MIO800

Generation 6 MX Detection Range Multi Input/Output Module

Features
// Compatible with MX Addressable Loop on SIMPLEX 4100ESi and VIGILANT MX1 panels
// Three configurable inputs and two relay outputs from latching relays
// LED indication of relay operation
// Larger MX module footprint
// Range of mounting enclosures

Description
The MIO800 Addressable Multi-Input/Output Module has three inputs and two outputs from latching relays and communicates with compatible MX Control and Indicating Equipment (CIE).

Each input on the MIO800 supports one of the following modes:
• Multiple normally-open contacts, closing for alarm, with open-circuit fault.
• A single normally-open contact, closing for alarm with short-circuit and open-circuit faults.
• Multiple normally-closed, open for alarm contacts with short-circuit faults.
• A single normally-closed contact, opening for alarm, with short-circuit and open-circuit faults.

Interrupt operation to speed up response is available on some configurations. As the MIO800 will interrupt on lowering resistance only (alarm or short circuit applied), interrupts cannot be used for normally-closed applications. Also, Input 3 does not support interrupt mode.
The MIO800 includes two unsupervised change-over relay outputs, labelled Relay 1 and Relay 2. These relays can be controlled by the CIE.
The MIO800 has 4 logic level outputs labelled 01, 02, 03 and 04. These terminals must not be used. The MIO800 must NOT be used to switch mains voltages.

Mounting
The MIO800 is supplied as an open circuit board (PCB) which can be fitted into a D800 Ancillary Housing, may be DIN rail mounted, or fitted to a suitable electrical back box or standoffs on a gear plate. Note that the MIO800 is a different size to the CIM, DIM, RIM, etc, and will therefore require a different mounting arrangement.

Specifications
Loop Voltage\(^1\)
Quiescent Current
Operated Current (LED on)
Max. MIO800 per Loop\(^2\)
Input EOL
Input Alarm Resistor
Maximum Circuit Resistance
Relay Contact Rating\(^3\)
Ambient Temperature
Storage Temperature
Relative Humidity
Indoor Applications Only
Dimensions (HWD)
Wire Size (maximum)
20V to 40Vdc
480µA
3mA
250
330 Ohm
150 Ohm
40 Ohm
2A @ 24Vdc\(^4\)
-25°C to +70°C
-40°C to +80°C
10% to 95% (non cond.)
72 x 110 x 18 mm
2.5sq. mm

Part Numbers
555.800.065
557.201.303
557.201.401
MIO800 PCB
DIN Rail Mounting Kit
D800 Ancillary Housing

Operation
The on-board LED will turn on when any input is in the alarm condition, and can also be programmed to blink when the device is polled by the CIE. With additional programming the LED can indicate output operation.

Address Setting
The MIO800 is shipped with a default (invalid) address of 255 and must be set to the correct loop address using the 850EMT or MX Service Tool.

1. Addressable loop voltage provided by MX CIE.
2. For use with MX1, 4100ESi. Refer to appropriate manual for design specifications.
3. Output current is for a resistive load.
4. The MIO800 must not be used to switch mains voltages.
Wiring

MIO800 wiring options.

Normally Open,
S/C=Alarm, O/C=Fault

Normally Open,
S/C=Fault, O/C=Fault

Normally Closed,
S/C=Fault, O/C=Alarm

Normally Closed,
O/C=Fault, S/C=Fault
(NZS 4512 Compliant)