



Certificate of Conformity

Certificate num.	Registration date	Version	Valid until	
afp - 3002	16-Oct-2015	Number 10	Issue date 1-May-2023	30-Apr-2024

Product designation

Titanus Micro•Sens®, air sampling smoke detection system

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

Agent/distributor

Ampac Pty Limited
7 Ledger Road, BALCATTA, WA, AUSTRALIA, 6021

Registrant

Wagner Group GmbH
Schleswigstraße 1-5, LANGENHAGEN, GERMANY, D-30853

Producer

Wagner Group GmbH
Schleswigstraße 1-5, LANGENHAGEN, GERMANY, D-30853

Conformance criteria and evaluation

The Titanus Micro•Sens®, air sampling smoke detection system has 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

Kaj Loh
Executive Officer – ActivFire Scheme



Schedule to Certificate of Conformity

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Producer's description

The Titanus Micro•Sens®, air sampling smoke detection system is comprised of a range of detection units, device base and pipe system.

The base unit contains the module for detection of the smoke aerosols and the aspirating unit. It contains an integrated air flow sensor for the transport of the air samples to the detector module as well as the air flow sensor for the monitoring of the pipe work system.

The pipe system consists essentially of pipe and fittings, in either PVC or ABS plastics material at option. Each aspirating hole in the pipe work system represents for configuration purposes one detector at ceiling level.

The detector alarm threshold can be set at between 0.1 %obs/m (DM-*-10-* models) or 0.5 %obs/m (DM-*-50-* models) and 2 %obs/m light obscuration in steps of 0.1 %obs/m. Using a smoke level indicator (where fitted), an indicator sensitivity of between 0.05 %/m and 0.2 %obs/m light obscuration can be achieved. The devices can provide two alarm thresholds (pre alarm and alarm). The pre-alarm threshold is adjustable from between 10 and 80% of the fire alarm threshold.

Technical specification

The following details are a representative extract of the technical specification for the Titanus Micro•Sens®, air sampling smoke detection system and may be subject to change. Complete and current details should be determined from the designated producer's technical manual/data sheets.

Schedule of variant designations

The following is a schedule of validated variant designations of the certified/listed equipment.

Variant		Description
Type	Ident. <small>(see Notes)</small>	
Model	DM-MB-TM-10	Detection box (enclosure)
	DM-MB-TM-B-10	
	DM-MB-TM-50	
	DM-MB-TM-B-50	
Model	DM-TM-10	Detection unit
	DM-TM-R-10	
	DM-TM-B-10	
	DM-TM-RB-10	
	DM-TM-Z-10	
	DM-TM-ZB-10	
	DM-TM-10-F	
	DM-TM-B-10-F	
	DM-TM-50	
	DM-TM-R-50	
	DM-TM-B-50	
	DM-TM-RB-50	
	DM-TM-Z-50	
	DM-TM-ZB-50	
	DM-TM-50-F	
	DM-TM-B-50-F	
	DM-TMV-10	
	DM-TMV-R-10	
	DM-TMV-B-10	
	DM-TMV-RB-10	
DM-TMV-Z-10		
DM-TMV-ZB-10		
DM-TMV-10-F		

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Variant		Description
Type	Ident. <small>(see Notes)</small>	
	DM-TMV-B-10-F	
	DM-TMV-50	
	DM-TMV-R-50	
	DM-TMV-B-50	
	DM-TMV-RB-50	
	DM-TMV-Z-50	
	DM-TMV-ZB-50	
	DM-TMV-50-F	
	DM-TMV-B-50-F	

Notes to model specifications:

- V designates pre-alarm function
- -R designates room identification function
- -F designates deep freeze models
- -B designates smoke level bar graph function
- -Z designates redundant fan function
- -10 designates a maximum sensitivity of 0.1 %obs/m, and -50 designates a maximum sensitivity of 0.5 %obs/m.

Schedule of properties/characteristics

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

Titanus Micro•Sens® detection units		
General	Parameter	
Displays on device	Operation	Green operating display
	Fire alarm	Red alarm display
	Action alarm	Red alarm display (optional)
	Fault	Yellow collective fault
	Smoke level display	Yellow smoke level display 1 to 10 (10 segments) (optional)
	Alarm location display	5 red displays (optional)
Reaction sensitivity		
DM-TM*-*10*	0.1 to 2.0 %obs/m	
DM-TM*-*50*	0.5 to 2.0 %obs/m	
Protection class (EN 60529)		
...without air return	IP 20	
...with air return	IP 42	
...with pipe piece 100 mm/pipe bend	IP 54	
Electrical		
Supply voltage	24 Vdc (nominal) 16 – 30 Vdc	
Current consumption	150 mA quiescent, 205 mA in Alarm	
Environmental		
Operating temperature range	-20°C to +60°C	
Operating humidity range	0 - 95% RH (Non-condensing)	
Mechanical		
Dimensions (H x W x D)	70 mm x 140 mm x 222 mm	
Weight	0.8 kg	

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Titanus Micro•Sens® detector box																			
General	Parameter																		
Displays on device	<table style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 50%;"></td> <td style="width: 50%;">Operation</td> <td>Green operating display</td> </tr> <tr> <td></td> <td>Fire alarm</td> <td>Red alarm display</td> </tr> <tr> <td></td> <td>Action alarm</td> <td>Red alarm display (optional)</td> </tr> <tr> <td></td> <td>Fault</td> <td>Yellow collective fault</td> </tr> <tr> <td></td> <td>Smoke level display</td> <td>Yellow smoke level display 1 to 10 (10 segments) (optional)</td> </tr> <tr> <td></td> <td>Alarm location display</td> <td>5 red displays (optional)</td> </tr> </table>		Operation	Green operating display		Fire alarm	Red alarm display		Action alarm	Red alarm display (optional)		Fault	Yellow collective fault		Smoke level display	Yellow smoke level display 1 to 10 (10 segments) (optional)		Alarm location display	5 red displays (optional)
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Reaction sensitivity																			
DM-TM*-*10*	0.1 to 2.0 %obs/m																		
DM-TM*-*50*	0.5 to 2.0 %obs/m																		
Protection class (EN 60529)	IP 54																		
Electrical																			
Supply voltage	24 Vdc (nominal) 15 – 30 Vdc																		
Current consumption	30 mA quiescent, 68 mA in Alarm																		
Environmental																			
Operating temperature range																			
Standard	-20°C to +60°C																		
Deep-freeze version	-40°C to +60°C																		
Operating humidity range	0 - 95% RH (Non-condensing)																		
Mechanical																			
Dimensions (H x W x D)	70 mm x 140 mm x 222 mm																		
Weight	0.8 kg																		

Titanus Micro•Sens® pipe network	
Maximum pipe length @25 mm	50 m
Plus maximum pipe length @12 mm	8 x 3 m
Maximum number of aspiration apertures	8
Maximum length aspiration hose per ceiling duct	1 m
Temperature range	
PVC-pipe	0°C to +60°C
ABS-pipe	-40°C to +80°C
Maximum monitoring surface area	400 m ²

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	XF2890/R1	Conformity Evaluation of the Wagner Titanus Micro.Sens Aspirating Smoke Detector series to the requirements of AS 7240.20-2012	18-Aug-2015	CSIRO, Fire Systems and Acoustics, AU
Item Number	69-30-0525 Edition 06/13	Air sampling smoke detection system Fire detection TITANUS MICRO•SENS® Technical Manual	Jun-2013	Wagner Group GmbH LANGENHAGEN, DE