



Main

Range of Product	Modicon X80
Product or Component Type	Discrete I/O module
Product Specific Application	For severe environments
Discrete input number	8
Input type	Current sink (logic positive)
Discrete input voltage	24 V DC positive
Discrete input current	3.5 mA
Discrete output number	8
Discrete output type	Relay
Discrete output voltage	24 V 19...30 V DC 24...240 V 19...264 V AC
Discrete output current	2000 mA

Complementary

Input compatibility	With 2-wire/3-wire proximity sensors IEC 60947-5-2 With 2-wire/3-wire proximity sensors IEC 61131-2 type 3
Sensor power supply	19...30 V 140 °F (60 °C) 21.1...29.0 V 158 °F (70 °C)
Current state 1 guaranteed	>= 2 mA
Current state 0 guaranteed	<= 1.5 mA
Input impedance	6800 Ohm
Insulation resistance	> 10 MOhm 500 V DC
Power dissipation in W	3.1 W
DC typical response time	4 ms
DC maximum response time	7 ms
Response time on output	<= 8 ms deactivation <= 10 ms activation
Paralleling of inputs	No
Typical current consumption	79 mA 3.3 V DC
MTBF reliability	940000 H
Protection type	1 external fuse per group of input channel 0.5 A fast blow Reverse polarity protection on input 1 external fuse per output channel or group of output channel fast blow
Voltage detection threshold	< 14 V DC sensor fault > 18 V DC sensor OK
Minimum switching current	1 mA 5 V DC
Maximum switching voltage	125 V DC 264 V AC
Mechanical durability	20000000 cycles

Electrical durability	AC-14 100000 cycles 120 VA 240 V 158 °F (70 °C) 0.7) AC-14 100000 cycles 150 VA 200 V 158 °F (70 °C) 0.7) AC-14 100000 cycles 240 VA 240 V -13...140 °F (-25...60 °C) 0.7) AC-14 100000 cycles 300 VA 200 V -13...140 °F (-25...60 °C) 0.7) AC-15 100000 cycles 100 VA 200 V 158 °F (70 °C) 0.35) AC-15 100000 cycles 120 VA 240 V -13...140 °F (-25...60 °C) 0.35) AC-15 100000 cycles 200 VA 200 V -13...140 °F (-25...60 °C) 0.35) AC-15 100000 cycles 60 VA 240 V 158 °F (70 °C) 0.35) DC-13 100000 cycles 12 W 24 V 158 °F (70 °C) DC-13 100000 cycles 24 W 24 V -13...140 °F (-25...60 °C) AC-14 300000 cycles 36 VA 240 V 158 °F (70 °C) 0.7) AC-14 300000 cycles 40 VA 200 V 158 °F (70 °C) 0.7) AC-14 300000 cycles 72 VA 240 V -13...140 °F (-25...60 °C) 0.7) AC-14 300000 cycles 80 VA 200 V -13...140 °F (-25...60 °C) 0.7) AC-15 300000 cycles 18 VA 240 V 158 °F (70 °C) 0.35) AC-15 300000 cycles 30 VA 200 V 158 °F (70 °C) 0.35) AC-15 300000 cycles 36 VA 240 V -13...140 °F (-25...60 °C) 0.35) AC-15 300000 cycles 60 VA 200 V -13...140 °F (-25...60 °C) 0.35) DC-13 300000 cycles 3.6 W 24 V 158 °F (70 °C) DC-13 300000 cycles 7.2 W 24 V -13...140 °F (-25...60 °C)
Switching frequency	1 Hz
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	0.30 lb(US) (0.135 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 50/60 Hz 1 minute, primary/secondary 2830 V AC 50/60 Hz 1 minute, output relay 500 V DC 1 minute, between group of I/O
Vibration resistance	3 gn
Shock resistance	30 gn
Ambient Air Temperature for Storage	-40...185 °F (-40...85 °C)
Ambient Air Temperature for Operation	-13...158 °F (-25...70 °C)
Relative humidity	5...95 % 131 °F (55 °C) without condensation
Protective treatment	Conformal coating
Operating altitude	0...6561.68 ft (0...2000 m) 2000...5000 m with derating factor

