Product data sheet

Specifications

discrete output module, Modicon X80, 16 NO relay outputs, 24 to 240V AC, 24 to 48V DC

BMXDRA1605

Main

Range of product	Modicon X80
Product or component type	Discrete output module
Discrete output number	16 conforming to EN/IEC 61131-2
Discrete output type	Relay
Discrete output voltage	24...48 V 19...60 V DC 24...240 V 19…264 V AC

Complementary

[Ith] conventional free air thermal current	2 A
Insulation resistance	> 10 MOhm 500 V DC
Power dissipation in W	3 W
Response time on output	< 8 ms activation < 10 ms deactivation
Typical current consumption	100 mA at 3.3 V DC 95 mA at 24 V DC
MTBF reliability	2100000 H
Output overload protection	Use 1 fast blow fuse per channel or group of channel
Output overvoltage protection	Use discharge diode on each output DC Use RC circuit on each output AC Use ZNO surge limiter on each output AC
Output short-circuit protection	Use 1 fast blow fuse per channel or group of channel
Minimum switching current	1 mA 5 V DC

Electrical durability	AC-15: 100000 cycles at 240 VA 200 V (load factor 0.7) AC-15: 100000 cycles at 120 VA 200 V (load factor 0.35) AC-12: 100000 cycles at 200 VA 100 V AC-12: 100000 cycles at 80 VA 48 V AC-12: 100000 cycles at 50 VA 24 V AC-15: 100000 cycles at 120 VA 100 V AC-15: 100000 cycles at 120 VA 24 V AC-15: 100000 cycles at 120 VA 48 V DC-12: 100000 cycles at 24 W 24 V DC-13: 100000 cycles at 10 W 24 V DC-13: 100000 cycles at 10 W 48 V AC-15: 300000 cycles at 72 VA 200 V (load factor 0.7) AC-15: 300000 cycles at 36 VA 200 V (load factor 0.35) AC-12: 300000 cycles at 200 VA 200 V AC-12: 300000 cycles at 80 VA 100 V AC-12: 300000 cycles at 50 VA 48 V AC-15: 300000 cycles at 36 VA 100 V AC-15: 300000 cycles at 72 VA 100 V AC-15: 300000 cycles at 36 VA 48 V AC-15: 300000 cycles at 72 VA 48 V AC-15: 300000 cycles at 36 VA 24 V AC-15: 300000 cycles at 72 VA 24 V DC-13: 300000 cycles at 3 W 24 V DC-13: 300000 cycles at 3 W 48 V DC-13: 7000 cycles at 24 W 24 V DC-13: 7000 cycles at 24 W 48 V DC-12: 50000 cycles at 24 W 48 V
Status LED	1 LED (green) RUN 1 LED per channel (green) channel diagnostic 1 LED (red) ERR 1 LED (red) I/O
Net weight	0.15 kg

Environment

IP degree of protection	IP20
Dielectric strength	2000 V AC at 50/60 Hz 1 min
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 Height	5.300 cm
Package 1 Width	11.000 cm
Package 1 Length	11.500 cm
Package 1 Weight	179.000 g
Unit Type of Package 2	S02
Number of Units in Package 2	15
Package 2 Height	15.000 cm
Package 2 Width	30.000 cm
Package 2 Length	40.000 cm

Package 2 Weight	2.960 kg

Contractual warranty

Warranty	18 months

Environmental Data

Schneider Electric aims to achieve Net Zero status by 2050 through supply chain partnerships, lower impact materials, and circularity via our ongoing “Use Better, Use Longer, Use Again” campaign to extend product lifetimes and recyclability.

Environmental Data explained >

How we assess product sustainability >

Environmental footprint

Total lifecycle Carbon footprint	**146**
Environmental Disclosure	**Product Environmental Profile**

Use Better

Materials and Substances

Packaging made with recycled cardboard	**Yes**
Packaging without single use plastic	**Yes**
EU RoHS Directive	**Pro-active compliance (Product out of EU RoHS legal scope)**
SCIP Number	**81872da8-8895-4d37-90f4-a72768531605**
REACh Regulation	**REACh Declaration**
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**

