



Certificate of Conformity

Certificate num.	Registration date	Version	Valid until	
afp - 1770	21-Jul-2005	Number 22	Issue date 1-May-2022	30-Apr-2023

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Product designation

VESDA, Models VLF-250-02 and VLF-500-02, multi-point aspirated smoke detectors

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

Agent/distributor

Xtralis Pty Ltd
4 North Drive, Virginia Park, 236-262 East Boundary Road, BENTLEIGH EAST, VIC, AUSTRALIA, 3165

Registrant

Xtralis Pty Ltd
4 North Drive, Virginia Park, 236-262 East Boundary Road, BENTLEIGH EAST, VIC, AUSTRALIA, 3165

Producer

Xtralis Pty Ltd
4 North Drive, Virginia Park, 236-262 East Boundary Road, BENTLEIGH EAST, VIC, AUSTRALIA, 3165

Conformance criteria and evaluation

The VESDA, Models VLF-250-02 and VLF-500-02, multi-point aspirated smoke detectors have been evaluated and verified as conforming with the relevant requirements of the following criteria.

1. Australian Standard AS 7240.20-2012, 'Fire detection and alarm systems - Part 20: Aspirating smoke detectors'.

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 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



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Producer's description

The VESDA, Models VLF-250-02 and VLF-500-02, multi-point aspirated smoke detectors, multi-point aspirated smoke incorporate early warning laser based aspirated smoke detection technology.

They provide localized fire risk management solutions for small, critical environments.

Model VLF-250 covers up to 250 m² (2,690 sq. ft.), and model VLF-500 covers areas up to 500 m² (5,380 sq. ft.), dependent on local codes and standards.

The VESDA, Models VLF-250-02 and VLF-500-02, multi-point aspirated smoke detectors complement the existing VESDA detector range and have been designed to provide simple installation and commissioning, absolute smoke detection and reliable and consistent response to smoke events without being affected by false alarms.

Technical specification

The following details are a representative extract of the technical specification for the VESDA, Models VLF-250-02 and VLF-500-02, multi-point aspirated smoke detectors and may be subject to change. Complete and current details should be determined from the designated producer's technical manual/data sheets.

Schedule of properties/characteristics

The following schedule is an extract of physical and operational properties/characteristics of the certified/listed equipment.

Model:	VLF-250-02	VLF-500-02
Area covered	250 m ² (2690 sq. ft.)	500 m ² (5380 sq. ft.)
Alarm ranges		
Alert, Action	0.025 – 2.0% obs/m (0.008 – 0.625% obs/ft.)*	
Fire 1, Fire 2	0.025 – 20% obs/m (0.008 – 6.25% obs/ft.)*	
Individual Delays	0 - 60 seconds	
2 Threshold sets (1 & 2)	Day and night	
Sampling network		
Air inlet pipe	OD 25 mm (ID 21 mm) / IPS ¾ in. (OD 1.05 in.) Alternate pipe sizes can be modelled with ASPIRE	
Single pipe length	25 m (80 ft.) max.	50 m (150 ft.) max.
Single pipe - Sampling holes	3-6 sampling holes pre-engineered For 7-12 sampling holes model with ASPIRE*	5-8 sampling holes pre-engineered For 9-24 sampling holes model with ASPIRE*
Branch (2) pipe length	15 m (50 ft.) max. per branch	30 m (90 ft.) max. per branch
Branch (2) - Sampling holes per branch	2-4 sampling holes pre-engineered For 5-6 sampling holes model with ASPIRE*	3-6 sampling holes pre-engineered For 5-12 sampling holes model with ASPIRE*
Return Air Sampling - U Shaped design per branch	4-10 sampling holes pre-engineered For 9-12 sampling holes model with ASPIRE*	8-14 sampling holes pre-engineered For 9-34 sampling holes model with ASPIRE*
Interfaces	Power In/Out. Fire 1 Relay (changeover, 2A @ 30 Vdc). Action Relay (changeover, 2A @ 30 Vdc). Fault Relay (changeover, 2A @ 30 Vdc). General Purpose Input (clean contact). External display port (with power limited output). RS232 programming port.	
Input Power		
Voltage	24Vdc nominal (18-30 Vdc)	
Current, @24Vdc	220 mA nominal	410 mA nominal
Current, alarm	295 mA	490 mA
Dimensions (W x H x D)	256 mm x 183 mm x 92 mm	
Weight, approx.	2 kg	
Mounting	Upright, inverted or horizontal with appropriate mounting bracket	
Operating conditions		
Detector ambient	0 °C to 39 °C (32°F to 103°F)	
Sampled air	-20°C to 60 °C (32°F to 140°F)	
Field wiring		

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Model:	VLF-250-02	VLF-500-02
Access	3 x 25 mm cable entries (1 rear entry, 2 top entry)	
Terminals	Screw terminals 0.2-2.5 mm ² (30-12 AWG)	
Display	4 Alarm State Indicators (Alert, Action, Fire 1 and Fire 2). Fault and Disabled Indicators. 10-sector Smoke Level Indicators. 10-sector Instant Fault Finder. Reset, Disable and Test Controls. Smoke and Flow AutoLearn Controls and Indicators.	

* Refer to the producer's current technical manual/data sheets and the requirements of the Authority having Jurisdiction.

Supplementary information

Schedule of relevant articles

The following schedule is an extract of articles significant and/or related as evidence of conformity.

Reference		Title / description	Date issued (or date validated)	Source
Ident. type	Ident.			
Report Number	XF3310/R5	Evaluation for conformity of the VESDA VLF series, aspirating smoke detector to the requirements of AS 7240.20-2012	22-Jul-2019	CSIRO, Fire systems Laboratory, AU
Part Number	29025	VESDA VLF-250 Product Guide	20-Dec-2017	Xtralis Pty Ltd, AU
	20297	VESDA VLF-500 Product Guide	20-Dec-2017	Xtralis Pty Ltd, AU