S Simplex

UL, ULC Listed*, FM Approved
NYC, MEA Approved**

TrueAlarm Analog Sensors
Model 4098-9793, IDNet™ Isolator Base

Features

Isolator base for TrueAlarm® analog sensors using IDNet addressable communications[†]

Short circuit wiring isolation:

- Input is automatically separated from output when a communications short circuit occurs

Earth fault isolation reduces time to fix wiring problems:

- Built-in control panel diagnostics assist in locating earth fault conditions — the most common installation wiring problem

Isolator base 4098-9793 is compatible with:

- Photoelectric sensor model 4098-9714
- Heat sensor model 4098-9733
- Ionization sensor model 4098-9717

For Class B (Style 4) or Class A (Style 6) wiring:

- Communications are received from either input or output allowing bases with Class A wiring to isolate short circuits while still operating their sensors

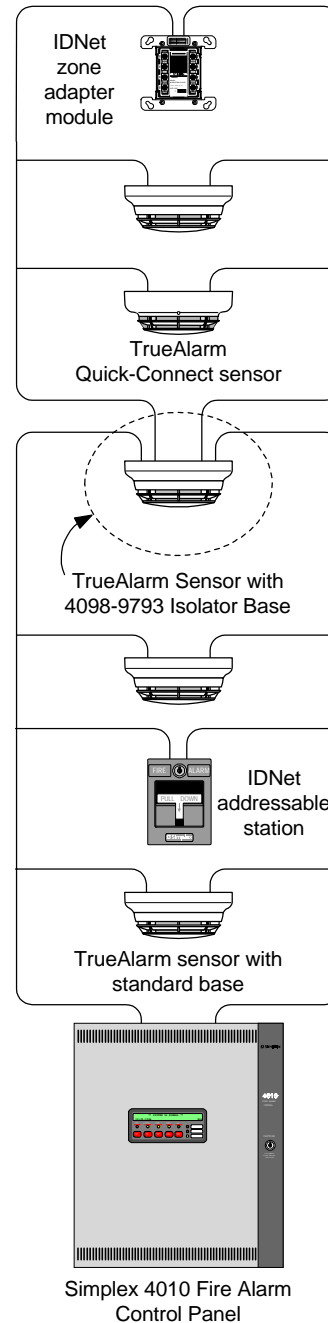**Can be installed up to 250 total, allowing isolation directly to the device level**

UL listed to Standard 268

Description

The 4098-9793 IDNet communications isolator base accepts Simplex TrueAlarm analog sensors and provides communications isolation to improve installation convenience and increase system integrity.

Short Circuit Isolation. An internal isolation relay allows a compatible fire alarm control panel to separate shorted communications wiring from functioning wiring to optimize the available sensors or other IDNet addressable devices. The isolator base's status is communicated to the control panel, allowing it to assist in identifying the location of the shorted wiring.

Earth Faults. During installation, earth faults frequently occur. Finding these faults normally requires extensive wiring disconnection. With the 4098-9793 isolator base, earth faults on the IDNet communications lines can be quickly located to assist in their repair and to restore the system wiring to normal.

