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 SIR 15.0089 issue No.:0	Certificate history:
Status:	**Current**	
Date of Issue:	**2015-12-18**	Page 1 of 3

Applicant:

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

Electrical Apparatus: **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: N Jones

Position: Certification Manager

Signature:
(for printed version)

Date: 2015-12-18

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.

Certificate issued by:

SIRA Certification Service
CSA Group
Unit 6, Hawarden Industrial Park
Hawarden
Deeside
CH5 3US
United Kingdom

IECEx Certificate of Conformity

Certificate No.: IECEx SIR 15.0089

Date of Issue: **2015-12-18** Issue No.: **0**

Manufacturer: **FFE Limited**
9 Hunting Gate
Hitchin
Hertfordshire SG4 0TJ
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 Edition: 6.0	Explosive atmospheres - Part 0: General requirements
IEC 60079-1 : 2014-06 Edition: 7.0	Explosive atmospheres - Part 1: Equipment protection by flameproof enclosures "d"
IEC 60079-28 : 2015 Edition: 2	Explosive atmospheres - Part 28: Protection of equipment and transmission systems using optical radiation
IEC 60079-31 : 2013 Edition: 2	Explosive atmospheres - Part 31: Equipment dust ignition protection by enclosure "t"

*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/SIR/ExTR15.0342/00

Quality Assessment Report:

GB/SIR/QAR13.0025/01

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Certificate No.: IECEx SIR 15.0089

Date of Issue: **2015-12-18** Issue No.: **0**

Schedule

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 IECEx TRC 13.0020U.
Cable entry holes are provided as specified on the certified drawings. Entries are to be fitted with suitably certified cable glands or blanking plugs, as appropriate, maintaining the ingress protection marked on the equipment, with a minimum of IP 66.

CONDITIONS OF CERTIFICATION: NO

1 **EC TYPE-EXAMINATION CERTIFICATE**

2 Equipment intended for use in Potentially Explosive Atmospheres Directive 94/9/EC

3 Certificate Number: **Sira 15ATEX1260** Issue: **0**

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

5 Applicant: **FFE Limited**

6 Address: 9 Hunting Gate
Hitchin
Hertfordshire SG4 0TJ
England

7 This equipment and any acceptable variation thereto is specified in the schedule to this certificate and the documents therein referred to.

8 Sira Certification Service, notified body number 0518 in accordance with Article 9 of Directive 94/9/EC of 23 March 1994, certifies that this equipment has been found to comply with the Essential Health and Safety Requirements relating to the design and construction of equipment intended for use in potentially explosive atmospheres given in Annex II to the Directive.

The examination and test results are recorded in the confidential reports listed in Section 14.2.

9 Compliance with the Essential Health and Safety Requirements, with the exception of those listed in the schedule to this certificate, has been assured by compliance with the following documents:

EN 60079-0:2012/A11:2013 EN 60079-1:2014 EN 60079-28:2007 EN 60079-31:2014

The above list of documents may detail standards that do not appear on the UKAS Scope of Accreditation, but have been added through Sira's flexible scope of accreditation, which is available on request.

10 If the sign 'X' is placed after the certificate number, it indicates that the equipment is subject to special conditions for safe use specified in the schedule to this certificate.

11 This EC type-examination certificate relates only to the design and construction of the specified equipment. If applicable, further requirements of this Directive apply to the manufacture and supply of this equipment.

12 The marking of the equipment shall include the following:

II 2 GD
Ex db op is IIC T6 Gb
Ex tb IIIC T85°C Db
Ta = -20°C to +55°C

Project Number 70021163

N Jones
Certification Manager

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Web: www.csagroupuk.org

SCHEDULE

EC TYPE-EXAMINATION CERTIFICATE

Sira 15ATEX1260
Issue 0

13 DESCRIPTION OF EQUIPMENT

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.

Cable entry holes are provided as specified on the certified drawings. Entries are to be fitted with suitably certified cable glands or blanking plugs, as appropriate, maintaining the ingress protection marked on the equipment, with a minimum of IP 66.

14 DESCRIPTIVE DOCUMENTS

14.1 Drawings

Refer to Certificate Annexe.

14.2 Associated Sira Reports and Certificate History

Issue	Date	Report number	Comment
0	18 December 2015	R70021163A	The release of the prime certificate.

15 SPECIAL CONDITIONS FOR SAFE USE (denoted by X after the certificate number)

None.

16 ESSENTIAL HEALTH AND SAFETY REQUIREMENTS OF ANNEX II (EHSRs)

The relevant EHSRs that are not addressed by the standards listed in this certificate have been identified and individually assessed in the reports listed in Section 14.2.

17 CONDITIONS OF CERTIFICATION

17.1 The use of this certificate is subject to the Regulations Applicable to Holders of Sira Certificates.

17.2 Holders of EC type-examination certificates are required to comply with the production control requirements defined in Article 8 of directive 94/9/EC.

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Certificate Annexe

Certificate Number: **Sira 15ATEX1260**

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

Applicant: **FFE Limited**

Issue 0

Drawing	Sheets	Rev	Date (Sira stamp)	Title
3000-115	1 of 1	01	09 Dec 15	General Arrangement
0040-233	1 of 1	01	09 Dec 15	LABEL

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