FX-IDC2B Analog Dual Input Module Installation Sheet

Operation

The module is an analog addressable device used to connect two normally open, alarm, supervisory, or monitor type dry contact initiating device circuits (IDCs) to a control panel. This module is designed for Class B circuit operation.

The device address is set using the two rotary switches located on the front of the module. Two consecutive device addresses are required. The second device address is automatically assigned one number higher than the value set on the rotary switches.

The device can be preset for alarm or supervisory operation using the slide switch located on the front of the module. The module can also be configured for other device types through front panel programming or the configuration utility.

Slide switch operation

The following slide switch settings determine the operation of the module. Setting the initial slide switch position is generally performed during module installation. This setting can be changed while the system is operating, but the change must be confirmed through front panel programming or by using the configuration utility.

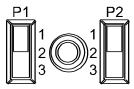
Slide switch P1 is used for IDC 1 and slide switch P2 is used for IDC 2. The waterflow device type available through front panel programming or the configuration utility can only be used with slide switch P1.

Table 1: Slide switch settings

Setting	Operation	Device type description
1	Alarm	Alarm latching: Configures the module for normally open dry contact initiating devices. When the NO input contact of an initiating device is closed, an alarm signal is sent to the control panel and the alarm condition is latched at the module. (Factory default)
2	Not used	
3	Supervisory	Supervisory nonlatching US marketplace: Supervisory latching Canadian marketplace: Nonlatching: Configures the module for normally open dry contact initiating devices. When the NO input contact of an initiating device is closed, a supervisory signal is sent to the control panel and the supervisory condition is not latched at the module. Latching: Configures the module for normally open dry contact initiating devices. When the NO input contact of an initiating device is closed, a supervisory signal is sent to the control panel and the supervisory condition is latched at the module.

Note: Additional device types are available through front panel programming or the configuration utility. Refer to applicable control panel technical reference manual.

Figure 1: Slide switches



LED operation

The module provides a bicolor LED that shows its status.

Normal: Green LED flashes

Alarm/active: Red LED flashes

Installation

Install and wire this device in accordance with applicable national and local codes, ordinances, and regulations.

WARNINGS

- This module will not operate without electrical power. As fires frequently cause power interruption, you should discuss further safeguards with your local fire protection specialist.
- This module does not support conventional smoke detectors.

Note: The module is shipped from the factory as an assembled unit; it contains no user-serviceable parts and should not be disassembled.

To install the module:

1. Verify that all field wiring is free of opens, shorts, and ground faults.
2. Make all wiring connections shown in “Wiring” and in Figure 4.
3. Set the module address. Refer to the panel technical reference manual for a list of valid addresses.

   Use a screwdriver to adjust the two rotary switches on the front of the module. Set the TENS rotary switch (0 through 12) for the 10s and 100s digit and the ONES rotary switch for the 0 through 9 digit. For example: device address 21, set TENS rotary switch to 2 and set the ONES rotary switch to 1 (see Figure 2).
4. Set slide switches P1 and P2 to appropriate setting. Refer to “Operation” and Table 1.
5. Mount the module on the electrical box using screws provided with the electrical box.
6. Mount the wall plate on the module using #4-24 × 1/2 in. (13 mm) self-tapping screws.

Figure 2: Module address

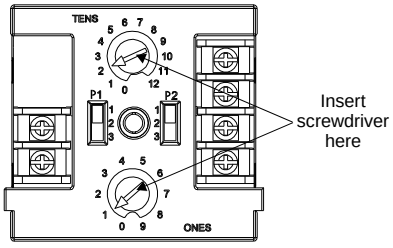
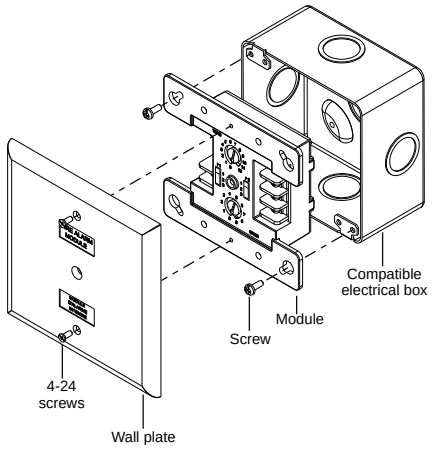


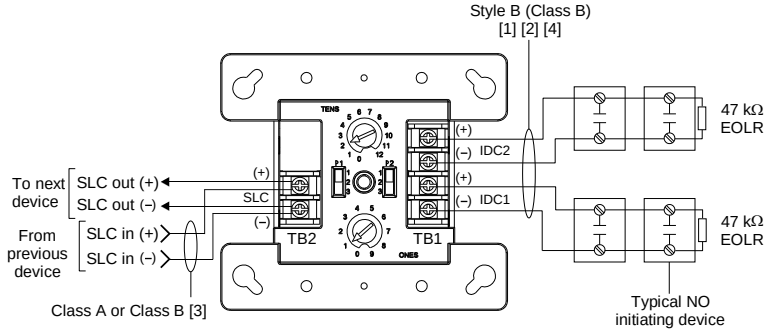
Figure 3: Module installation



Wiring

Wire the device as shown in Figure 4. Be sure to observe the polarity of the wires.

Figure 4: Module wiring



[1] Maximum 25 Ω resistance per wire
[2] Maximum 12 AWG (2.5 mm^2) wire; minimum 18 AWG (0.75 mm^2) wire
[3] Refer to the control panel technical reference manual for wiring specifications
[4] Maximum 10 VDC at 350 µA
5. All wiring is power-limited and supervised
6. This module will not support two-wire smoke detectors

Specifications

Communication line voltage	Maximum 20.6 V peak-to-peak
Current	
Standby	550 µA
Activated	725 µA
Ground fault impedance	10 kΩ
Operating environment	
Temperature	32 to 120° F (0 to 49° C)
Relative humidity	0 to 93% noncondensing at 90° F (32° C)
Storage temperature range	–4 to 140° F (–20 to 60° C)
Compatible electrical boxes	North American 4 inch square × 2-1/2 in. (64 mm) deep 2 gang box Standard 4 in. square box 1-1/2 in. (38 mm) deep
Wire size	12, 14, 16, or 18 AWG wire (2.5, 1.5, 1.0, or 0.75 mm^2) (Sizes 16 and 18 AWG are preferred)
Initiating device circuit (IDC)	
EOL resistor value	47 kΩ, (P/N: EOL-47)
Max. circuit resistance	50 Ω (25 Ω per wire)
Max. circuit capacitance	0.1 µF

Contact information

For contact information, see www.kiddelifesafety.com