



UL, ULC Listed; FM, CSFM,
and MEA (NYC) Approved*

TrueAlarm® Analog Sensing

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

Features

Isolator base for TrueAlarm® analog sensors using IDNet addressable communications** :

- Compatible with: Simplex® fire alarm control panel models 4008, 4010, and 4100U
- When panel mounted quad isolation is also required (available with 4100U only), use IDNet+ Module 4100-3107 (see diagram notes)
- Can be installed up to 250 total allowing isolation directly to the device level (200 total with 4008)
- Base mounted LED indicates sensor status
- Designed for EMI compatibility
- UL listed to Standard 268

Short circuit wiring isolation:

- Input is automatically separated from output when an output 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
- Multi-sensor model 4098-9754
- Ionization sensor model 4098-9717

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

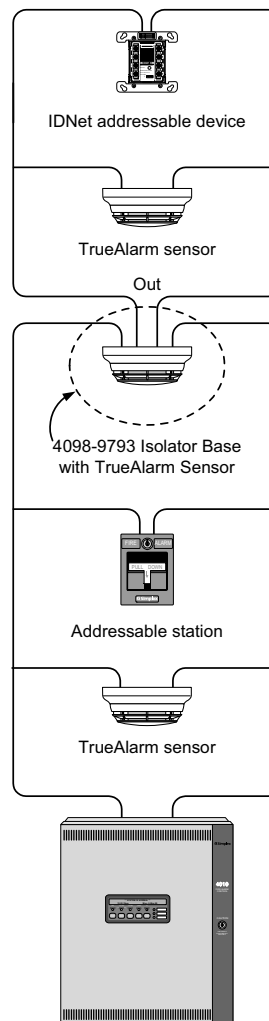
- Communications are received from either input or output allowing bases with Class A wiring to isolate short circuits while still operating their sensors

Description

TrueAlarm Sensing and IDNet communication isolation. The 4098-9793 IDNet Communications Isolator Base provides Simplex TrueAlarm analog sensor operation and also provides IDNet communications isolation to improve installation convenience and increase system integrity. Isolation is automatically activated at the base when an output short circuit is detected and isolation can also be selected per base manually from the control panel to assist with troubleshooting wiring problems.

Operation. Isolator bases power-up in isolation mode and are directed to connect by the control panel. If the output wiring is acceptable, the isolator base will connect to the rest of the circuit. If the output wiring is shorted, the isolator remains isolated.

* ULC listed model is 4098-9793C. Model 4098-9793 has been approved by the California State Fire Marshal (CSFM) pursuant to Section 13144.1 of the California Health and Safety Code. See CSFM Listings 7300-0026:217 and 7271-0026:231 for allowable values and/or conditions concerning material presented in this document. It is subject to re-examination, revision, and possible cancellation. Model 4098-9793 is accepted for use – City of New York Department of Buildings – MEA35-93E. Additional listings may be applicable; contact your local Simplex product supplier for the latest status. Listings and approvals under Simplex Time Recorder Co. are the property of Tyco Safety Products Westminster.



IDNet Channel with a Single 4098-9793 Isolator Base

Description (Continued)

Status Tracking. The isolator reports back to the panel when it is in isolator mode and the extent of shorted wiring is reported back to the panel by identifying device addresses that are not communicating. [Isolators are assigned sequentially to low number addresses to expedite Signaling Line Circuit (SLC) power-up. Refer to Installation Instructions 574-709 and 574-707 for additional information.]