IDNet Channel with a Single TrueAlarm
Sensor in a 4098-9793 Isolator Base

* ULC listed models are designated by a "C" suffix such as 4098-9714C. ULC listing of 4098-9717 is in process, contact Simplex for status.
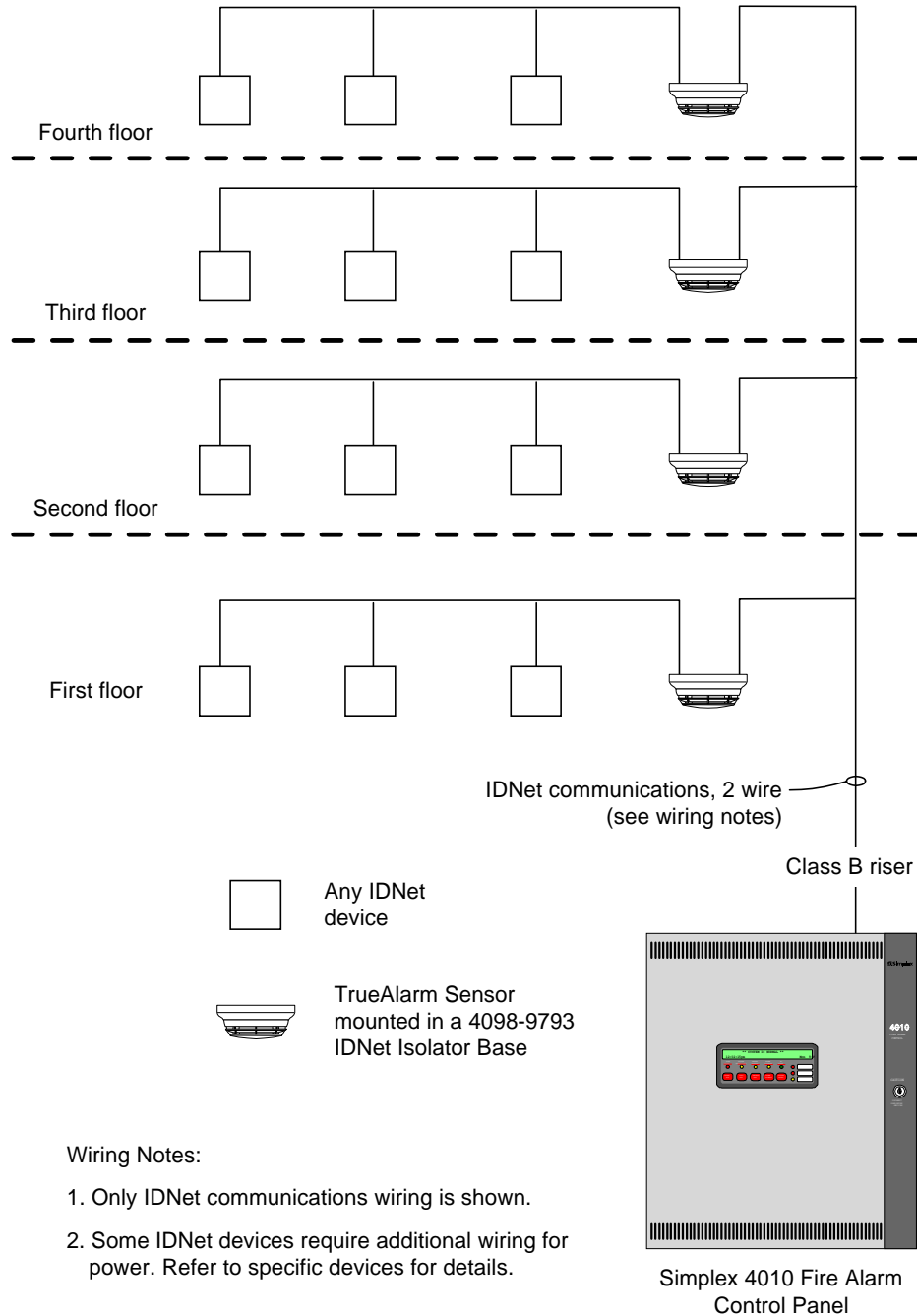
** Accepted for use – City of New York Department of Buildings – MEA35-93E.

† TrueAlarm analog sensors and MAPNET and IDNet communications are protected by one or more of the following U.S. Patent Numbers: 5,155,468; 5,173,683; 5,543,777; 5,400,014; 5,552,765; 5,552,763; 4,796,025; DES. 377,460.

Multi-Floor Isolator Example 1

The one-line diagram on this page shows a multiple floor example with Class B (Style 4) IDNet communications for each floor starting at an isolator base. If any floor wiring beyond the isolator base should experience a short circuit, each floor can be individually separated from the next, preventing the short circuit from disabling the entire IDNet communications wiring.

