



ACTIVE FIRE PROTECTION-EQUIPMENT LISTING SCHEME

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PRODUCT LISTING DATA SHEET (Active Fire Protection Equipment)

Product designation

Simplex, Model 4098-9603EA, nom. sens. (S)=0.4 MIC X, ionisation smoke detector
(Refer to the Technical Specification section of this document for further specific detail)

Supplier

Simplex Fire Products

47 Gilby Road, MOUNT WAVERLEY, VIC, AUSTRALIA, 3149

Manufacturer

Simplex Time Recorder Co.

Simplex Plaza, GARDNER, MA, USA, 01441-0001

Supplier's description

The Simplex, Model 4098-9603EA, nom. sens. (S)=0.4 MIC X, ionisation smoke detector is a single source, two chamber ionisation smoke detector. The smoke detector is most sensitive to small particles generated from a flaming fire. It is less responsive to larger particles generated by a smouldering fire. The two chambers in the detector consist of a reference chamber and a sensing chamber. The reference chamber in the smoke detector contains a small, low level of alpha particle radiation source, Americium 241 (0.9 μ C). The sensing chamber is open to air flow via baffles that restrict high velocity air from blowing through too rapidly.

When the smoke density reaches a pre-determined level, the detector's circuitry will cause an alarm condition. The sensitivity of the smoke detector is fixed at the point of manufacture.

The smoke detector has one integral LED that protrudes from the cover moulding. The LED flashes red when in the quiescent state and is permanently red in colour when in the alarm condition. Once the detector is in the alarm state, interruption of the power supply is required to reset the detector.

Electrical connection to the smoke detector from the control and indicating equipment is achieved through the Simplex mounting base assembly.

Conformance criteria and evaluation

The Simplex, Model 4098-9603EA, nom. sens. (S)=0.4 MIC X, ionisation smoke detector complies with the requirements of Australian Standard AS 1603.2-1997, including amendment number 1, 'Automatic fire detection & alarm systems, Point type smoke detectors'.

Listing is subject to ActivFire Scheme terms and conditions as applicable to the designated registrant and supplier.



This product listing data sheet should be read in conjunction with the general requirements of the terms and conditions of listing under the ActivFire Scheme.

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Executive Officer

Limitations/conditions of conformance

Limitations/conditions of conformance, where identified on this Product Listing Data Sheet, are derived from qualifications within the report of the testing agency and/or other related technical documentation. It is recommended that all details with respect to design, assembly and installation restrictions should be checked against the designated supplier's/maker's current technical manual/data sheets and the requirements of the Authority having Jurisdiction.

Compatibility of the detector and base with new or existing control and indicating equipment should be confirmed prior to installation.

Technical specification

The following details are a representative extract of the technical specification for the Simplex, Model 4098-9603EA, nom. sens. (S)=0.4 MIC X, ionisation smoke detector and may be subject to change. Complete and current details should be determined from the designated supplier's/maker's technical manual/data sheets.

Nominal sensitivity (S):	0.4 MIC X
Radioactive source:	0.9 microcurie, Americium 241
Operating voltage range:	8.5 - 33 Vdc
Quiescent current:	20 to 100 μ A @ 25°C
Alarm current:	5 mA @ 6 Vdc 86 mA @ 12 Vdc
Operating temperature range:	0°C to 50°C
Humidity range:	10 to 95% (non-condensating).
Dimensions:	Approximately 104 mm in diameter Approximately 50 mm in height when connected to the base assembly

Tested Base Designation	Base + Detector Circuit Type
Simplex, Model 4098-9788EA	Conventional

Supplementary information

Simplex Base Assembly 4098-9788EA

Typical wiring connection to base assembly

Terminal	Connection
1 (+)	(+) Zone In Connection
2 (+)	(+) Zone Out Connection
3 (R)	Remote LED Connection
4 (-)	(-) Zone Connection