Product data sheet
Characteristics

BMXDDM16025
discrete I/O module X80 - 8 inputs - 24 V DC - 8 outputs - relay

Main

Range of product	Modicon X80
Product or component type	Discrete I/O module
Discrete input number	8
Input type	Current sink (logic positive)
Discrete input voltage	24 V DC, discrete input logic: 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 conforming to IEC 60947-5-2 With 2-wire/3-wire proximity sensors conforming to IEC 61131-2 type 3
Sensor power supply	19...30 V
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 at 3.3 V DC
MTBF reliability	835303 H
Protection type	1 external fuse per group of input channel0.5 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 at 240 VA 240 V (load factor 0.7) AC-14: 100000 cycles at 300 VA 200 V (load factor 0.7) AC-15: 100000 cycles at 120 VA 240 V (load factor 0.35) AC-15: 100000 cycles at 200 VA 200 V (load factor 0.35) DC-13: 100000 cycles at 24 W 24 V AC-14: 300000 cycles at 72 VA 240 V (load factor 0.7) AC-14: 300000 cycles at 80 VA 200 V (load factor 0.7) AC-15: 300000 cycles at 36 VA 240 V (load factor 0.35) AC-15: 300000 cycles at 60 VA 200 V (load factor 0.35) DC-13: 300000 cycles at 7.2 W 24 V
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	0.135 kg

Environment

IP degree of protection	IP20
Directives	2014/35/EU - low voltage directive 2014/30/EU - electromagnetic compatibility
Dielectric strength	1500 V AC at 50/60 Hz 1 minute, primary/secondary 2830 V AC at 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…85 °C
Ambient air temperature for operation	0…60 °C
Relative humidity	5…95 % at 55 °C without condensation
Operating altitude	0...2000 m 2000...5000 m with derating factor

Packing Units

Unit Type of Package 1	PCE
Number of Units in Package 1	1
Package 1 Weight	166 g
Package 1 Height	6 cm
Package 1 width	11 cm
Package 1 Length	12 cm
Unit Type of Package 2	S02
Number of Units in Package 2	15
Package 2 Weight	2.861 kg
Package 2 Height	15 cm
Package 2 width	30 cm
Package 2 Length	40 cm

Offer Sustainability

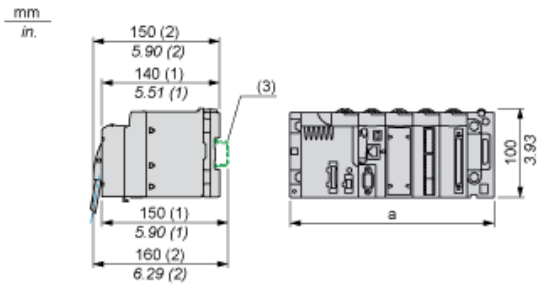
Sustainable offer status	Green Premium product
REACh Regulation	REACh Declaration
REACh free of SVHC	Yes
EU RoHS Directive	Pro-active compliance (Product out of EU RoHS legal scope) EU RoHS Declaration
Mercury free	Yes
RoHS exemption information	Yes
China RoHS Regulation	China RoHS Declaration
Environmental 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

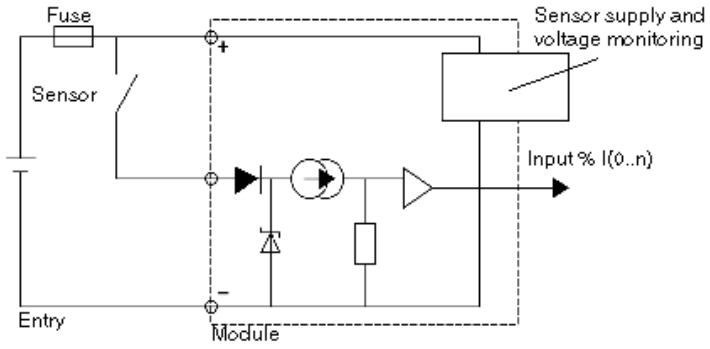


(1) With removable terminal block (cage, screw or spring).
(2) With FCN connector.
(3) On AM1 ED rail: 35 mm wide, 15 mm deep. Only possible with BMXXBP0400/0400H/0600/0600H/0800/0800H rack.

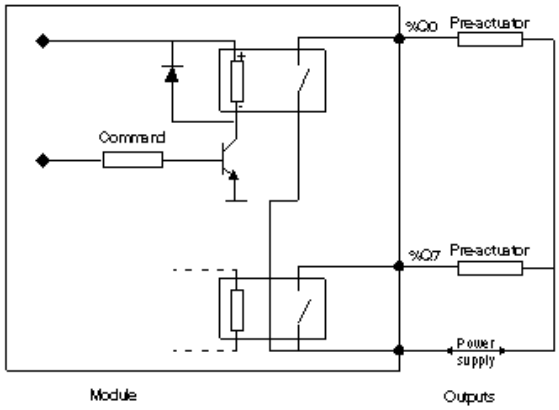
Rack references	a in mm	a in in.
BMXXBP0400 and BMXXBP0400H	242.4	09.54
BMXXBP0600 and BMXXBP0600H	307.6	12.11
BMXXBP0800 and BMXXBP0800H	372.8	14.68
BMXXBP1200 and BMXXBP1200H	503.2	19.81

Connecting the Module

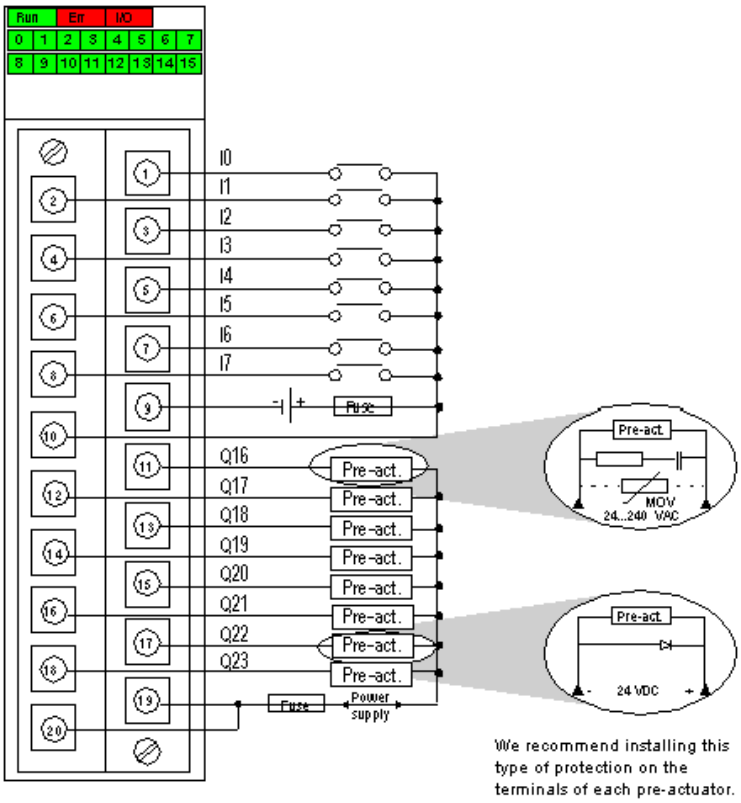
Input Circuit Diagram



Output Circuit Diagram



Module Connection



input 24 VDC power supply
output 24 VDC or 24...240 VAC power supply
input 1 fast blow fuse of 0.5 A fuse
output 1 fast blow fuse of 12 A fuse
pre-act pre-actuator