

# discrete mixed IO module, Modicon X80, 8 inputs, 8 outputs, 24V DC positive

BMXDDM16022

Product availability: Stock - Normally stocked in distribution facility

#### Main

| Range Of Product          | Modicon X80                   |
|---------------------------|-------------------------------|
| Product Or Component Type | Discrete I/O module           |
| Discrete Input Number     | 8                             |
| Input Type                | Current sink (logic positive) |
| Discrete Input Voltage    | 24 V DC positive              |
| Discrete Input Current    | 3.5 mA                        |
| Discrete Output Number    | 8                             |
| Discrete Output Type      | Solid state                   |
| Discrete Output Voltage   | 24 V 1930 V DC                |
| Discrete Output Current   | 0.5 A                         |

# Complementary

| Input Compatibility         | With 2-wire/3-wire proximity sensors IEC 60947-5-2 With 2-wire/3-wire proximity sensors IEC 61131-2 type 3 |
|-----------------------------|--|
| Sensor Power Supply         | 1930 V   |
| Current State 1 Guaranteed  | >= 3 mA  |
| Current State 0 Guaranteed  | <= 1.5 mA  |
| Current Per Channel         | 0.625 A  |
| Maximum Current Per Module  | 5 A  |
| Maximum Leakage Current     | 0.5 mA at state 0  |
| Maximum Voltage Drop        | <1.2 V at state 1  |
| Input Impedance             | 6800 Ohm   |
| Insulation Resistance       | > 10 MOhm 500 V DC   |
| Power Dissipation In W      | 3.7 W  |
| Dc Typical Response Time    | 4 ms   |
| Dc Maximum Response Time    | 7 ms   |
| Response Time On Output     | 1.2 ms   |
| Paralleling Of Outputs      | Yes : 2 maximum  |
| Typical Current Consumption | 79 mA 3.3 V DC<br>59 mA 24 V DC  |
| Current Consumption         | <= 111 mA 3.3 V DC<br><= 67 mA 24 V DC   |
| Mtbf Reliability            | 450000 H   |

Price is "List Price" and may be subject to a trade discount – check with your local distributor or retailer for actual price.

| Protection Type                 | 1 external fuse per group of input channel 0.5 A fast blow overvoltage protection on output reverse polarity protection on input reverse polarity protection on output |
|---------------------------------|--|
| Output Overload Protection      | With current limiter With electronic circuit breaker 1.5 ln < ld < 2 ln  |
| Output Overvoltage Protection   | With transil diode   |
| Output Short-Circuit Protection | With 2 A external fuse   |
| Reverse Polarity Protection     | Reverse mounted diode  |
| Voltage Detection Threshold     | < 14 V DC preactuator fault < 14 V DC sensor fault > 18 V DC preactuator OK > 18 V DC sensor OK  |
| Maximum Tungsten Load           | 6 W  |
| Switching Frequency             | 0.5/Ll² Hz   |
| Maximum Overload Time           | 15 ms  |
| Load Impedance Ohmic            | >= 48 Ohm  |
| 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                      | 0.25 lb(US) (0.115 kg)   |

# **Environment**

| Ip Degree Of Protection               | IP20   |
|---------------------------------------|--|
| Directives                            | 2014/35/EU - low voltage directive<br>2014/30/EU - electromagnetic compatibility   |
| Dielectric Strength                   | 1500 V AC 50/60 Hz 1 minute, output/ground<br>1500 V AC 50/60 Hz 1 minute, output/internal logic<br>1500 V AC 50/60 Hz 1 minute, primary/secondary<br>500 V DC 1 minute, between group of inputs and outputs |
| Vibration Resistance                  | 3 gn   |
| Shock Resistance                      | 30 gn  |
| Ambient Air Temperature For Storage   | -40185 °F (-4085 °C)   |
| Ambient Air Temperature For Operation | 32140 °F (060 °C)  |
| Relative Humidity                     | 595 % 131 °F (55 °C) without condensation  |
| Operating Altitude                    | 06561.68 ft (02000 m)<br>20005000 m with derating factor   |

# Ordering and shipping details

| Category          | US1PC3418160  |  |
|-------------------|---------------|--|
| Discount Schedule | PC34          |  |
| Gtin              | 3595863910506 |  |
| Returnability     | Yes           |  |
| Country Of Origin | US            |  |