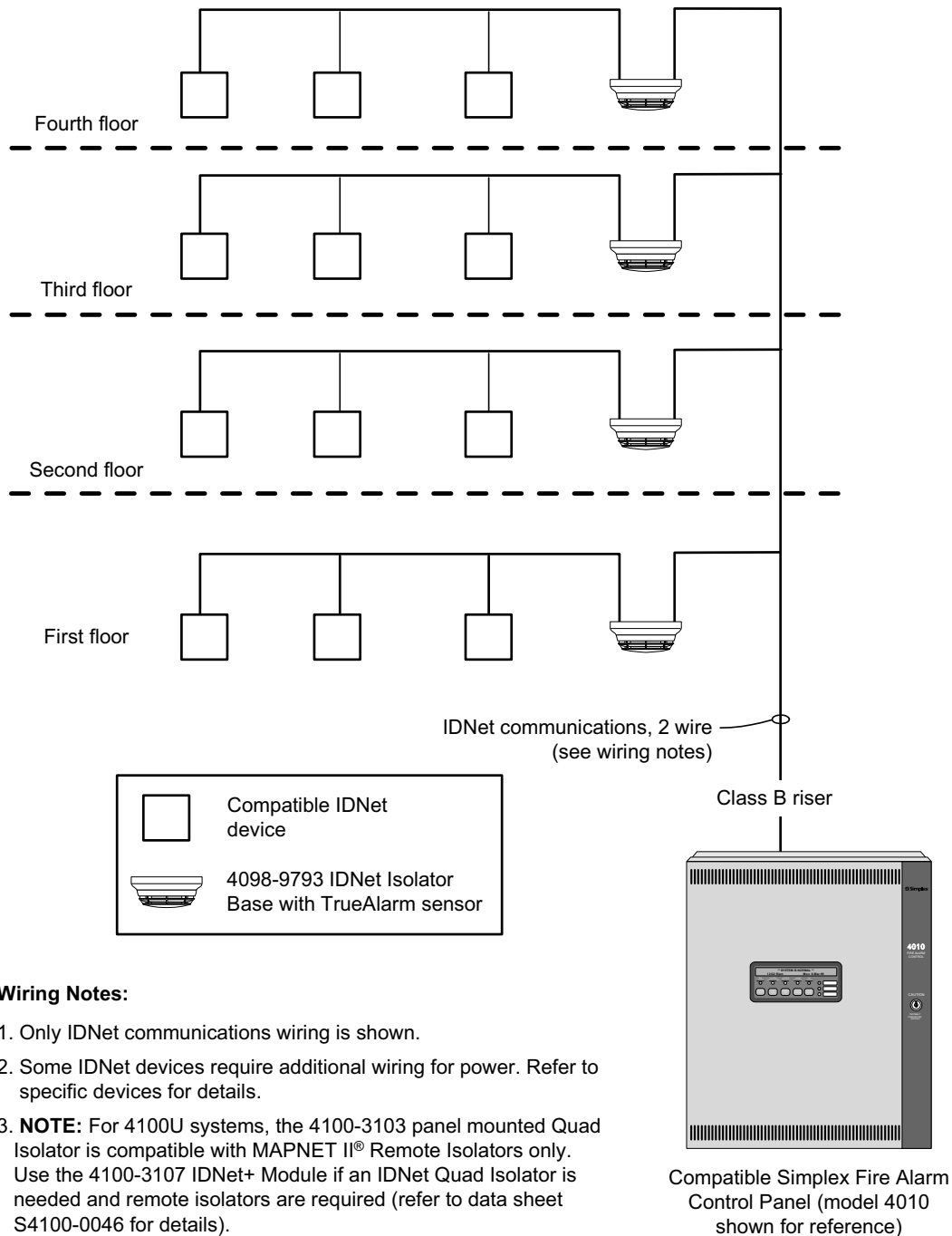
Earth Faults. During installation, earth faults often occur and finding these faults normally requires extensive wiring disconnection. With the 4098-9793 isolator base, wiring suspected to have earth faults can be isolated to assist in their discovery and repair.

** TrueAlarm analog sensors are protected by one or more of the following U.S. Patents: 5,155,468; 5,173,683; 5,400,014; 5,543,777; 5,710,541; D383,407; D388,352; D392,573. IDNet addressable communications designs are protected by U.S. Patent No. 4,796,025.

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 control panel diagnostics. With individual floor control, the earth fault can be isolated to the floor level to narrow the search area.