Ordering and shipping details

Category	18160-MODICON M340
Discount Schedule	PC34
GTIN	3595864025742
Returnability	No
Country of origin	FR

Packing Units

Unit Type of Package 1	PCE
Number of Units in Package 1	1
Package 1 Height	2.17 in (5.500 cm)
Package 1 Width	4.33 in (11.000 cm)
Package 1 Length	4.72 in (12.000 cm)
Package 1 Weight	5.93 oz (168.000 g)
Unit Type of Package 2	S02

Number of Units in Package 2	15
Package 2 Height	5.91 in (15.000 cm)
Package 2 Width	11.81 in (30.000 cm)
Package 2 Length	15.75 in (40.000 cm)
Package 2 Weight	5.79 lb(US) (2.625 kg)

Offer Sustainability

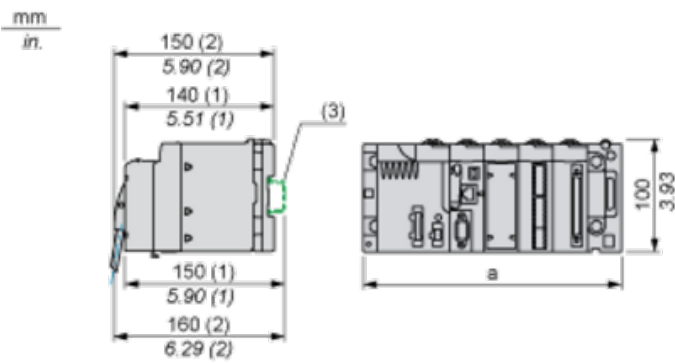
California proposition 65	WARNING: This product can expose you to chemicals including: Lead and lead compounds, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov
REACH Regulation	 REACH Declaration
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

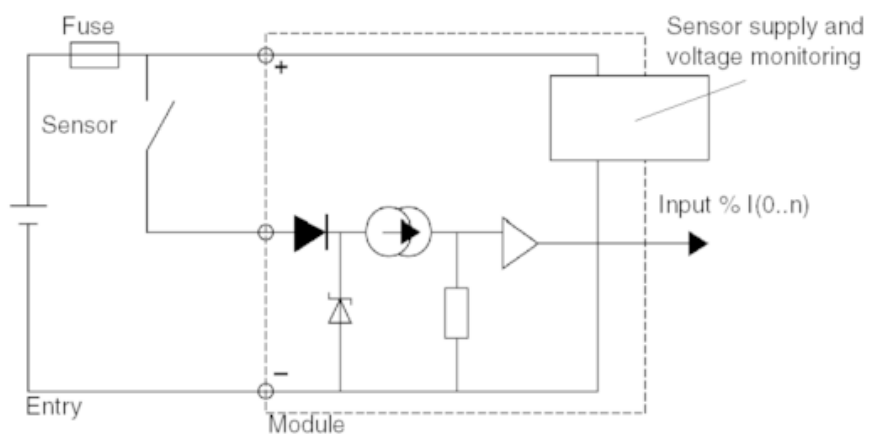


- (1) With removable terminal block (cage, screw or spring).
(2) With FCN connector.
(3) On AM1 ED rail: 35 mm wide, 15 mm deep. Only possible with BMXXBP0400/0400H/0600/0600H/0800/0800H rack.

