

# Product data sheet

Specifications



## discrete input module X80 - 16 inputs - 100..120 V AC capacitive

BMXDAI1604

### Main

Range of product	Modicon X80
Product or component type	Discrete input module
Discrete input number	16
Discrete input type	Isolated
Input type	Capacitive
Discrete input voltage	100...120 V AC
Discrete input current	5 mA

### Complementary

Input compatibility	2-wire proximity sensor conforming to IEC 60947-5-2 2-wire proximity sensor conforming to IEC 61131-2 type 3
Network frequency	50/60 Hz
Network frequency limits	47...63 Hz
Sensor power supply	85...132 V
Current state 1 guaranteed	$\geq 2.5$ mA
Current state 0 guaranteed	$\leq 1$ mA
Input impedance	13000 Ohm
Insulation resistance	$> 10$ MOhm 500 V DC
Power dissipation in W	3.8 W
AC activation response time	10 ms
AC deactivation response time	20 ms
Typical current consumption	76 mA at 3.3 V DC
MTBF reliability	1120000 H
Protection type	1 external fuse per group of channel 0.5 A fast blow
Voltage detection threshold	$< 40$ V AC sensor fault $> 82$ V AC 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
Directives	2014/35/EU - low voltage directive 2014/30/EU - electromagnetic compatibility
Dielectric strength	1500 V AC at 50/60 Hz 1 min
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	11.400 cm
Package 1 Length	12.000 cm
Package 1 Weight	149.000 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	2.435 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

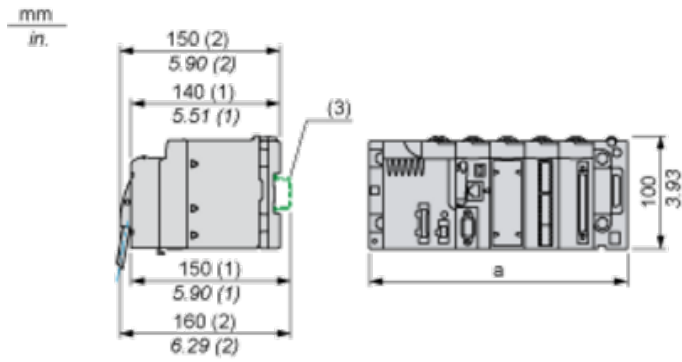
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Warranty

18 months

**Modules Mounted on Racks**

**Dimensions**



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

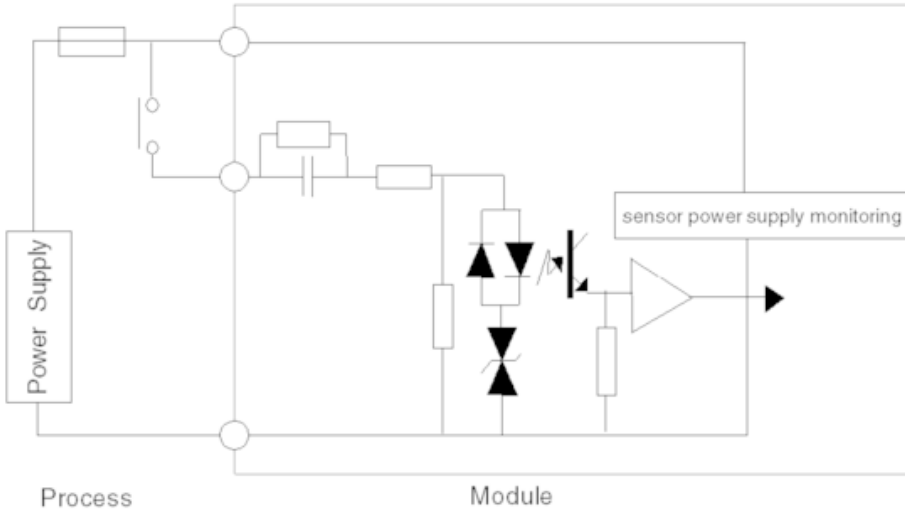
(2) With FCN connector.

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

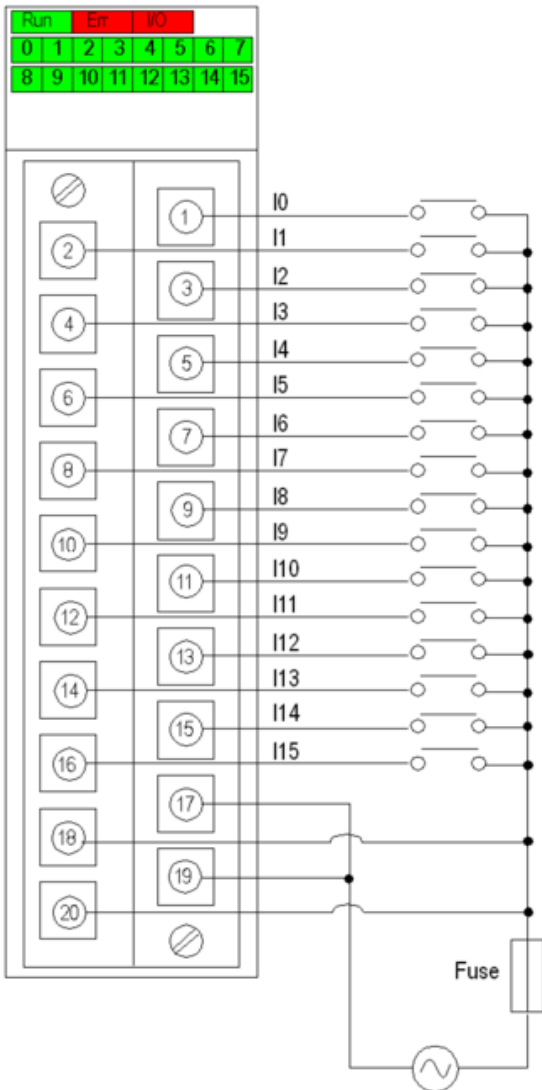
Rack references	a in mm	a in in.
BMXXBP0400 and BMXXBP0400H	242.4	09.54
BMXXBP0600 and BMXXBP0600H	307.6	12.11
BMXXBP0800 and BMXXBP0800H	372.8	14.68
BMXXBP1200 and BMXXBP1200H	503.2	19.81

**Connecting the Module**

**Input Circuit Diagram**



**Module Connection**



power supply 100...120 VAC  
fuse fast blow fuse of 0.5 A

**Recommended replacement(s)**