



Certificate of Conformity

Certificate num.	Registration date	Version	Valid until	
afp - 1224	16-Feb-1999	Number 12	Issue date 1-May-2018	30-Apr-2019

Page 1 of 2

Product designation

Simplex, Model 4098-9601EA, nom. sens. (S)=6.0% obs./m, photoelectric smoke detector
(Refer to the Schedule/enclosures for further specified details)

Agent/distributor

Simplex Fire Products
47 Gilby Road, MOUNT WAVERLEY, VIC, AUSTRALIA, 3149

Registrant

Johnson Controls
17 Mary Muller Drive, HILLSBOROUGH, CHRISTCHURCH, NEW ZEALAND, 8022

Producer

Simplex Time Recorder Co.
Simplex Plaza, GARDNER, MA, UNITED STATES, 01441-0001

Conformance criteria and evaluation

The Simplex, Model 4098-9601EA, nom. sens. (S)=6.0% obs./m, photoelectric smoke detector has been evaluated and verified as conforming with the relevant requirements of the following criteria.

1. Australian Standard AS 1603.2-1997, 'Automatic fire detection and alarm systems - Point type smoke detectors' incl. Amdt 1 (August 1998).

Limitations/conditions of conformance

Limitations/conditions of conformance, where identified on this certificate, are derived from qualifications from evaluation(s) for conformity and/or other related technical documentation. All details with respect to design, assembly and installation instructions and restrictions should be checked against the producer's current technical manual/data sheets and the requirements of the Authority having Jurisdiction.

Specified limitations/conditions, determined from the evaluation for conformity, include the following.

- i. Compatibility of this fire detector and its base assembly with new or existing control and indicating equipment should be verified prior to installation.

This certification is issued within the scope of CSIRO Verification Services – Rules governing ActivFire Scheme and is valid only for the product(s) as submitted for evaluation and verification of conformity, subject to the following conditions.

- Reference to details, limitations and requirements, where documented as a schedule/enclosure with this certificate.
- The Registrant is responsible for their attestation of conformity and ensuring that on-going production complies with the conformance criteria defined in this certificate.
- This certificate will not be valid if any changes or modifications are made to the product which have not been notified and validated by CSIRO Verification Services.
- This certificate is subject to periodical re-validation upon verification that all requirements, as determined by the conformity assessment body, continue to be satisfactorily met by the Registrant.
- This certificate may only be reproduced in its published form, without modification and inclusive of all schedules/enclosures.
- Any changes, errors or omissions, must be submitted in writing and if necessary or requested, substantiated with relevant evidence.
- Any representations, such as advertising or other marketing related activities or articles shall reflect the correct contents of this certificate and conform with all relevant trade practices and consumer protection legislation and regulations.
- Any terms or conditions of use as applicable to content and documentation as published or accessed through web sites administered by the CSIRO Verification Services.

Issued by

David Whittaker
Executive Officer – ActivFire Scheme



Schedule to Certificate of Conformity

Certificate num.	Registration date	Version		Valid until	Page 2 of 2
afp - 1224	16-Feb-1999	Number 12	Issue date 1-May-2018	30-Apr-2019	

Producer's description

The Simplex, Model 4098-9601EA, nominal sensitivity (S)=6.0% obs./m, photoelectric smoke detector is designated as a conventional type smoke detector that operates on the light scattering detection principle. The smoke detector consists of a light scattering chamber and labyrinth which incorporates a pulsing infra-red light emitting diode (LED) and a photo-diode as the sensing element. A prism is used to focus the LED strobe onto the photo-diode. A custom ASIC and micro-controller provide timing and sampling of smoke and enable conversion of ambient smoke density into analog values for processing. Under increasing smoke conditions, the smoke detector's analog output value will increase. An alarm condition will be initiated at the Control and Indicating Equipment (CIE) once the smoke detector's analog value reaches the pre-set alarm level.

The smoke detector is connected to the CIE via a compatible conventional base which provides power to the attached smoke detector. Once the smoke detector has entered into an alarm state, interruption of the power supply is required to reset the smoke detector to its quiescent state. The sensitivity of the smoke detector is fixed at the point of manufacture.

The Simplex model 4098-9601 smoke detector is approximately 103 mm in diameter and has a height of approximately 48 mm when connected to its base.

Technical specification

The following details are a representative extract of the technical specification for the Simplex, Model 4098-9601EA, nom. sens. (S)=6.0% obs./m, photoelectric smoke detector and may be subject to change. Complete and current details should be determined from the designated producer's technical manual/data sheets.

Sensitivity (Nominal S Value):	6% obs./m
Operating voltages:	8.5 Vdc to 33.0 Vdc
Quiescent current/voltage:	50 μ A @ 8.5 Vdc 120 μ A @ 33.0 Vdc
Alarm current/voltage:	5 mA @ 4.7 Vdc 86 mA @ 10.8 Vdc (Must be externally limited)
Operating temperature range:	0°C to 50°C
Humidity range:	10% to 95%RH (non condensing over temperature range)
Reset time:	22 Seconds (maximum)

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