



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) Current source (logic negative)
Discrete input voltage	12 V DC positive or negative 24 V DC positive or negative
Discrete input current	3.3 mA

Complementary

Input compatibility	With 2-wire/3-wire proximity sensors IEC 61131-2 type 3
Sensor power supply	19...30 V
Voltage state 1 guaranteed	≥ 10 V ≤ -10 V
Current state 1 guaranteed	≥ 2 mA
Voltage state 0 guaranteed	≤ 5 V ≥ -5 V
Current state 0 guaranteed	≤ 1.5 mA
Input impedance	7270 Ohm
Insulation resistance	> 10 MOhm 500 V DC
Power dissipation in W	4.7 W
DC typical response time	4 ms
DC maximum response time	7 ms
Paralleling of outputs	Yes
Typical current consumption	100 mA 3.3 V DC
MTBF reliability	2200000 H
Protection type	1 external fuse per group of channel 0.5 A fast blow
Voltage detection threshold	< 14 V DC sensor fault > 19 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	0.30 lb(US) (0.137 kg)

Environment

IP Degree of Protection	IP20
Directives	2014/35/EU - low voltage directive 2014/30/EU - electromagnetic compatibility
Dielectric strength	1500 V AC 50/60 Hz 1 minute, primary/secondary 1500 V AC 50/60 Hz 1 minute, between group of channels
Vibration resistance	3 gn
Shock resistance	30 gn
Ambient Air Temperature for Storage	-40...185 °F (-40...85 °C)
Ambient Air Temperature for Operation	32...140 °F (0...60 °C)

Relative humidity	5...95 % -13...158 °F (-25...70 °C) without condensation
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	3606481946706
Returnability	Yes
Country of origin	ID

Packing Units

Unit Type of Package 1	PCE
Number of Units in Package 1	1
Package 1 Height	2.20 in (5.6 cm)
Package 1 Width	7.05 in (17.9 cm)
Package 1 Length	10.24 in (26.0 cm)
Package 1 Weight	11.29 oz (320.0 g)
Unit Type of Package 2	S03
Number of Units in Package 2	10
Package 2 Height	11.81 in (30.0 cm)
Package 2 Width	11.81 in (30.0 cm)
Package 2 Length	15.75 in (40.0 cm)
Package 2 Weight	8.91 lb(US) (4.04 kg)
Unit Type of Package 3	P06
Number of Units in Package 3	80
Package 3 Height	31.50 in (80.0 cm)
Package 3 Width	23.62 in (60.0 cm)
Package 3 Length	31.50 in (80.0 cm)
Package 3 Weight	79.37 lb(US) (36.0 kg)

Offer Sustainability

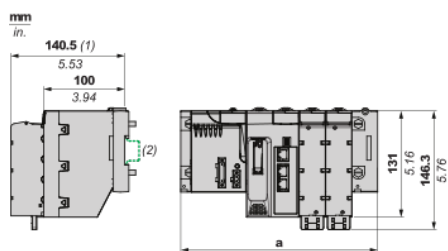
California proposition 65	WARNING: This product can expose you to chemicals including: Lead and lead compounds, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov
REACH Regulation	REACH Declaration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



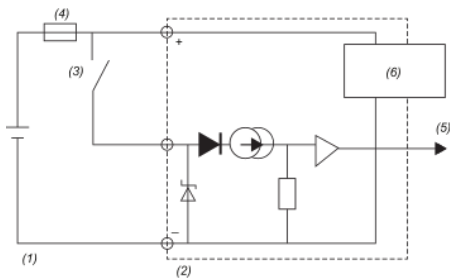
(1) With removable terminal block (cage, screw or spring).

(2) On AM1 ED rail: 35 mm wide, 15 mm deep.

