



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)



2015-12-18

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:

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

sira
CERTIFICATION





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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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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