



Main

Range of product	Modicon X80
Product or component type	Discrete input module
Product specific application	For severe environments
Discrete input number	16
Discrete input type	Isolated
Input type	Capacitive
Discrete input voltage	100...120 V AC, discrete input logic: positive
Discrete input current	2 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 1
Network frequency	50/60 Hz
Network frequency limits	47...63 Hz
Sensor power supply	85...132 V
Current state 1 guaranteed	≥ 2 mA
Current state 0 guaranteed	≤ 1 mA
Input impedance	14000 Ohm
Insulation resistance	> 10 MOhm 500 V DC
Power dissipation in W	5 W
AC activation response time	10 ms
AC deactivation response time	20 ms
Typical current consumption	76 mA at 3.3 V DC
MTBF reliability	970000 H
Protection type	1 external fuse per group of channel0.25 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
Product weight	0.157 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

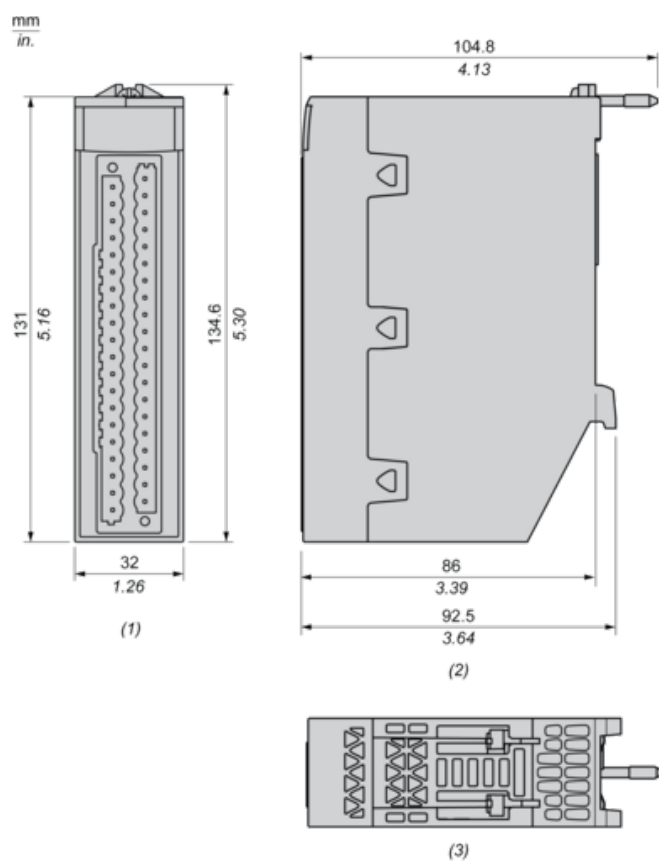
Packing Units

Unit Type of Package 1	PCE
Number of Units in Package 1	1
Package 1 Weight	294 g
Package 1 Height	5.7 cm
Package 1 width	18 cm
Package 1 Length	26 cm
Unit Type of Package 2	S03
Number of Units in Package 2	8
Package 2 Weight	2.87 kg
Package 2 Height	30 cm
Package 2 width	30 cm
Package 2 Length	40 cm

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
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
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

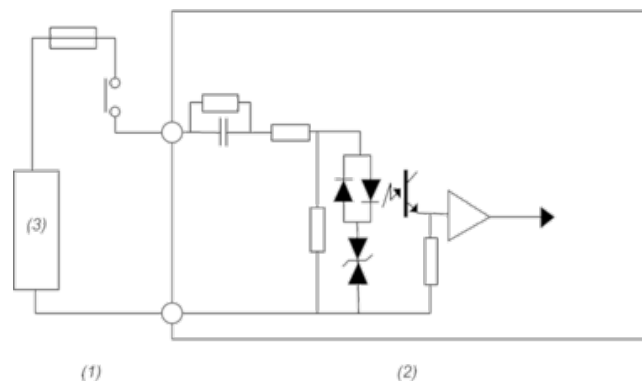
Dimensions



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

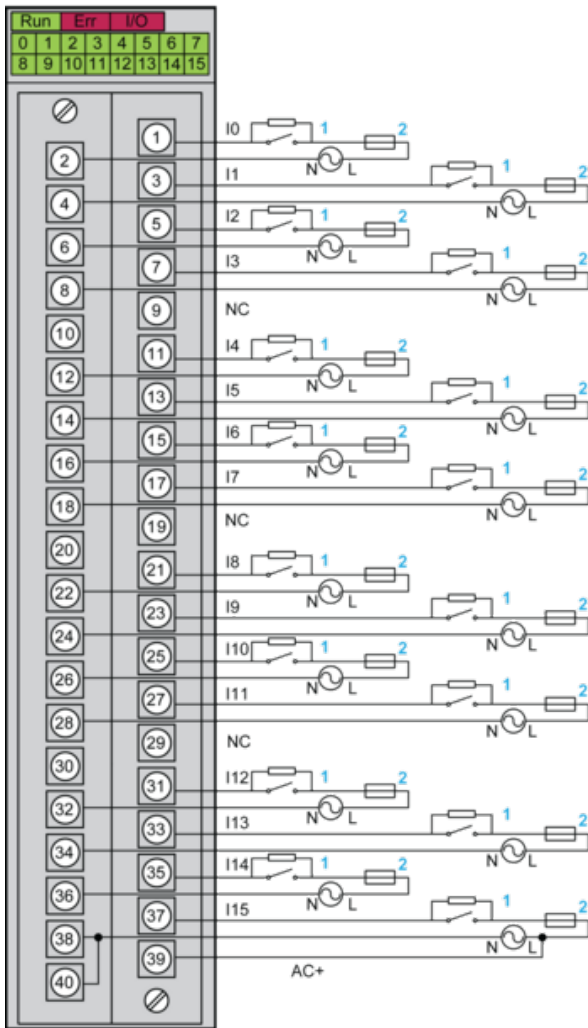
Connecting the Module

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.