



Main

Range of product	Modicon X80
Product or component type	Discrete input module
Product specific application	For severe environments
Discrete input number	64
Discrete input type	Isolated
Input type	Current sink (logic positive)
Discrete input voltage	24 V DC, discrete input logic: positive
Discrete input current	0.6 mA

Complementary

Sensor power supply	19...30 V
Input impedance	40000 Ohm
Insulation resistance	> 10 MOhm 500 V DC
Power dissipation in W	4.3 W
DC typical response time	4 ms
DC maximum response time	7 ms
Paralleling of inputs	No
Typical current consumption	160 mA at 3.3 V DC
MTBF reliability	510000 H
Protection type	1 external fuse per group of channel 0.5 A fast blow Without reverse polarity protection
Voltage detection threshold	< 14 V DC sensor fault > 18 V DC sensor OK
Status LED	1 LED (green) +32 channels indicator 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	0.145 kg

Environment

IP degree of protection	IP20
Directives	2014/35/EU - low voltage directive 2014/30/EU - electromagnetic compatibility
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
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	-25...70 °C
Relative humidity	5...95 % at -25...70 °C without condensation

Protective treatment	Conformal coating
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	5.5 cm
Package 1 Width	12.0 cm
Package 1 Length	11.0 cm
Package 1 Weight	191.0 g

Offer Sustainability

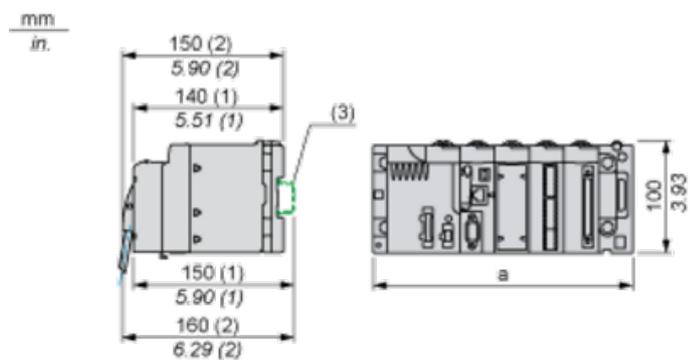
REACH Regulation	REACH Declaration
EU RoHS Directive	Pro-active compliance (Product out of EU RoHS legal scope)
Mercury free	Yes
China RoHS Regulation	China RoHS Declaration
RoHS exemption information	Yes
WEEE	The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins

Contractual warranty

Warranty	18 months
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Modules Mounted on Racks

Dimensions



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

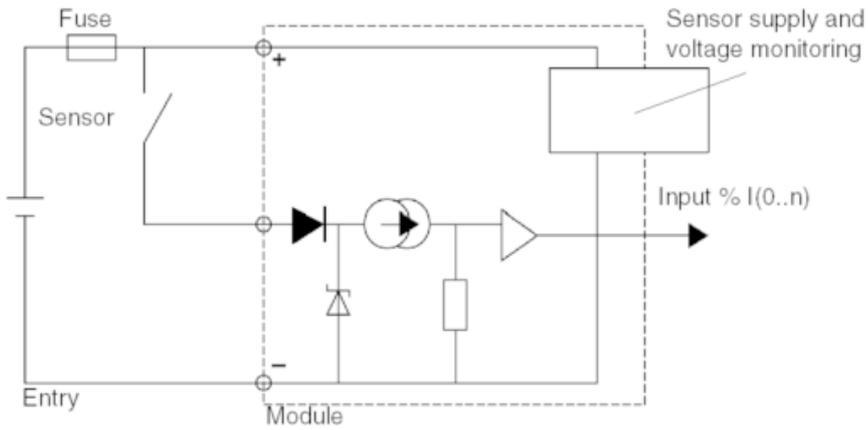
(2) With FCN connector.

