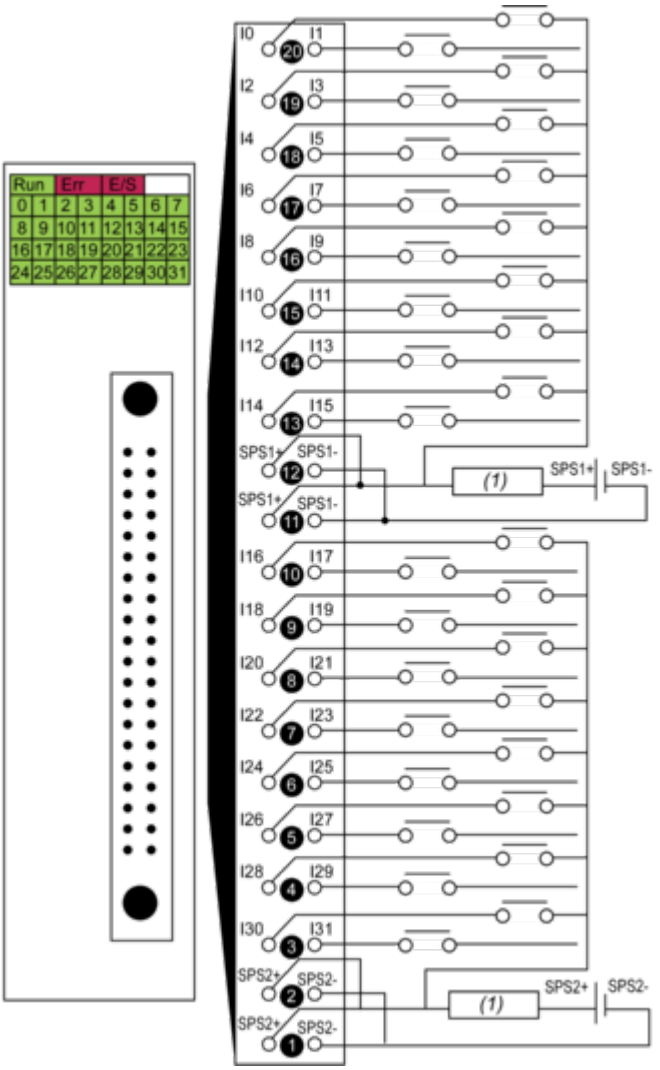
Connections and Schema

Connecting the Module

Input Circuit Diagram



Module Connection



(1) fuse: fast blow fuse of 0.5 A for each 16-channel group

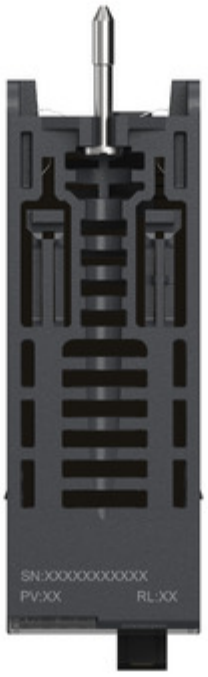
power supply 24 VDC
SPS sensor power supply

Image of product / Alternate images

Alternative






SN:XXXXXXXXXXX
PV:XX
RL:XX

