Product data sheet

Specifications

discrete module X80 - 8 NO/NC Type C - Isolated relays - 125 V DC/ 250 V AC - sev

BMXDRC0805H

Main

Range of product	Modicon X80
Product or component type	Relay discrete output module
Product specific application	For severe environments
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 1.2 A 70 °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 -25…60 °C AC-12: 200000 cycles at 28.8 VA 24 V at 60…70 °C AC-12: 300000 cycles at 48 VA 48 V at -25…60 °C AC-12: 300000 cycles at 28.8 VA 48 V at 60…70 °C AC-12: 150000 cycles at 96 VA 48 V at -25…60 °C AC-12: 150000 cycles at 57.6 VA 48 V at 60…70 °C AC-12: 300000 cycles at 110 VA 100...120 V at -25…60 °C AC-12: 300000 cycles at 66 VA 100...120 V at 60…70 °C AC-12: 150000 cycles at 220 VA 100...120 V at -25…60 °C AC-12: 150000 cycles at 132 VA 100...120 V at 60…70 °C AC-12: 300000 cycles at 220 VA 200...250 V at -25…60 °C AC-12: 300000 cycles at 132 VA 200...250 V at 60…70 °C AC-12: 150000 cycles at 500 VA 200...250 V at -25…60 °C AC-12: 150000 cycles at 300 VA 200...250 V at 60…70 °C AC-15: 700000 cycles at 10 VA 24 V at -25…60 °C (load factor 0.4) AC-15: 700000 cycles at 6 VA 24 V at 60…70 °C (load factor 0.4) AC-15: 500000 cycles at 24 VA 24 V at -25…60 °C (load factor 0.4) AC-15: 500000 cycles at 14.4 VA 24 V at 60…70 °C (load factor 0.4) AC-15: 200000 cycles at 48 VA 24 V at -25…60 °C (load factor 0.4) AC-15: 200000 cycles at 28.8 VA 24 V at 60…70 °C (load factor 0.4) AC-15: 700000 cycles at 10 VA 48 V at -25…60 °C (load factor 0.4) AC-15: 700000 cycles at 6 VA 48 V at 60…70 °C (load factor 0.4) AC-15: 500000 cycles at 24 VA 48 V at -25…60 °C (load factor 0.4) AC-15: 500000 cycles at 14.4 VA 48 V at 60…70 °C (load factor 0.4) AC-15: 300000 cycles at 48 VA 48 V at -25…60 °C (load factor 0.4) AC-15: 300000 cycles at 28.8 VA 48 V at 60…70 °C (load factor 0.4) AC-15: 100000 cycles at 96 VA 48 V at -25…60 °C (load factor 0.4) AC-15: 100000 cycles at 57.6 VA 48 V at 60…70 °C (load factor 0.4) AC-15: 1000000 cycles at 10 VA 100...120 V at -25…60 °C (load factor 0.4) AC-15: 1000000 cycles at 6 VA 100...120 V at 60…70 °C (load factor 0.4) AC-15: 300000 cycles at 50 VA 100...120 V at -25…60 °C (load factor 0.4) AC-15: 300000 cycles at 30 VA 100...120 V at 60…70 °C (load factor 0.4) AC-15: 200000 cycles at 110 VA 100...120 V at -25…60 °C (load factor 0.4) AC-15: 200000 cycles at 66 VA 100...120 V at 60…70 °C (load factor 0.4) AC-15: 70000 cycles at 220 VA 100...120 V at -25…60 °C (load factor 0.4) AC-15: 70000 cycles at 132 VA 100...120 V at 60…70 °C (load factor 0.4) AC-15: 1000000 cycles at 10 VA 200...250 V at -25…60 °C (load factor 0.4) AC-15: 1000000 cycles at 6 VA 200...250 V at 60…70 °C (load factor 0.4) AC-15: 500000 cycles at 50 VA 200...250 V at -25…60 °C (load factor 0.4) AC-15: 500000 cycles at 30 VA 200...250 V at 60…70 °C (load factor 0.4) AC-15: 200000 cycles at 110 VA 200...250 V at -25…60 °C (load factor 0.4) AC-15: 200000 cycles at 66 VA 200...250 V at 60…70 °C (load factor 0.4) AC-15: 150000 cycles at 220 VA 200...250 V at -25…60 °C (load factor 0.4) AC-15: 150000 cycles at 132 VA 200...250 V at 60…70 °C (load factor 0.4) DC-12: 200000 cycles at 24 W 24 V at -25…60 °C DC-12: 200000 cycles at 14.4 W 24 V at 60…70 °C DC-12: 150000 cycles at 48 W 24 V at -25…60 °C DC-12: 150000 cycles at 28.8 W 24 V at 60…70 °C DC-12: 150000 cycles at 40 W 48...60 V at -25…60 °C DC-12: 150000 cycles at 24 W 48...60 V at 60…70 °C DC-12: 100000 cycles at 45 W 100...125 V at -25…60 °C DC-12: 60000 cycles at 45 W 100...125 V at 60…70 °C DC-13: 100000 cycles at 10 W 24 V at -25…60 °C DC-13: 100000 cycles at 6 W 24 V at 60…70 °C DC-13: 60000 cycles at 24 W 24 V at -25…60 °C DC-13: 60000 cycles at 14.4 W 24 V at 60…70 °C DC-13: 40000 cycles at 48 W 24 V at -25…60 °C DC-13: 40000 cycles at 28.8 W 24 V at 60…70 °C DC-13: 40000 cycles at 40 W 48...60 V at -25…60 °C DC-13: 40000 cycles at 24 W 48...60 V at 60…70 °C DC-13: 100000 cycles at 15 W 100...125 V at -25…60 °C DC-13: 40000 cycles at 15 W 100...125 V at 60…70 °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

