



Certificate of Conformity

Certificate num.	Registration date	Version	Valid until	
afp - 3060	10-Oct-2016	Number 1	Issue date 10-Oct-2016	30-Apr-2018
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Product designation

Hochiki, IFD-E Series, Triple Infra-red, IR³ flame detector

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

Agent/distributor

Hochiki Australia Pty Ltd
391 Park Road, REGENTS PARK, NSW, AUSTRALIA, 2143

Registrant

Hochiki Australia Pty Ltd
391 Park Road, REGENTS PARK, NSW, AUSTRALIA, 2143

Producer

Talentum Developments Ltd
Beal Lane, SHAW, OLDHAM, UNITED KINGDOM, OL2 8PF

Conformance criteria and evaluation

The Hochiki, IFD-E Series, Triple Infra-red, IR³ flame detector has been evaluated and verified as conforming with the relevant requirements of the following criteria.

1. European Standard EN 54-10:2002, 'Fire detection and fire alarm systems. Flame detectors. Point 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 and its base assembly with new or existing control and indicating equipment should be verified prior to installation.
- ii. Intrinsically safe unit shall only be installed with approved barriers as specified by the producer/manufacturer.

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

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Producer's description

The Hochiki, IFD-E Series, Triple Infra-red, IR³ flame detector is designed for use where open flaming fires may be expected and responds to the light emitted from flames during combustion.

The detector discriminates between flames and other light sources by responding only to particular optical wavelengths and flame flicker frequencies. This enables the detector to avoid false alarms due to such factors as flickering sunlight. Ideal for the detection of flames from the burning of Aviation Fuels (kerosene), Butane, Grain & Feeds, Hydrogen, Paper, Natural Gas, Petrol (gasoline) etc.

Technical specification

The following details are a representative extract of the technical specification for the Hochiki, IFD-E Series, Triple Infra-red, IR³ flame detector 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.

Type	Ident.	Variant		Description
		Other element	Circuit configuration	
Model	IFD-E	016589	Conventional	Infra-red Flame Detector
		016689	Analogue addressable	
	IFD-E(EXD)	016519	Conventional	Infra-red Flame Detector, Alloy Flameproof
		016619	Analogue addressable	
	IFD-E(IS)	016579	Conventional	Infra-red Flame Detector, Intrinsically Safe
		016679	Analogue addressable	

Schedule of properties/characteristics

Property/Characteristic	IFD-E	IFD-E(IS)	IFD-E(EXD)
Operating voltage		14 – 30 Vdc	
Alarm current (selected via by DIL switches)		3 ~ 28 mA	
Test signal voltage		14 to 30 Vdc	
Relay contact ratings	Current	1.0 A (max)	
	Voltage	50 Vdc (max)	
	Power	30 W (max) (resistive loads only)	
Power up time		2 seconds (max)	
Field of view		90° min. Cone	
Range		Class 1 – 0.1 m2 n-heptane at 25 m	
		Class 3 – 0.1 m2 n-heptane at 12 m	
Operating wavelength band		IR (0.75 ~ 2.7 μm)	
Operating temperature range		-10°C to + 55°C (sensor limit -10°C to +40°C (T4))	
Storage temperature range		-20°C to + 65°C	
Maximum humidity		95% RH - Non condensing (at 40°C)	
Ingress protection rating	IP65	IP65	IP66
Colour / Case material	Blue / Die-Cast Zinc Alloy (ZA12)	Blue / Die-Cast Zinc Alloy (ZA12)	Red / Copper Free Aluminium Alloy LM25
Weight (Kg) Height / Width / Depth (mm)	2 142 / 108 / 82	2 142 / 108 / 82	2.5 150 / 146 / 137

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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.			
Test report number	TE219534	Technical evaluation of a Talentum Developments Ltd model 016000 series conventional and analogue addressable IR ³ flame detectors to the requirements of EN 54-10: 2002 and Agreement Document AD13.1 Draft in accordance with LPCB test schedule E120379/1.1	26-Aug-2006	BRE Testing, UK
LPCB Ref. No.	164m/01	Conventional IR ³ Flame detector (IFD-MB) Certificate No 164m to EN54-10:2002 (lpcb_w3_Cert_164m_v_2016-08-10.pdf)	8-Oct-2016	BRE Global Ltd, LPCB, UK
	164m/02	Conventional IR ³ Intrinsically Safe Flame Detector (IFD-MB) Certificate No 164m to EN54-10:2002 (lpcb_w3_Cert_164m_v_2016-08-10.pdf)		
	164m/03	Conventional IR ³ (Exd) Flameproof Flame Detector (IFD-MB) Certificate No 164m to EN54-10:2002 (lpcb_w3_Cert_164m_v_2016-08-10.pdf)		
Doc. Id.	2-3-0-808/ISS4/JAN14	Hochiki IFD-E Flame Detector User Manual	11-Mar-2014	Hochiki Europe (UK) Ltd, UK
	2-3-0-809/ISS2/JUL07	Hochiki IFD-E(IS) Intrinsically Safe Flame Detector User Manual	12-Jul-2007	
	2-3-0-810/ISS3/OCT11	Hochiki IFD-E(Exd) Explosion-Proof Flame Detector User Manual	4-Oct-2011	
DoP No.	IFD-E 589CPR2013-08-15	Declaration of Performance Conventional, IS, IR3 flame detector – Point detector IFD-E EN54-10:2002 + A1:2005 Certificate of constancy of conformity, 0832-CPD-0595	15-May-2013	Talentum Developments Ltd, UK
	IFD-E(IS) 579CPR2013-08-15	Declaration of Performance Conventional, IS, IR3 flame detector – Point detector IFD-E(IS) EN54-10:2002 + A1:2005 Certificate of constancy of conformity, 0832-CPD-0597	15-Aug-2013	
	IFD-E(ExD) 519CPR2013-08-15	Declaration of Performance Conventional, Exd, IR3 flame detector – Point detector IFD-E(ExD), EN54-10:2002 + A1:2005 Certificate of constancy of conformity, 0832-CPD-0599	15-Aug-2013	