Product data sheet

Specifications

Discrete output module, Modicon X80, 8 NO/NC relay outputs, 24 to 240V AC / 24 to 125V DC

BMXDRC0805

Main

Range of product	Modicon X80
Product or component type	Relay discrete output module
Discrete output number	8 conforming to EN/IEC 61131-2
Discrete output logic	Positive or negative
Discrete output voltage	5...125 V 5...150 V DC 24...240 V 19...264 V AC

Complementary

Electrical connection	40 ways terminal block
Network frequency	50/60 Hz
Network frequency limits	47…63 Hz
Sensor power supply	5...150 V 19...264 V
[Ith] conventional free air thermal current	4 A 40 °C 3 A 50 °C 2 A 60 °C
Insulation resistance	> 10 MOhm 500 V DC
Power dissipation in W	3.6 W
Response time on output	<= 10 ms activation <= 13 ms deactivation
Typical current consumption	40 mA at 3.3 V DC 101 mA at 24 V DC
MTBF reliability	2650000 H
Protection type	External short-circuit protection External overload protection External overvoltage protection, inductive AC network External overvoltage protection, inductive DC network
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	10 mA 5 V DC
Electrical durability	AC-12: 200000 cycles at 48 VA 24 V at 0…60 °C AC-12: 300000 cycles at 48 VA 48 V at 0…60 °C AC-12: 150000 cycles at 96 VA 48 V at 0…60 °C AC-12: 300000 cycles at 110 VA 100...120 V at 0…60 °C AC-12: 150000 cycles at 220 VA 100...120 V at 0…60 °C

	AC-12: 300000 cycles at 220 VA 200...250 V at 0…60 °C AC-12: 150000 cycles at 500 VA 200...250 V at 0…60 °C AC-15: 700000 cycles at 10 VA 24 V at 0…60 °C (load factor 0.4) AC-15: 500000 cycles at 24 VA 24 V at 0…60 °C (load factor 0.4) AC-15: 200000 cycles at 48 VA 24 V at 0…60 °C (load factor 0.4) AC-15: 700000 cycles at 10 VA 48 V at 0…60 °C (load factor 0.4) AC-15: 500000 cycles at 24 VA 48 V at 0…60 °C (load factor 0.4) AC-15: 300000 cycles at 48 VA 48 V at 0…60 °C (load factor 0.4) AC-15: 100000 cycles at 96 VA 48 V at 0…60 °C (load factor 0.4) AC-15: 1000000 cycles at 10 VA 100...120 V at 0…60 °C (load factor 0.4) AC-15: 300000 cycles at 50 VA 100...120 V at 0…60 °C (load factor 0.4) AC-15: 200000 cycles at 110 VA 100...120 V at 0…60 °C (load factor 0.4) AC-15: 70000 cycles at 220 VA 100...120 V at 0…60 °C (load factor 0.4) AC-15: 1000000 cycles at 10 VA 200...250 V at 0…60 °C (load factor 0.4) AC-15: 500000 cycles at 50 VA 200...250 V at 0…60 °C (load factor 0.4) AC-15: 200000 cycles at 110 VA 200...250 V at 0…60 °C (load factor 0.4) AC-15: 150000 cycles at 220 VA 200...250 V at 0…60 °C (load factor 0.4) DC-12: 200000 cycles at 24 W 24 V at 0…60 °C DC-12: 150000 cycles at 48 W 24 V at 0…60 °C DC-12: 150000 cycles at 40 W 48...60 V at 0…60 °C DC-12: 100000 cycles at 45 W 100...125 V at 0…60 °C DC-13: 100000 cycles at 10 W 24 V at 0…60 °C DC-13: 60000 cycles at 24 W 24 V at 0…60 °C DC-13: 40000 cycles at 48 W 24 V at 0…60 °C DC-13: 40000 cycles at 40 W 48...60 V at 0…60 °C DC-13: 100000 cycles at 15 W 100...125 V at 0…60 °C
Status LED	1 LED (green) RUN 1 LED per channel (green) channel diagnostic 1 LED (red) ERR 1 LED (red) I/O
Net weight	0.189 kg

Environment

IP degree of protection	IP20
Dielectric strength	1780 V AC at 50/60 Hz 1 min
Vibration resistance	3 gn
Shock resistance	30 gn
Relative humidity	0…95 % at 0…60 °C without condensation
Operating altitude	0...2000 m 2000...5000 m with derating factor