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	1780 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	-25…70 °C
Relative humidity	0…95 % at -25…70 °C without condensation
Protective treatment	Conformal coating
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	5.500 cm
Package 1 Width	17.900 cm
Package 1 Length	26.100 cm
Package 1 Weight	356.000 g
Unit Type of Package 2	S03
Number of Units in Package 2	8
Package 2 Height	30.000 cm
Package 2 Width	30.000 cm
Package 2 Length	40.000 cm
Package 2 Weight	3.332 kg

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	26
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	43b0fbab-d94b-43e8-be0a-0b39cadd288b
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

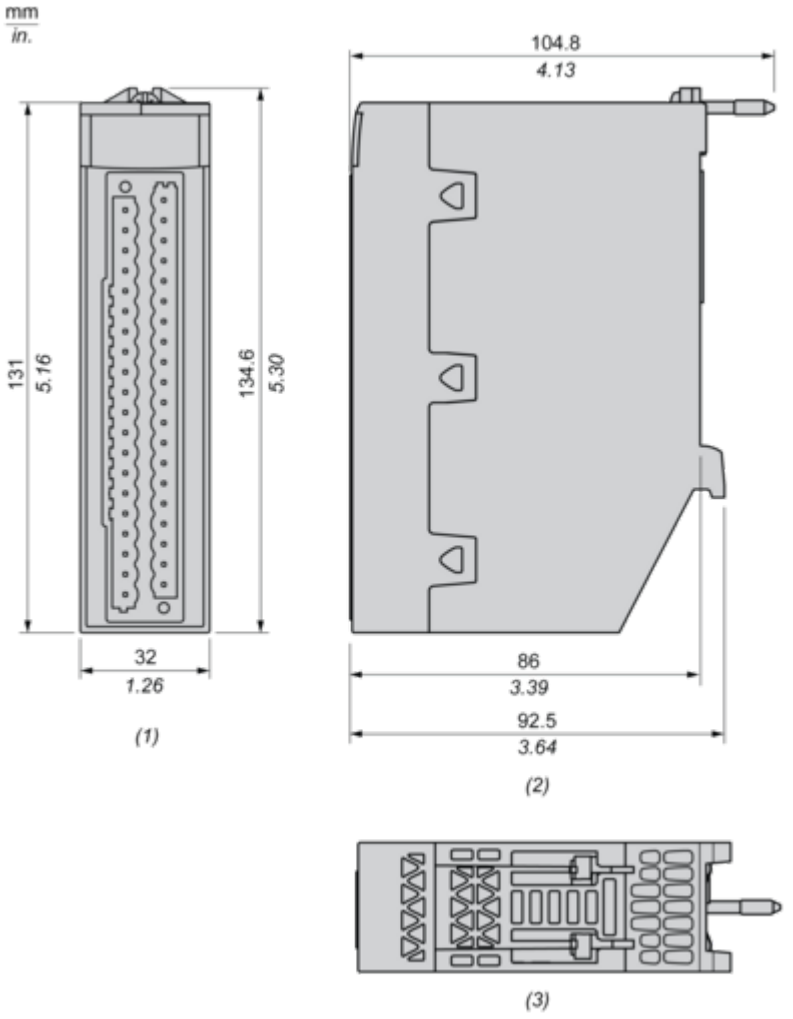
Use Again