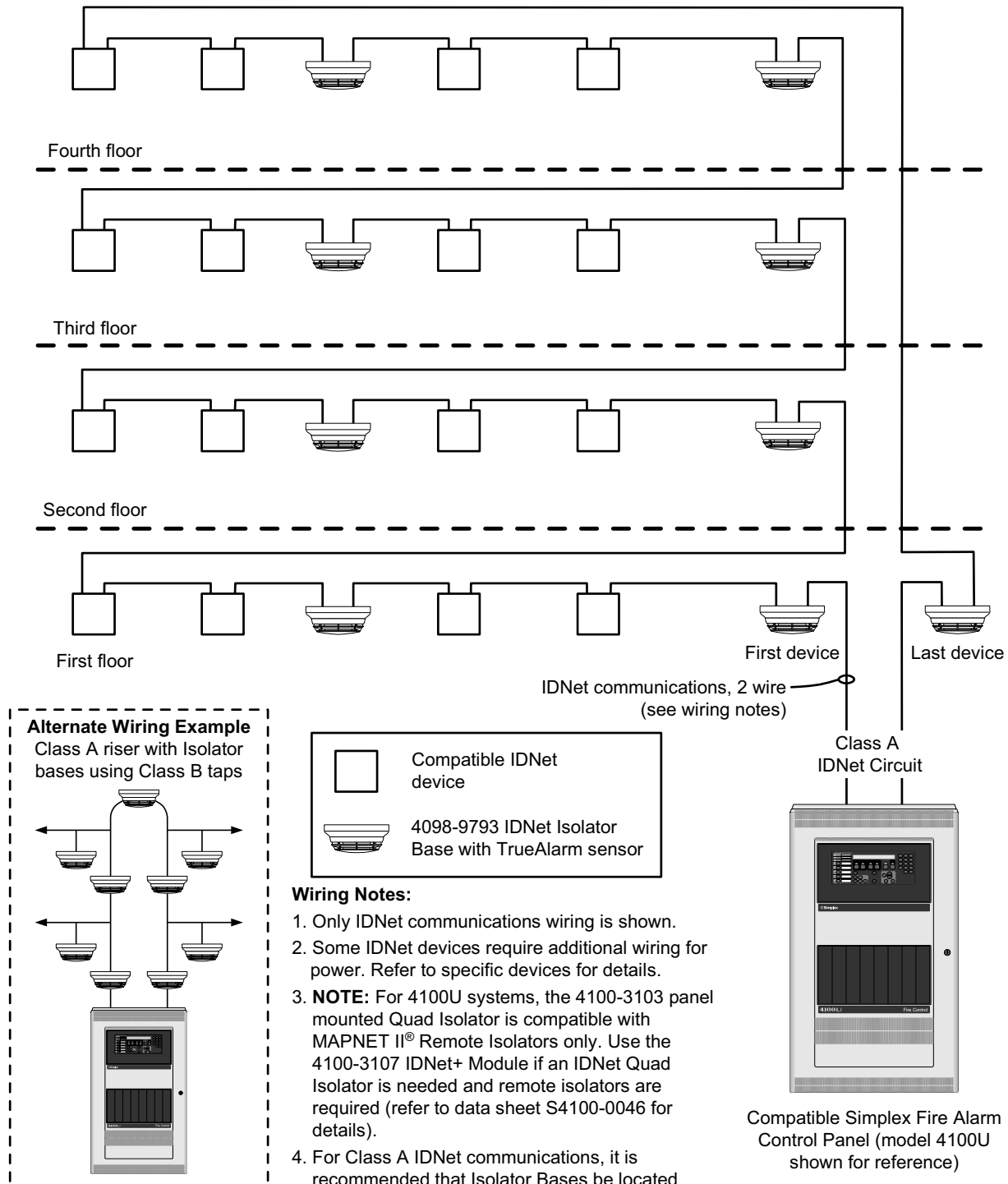
Wiring Notes:

1. Only IDNet communications wiring is shown.
2. Some IDNet devices require additional wiring for power. Refer to specific devices for details.
3. **NOTE:** For 4100U systems, the 4100-3103 panel mounted Quad Isolator is compatible with MAPNET II® Remote Isolators only. Use the 4100-3107 IDNet+ Module if an IDNet Quad Isolator is needed and remote isolators are required (refer to data sheet S4100-0046 for details).