# **Packing Units**

| Unit Type Of Package 1       | PCE |
|------------------------------|-----|
| Number Of Units In Package 1 | 1   |

| Package 1 Height             | 2.17 in (5.500 cm)     |
|------------------------------|------------------------|
| Package 1 Width              | 4.33 in (11.000 cm)    |
| Package 1 Length             | 4.61 in (11.700 cm)    |
| Package 1 Weight             | 5.01 oz (142.000 g)    |
| Unit Type Of Package 2       | S02                    |
| Number Of Units In Package 2 | 15                     |
| Package 2 Height             | 5.91 in (15.000 cm)    |
| Package 2 Width              | 11.81 in (30.000 cm)   |
| Package 2 Length             | 15.75 in (40.000 cm)   |
| Package 2 Weight             | 5.49 lb(US) (2.490 kg) |

# **Contractual warranty**

Warranty 18 months

# Sustainability

**Green Premium<sup>TM</sup> label** is Schneider Electric's commitment to delivering products with best-inclass environmental performance. Green Premium promises compliance with the latest regulations, transparency on environmental impacts, as well as circular and low-CO<sub>2</sub> products.

**Guide to assessing product sustainability** is a white paper that clarifies global eco-label standards and how to interpret environmental declarations.

Yes

Learn more about Green Premium >

Guide to assess a product's sustainability >

# Well-being performance

| lacksquare | Mercury Free               |
|------------|----------------------------|
| <b>②</b>   | Rohs Exemption Information |

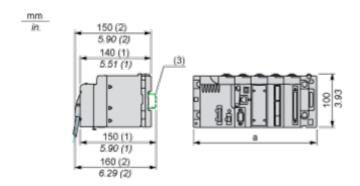
| Reach Regulation          | REACh Declaration   |
|---------------------------|---|
| Eu Rohs Directive         | Pro-active compliance (Product out of EU RoHS legal scope)  |
| China Rohs Regulation     | China RoHS declaration  |
| Weee                      | The product must be disposed on European 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 |

### **BMXDDM16022**

#### **Dimensions Drawings**

#### **Modules Mounted on Racks**

#### **Dimensions**



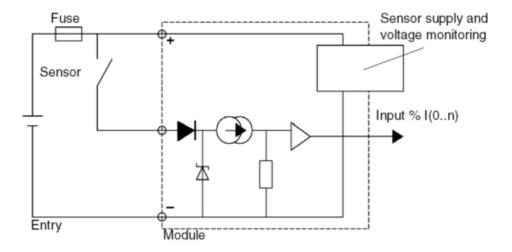
- (1) With removable terminal block (cage, screw or spring).
- (2) With FCN connector.
- (3) On AM1 ED rail: 35 mm wide, 15 mm deep. Only possible with BMXXBP0400/0400H/0600/0600H/0800/0800H rack.

| 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    |

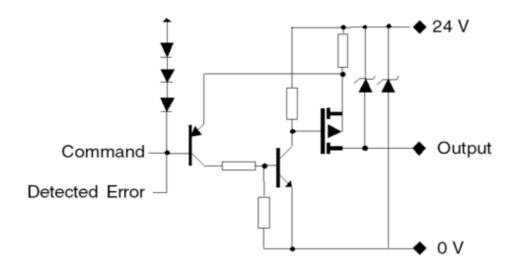
Connections and Schema

## **Connecting the Module**

#### **Input Circuit Diagram**

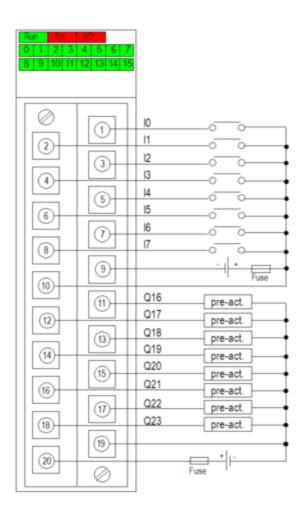


#### **Output Circuit Diagram**



#### **Module Connection**

### **BMXDDM16022**



power supply 24 VDC input fuse fast blow fuse of 0.5 A output fuse fast blow fuse of 6.3 A pre-act pre-actuator