



Certificate of Conformity

Certificate num.	Registration date	Version	Valid until	
afp - 2518	22-Jun-2011	Number 4	Issue date 24-Apr-2014	30-Apr-2015

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Product designation

Hochiki, Model DRD-AS, conventional, Class 1, infrared, flame detector

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

Agent/distributor

Fire & Safety Products (A/Asia) Pty. Ltd.
41-45 Richmond Road, KESWICK, SA, AUSTRALIA, 5035

Registrant

Hochiki Corporation
10 - 43, Kamiosaki 2-Chome, SHINAGAWA-KU, TOKYO, JAPAN, 141

Producer

Hochiki Corporation
10 - 43, Kamiosaki 2-Chome, SHINAGAWA-KU, TOKYO, JAPAN, 141

Conformance criteria and evaluation

The Hochiki, Model DRD-AS, conventional, Class 1, infrared, 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.

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, Model DRD-AS, conventional, Class 1, infrared, flame detector is intended to identify the occurrence of a fire by detecting the infrared radiation energy emitted from flames of burning substances. The flames of burning substances contain many infrared rays which exhibit the spectral peak near a wavelength of 4.3 μm emitted by carbon dioxide (CO_2) based on the resonance radiation and offer the remarkable feature of fluctuating infrared emissions at frequencies between 2 and 8 Hz. This phenomenon, known as CO_2 resonance radiation, appears only when substances burn in a full flaming condition, and differs greatly from the relative intensity of radiant energy from typical objects at elevated temperatures.

This detector is designed based on the principle that only infrared rays in the wavelength range of 4.45 μm are captured through a special optical filter and converted to electrical signals by opto-electrical conversion, and the fluctuating components are amplified through an electrical band filter for proper detection.

Technical specification

The following details are a representative extract of the technical specification for the Hochiki, Model DRD-AS, conventional, Class 1, infrared, flame detector and may be subject to change. Complete and current details should be determined from the designated producer's technical manual/data sheets.

Line voltage

Nominal rated voltage:	24 Vdc
Rated voltage (filtered dc):	15 ~ 30.0 Vdc
Maximum allowable voltage:	42 Vdc
Wave form:	Filtered DC
Supervisory current:	70 μA (at 24V, 25°C)
Surge current:	320 μA max. (at 24V, 25°C)
Maximum switching current:	40 mA max. (at 25°C)
Minimum alarm trip current:	6 mA (at 25°C)
Operating temperature range:	-10°C ~ +50°C
Classification:	Class 1
Detection angle:	90°cone

Verified base designation	Base + detector circuit type
Hochiki, Model YBN-R/6	Conventional
Hochiki, Model YBO- R/6PA	Conventional