Product datasheet
Characteristics

BMXDDM3202K
discrete I/O module X80 - 16 inputs - 24 V DC - 16 outputs - solid state



Main

Range of product	Modicon X80
Product or component type	Discrete I/O module
Discrete input number	16
Input type	Current sink (logic positive)
Discrete input voltage	24 V DC, discrete input logic: positive
Discrete input current	2.5 mA
Input compatibility	With 2-wire/3-wire proximity sensors conforming to IEC 60947-5-2
Discrete output number	16
Discrete output type	Solid state
Discrete output voltage	24 V 19...30 V DC
Discrete output current	0.1 A

Complementary

Sensor power supply	19…30 V
Voltage state 1 guaranteed	>= 11 V
Current state 1 guaranteed	>= 2 mA
Voltage state 0 guaranteed	<= 5 V
Current state 0 guaranteed	<= 1.5 mA
Current per channel	0.125 A
Maximum current per module	3.2 A
Maximum leakage current	0.1 mA at state 0
[Ures] residual voltage	1.5 V at state 1
Input impedance	9600 Ohm
Insulation resistance	> 10 MOhm 500 V DC
Maximum power dissipation in W	4 W
DC typical filtering time	4 ms
DC maximum filtering time	7 ms

Disclaimer: This documentation is not intended as a substitute for and is not to be used for determining suitability or reliability of these products for specific user applications

Response time on output	1.2 ms
Paralleling of outputs	Yes : 3 maximum
Typical current consumption	69 mA at 24 V DC 150 mA at 3.3 V DC
Current consumption	<= 104 mA at 24 V DC <= 166 mA at 3.3 V DC
MTBF reliability	432904 H
Protection type	1 external fuse per group of input channel0.5 A fast blow overvoltage protection on output reverse polarity protection on input reverse polarity protection on output
Output overload protection	With electronic circuit breaker 0.125 A < Id < 0.185 A With current limiter
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
Maximum tungsten load	1.2 W
Switching frequency	0.5/LI² Hz
Maximum overload time	15 ms
Load impedance ohmic	<= 220 Ohm
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:
Product weight	0.11 kg

Environment

IP degree of protection	IP20
Directives	2014/35/EU - low voltage directive 2014/30/EU - electromagnetic compatibility 2012/19/EU - WEEE directive
Product certifications	CE Merchant Navy RCM EAC UL CSA
Standards	EN 61131-2 EN 61000-6-4 EN 61000-6-2 EN 61010-2-201
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 % at 55 °C without condensation
Protective treatment	TC
Operating altitude	0...2000 m 2000...5000 m with derating factor

Offer Sustainability

Sustainable offer status	Green Premium product

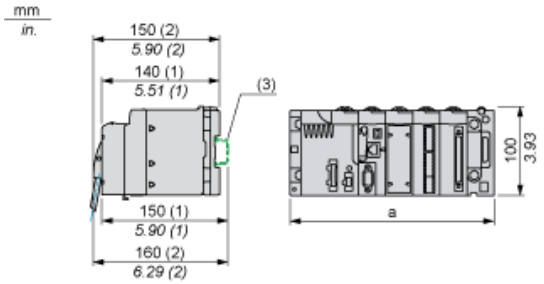
REACh Regulation	REACh Declaration
EU RoHS Directive	Pro-active compliance (Product out of EU RoHS legal scope) EU RoHS Declaration
Mercury free	Yes
RoHS exemption information	Yes
China RoHS Regulation	China RoHS declaration
Environmental Disclosure	Product Environmental Profile
Circularity Profile	End 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

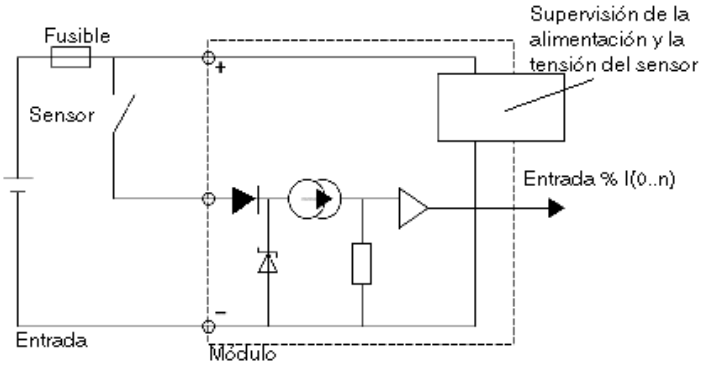


(1) With removable terminal block (cage, screw or spring).
(2) With FCN connector.
(3) On AM1 ED rail: 35 mm wide, 15 mm deep. Only possible with BMXXBP0400/0400H/0600/0600H/0800/0800H rack.

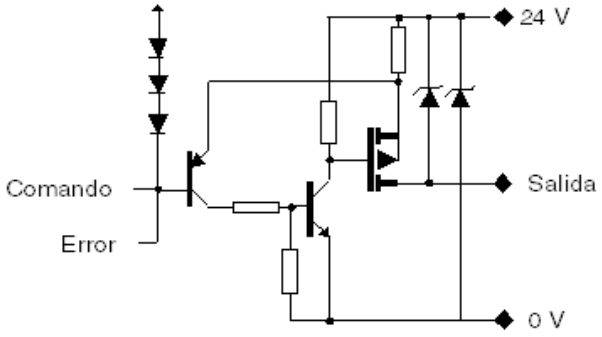
Rack references	a in mm	a in in.
BMXXBP0400 and BMXXBP0400H	242.4	09.54
BMXXBP0600 and BMXXBP0600H	307.6	12.11
BMXXBP0800 and BMXXBP0800H	372.8	14.68
BMXXBP1200 and BMXXBP1200H	503.2	19.81

Connecting the Module

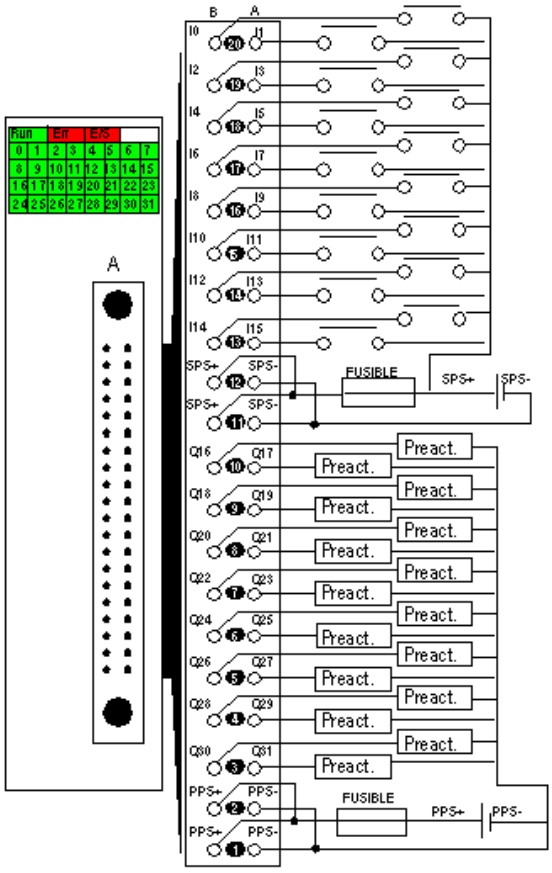
Input Circuit Diagram



Output Circuit Diagram



Module Connection



power supply 24 VDC
input fuse fast blow fuse of 0.5 A
output fuse fast blow fuse of 2 A
pre-act pre-actuator
SPS sensor power supply
PPS pre-actuator power supply

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