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ACTIVE FIRE PROTECTION – PRODUCT CERTIFICATION

Certificate of Conformity

Certificate num.	Registration date	Version Number	Version Issue date	Valid until	Page
afp - 1295	28-Feb-2000	7	1-May-2013	30-Apr-2014	Page **1** of **3**

Product designation

System Sensor, Model 1251AUS, nom. sens. (S)=0.4 MIC X, ionisation smoke detector

(Refer to the Schedule/enclosures for further specified details)

Agent/distributor

Pertronic Industries Pty Limited
Unit C2, Hallmarc Business Park, 2A Westall Road, SPRINGVALE, VIC, AUSTRALIA, 3171

Registrant

Pertronic Industries Pty Limited
Unit C2, Hallmarc Business Park, 2A Westall Road, SPRINGVALE, VIC, AUSTRALIA, 3171

Producer

System Sensor
3825 Ohio Avenue, ST CHARLES, IL., UNITED STATES, 60174

Conformance criteria and evaluation

The System Sensor, Model 1251AUS, nom. sens. (S)=0.4 MIC X, ionisation 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. Compatible with the Pertronic Firetronix, Model F100A fire indicator panel.

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
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Producer's description

The System Sensor, Model 1251AUS, nom. sens. (S)=0.4 MIC X, ionisation smoke detector uses a state-of-the-art sensing chamber. The sensor is designed to provide open area protection and is intended for use with compatible control panels only.

Two indicator LEDs are provide on each sensor to provide a local, visible sensor indication. The LEDs can be latched on by a code command from the control panel for an alarm indication. Remote LED annunciation capability is also available as an optional accessory. The System Sensor, Model 1251AUS, nom. sens. (S)=0.4 MIC X, ionisation smoke detector includes a tamper-resistant capability that prevents its removal from the base assembly without the use of a tool.

Technical specification

The following details are a representative extract of the technical specification for the System Sensor, Model 1251AUS, 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 producer's technical manual/data sheets.

Sensing element: Ionisation chamber
Americium 241, 20 kBq
Operating voltage range: 15 to 32 Vdc
Maximum average standby current: 300 µA @ 24 Vdc
(One communication every 5 sec with LED blink enabled)
Maximum alarm current (LED on): 6.5 mA @ 24 Vdc
Operating temperature range: 0° to 49°C
Operating humidity range: 10% to 93% RH, noncondensing
Dimensions:
Height: 43 mm, mounted on a base assembly
Diameter: 104 mm
Weight: 102 g

Tested base designation	Base + detector circuit type
System Sensor, Model B501	Analogue Addressable

Supplementary information

Evaluated modules

Module description	Assembly number	Rev	PCB number	Iss	Tech. drawing number	Iss
F100A main PCB	F100 A1-A1	1.1	F100 A1-A1	1.3	F100 A1-A1	1.3.6
F100a 1.5a power supply	F100 A-A3		F100 A-A3	2.0	F100 A-A3	2.3
F100A keyboard display unit	F100 A-A2		F100 A-A2	1.5	F100 A-A2	2.0
F100A LCD remote mimic	F100 A-2		F100 A-2	1.5	F100 A-2	2.0
Firetronix 8 circuit, 1 relay loop responder	AA8LR	1.0	AA8LR	2.11.a	AA8LR	2.11.2
Firetronix 4 way relay loop responder (monitored)	AA4MMR	1.0	AA4MMR	2.11	AA4MMR	2.11.1
Firetronix 4 way relay loop responder (not monitored)	AA4NRR	1.0	AA4NRR	1.0	AA4NRR	1.1

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EPROMS:	
Firmware F100A02	Version 1.62.1
Firmware LCD	Version 3.06

Addressable devices:

Device type	Max addressable points on analogue loop	Max addressable points on analogue line	Reference
System Sensor, M500MB Monitor Module	99	40*	XF1456/R2, Feb 2000, AS 4428.1- 1998
System Sensor, M501MB Monitor Module (miniature)	99	40*	"
System Sensor, M503ME Monitor Module (micro with LED)	99	40*	"
System Sensor, M500CH Control Module	99	40*	"
System Sensor, M500X Zone Isolator	99	40*	"
Firetronix AA8LR S Circuit, 1 Relay Loop Responder	11	n/a	"
Firetronix, AA4MRR 4 Way Relay Responder	24	n/a	"

Actuating devices
AZF module num.: Pertronic loop protocol
Nominal detector line voltage: 17 V

Device type	Max addressable points on analogue loop	Maximum addressable points on analogue line	Reference
System Sensor, 1251AUS, Smoke Ionisation	99	40*	XF1456/R2, Feb 2000, AS 4428.1- 1998
System Sensor, 2251AUS, Smoke Photoelectric	99	40*	"
System Sensor, 3251AUS, Sensor	99	40*	"
The above detectors with the System Sensor B501 base.			
System Sensor, M500KAC, MCP	99	40*	XF1456/R2, Feb 2000, AS 4428.1- 1998

AZF module num..: Responder Module Rev. 1:

Device type	Maximum number of devices per AZF	Reference
System Sensor, 51A51, Heat Type A	40*	XF1742/R1, Dec 2000,
System Sensor, 51C51, Heat Type C	40*	Compatibility Assessment
The above detectors with the System Sensor B401 base.		

* Maximum number of detectors per AZF/AZC allowed by code.