IECEx Certificate of Conformity

INTERNATIONAL ELECTROTECHNICAL COMMISSION
IEC Certification System for Explosive Atmospheres

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

Certificate No.: **IECEx SIR 15.0089X**

Certificate history:
Issue 0 (2015-12-18)

Status: **Current**

Issue No: 1

Date of Issue: 2024-02-14

Applicant: **FFE Limited**
9 Hunting Gate
Hitchin
Hertfordshire SG4 0TJ
United Kingdom

Equipment: **Optical beam smoke detector (Fireray 3000 Ex d)**

Optional accessory:

Type of Protection: **Flameproof, Optical Isolation and Dust Protection by Enclosure**

Marking: Ex db op is IIC T6 Gb
Ex tb IIIC T85°C Db
Ta = -20°C to +55°C

Approved for issue on behalf of the IECEx Certification Body: **Michelle Halliwell**

Position: **Director Operations, UK & Industrial Europe**

Signature:
(for printed version)

Date:
(for printed version)

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 www.iecex.com or use of this QR Code.

Certificate issued by:

CSA Group Testing UK Ltd
Unit 6, Hawarden Industrial Park
Hawarden, Deeside CH5 3US
United Kingdom

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Manufacturer: **FFE Limited**
9 Hunting Gate
Hitchin
Hertfordshire SG4 0TJ
United Kingdom

Manufacturing locations: **FFE Limited**
9 Hunting Gate
Hitchin
Hertfordshire SG4 0TJ
United Kingdom

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 equipment 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 60079-0:2017 Explosive atmospheres - Part 0: Equipment - General requirements
Edition:7.0

IEC 60079-1:2014 Explosive atmospheres - Part 1: Equipment protection by flameproof enclosures "d"
Edition:7.0

IEC 60079-28:2015 Explosive atmospheres - Part 28: Protection of equipment and transmission systems using optical radiation
Edition:2

IEC 60079-31:2022 Explosive atmospheres – Part 31: Equipment dust ignition protection by enclosure "t"
Edition:3.0

This Certificate **does not** indicate compliance with 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 Reports:

GB/SIR/ExTR15.0342/00 GB/SIR/ExTR24.0025/00

Quality Assessment Report:

GB/SIR/QAR13.0025/07

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EQUIPMENT:
Equipment and systems covered by this Certificate are as follows:

The Fireray 3000 Ex d Optical Beam Smoke Detector is used for fire detection in explosive atmospheres. It utilises a Transmitter to project a modulated infra-red beam across the protected area to a Receiver mounted opposite. The received signal strength is monitored and analysed in the Receiver, and should the signal strength fall below the pre-set threshold for more than the fire delay selected by the user, a fire alarm is signalled. A low-level control unit allows adjustment and testing from a non-hazardous location.

The Transmitter and Receiver are fitted inside an aluminium alloy or stainless steel cylindrical EMH29 enclosure with a threaded window cover. The enclosure is manufactured by JCE (Europe) Limited and is certified under TRAC 13ATEX0058U.

The equipment is supplied with the cable entry holes fitted with either transit blanking caps or suitably certified Ex db cable glands and/or blanking elements.

SPECIFIC CONDITIONS OF USE: YES as shown below:

1. This equipment includes a non-metallic outer protective coating. To avoid the possibility electrostatic charges, cleaning must only be carried out with a damp or anti-static cloth.

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DETAILS OF CERTIFICATE CHANGES (for issues 1 and above)
This issue, Issue 1, recognises the following changes; refer to the certificate annex to view a comprehensive history:

Issue 1 – this Issue introduced the following changes:

1. Following appropriate assessment to demonstrate compliance with the latest technical knowledge, IEC 60079-0:2011 Ed 6 and IEC 60079-31:2013 Ed 2 were replaced by IEC 60079-0:2074 Ed 7 (Cor1 2020) and IEC 60079-31:2022 Ed 3, the markings were updated accordingly.
2. As a result of the assessment, Specific Conditions of Use were introduced and therefore an 'X' suffix was added to the certificate number.

Annex:

IECEx SIR 15.0089X Annexe Issue 1.pdf

Annexe to: **IECEx SIR 15.0089X Issue 1**

Applicant: **FFE Limited**

Apparatus: **Optical beam smoke detector (Fireray 3000 Ex d)**

Conditions of Manufacture

i. The equipment covered by this certificate incorporate previously certified devices as detailed below, it is therefore the responsibility of the manufacturer to continually monitor the status of the certification associated with these devices, and the manufacturer shall inform CSA of any modifications of the devices that may impinge upon the explosion safety design of their products.

Item	Manufacturer	Certificate No	Key attributes
Enclosure type EMH 29	JCE (Europe)	IECEx TRC 13.0020U *Revision 0*	Ex d IIC Gb/Ex tb IIIC Db Rated service temp: -40°C to +60°C Limiting temperature of window cement 100°C

ii. If the equipment is shipped with suitably certified Ex db cable glands and/or blanking elements the relevant certificates and user instruction shall be supplied with the package.

Full certificate change history

Issue 1 – this Issue introduced the following changes:

i. Following appropriate assessment to demonstrate compliance with the latest technical knowledge, IEC 60079-0:2011 Ed 6 and IEC 60079-31:2013 Ed 2 were replaced by IEC 60079-0:2074 Ed 7 (Cor1 2020) and IEC 60079-31:2022 Ed 3, the markings were updated accordingly.
ii. As a result of the assessment, Specific Conditions of Use were introduced and therefore an 'X' suffix was added to the certificate number.

Date: **14 February 2024**

CSA Group Testing UK Ltd.
Unit 6 Hawarden Industrial Park,
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