℠Simplex

True*Alarm*® Analog Sensing

Features

For use with Simplex® 4098-9714 TrueAlarm photoelectric sensor and compatible base**
(ordered separately)**:**

- For **ceiling mounted** sensor applications with flush mounted electrical box only
- Combines accurate, individually addressable analog smoke sensing with physical protection
- TrueAlarm analog sensing provides compensation for air flow restriction by providing maintained high sensitivity
- Sensitivity is selectable from 0.5 to 1.5%/ft at the fire alarm control panel
- Panel automatically compensates for sensitivity shifts caused by contamination and automatically reports dirty devices
- Mounting requires flush mounted electrical box

Tamper resistant design:

- Heavy duty steel construction, single wall
- Tamper resistant grill mounting screws

Listings standards reference:

- Model 4098-9838 is UL listed to Standard 268 (URRQ)
- Model 4098-9838C is ULC listed to Standard S529
- **Note:** Sensors and compatible bases are now ULC listed under their base model numbers and no longer require a "C" suffix
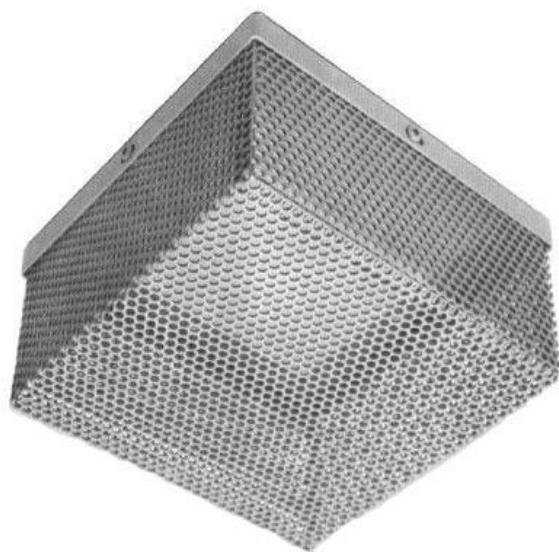
Description

Sensor Guard 4098-9838 combines the sensitivity and maintained accuracy of the Simplex TrueAlarm 4098-9714 photoelectric sensor with a rugged, tamper resistant enclosure. Typical applications are: Correctional/Detention facilities, Mental Hospitals, Industrial areas, Educational facilities, Dormitories, and many other locations where the smoke sensor may be intentionally or accidentally subjected to abuse.

Location Reference. With this combination, the sensor can be located directly in the ceiling of a detention cell or similar area and can provide accurate and quick sensing of smoke conditions. Additionally, after removing the tamper resistant hardware, the sensor is readily accessible for cleaning when the TrueAlarm system automatically identifies the need for maintenance.

Additional Reference:

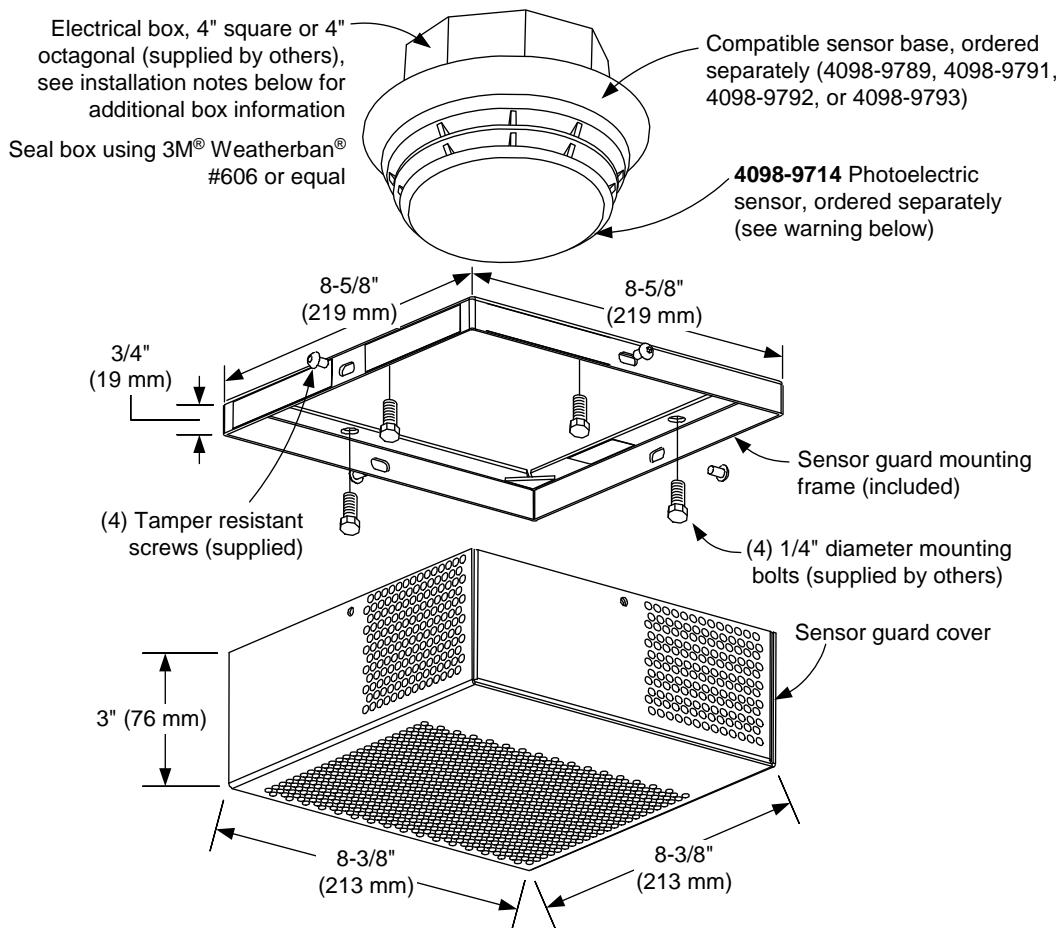| Product	Reference Document
TrueAlarm Sensors and Bases	Data Sheet S4098-0019
TrueAlarm IDNet™ Isolator Base	Data sheet S4098-0025
Sensor Guard for ceiling or wall mount, with optional surface mount extension box	Data sheet S4098-0035
Installation Instructions	574-350