Repack and remanufacture

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

Dimensions Drawings

Dimensions

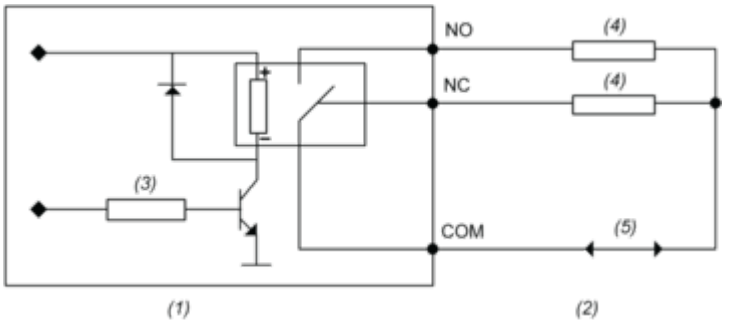


(1) Front view
(2) Right view
(3) Top view

Connections and Schema

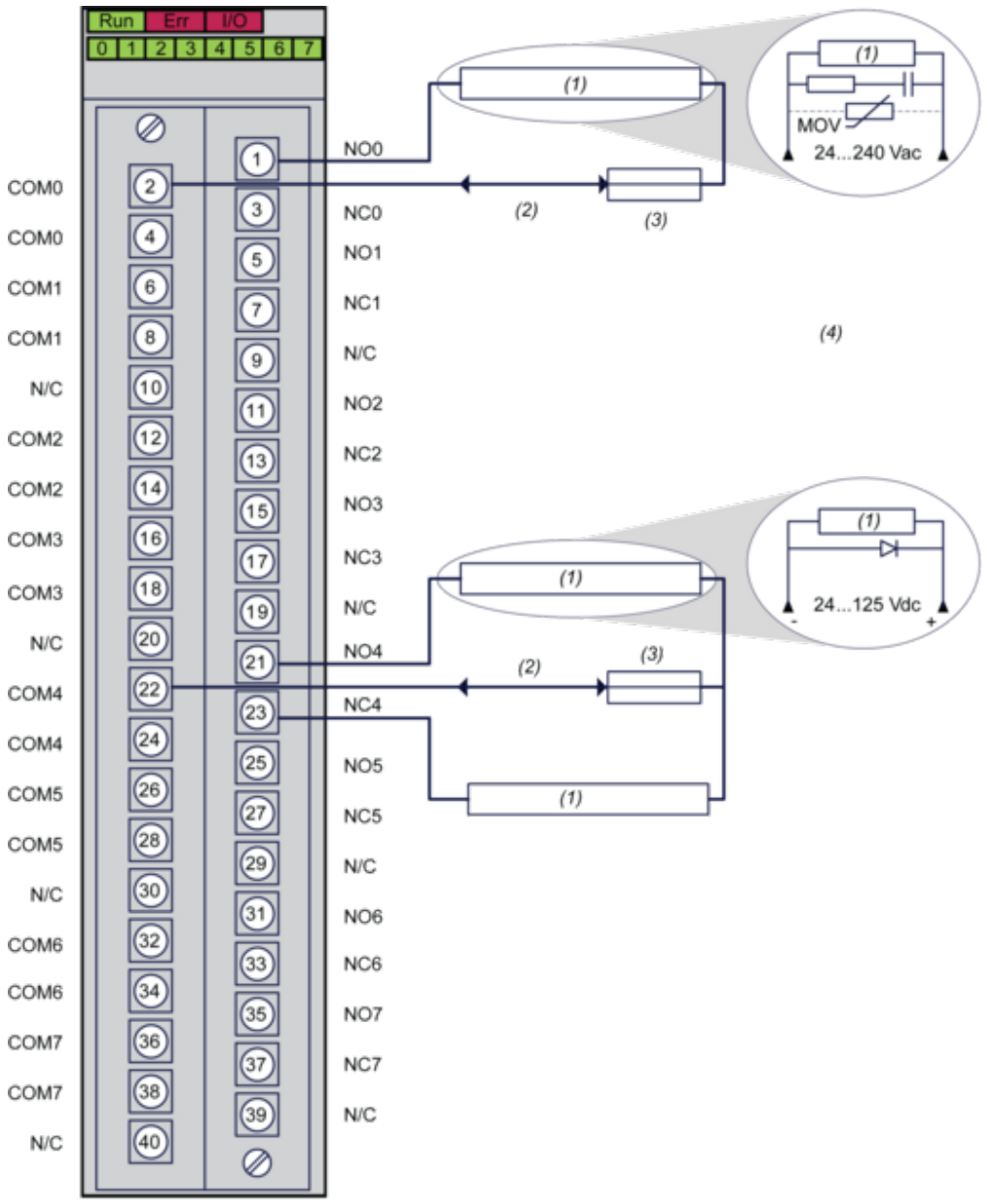
Connecting the Module

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

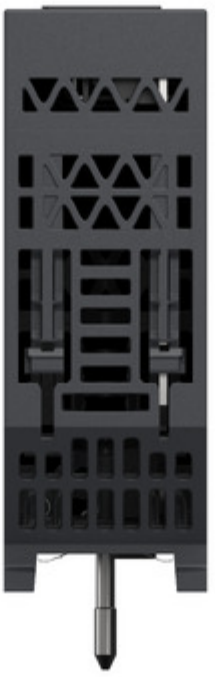


(1) Pre-actuator
(2) Power supply : 24...125 Vdc or 24...240 Vac
(3) Fuse : Use appropriate fast-blow fuse for each relay
(4) We recommend installing this type of protection on the terminals of each pre-actuator
N/C : Not connected

Image of product / Alternate images

Alternative


SN:XXXXXXXXXXX
PV:XX
RL:XX




Schneider
Electric
Modicon
BMXDRC0805
DIG 8NO/NC
125VDC/250VAC
ISOLATED RELAYS
DOM - XXXX