Product data sheet

Specifications



discrete input module X80 - 16 inputs - 48 V 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	738749 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

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
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 Weight	152.0 g
Package 1 Height	6 cm
Package 1 width	11.5 cm
Package 1 Length	11.5 cm
Unit Type of Package 2	S02
Number of Units in Package 2	15
Package 2 Weight	2.8 kg
Package 2 Height	15 cm
Package 2 width	30 cm
Package 2 Length	40 cm
Unit Type of Package 3	PAL
Number of Units in Package 3	240
Package 3 Weight	52.56 kg
Package 3 Height	60 cm
Package 3 width	80 cm
Package 3 Length	240 cm

Offer Sustainability

Sustainable offer status	Green Premium product
REACh Regulation	REACh Declaration
REACh free of SVHC	Yes
EU RoHS Directive	Pro-active compliance (Product out of EU RoHS legal scope) EU RoHS Declaration
Mercury free	Yes
RoHS exemption information	Yes
China RoHS Regulation	China RoHS declaration
Environmental Disclosure	Product Environmental Profile

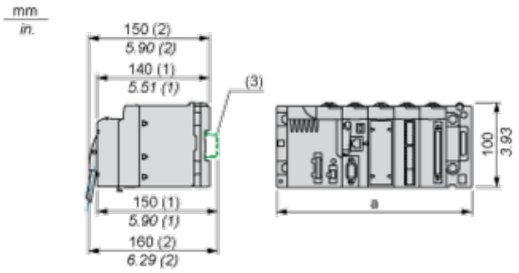
Circularity Profile	End of Life Information
WEEE	The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins
California proposition 65	WARNING: This product can expose you to chemicals including: Lead and lead compounds, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov

Contractual warranty

Warranty	18 months

Modules Mounted on Racks

Dimensions



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

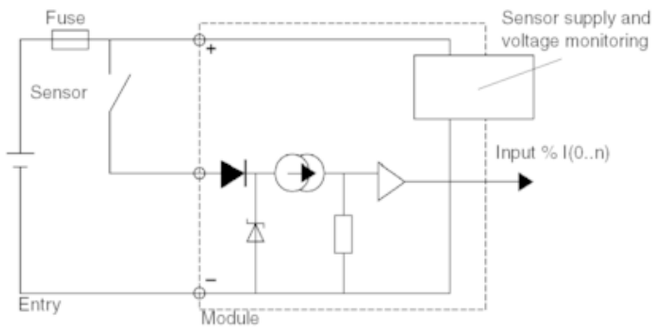
(2) With FCN connector.

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

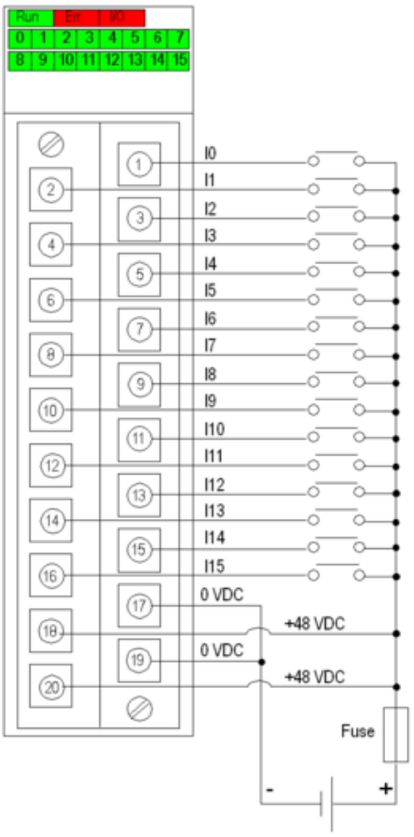
Rack references	a in mm	a in in.
BMXXBP0400 and BMXXBP0400H	242.4	09.54
BMXXBP0600 and BMXXBP0600H	307.6	12.11
BMXXBP0800 and BMXXBP0800H	372.8	14.68
BMXXBP1200 and BMXXBP1200H	503.2	19.81

Connecting the Module

Input Circuit Diagram



Module Connection



power supply 48 VDC
fuse fast blow fuse of 0.5 A