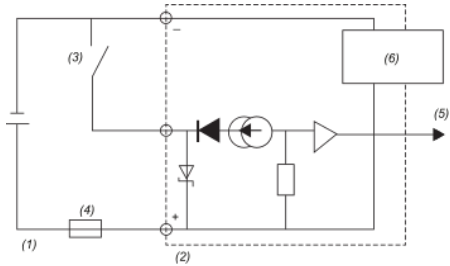
Rack references	a in mm	a in in.
BMXXBP0400 and BMXXBP0400H	242.4	9.54
BMXXBP0600 and BMXXBP0600H	307.6	12.11
BMXXBP0800 and BMXXBP0800H	372.8	14.68
BMXXBP1200 and BMXXBP1200H	503.2	19.81
BMEXBP0400 and BMEXBP0400H	242.4	9.54
BMEXBP0800 and BMEXBP0800H	372.8	14.68
BMEXBP1200 and BMEXBP1200H	503.2	19.81
BMEXBP0602 and BMEXBP0602H	375.8	14.8
BMEXBP1002 and BMEXBP1002H	506.2	19.93

Connecting the Module

Input Circuit Diagram

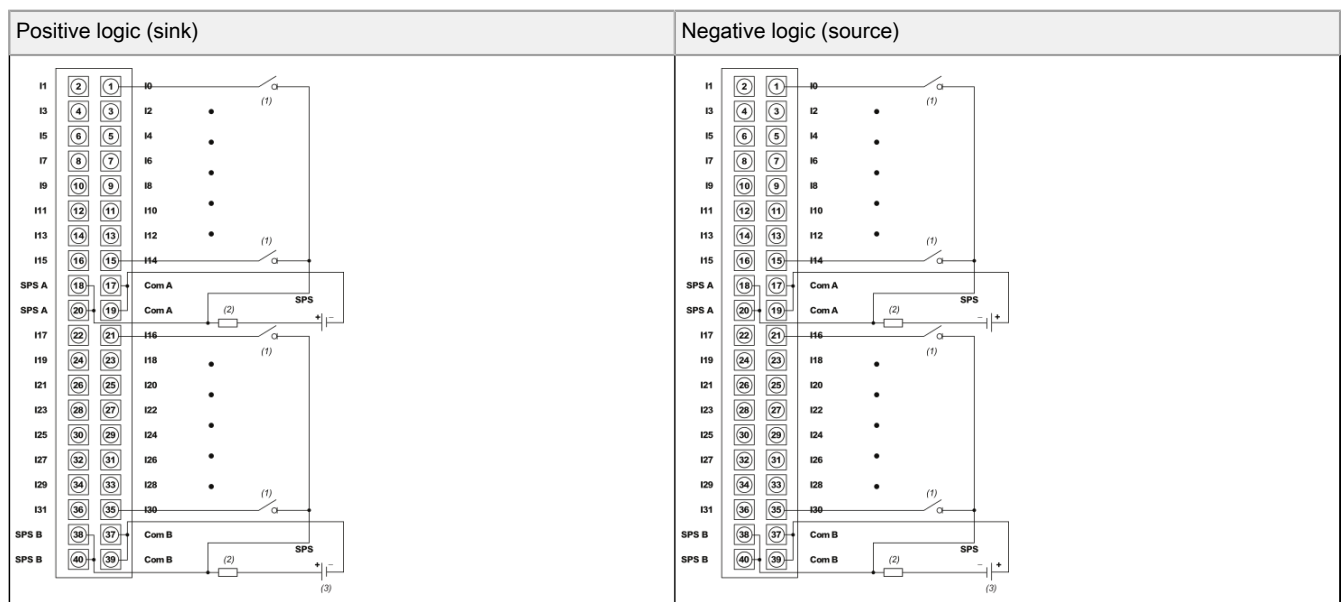


The following diagram shows the circuit of a direct current input (negative logic).



- (1) Entry
- (2) Module
- (3) Sensor
- (4) Fuse
- (5) Input % I(0...n)
- (6) Sensor supply and voltage monitoring

Module Connection



- (1) Sensor
- (2) Fuse : fast-blow fuse of 0.5A
- (3) 12 VDC/24 VDC

SPS: Sensor power supply