



Main

Range of product	Modicon X80
Product or component type	Discrete I/O module
Discrete input number	8
Input type	Current sink (logic positive)
Discrete input voltage	24 V DC positive
Discrete input current	3.5 mA
Input compatibility	With 2-wire/3-wire proximity sensors conforming to IEC 60947-5-2
Discrete output number	8
Discrete output type	Solid state
Discrete output voltage	24 V 19...30 V DC
Discrete output current	0.5 A

Complementary

Sensor power supply	19...30 V
Voltage state 1 guaranteed	≥ 11 V
Current state 1 guaranteed	≥ 3 mA
Voltage state 0 guaranteed	≤ 5 V
Current state 0 guaranteed	≤ 1.5 mA
Current per channel	0.625 A
Current per module	≤ 5 A
Leakage current	≤ 0.5 mA at state 0
[Ures] residual voltage	1.2 V at state 1
Input impedance	6800 Ohm
Insulation resistance	> 10 MOhm 500 V DC
Power dissipation in W	≤ 3.7 W
DC typical filtering time	4 ms
DC maximum filtering time	7 ms

Response time on output	1.2 ms
Paralleling of outputs	Yes : 2 maximum
Typical current consumption	100 mA at 3.3 V DC 30 mA at 24 V DC
Current consumption	<= 111 mA at 3.3 V DC <= 67 mA at 24 V DC
MTBF reliability	447581 H
Protection type	Overvoltage protection on output Reverse polarity protection on input Reverse polarity protection on output 1 external fuse per group of input channel 0.5 A fast blow
Output overload protection	With current limiter With electronic circuit breaker $1.5 I_n < I_d < 2 I_n$
Output overvoltage protection	With transil diode
Output short-circuit protection	With 2 A external fuse
Reverse polarity protection	Reverse mounted diode
Voltage detection threshold	< 14 V DC preactuator fault < 14 V DC sensor fault > 18 V DC preactuator OK > 18 V DC sensor OK
Tungsten load	<= 6 W
Switching frequency	0.5/LI ² Hz
Overload time	<= 15 ms
Load impedance ohmic	<= 48 Ohm
Status LED	1 LED green for module operating (RUN) 1 LED per channel green for channel diagnostic 1 LED red for module I/O 1 LED red for module error (ERR)
Product weight	0.115 kg

Environment

Directives	2014/30/EU - electromagnetic compatibility 2014/35/EU - low voltage directive 2012/19/EU - WEEE directive
IP degree of protection	IP20
Product certifications	EAC RCM UL CSA Merchant Navy CE
Standards	EN 61131-2 EN 61010-2-201 EN 61000-6-2 EN 61000-6-4
Dielectric strength	1500 V AC at 50/60 Hz 1 minute, output/ground 1500 V AC at 50/60 Hz 1 minute, output/internal logic 1500 V AC at 50/60 Hz 1 minute, primary/secondary 500 V DC 1 minute, between group of inputs and outputs
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 % without condensation 55 °C
Protective treatment	TC
Operating altitude	0...2000 m 2000...5000 m (with derating factor)

Offer Sustainability

Sustainable offer status	Green Premium product
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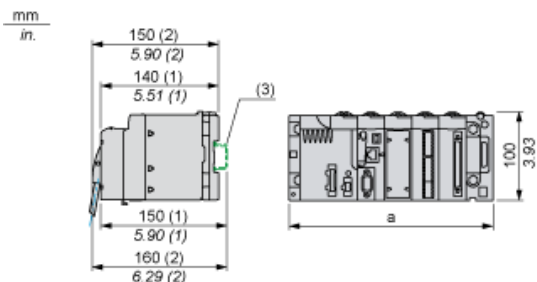
RoHS (date code: YYWW)	Compliant - since 0722 - Schneider Electric declaration of conformity Schneider Electric declaration of conformity
REACH	Reference not containing SVHC above the threshold Reference not containing SVHC above the threshold
Product environmental profile	Available Product Environmental Profile
Product end of life instructions	Available End of Life Information

