Product data sheet
Characteristics

BMXDAI1602
discrete input module X80 - 16 inputs - 24V AC/DC positive or negative

Green Premium™ Product

Main

Range of product	Modicon X80
Product or component type	Discrete input module
Discrete input number	16
Discrete input type	Isolated
Input type	Resistive
Discrete input voltage	24 V DC positive or negative 24 V AC
Discrete input current	3 MA 24 V AC 3.9 mA 24 V DC

Complementary

Input compatibility	With 2-wire/3-wire proximity sensors IEC 60947-5-2 With 2-wire/3-wire proximity sensors AC IEC 61131-2 Type 1
Network frequency	50/60 Hz
Network frequency limits	47…63 Hz
Sensor power supply	20...26 V AC 19...30 V DC
Current state 1 guaranteed	>= 2 mA AC >= 2 mA DC
Current state 0 guaranteed	<= 1 mA AC <= 0.5 mA DC
Input impedance	6 kOhm
Insulation resistance	> 10 MOhm 500 V DC
Power dissipation in W	3 W
AC activation response time	15 ms
AC deactivation response time	20 ms
Paralleling of inputs	No
Typical current consumption	76 mA 3.3 V DC
MTBF reliability	1307702 H
Protection type	1 external fuse per group of channel 0.5 A fast blow
Voltage detection threshold	< 14 V AC/DC sensor fault > 18 V AC/DC sensor OK
Status LED	Module operating (RUN) 1 LED Green) Channel diagnostic 1 LED per channel Green) Module error (ERR) 1 LED Red) Module I/O 1 LED Red)
Net Weight	0.25 lb(US) (0.115 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
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 % 131 °F (55 °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	00785901681731
Nbr. of units in pkg.	1
Package weight(Lbs)	0.31 lb(US) (0.14 kg)
Returnability	Yes
Country of origin	FR

Packing Units

Unit Type of Package 1	PCE
Package 1 Height	2.17 in (5.5 cm)
Package 1 width	4.33 in (11 cm)
Package 1 Length	4.53 in (11.5 cm)
Unit Type of Package 2	S02
Number of Units in Package 2	15
Package 2 Weight	4.76 lb(US) (2.16 kg)
Package 2 Height	5.91 in (15 cm)
Package 2 width	11.81 in (30 cm)
Package 2 Length	15.75 in (40 cm)

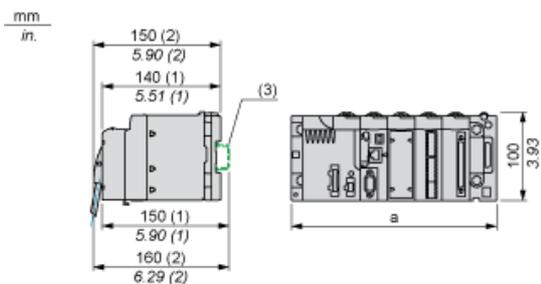## Offer Sustainability

Sustainable offer status	Green Premium product
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 free of SVHC	Yes
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