Packing Units

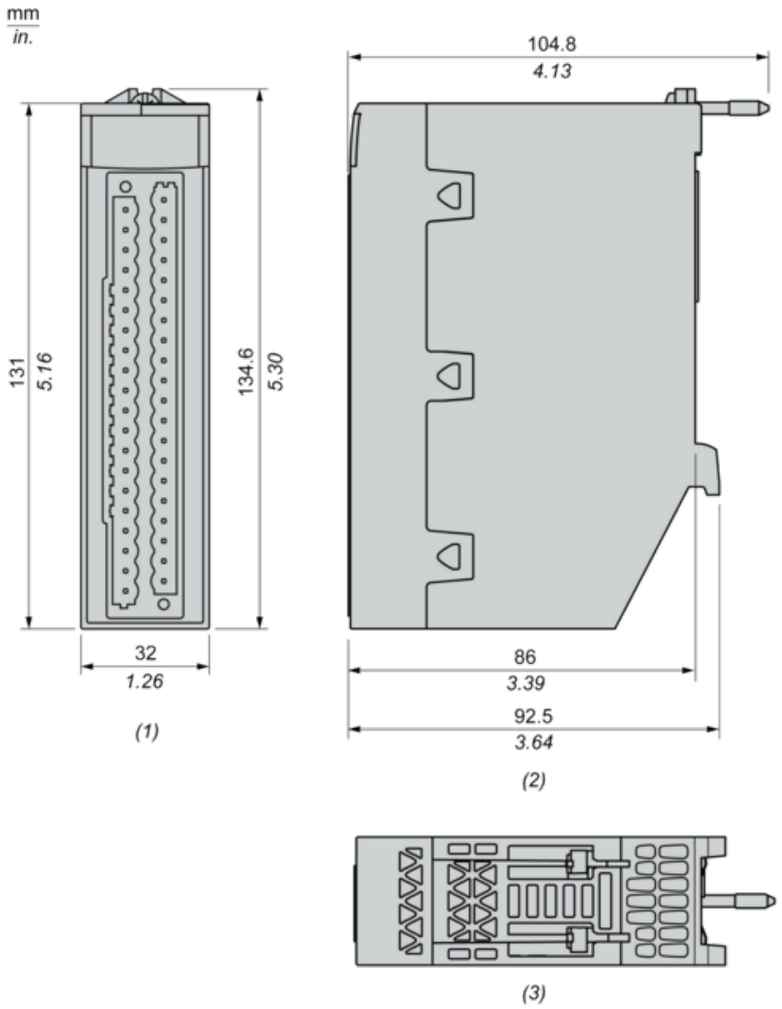
Unit Type of Package 1	Db
Number of Units in Package 1	1
Package 1 Height	5.5 cm
Package 1 Width	18.0 cm
Package 1 Length	26.0 cm
Package 1 Weight	332.0 g
Unit Type of Package 2	Doboz
Number of Units in Package 2	8
Package 2 Height	30.0 cm
Package 2 Width	30.0 cm
Package 2 Length	40.0 cm
Package 2 Weight	2.656 kg

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
China RoHS Regulation	China RoHS declaration
RoHS exemption information	Yes
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
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