Multi-Floor Isolator Example 2

The illustration below is a modification of Example 1. Wiring for each floor 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. Also, 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.



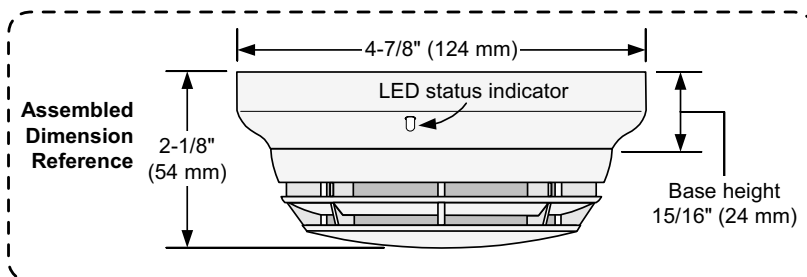
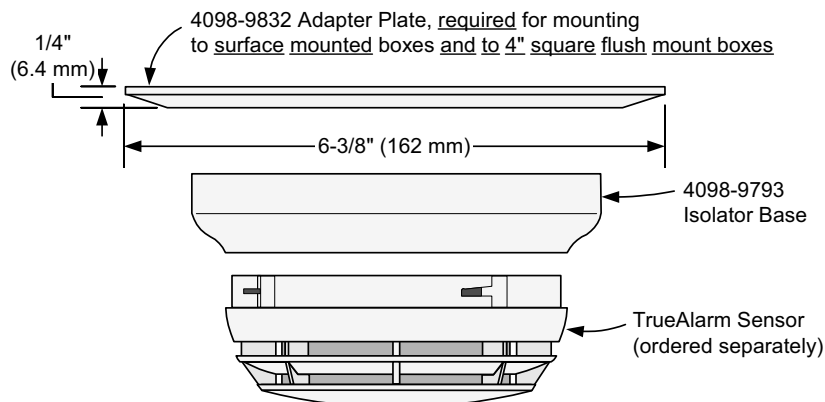
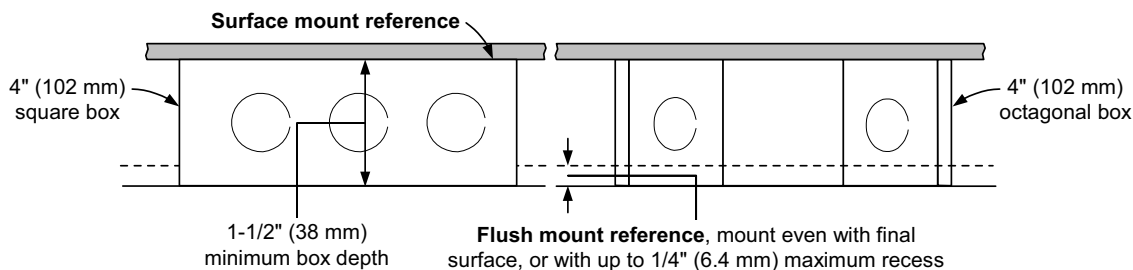
Specifications

Power and Communications	IDNet, one address per base		
IDNet Connections	Screw terminals for in/out wiring, 18 to 14 AWG (0.82 to 2.08 mm ²)		
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 (sensors are ordered separately)	Product		Data Sheet Reference
	4098-9714, Photoelectric Sensor		S4098-0019
	4098-9733, Heat Sensor		
	4098-9717, Ionization Sensor		
	4098-9754, TrueSense® Multi-Sensor		S4098-0024
Additional Isolator Products	4100U and 4008 Only	4090-9116, Remote IDNet Isolator Module	S4090-0005
	4100U Only	4090-9117, 24 V Addressable Power Isolator	S4090-0006

Mounting Information

Electrical Box Requirements:

4" octagonal or 4" square, 1-1/2" deep;
single gang, 2" deep (by others)



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