Use Again

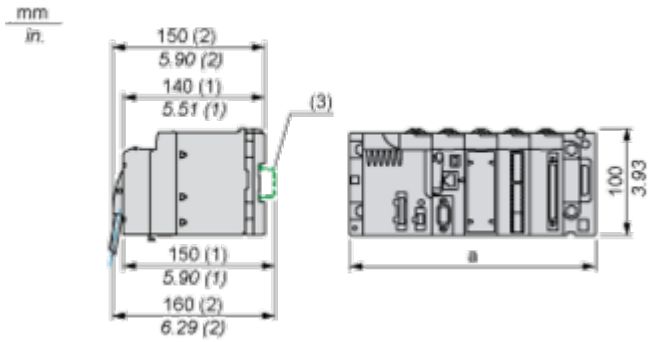
Repack and remanufacture

End of life manual availability	**End of Life Information**
Take-back	**No**

Dimensions Drawings

Modules Mounted on Racks

Dimensions



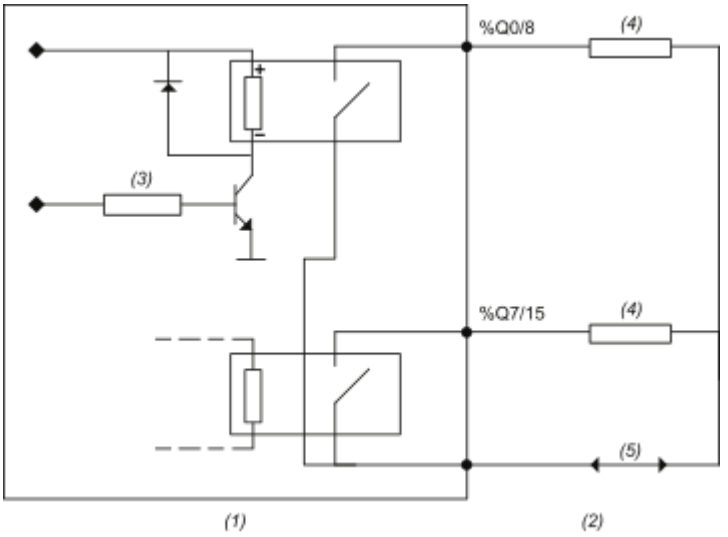
(1) With removable terminal block (cage, screw or spring).
(2) With FCN connector.
(3) On AM1 ED rail: 35 mm wide, 15 mm deep. Only possible with BMXXBP0400/0400H/0600/0600H/0800/0800H rack.

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

Connections and Schema

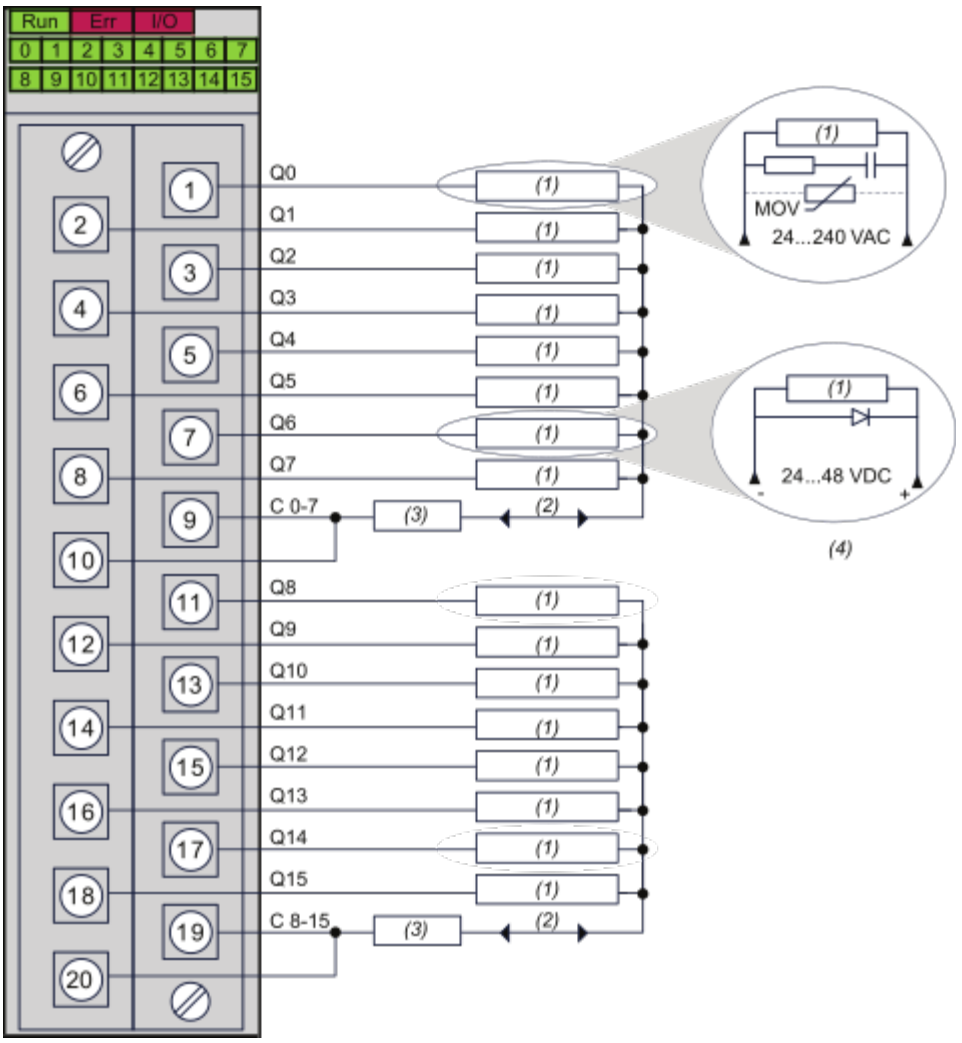
Connecting the Module

Output Circuit Diagram



(1) Module
(2) Output
(3) Command
(4) Pre-actuator
(5) Power supply

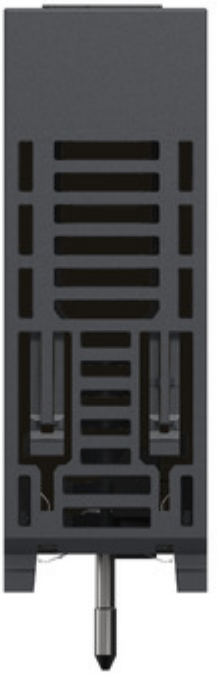
Module Connection



(1) Pre-actuator
(2) Power supply : 24...48 VDC or 24...240 VAC
(3) Fuse : 1 fast blow fuse of 12 A for each 8-channel group
(4) We recommend installing this type of protection on the terminals of each pre-actuator

Image of product / Alternate images

Alternative




Schneider
Electric
Modicon
BMXDRA1605
DIG 16Q RELAYS
DOM : XXXX


SN:XXXXXXXXXXX
PV:XX
RL:XX