In the event of an earth connection, each floor can be individually isolated using the built-in 4010 control panel diagnostics. With individual floor control, the earth fault can be isolated to the floor level to narrow the search area.

Fourth floor

Third floor

Second floor

First floor

IDNet communications, 2 wire
(see wiring notes)

Class B riser

Any IDNet device

TrueAlarm Sensor mounted in a 4098-9793 IDNet Isolator Base

Wiring Notes:

1. Only IDNet communications wiring is shown.

2. Some IDNet devices require additional wiring for power. Refer to specific devices for details.

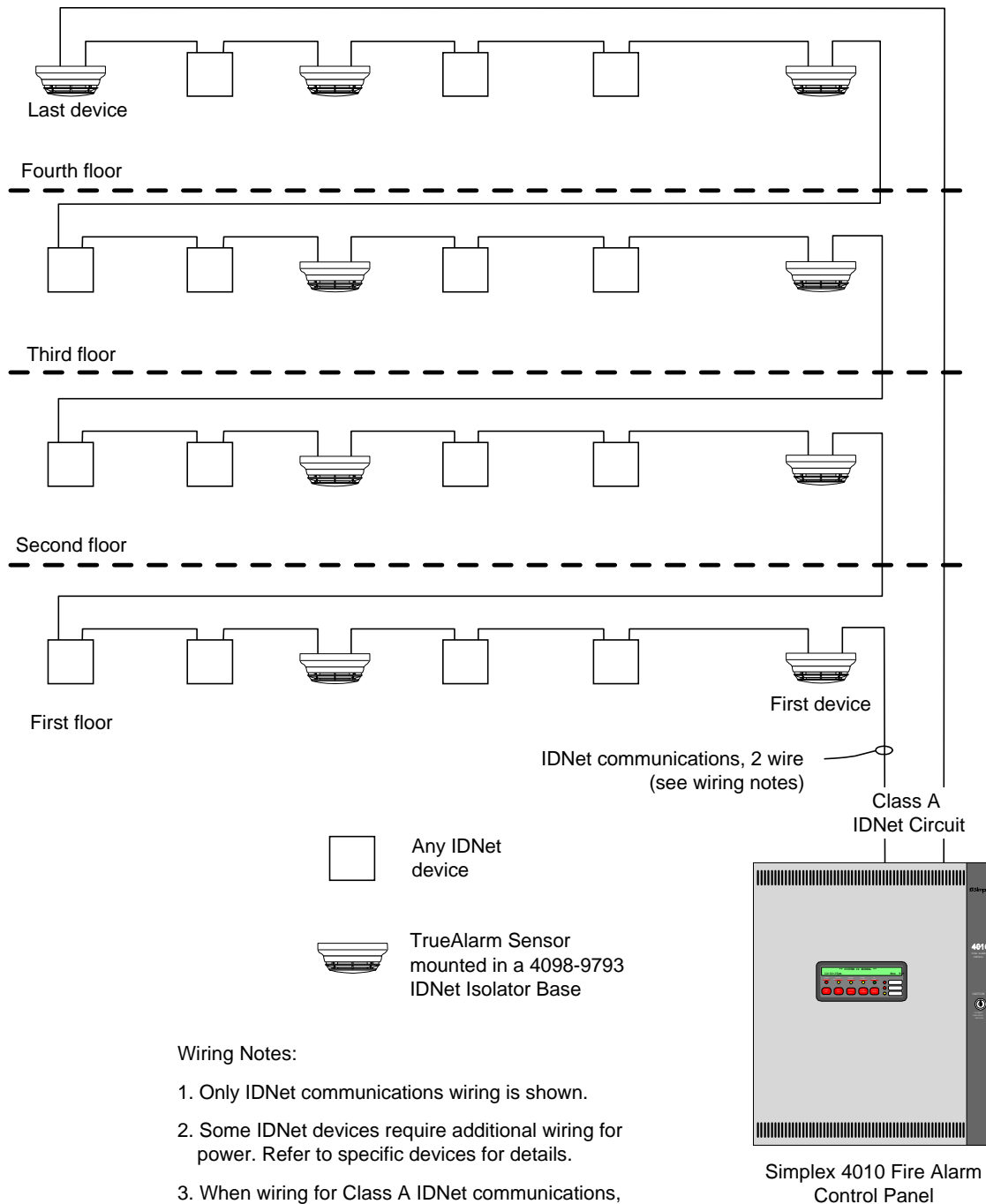Simplex 4010 Fire Alarm Control Panel

Multi-Floor Isolator Example 2

The illustration below is a modification of Example 1. Each floor wiring has an additional isolator base and the IDNet circuit is wired as a Class A (Style 6) connection. With the addition of these isolator bases, wiring between floors can be better protected in the event of a short circuit.

In the event of an earth connection, the additional isolator base per floor allows earth fault isolation to be achieved with better precision.

The isolator base examples on pages 2 and 3 show that as more isolator bases are added to an IDNet addressable communications loop, short circuit isolation and earth fault location can be obtained with a resolution level as close to the single device as required.
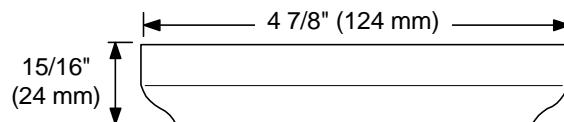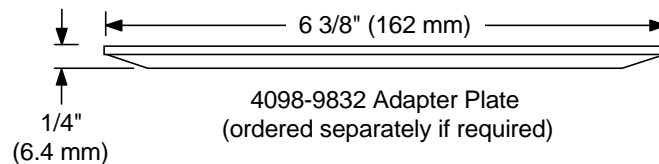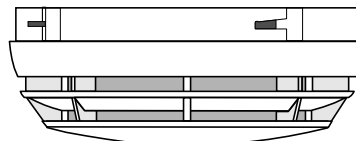