Contractual warranty

Warranty period	18 months
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Modules Mounted on Racks

Dimensions

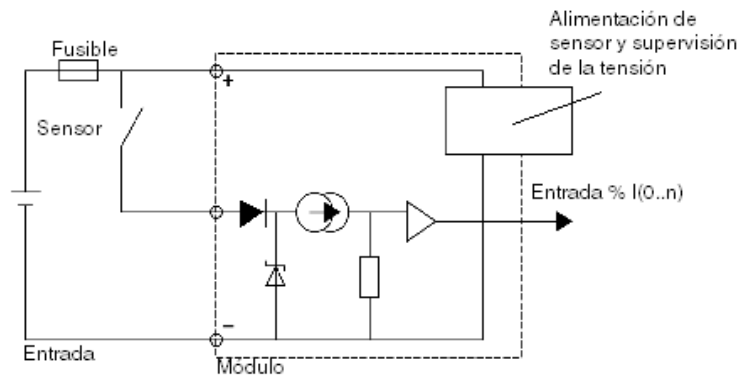


- (1) With removable terminal block (cage, screw or spring).
- (2) With FCN connector.
- (3) On AM1 ED rail: 35 mm wide, 15 mm deep. Only possible with BMXXBP0400/0400H/0600/0600H/0800/0800H rack.

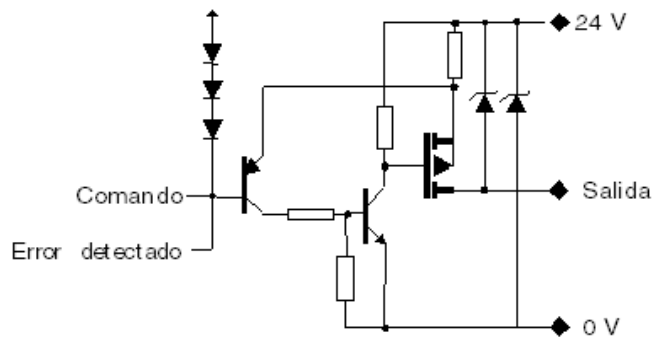
Rack references	a in mm	a in in.
BMXXBP0400 and BMXXBP0400H	242.4	09.54
BMXXBP0600 and BMXXBP0600H	307.6	12.11
BMXXBP0800 and BMXXBP0800H	372.8	14.68
BMXXBP1200 and BMXXBP1200H	503.2	19.81

Connecting the Module

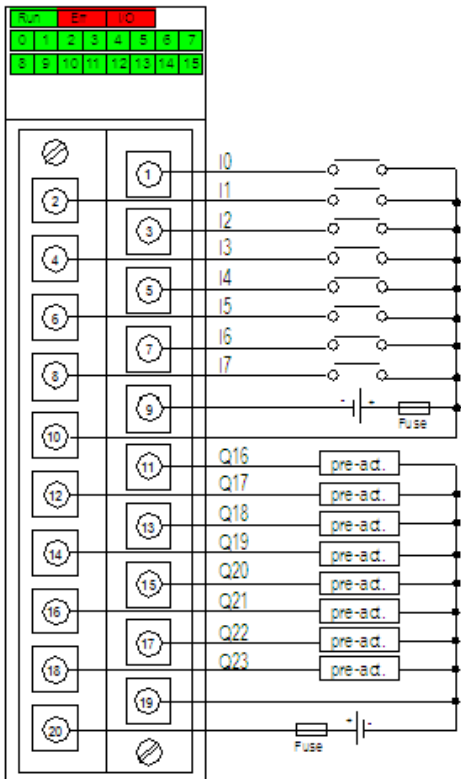
Input Circuit Diagram



Output Circuit Diagram



Module Connection



power supply 24VDC
input fuse fast blow fuse of 0.5 A
output fuse fast blow fuse of 6.3 A
pre-act pre-actuator