

# Product data sheet

Specifications



## discrete input module X80 - 32 inputs - 24 V DC positive

BMXDDI3202K

### 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)
Discrete input voltage	24 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	19...30 V
Current state 1 guaranteed	$\geq 2$ mA
Current state 0 guaranteed	$\leq 0.5$ mA
Input impedance	9600 Ohm
Insulation resistance	$> 10$ MOhm 500 V DC
Power dissipation in W	3.9 W
DC typical response time	4 ms
DC maximum response time	7 ms
Paralleling of inputs	No
Typical current consumption	121 mA at 3.3 V DC
MTBF reliability	696320 H
Protection type	1 external fuse per group of channel 0.5 A fast blow reverse polarity protection
Voltage detection threshold	$< 14$ V DC sensor fault $> 18$ 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	0.112 kg

## 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 500 V DC 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 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	5.373 cm
Package 1 Width	10.974 cm
Package 1 Length	11.554 cm
Package 1 Weight	154.4 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	2.5 kg

## Offer Sustainability

Sustainable offer status	Green Premium product
REACH Regulation	<a href="#">REACH Declaration</a>
REACH free of SVHC	Yes
EU RoHS Directive	Pro-active compliance (Product out of EU RoHS legal scope) <a href="#">EU RoHS Declaration</a>
Mercury free	Yes
China RoHS Regulation	<a href="#">China RoHS declaration</a>
RoHS exemption information	<a href="#">Yes</a>
Environmental Disclosure	<a href="#">Product Environmental Profile</a>
Circularity Profile	<a href="#">End of Life Information</a>
WEEE	The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins
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 <a href="http://www.P65Warnings.ca.gov">www.P65Warnings.ca.gov</a>

# Contractual warranty

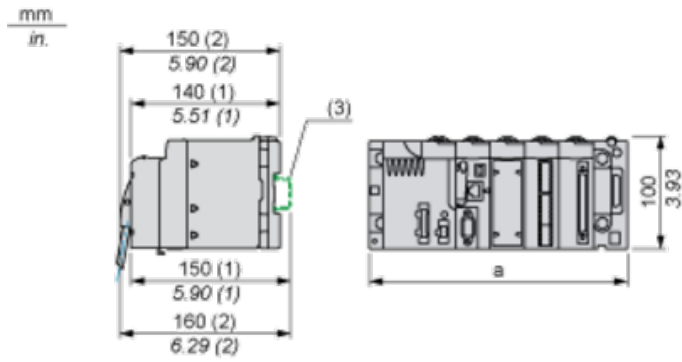
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Warranty

18 months

**Modules Mounted on Racks**

**Dimensions**



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

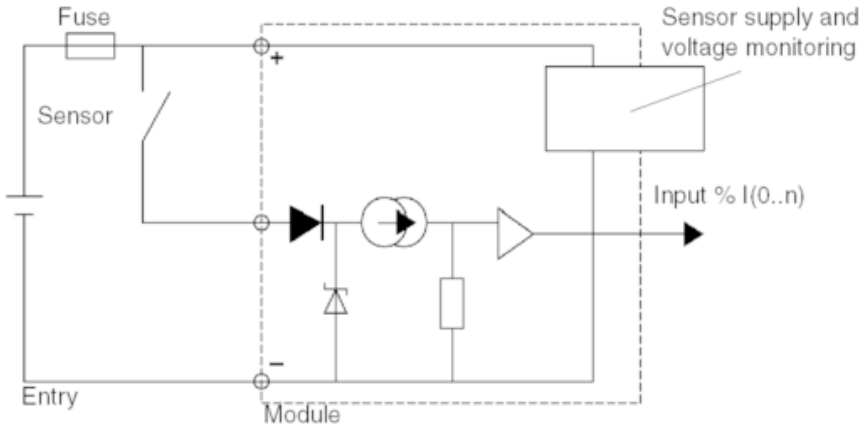
(2) With FCN connector.

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

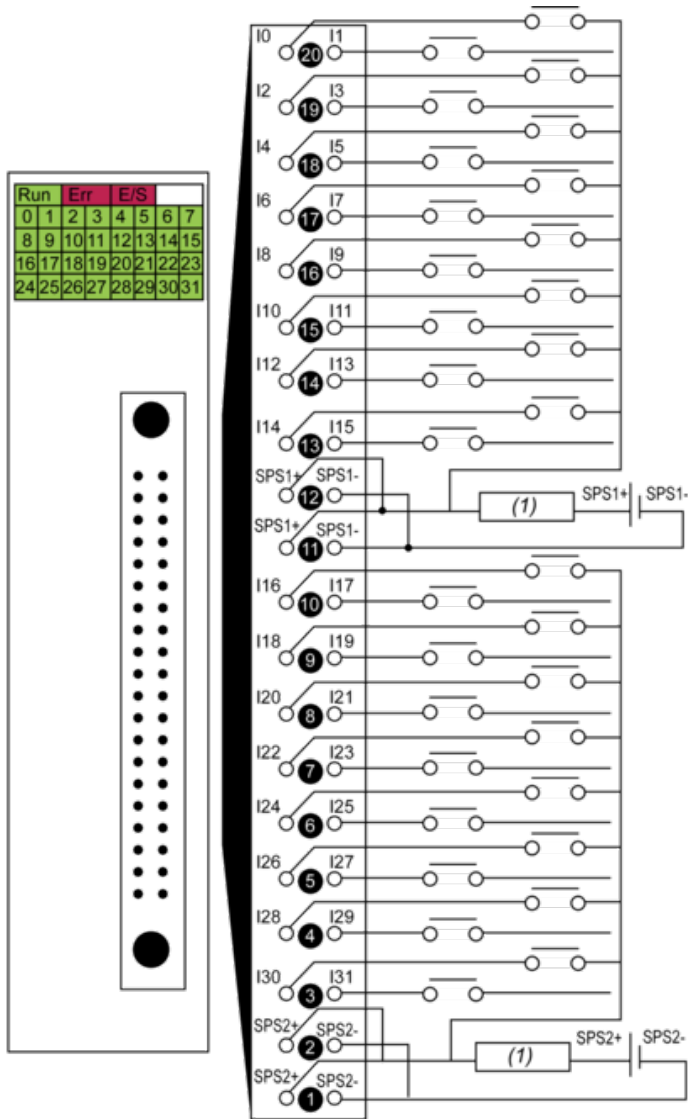
Rack references	a in mm	a in in.
BMXXBP0400 and BMXXBP0400H	242.4	09.54
BMXXBP0600 and BMXXBP0600H	307.6	12.11
BMXXBP0800 and BMXXBP0800H	372.8	14.68
BMXXBP1200 and BMXXBP1200H	503.2	19.81

**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

**Recommended replacement(s)**