



IECEx Certificate of Conformity

INTERNATIONAL ELECTROTECHNICAL COMMISSION IEC Certification Scheme for Explosive Atmospheres

for rules and details of the IECEx Scheme visit www.iecex.com

Certificate No.: **IECEx BAS 12.0131X** issue No.: **0** Certificate history: _____

Status: **Current**

Date of Issue: **2013-03-22** Page 1 of 3

Applicant: **Hochiki Europe**
Grosvenor Road,
Gillingham Business Park,
Gillingham,
Kent,
ME8 0SA.
United Kingdom

Electrical Apparatus: **Heat Detector Type DCD-1E-IS**
Optional accessory:

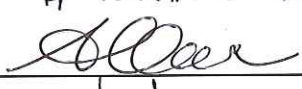
Type of Protection: **Intrinsic Safety**

Marking: **Ex ia IIC T5 Ga (-20°C ≤ Ta ≤ +55°C)**

Approved for issue on behalf of the IECEx Certification Body: **R S Sinclair**

Position: **General Manager**

Signature:
(for printed version)

R S Sinclair


23/3/2013

Date:

1. This certificate and schedule may only be reproduced in full.
2. This certificate is not transferable and remains the property of the issuing body.
3. The Status and authenticity of this certificate may be verified by visiting the [Official IECEx Website](http://www.iecex.com).

Certificate issued by:

SGS Baseefa Limited
Rockhead Business Park
Staden Lane
Buxton
Derbyshire
SK17 9RZ
United Kingdom





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Manufacturer: **Hochiki Europe**
Grosvenor Road,
Gillingham Business Park,
Gillingham,
Kent,
ME8 0SA.
United Kingdom

Additional Manufacturing location
(s):

This certificate is issued as verification that a sample(s), representative of production, was assessed and tested and found to comply with the IEC Standard list below and that the manufacturer's quality system, relating to the Ex products covered by this certificate, was assessed and found to comply with the IECEx Quality system requirements. This certificate is granted subject to the conditions as set out in IECEx Scheme Rules, IECEx 02 and Operational Documents as amended.

STANDARDS:

The electrical apparatus and any acceptable variations to it specified in the schedule of this certificate and the identified documents, was found to comply with the following standards:

IEC 60079-0 : 2011 Explosive atmospheres - Part 0: General requirements
Edition: 6.0

IEC 60079-11 : 2011 Explosive atmospheres - Part 11: Equipment protection by intrinsic safety "i"
Edition: 6.0

*This Certificate **does not** indicate compliance with electrical safety and performance requirements other than those expressly included in the Standards listed above.*

TEST & ASSESSMENT REPORTS:

A sample(s) of the equipment listed has successfully met the examination and test requirements as recorded in

Test Report:

[GB/BAS/ExTR12.0318/00](#)

Quality Assessment Report:

[GB/BAS/QAR13.0003/00](#)



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Schedule

EQUIPMENT:

Equipment and systems covered by this certificate are as follows:

The Heat Detectors Type DCD-1E-IS and Type DCD-1E-IS(WHT) are designed to detect temperature and the rate of rise of the temperature within a hazardous area and to provide an alarm indication on a locally mounted LED and also to provide an alarm indication to safe area mounted apparatus via a suitable interface.

The Heat Detector is mounted on Base Unit Types YBN-R/4IS or YBN-R/4IS(WHT) for installation within the hazardous area and comprises a printed circuit board encapsulated within a non-metallic housing, is populated with surface mounted components. When fitted to a Base Unit the enclosure provides a degree of protection of at least IP20 to the electronic circuit. The field wiring connections from the safe area apparatus, and to external simple apparatus such as switches and resistors, are made within the base unit.

The design is assessed against the requirements for Intrinsically Safe Apparatus as defined in IEC60079-0:2011 and IEC60079-11:2011 to Category ia with respect to Group IIC gases and a Temperature Class of T5 for an equipment protection level of Ga in ambient temperatures from -20°C to +55°C.

Supply Input Terminals 2 and 6 or Loop Output Terminals 1 and 5 and Remote Indicator Alarm Terminals 1 and 4

$U_i = 30V$	$I_i = 200mA$	$P_i = 1W$	$C_i = 0$	$L_i = 0$
$U_o = U_i$	$I_o = I_i$	$P_o = P_i$	$C_i = 0$	$L_i = 0$

Note :- Terminals 1 & 2 are directly interconnected only when the smoke detector is fitted to the Base Unit and Terminals 6 & 5 are directly interconnected within the Base Unit. All inputs / outputs are derived from a common source.

Terminal 3 may be used for terminating cable screens and has no electrical connection to the circuit.

CONDITIONS OF CERTIFICATION: YES as shown below:

1) The Heat Detectors Type DCD-1E-IS and Type DCD-1E-IS(WHT) have a plastic enclosure which may present an electrostatic risk if rubbed or placed in a fast moving air flow.