# Product data sheet Characteristics

# BMXDAI1602H

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



#### Main

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Range of Product	Modicon X80
Product or Component Type	Discrete input module
Product Specific Application	For severe environments
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	4763 Hz	
Sensor power supply	2026 V AC 140 °F (60 °C) 1930 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	1125000 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	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	0.25 lb(US) (0.115 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	
Vibration resistance	3 gn	
Shock resistance	30 gn	
Ambient Air Temperature for Storage	-40185 °F (-4085 °C)	
Ambient Air Temperature for Operation	-13158 °F (-2570 °C)	
Relative humidity	595 % 131 °F (55 °C) without condensation	
Protective treatment	Conformal coating	
Operating altitude	06561.68 ft (02000 m) 20005000 m with derating factor	

## Ordering and shipping details

Category 18160-MODICON M340	
18160-MODICON M340	
PC34	
3595864006413	
No	
FR	
	3595864006413 No

## Packing Units

1
2.17 in (5.5 cm)
4.33 in (11.0 cm)
4.72 in (12.0 cm)
5.43 oz (154.0 g)
S02
15
5.91 in (15.0 cm)
11.81 in (30.0 cm)
15.75 in (40.0 cm)
5.09 lb(US) (2.31 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	<b>₽</b> Yes
WEEE	The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins.

Warranty

18 months

# BMXDAI1602H

#### 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

# Product data sheet **Connections and Schema**

# BMXDAI1602H

#### Connecting the Module

### Input Circuit Diagram



#### Module Connection (AC Power Supply)

Run Err VO   0 1 2 3 4 5 6 7   8 9 10 11 12 13 14 1	
	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$
	Fuse

power supply 24 VAC fuse fast blow fuse of 0.5 A

#### Module Connection (DC Power Supply)



# **Positive Logic Wiring**

**Negative Logic Wiring** 

10

11

12

13

14

15

16

17

18

19

110

111

112

113

114

115

+24 VDC

+24 VDC

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-0

0

-0

-0

-0

-0

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-0

-0

-0

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0 VDC

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power supply 24 VDC fuse fast blow fuse of 0.5 A