4098-9838 TrueAlarm Sensor Guard

Specifications

Mounting Frame Dimensions	8-5/8" (219 mm) square, 3/4" x 3/4" (19 mm) angle construction, 14 gauge
Guard Dimensions	8-3/8" square x 3" deep (213 mm x 76 mm)
Grill Material	16 Gauge steel (0.060" thick, 1.5 mm)
Perforation Pattern	3/16" (4.8 mm) diameter holes staggered on 1/4" (6.4 mm) centers
Color/Finish	Tan, baked enamel
Mounting Frame Hardware	1/4" Bolts recommended, not supplied
Grill Mounting Screws	Four tamper resistant, recessed hex head screws, supplied with guard
Screw Removal Tool	4098-9823 Secure Hex Key, ordered separately
Sensor Compatibility	4098-9714 TrueAlarm photoelectric sensor, ordered separately
Simplex TrueAlarm Base Compatibility (base ordered separately)	4098-9792, Standard 4098-9791, Relay control base 4098-9789, Base with LED output 4098-9793, IDNet™ Isolator Base

* This product has been approved by the California State Fire Marshal (CSFM) pursuant to Section 13144.1 of the California Health and Safety Code. See CSFM Listing 7300-0026:233 for allowable values and/or conditions concerning material presented in this document. It is subject to re-examination, revision, and possible cancellation. This product was not approved by FM or MEA (NYC) as of document revision date. 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. 4098-9838C is ULC listed under SimplexGrinnell, Division of Tyco International of Canada.

** 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.

Mounting Information – IMPORTANT – See Warning and Installation Notes Below

Electrical box, 4" square or 4" octagonal (supplied by others), see installation notes below for additional box information

Seal box using 3M® Weatherban® #606 or equal

Compatible sensor base, ordered separately (4098-9789, 4098-9791, 4098-9792, or 4098-9793)

4098-9714 Photoelectric sensor, ordered separately (see warning below)

8-5/8" (219 mm)   8-5/8" (219 mm)

3/4" (19 mm)

Sensor guard mounting frame (included)

(4) Tamper resistant screws (supplied)

(4) 1/4" diameter mounting bolts (supplied by others)

Sensor guard cover

3" (76 mm)

8-3/8" (213 mm)   8-3/8" (213 mm)

WARNING !

Per NFPA 72, the *National Fire Alarm Code*, Section 5.4.3 (2007 Edition): "Where subject to mechanical damage, an initiating device shall be protected. A mechanical guard used to protect a smoke, heat, or radiant energy–sensing detector shall be listed for use with the detector." **Sensor guard 4098-9838 is for use only with a Simplex 4098-9714 photoelectric sensor with a restricted sensitivity range of 0.5 to 1.5% per foot obscuration and for use only with sensor bases 4098-9789, 4098-9791, 4098-9792, or 4098-9793.** This will ensure the sensor will activate within the UL listed obscuration range when mounted in the sensor guard.

PLEASE NOTE: For proper performance, follow installation instructions and review sensor and guard locations carefully. Wall mounting may not be appropriate for institutional or detention applications.

Maintenance Issue. The presence of debris on the sensor guard grill will significantly restrict airflow into the sensor. It is recommended that increased visual maintenance be performed to ensure proper operation.

Installation Notes

1. 4098-9838 sensor guards are for **ceiling mount** applications only.

2. Electrical box is to be **flush mounted** or recessed **no more than 1/4"** (6.4 mm).

3. Installation requires solid anchoring, 1/4" bolts are recommended.

4. For additional information, refer to Simplex installation instructions 574-350.