



Main

Range of product	Modicon X80
Product or component type	Discrete I/O module
Discrete input number	16
Discrete input type	Isolated
Input type	Capacitive
Discrete input voltage	100...120 V AC
Discrete input current	11.9 mA

Complementary

Input compatibility	2-wire proximity sensor conforming to IEC 60947-5-2 2-wire proximity sensor conforming to IEC 61131-2 Type 1
Network frequency	60 Hz
Network frequency limits	47...63 Hz
Sensor power supply	85...132 V
Current state 1 guaranteed	≥ 4 mA
Current state 0 guaranteed	≤ 3 mA
Input impedance	11...13.4 kOhm
Insulation resistance	> 10 MOhm 500 V DC
Power dissipation in W	4.3 W
AC activation response time	21 ms
AC deactivation response time	35 ms
Typical current consumption	76 mA at 3.3 V DC
MTBF reliability	3700000 H
Protection type	1 external fuse per group of channel 0.25 A fast blow
Voltage detection threshold	< 40 V AC sensor fault > 85 V AC sensor OK
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	0.157 kg

Environment

IP degree of protection	IP20
Dielectric strength	1780 V AC at 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	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	PCE
Number of Units in Package 1	1
Package 1 Height	5.700 cm
Package 1 Width	17.700 cm
Package 1 Length	26.000 cm
Package 1 Weight	294.000 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	2.835 kg

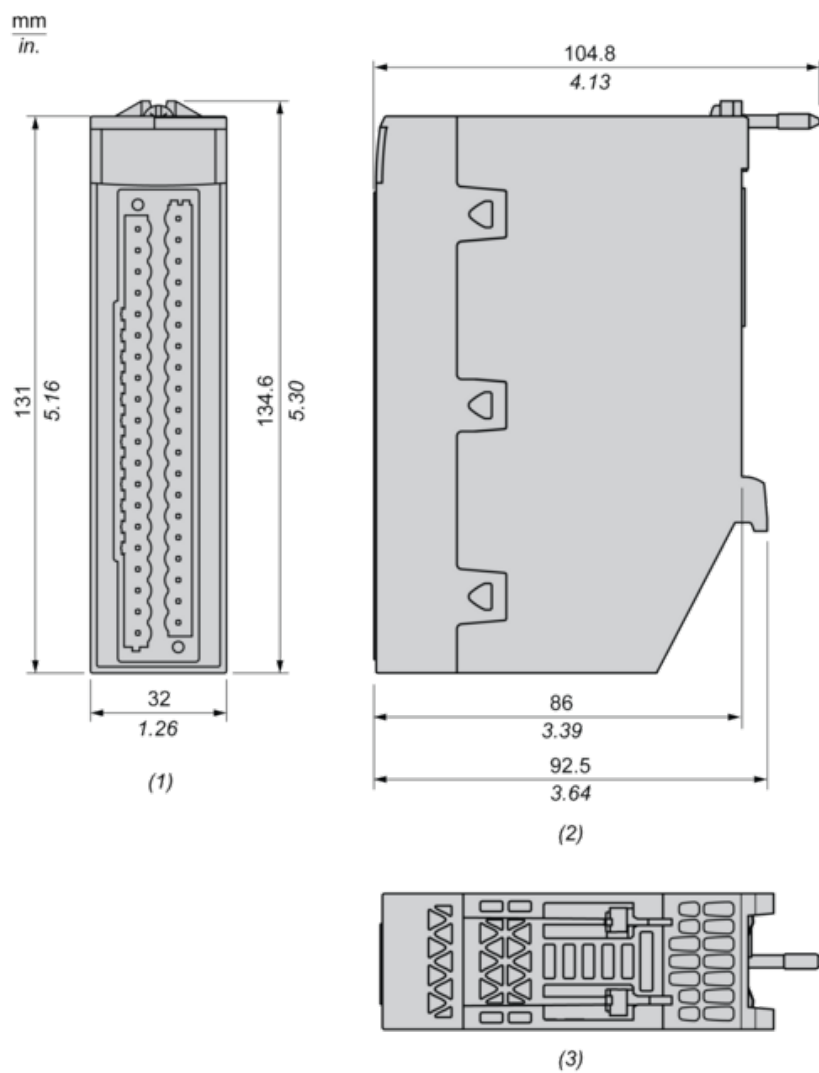
Offer Sustainability

Sustainable offer status	Green Premium product
REACH Regulation	 REACH Declaration
EU RoHS Directive	Pro-active compliance (Product out of EU RoHS legal scope)
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