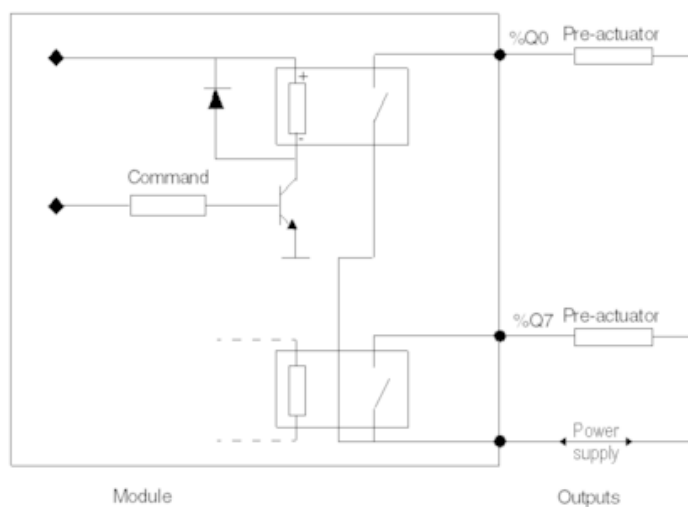
Rack references	a in mm	a in in.
BMXXBP0400 and BMXXBP0400H	242.4	09.54
BMXXBP0600 and BMXXBP0600H	307.6	12.11
BMXXBP0800 and BMXXBP0800H	372.8	14.68
BMXXBP1200 and BMXXBP1200H	503.2	19.81

Connecting the Module

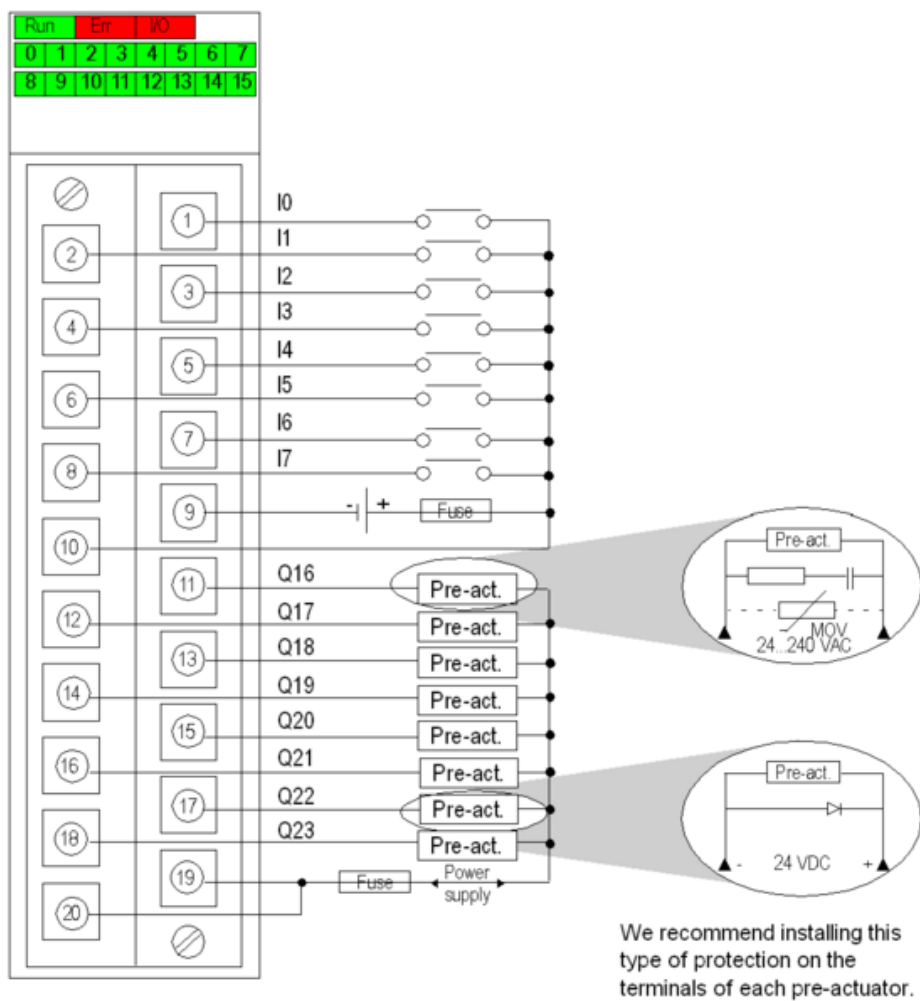
Input Circuit Diagram



Output Circuit Diagram



Module Connection



input power supply 24 VDC

output power supply 24 VDC or 24...240 VAC

input fuse 1 fast blow fuse of 0.5 A

output fuse 1 fast blow fuse of 12 A

pre-act pre-actuator