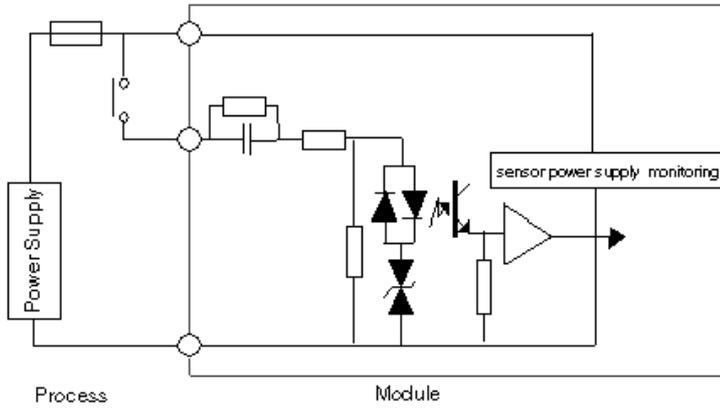|	
Warranty	18 months

Modules Mounted on Racks

Dimensions

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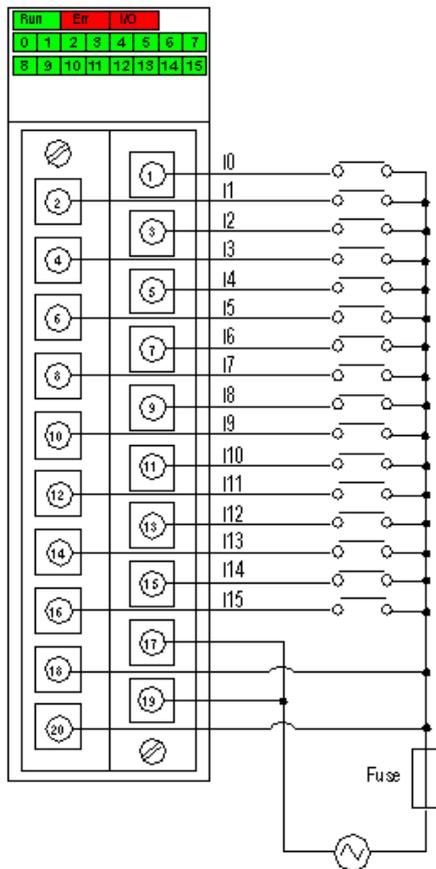(3)   On AM1 ED rail: 35 mm wide, 15 mm deep. Only possible with BMXXBP0400/0400H/0600/0600H/0800/0800H rack.

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
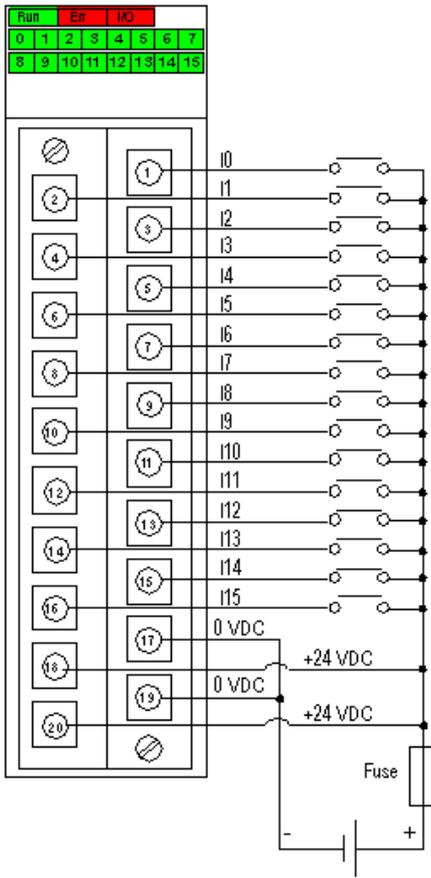

Process   Module

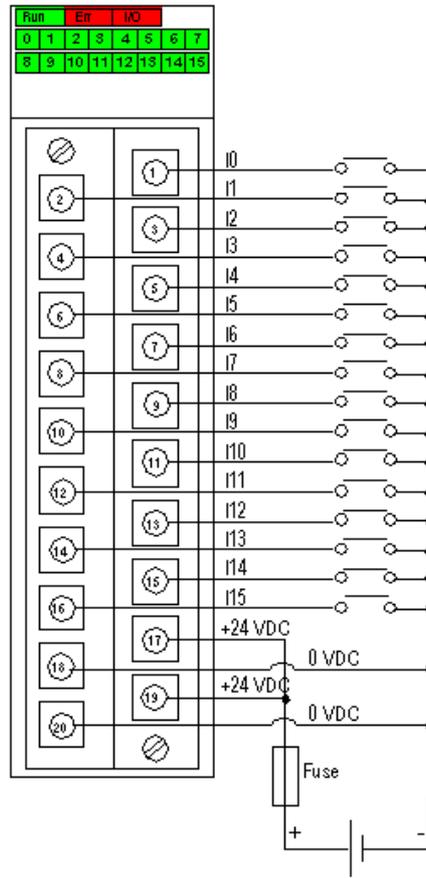### Module Connection (AC Power Supply)

power 24 VAC
supply
fuse fast blow fuse of 0.5 A

Module Connection (DC Power Supply)

Positive Logic Wiring

Negative Logic Wiring

power 24 VDC
supply
fuse   fast blow fuse of 0.5 A