Last device

Fourth floor

Third floor

Second floor

First floor

First device

IDNet communications, 2 wire
(see wiring notes)

Class A
IDNet Circuit

Any IDNet
device

TrueAlarm Sensor
mounted in a 4098-9793
IDNet Isolator Base

Wiring Notes:

1. Only IDNet communications wiring is shown.

2. Some IDNet devices require additional wiring for power. Refer to specific devices for details.

3. When wiring for Class A IDNet communications, connecting an Isolator base as the first and the last device is recommended to assist with earth fault control panel diagnostics.

Simplex 4010 Fire Alarm
Control Panel

Specifications

Power and Communications	IDNet, 1 address per base
IDNet Connections	Screw terminals for in/out wiring, AWG #18 to #14
UL Listed Temperature Range	32° F to 100° F (0° C to 38° C)
Operating Temperature Range	15° F to 122° F (-90° C to 50° C)
Humidity Range	10 to 95% RH, from 32° F to 122° F (0° C to 50° C)
Housing Color	Frost white
Sensor Compatibility (sensor ordered separately)	• 4098-9714, Photoelectric sensor • 4098-9733, Heat sensor • 4098-9717, Ionization sensor
Sensor Reference Data Sheet	• 4098-0019, TrueAlarm analog sensors

Mounting Information

Electrical box: 4" octagonal,
4" square, or single gang, 1 1/2" deep
Supplied by others

6 3/8" (162 mm)

4098-9832 Adapter Plate
(ordered separately if required)

1/4"
(6.4 mm)

4 7/8" (124 mm)

15/16"
(24 mm)

TrueAlarm Isolator Base 4098-9793

TrueAlarm Sensor (ordered separately)

Simplex