



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
Input compatibility	With 2-wire/3-wire proximity sensors conforming to IEC 60947-5-2

Complementary

Sensor power supply	19...30 V
Voltage state 1 guaranteed	≥ 11 V
Current state 1 guaranteed	≥ 2 mA
Voltage state 0 guaranteed	≤ 5 V
Current state 0 guaranteed	≤ 1.5 mA
Input impedance	9600 Ohm
Insulation resistance	> 10 MOhm 500 V DC
Maximum power dissipation in W	3.9 W
DC typical filtering time	4 ms
DC maximum filtering time	7 ms
Paralleling of inputs	No
Typical current consumption	140 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:
Product weight	0.112 kg

Environment

IP degree of protection	IP20
Directives	2014/35/EU - low voltage directive 2014/30/EU - electromagnetic compatibility 2012/19/EU - WEEE directive
Product certifications	CSA UL EAC RCM Merchant Navy CE
Standards	EN 61131-2 EN 61000-6-4 EN 61000-6-2 EN 61010-2-201
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
Protective treatment	TC
Operating altitude	0...2000 m 2000...5000 m with derating factor

Offer Sustainability

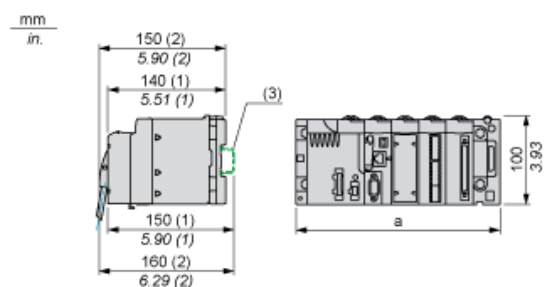
Sustainable offer status	Green Premium product
REACH Regulation	REACH Declaration
EU RoHS Directive	Pro-active compliance (Product out of EU RoHS legal scope) EU RoHS Declaration
Mercury free	Yes
RoHS exemption information	Yes
China RoHS Regulation	China RoHS Declaration
Environmental Disclosure	Product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

Contractual warranty

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

Modules Mounted on Racks

Dimensions

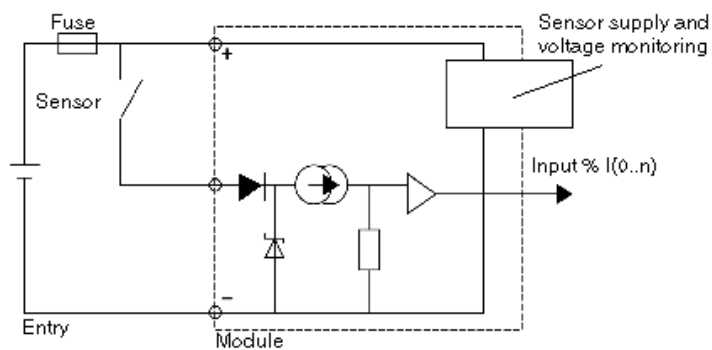


- (1) With removable terminal block (cage, screw or spring).
- (2) With FCN connector.
- (3) On AM1 ED rail: 35 mm wide, 15 mm deep. Only possible with BMXXBP0400/0400H/0600/0600H/0800/0800H rack.

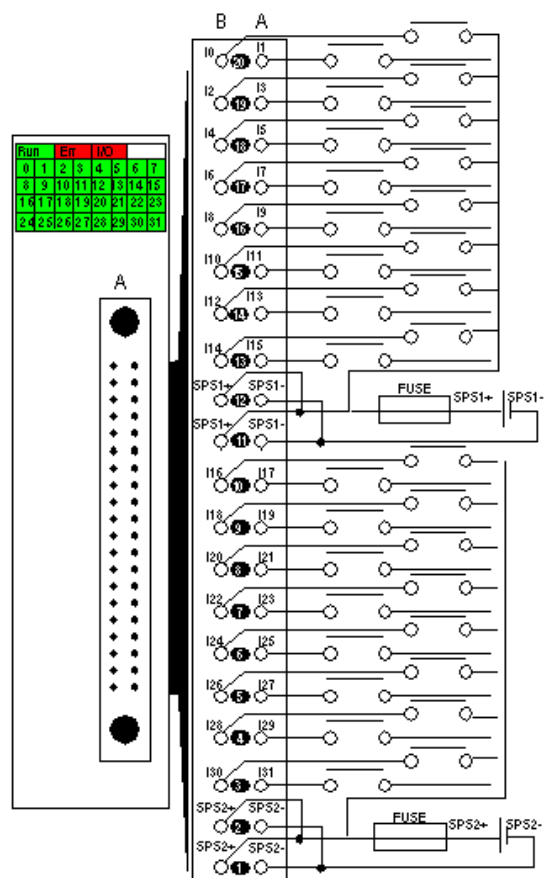
Rack references	a in mm	a in in.
BMXXBP0400 and BMXXBP0400H	242.4	09.54
BMXXBP0600 and BMXXBP0600H	307.6	12.11
BMXXBP0800 and BMXXBP0800H	372.8	14.68
BMXXBP1200 and BMXXBP1200H	503.2	19.81

Connecting the Module

Input Circuit Diagram



Module Connection



power 24 VDC

supply

fuse fast blow fuse of 0.5 A for each 16-channel group

SPS sensor power supply