Dimensions



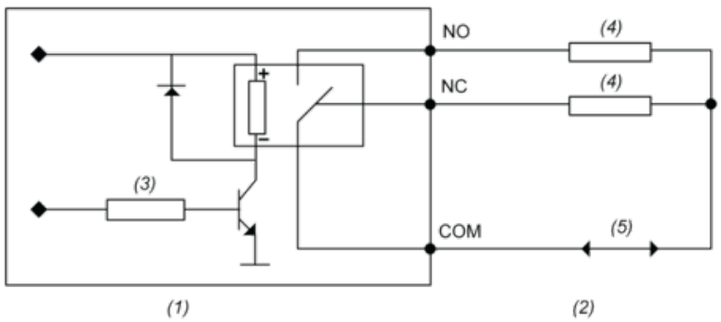
(1) Front view

(2) Right view

(3) Top view

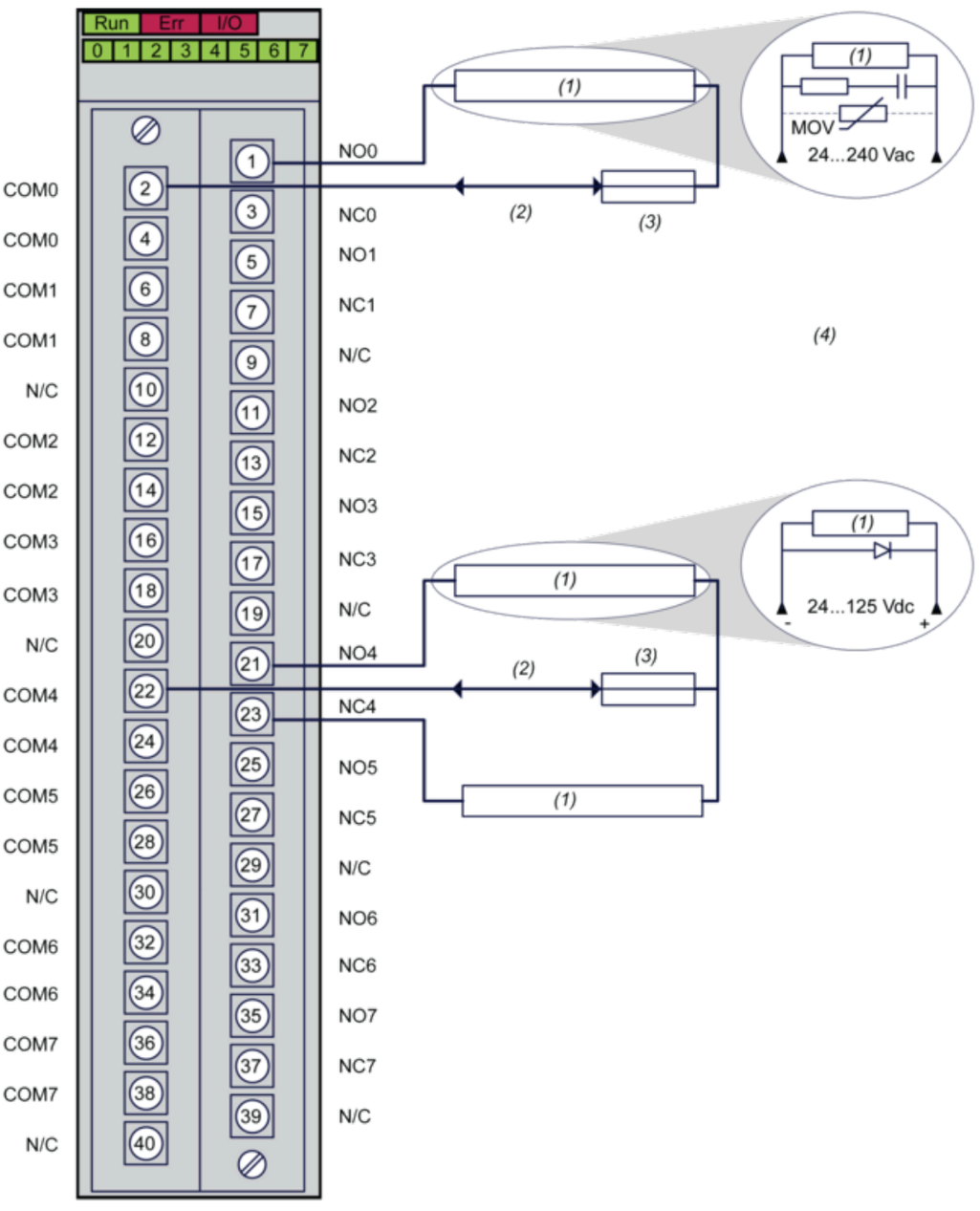
Connecting the Module

Output Circuit Diagram



(1) Module
(2) Output
(3) Command
(4) Pre-actuator
(5) Power supply
NO : Normally open output
NC : Normally closed output

Module Connection



(1) Pre-actuator
(2) Power supply : 24...125 Vdc or 24...240 Vac
(3) Fuse : Use appropriate fast-blow fuse for each relay

(4) We recommend installing this type of protection on the terminals of each pre-actuator
N/C : Not connected

Recommended replacement(s)