Class A-B Two-Wire Module

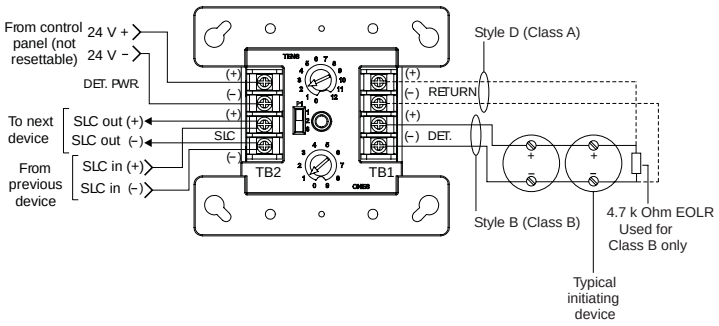
E-2WIRE

The E-2WIRE module interfaces between conventional two-wire smoke detectors and the Edwards Signaling control panel. It monitors the circuit and smoke detectors, and signals the control panel of any trouble or alarm conditions. The module also regulates and supervises the 24 VDC input power.

The E-2WIRE is configured to operate as a two-wire alarm device that does not require alarm verification. It can be set for two-wire alarm verified operation through front panel programming or the configuration utility. When using the alarm verification feature of the control panel, do not mix normally open contact initiating devices with two-wire conventional smoke detectors.

This module recognizes the *CleanMe* signal from detectors that support this feature.

The device address is set using the two rotary switches located on the front of the module. One device address is required.



The E-2WIRE can be set for Class B or Class A operation using the slide switch located on the front of the module.

Note: This module cannot be used on a device loop with isolator modules or isolator bases.

Communication line voltage	Maximum 20.6 V peak-to-peak
Current	Standby: 350 µA. Activated: 350 µA
Control panel input power	12.4 to 28.3 VDC (not resettable)
Smoke power current	Standby: 17 mA. Alarm: 58 mA
Smoke detector current	3 mA
UL compatibility ID	0.0
Ground fault impedance	5 k ohm
Operating environment Temperature Humidity	 32 to 120°F (0 to 49°C) 0 to 93% RH, noncondensing at 90°F (32°C)
Storage temperature	–4 to 140°F (–20 to 60°C)
Compatible electrical boxes	North American 4 inch square x 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 sq. mm) (Sizes 16 and 18 AWG are preferred)
Device address	01 to 64 (64 point control panel) 01 to 127 (127 point control panel)
Initiating device circuit EOL resistor value Max. circuit resistance Max. circuit capacitance	 4.7 kΩ, (P/N: EOL-4.7) 50 Ω (25 Ω per wire) 0.1 µF

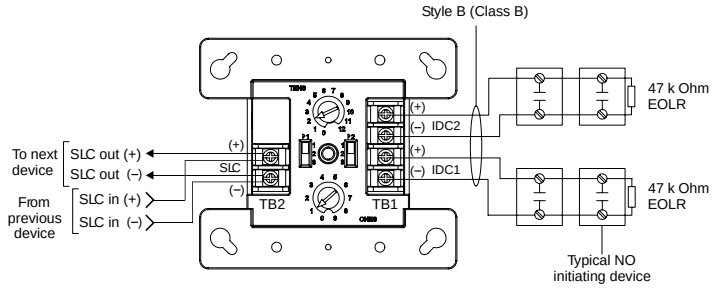
Dual Input Module

E-IDC2B

The E-IDC2B connects two normally open, alarm, supervisory, or monitor type dry contact initiating device circuits (IDCs) to the Edwards Signaling 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 addresses are required. The second address is automatically assigned one number higher than the value set on the rotary switches.

The E-IDC2B can be preset for alarm or supervisory operation using the slide switch located on the front of the module. It can also be configured for other device types through front panel programming or the configuration utility.