Contractual warranty

Warranty	18 months
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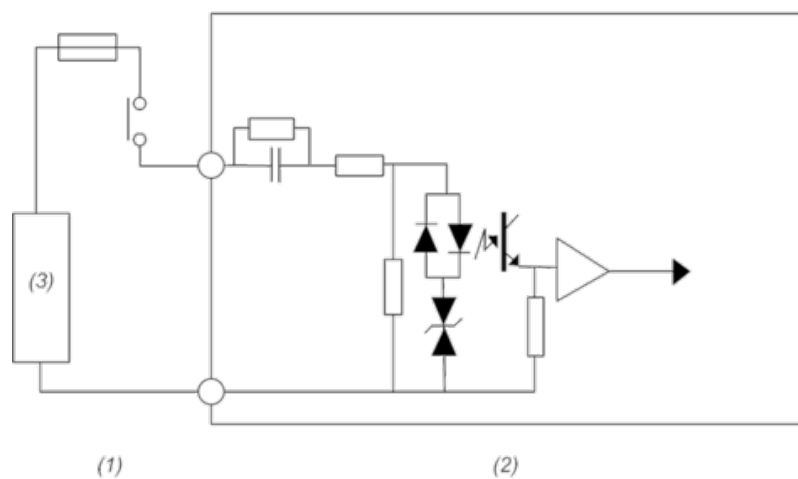
Dimensions



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

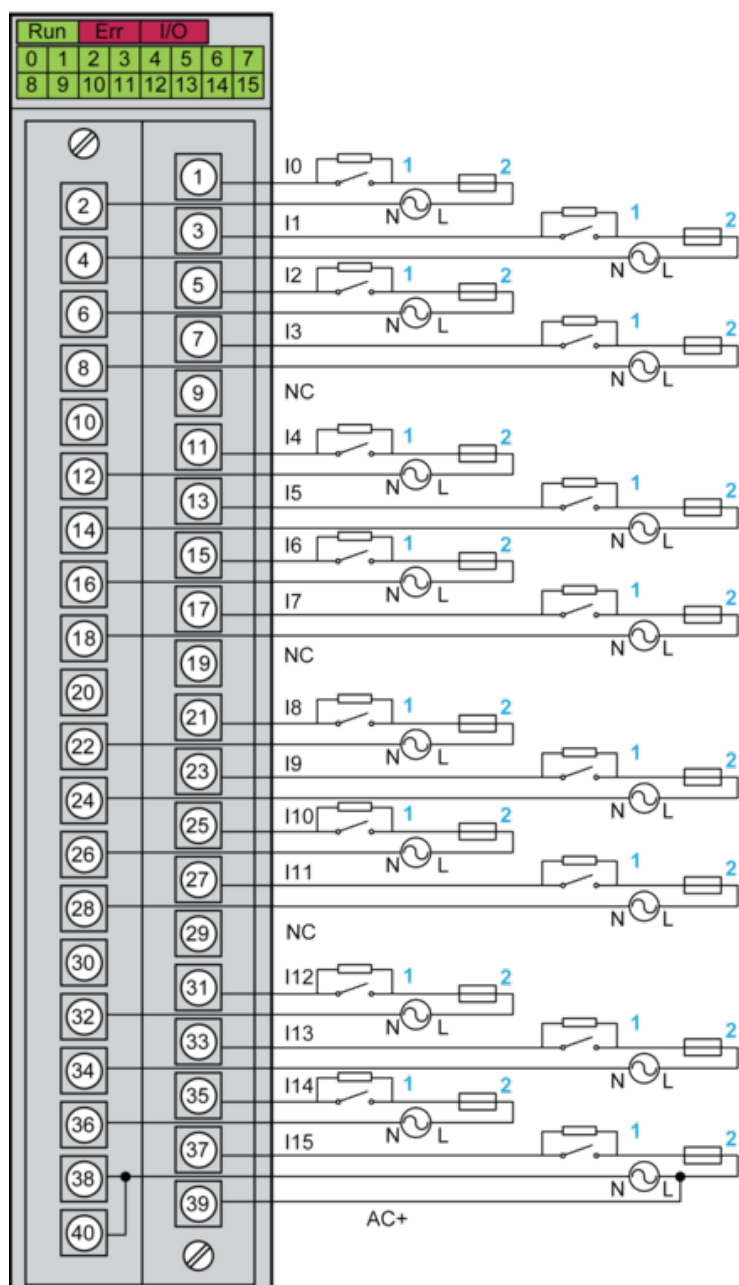
Connecting the Module

Input Circuit Diagram



- (1) Process
- (2) Module
- (3) Power supply

Module Connection



1 : External resistor for open wire detection function

2 : Fast blow fuse of 0.25A

AC+ : Input pin for IO supply monitoring function on channel 15

NC : Not connected

Power supply : 100...120 Vac

NOTE : The maximum input voltage is 132 Vrms@63 Hz. Any over voltage will damage the module.