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

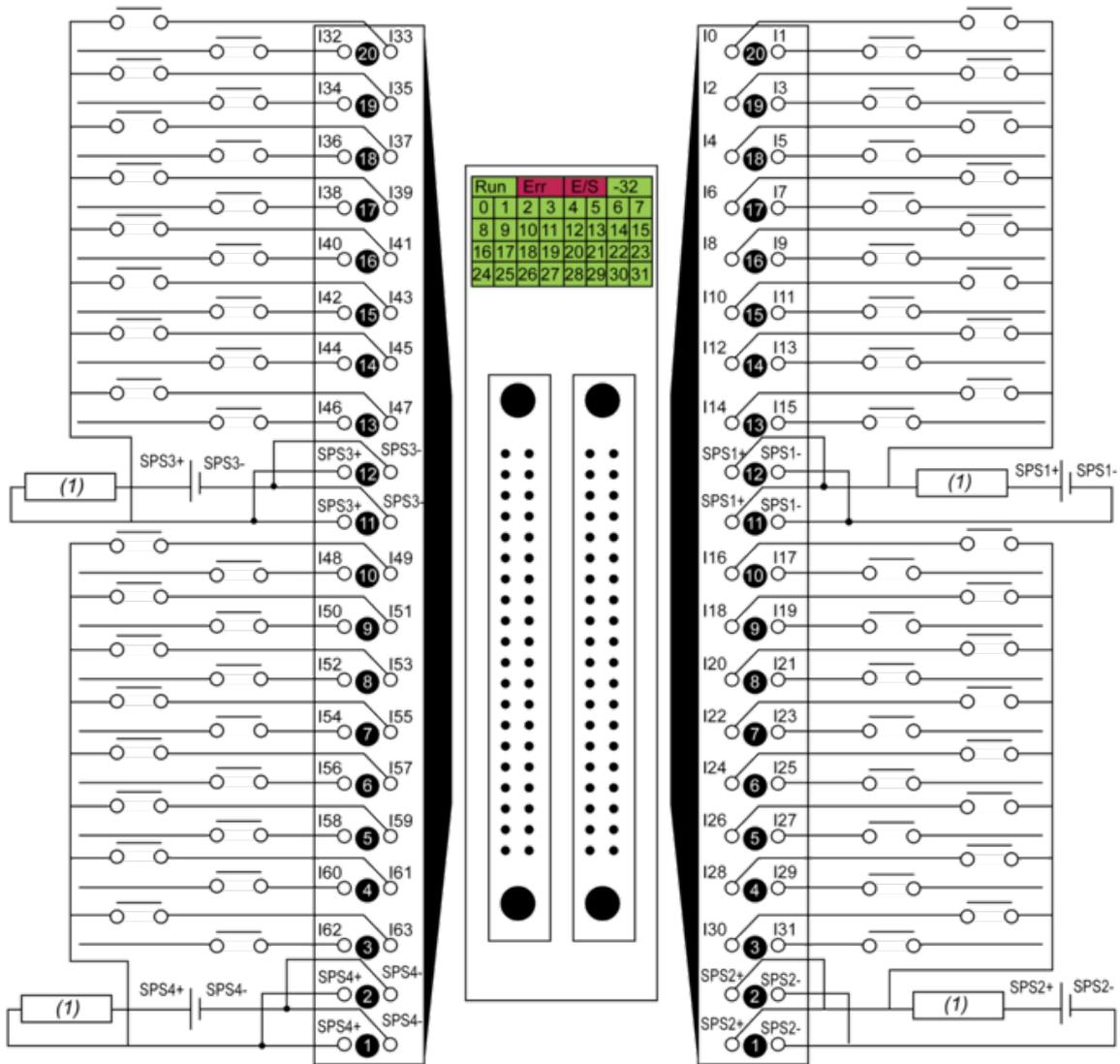
Rack references	a in mm	a in in.
BMXXBP0400 and BMXXBP0400H	242.4	09.54
BMXXBP0600 and BMXXBP0600H	307.6	12.11
BMXXBP0800 and BMXXBP0800H	372.8	14.68
BMXXBP1200 and BMXXBP1200H	503.2	19.81

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