Communication line voltage	Maximum 20 V peak-to-peak
Current Standby Activated	 550 µA 725 µA
Ground fault impedance	10 k ohm
Operating environment Temperature Humidity	 32 to 120°F (0 to 49°C) 0 to 93% RH, 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 x 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 sq. mm) (Sizes 16 and 18 AWG are preferred)
Device address	01 to 63 (64 point control panel) 01 to 126 (127point control panel)
Initiating device circuit (IDC) EOL resistor value Max. circuit resistance Max. circuit capacitance	 47 kΩ, (P/N: EOL-47) 50 Ω (25 Ω per wire) 0.1 µF

Dual Input Waterflow, Supervisory Module

E-IDCWS

The E-IDCWS connects normally open waterflow alarm and supervisory initiating device circuits (IDCs) to the Edwards Signaling control panel. The E-IDCWS 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 addresses are required. The second address is automatically assigned one number higher that the value set on the rotary switches.

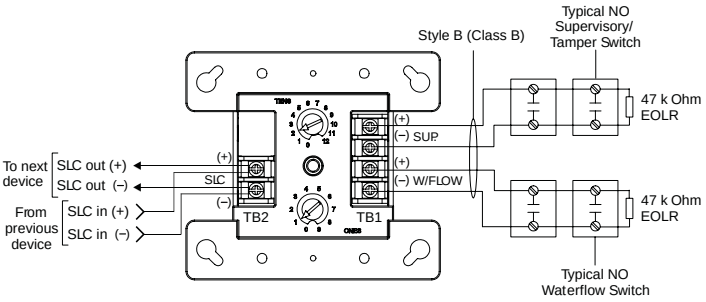
The E-IDCWS can operate in the following modes:

Waterflow

- Alarm latching delayed: Configures the module for use with only nonretarded waterflow alarm switches. When the NO input contact of an initiating device is closed, an alarm is sent to the control panel, which after a 16 second time delay, generates an alarm signal.

Supervisory

- Supervisory active nonlatching US marketplace
- Supervisory active 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.

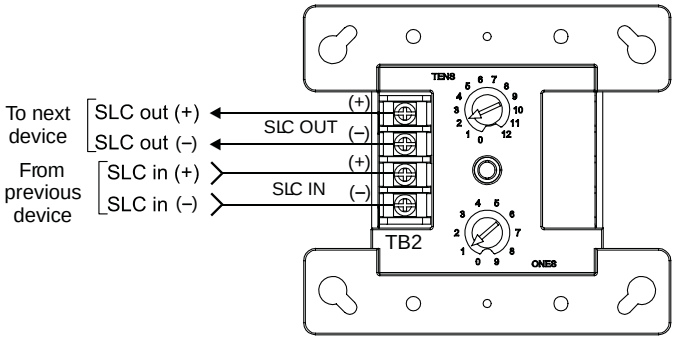
Communication line voltage	Maximum 20 V peak-to-peak
Current Standby Activated	 550 µA 725µA
Ground fault impedance	10 k ohm
Operating environment Temperature Humidity	 32 to 120°F (0 to 49°C) 0 to 93% RH
Storage temperature range	–4 to 140°F (–20 to 60°C)
Compatible electrical boxes	North American 4 inch square x 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 sq. mm) (Sizes 16 and 18 AWG are preferred)
Device address	01 to 63 (64 point control panel) 01 to 126 (127 point control panel)
Initiating device circuit (IDC) EOL resistor value Max. circuit resistance Max. circuit capacitance	 47 kΩ, (P/N: EOL-47) 50 Ω (25 Ω per wire) 0.1 µF

SLC Fault Isolator Module

E-ISO

The E-ISO protects a Class A SLC from total collapse due to wire-to-wire short circuits. The module monitors line voltages and opens the SLC when a short is detected. A short is isolated between the two modules located electrically closest to the short.

The device address is set using the two rotary switches located on the front of the module. One device address is required.



Communication line voltage	Maximum 20 V peak-to-peak
Current Standby Activated	 175 µA 200 µA
Ground fault impedance	10 k ohm
Maximum circuit resistance between isolators	6 ohm
Operating environment Temperature Humidity	 32 to 120°F (0 to 49°C) 0 to 93% RH, 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 x 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 sq. mm) (Sizes 16 and 18 AWG are preferred)
Module address	01 to 64 (64 point control panel) 01 to 127 (127 point control panel)