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 ETL 16.0006**	Page 1 of 4	Certificate history:
Status:	**Current**	Issue No: 2	Issue 1 (2022-04-19) Issue 0 (2016-06-14)
Date of Issue:	2024-02-29		
Applicant:	**Reuter Stokes, LLC** 8499 Darrow Road, Twinsburg, OH, 44087 **United States of America**		
Equipment:	**Flame Tracker RS-FS-9004 Single Unit**		
Optional accessory:	NONE		
Type of Protection:	**Intrinsic Safety - Ex ia**		
Marking:	Ex ia IIB T2, T3 Ga IECEx ETL 16.0006 -51°C ≤ Ta ≤ 150°C or -51°C ≤ Ta ≤ 200°C* with cooling coil		

Approved for issue on behalf of the IECEx Certification Body: **Todd L. Relyea**

Position: **Certification Officer**

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:

Intertek
3933 US Route 11 South
Cortland NY 13045-2995
United States of America

IECEx Certificate of Conformity

Certificate No.: **IECEx ETL 16.0006**

Date of issue: 2024-02-29

Manufacturer: **Reuter Stokes, LLC**
8499 Darrow Road, Twinsburg, OH, 44087
United States of America

Manufacturing locations: **Reuter Stokes, LLC**
8499 Darrow Road, Twinsburg, OH, 44087
United States of America

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

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 Report:

US/ETL/ExTR16.0023/02

Quality Assessment Report:

GB/ITS/QAR10.0012/11

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

The Flame Tracker is used to detect a flame/combustion optically. The product senses the UV light given off by the flame and produces a 4-20mA signal in response to the flame. The product has a sealed, argon filled metal enclosure. For RS-FS-9004 is a single unit with a thread mounting head that houses glass lens where the photodiode is positioned, this threads onto the combustion chamber and monitors the flame/ combustion. The equipment is powered by a certified Intrinsically Safe Barrier satisfying the specific entity parameters. The RS-FS-9004 has a cool end allowing installation in an ambient up to 200ºC with a T2 temperature classification. The circuit board is evaluated with both through mount components as per schematic under controlled drawing no. FS-9004-20S-CERT and surface mount board as per schematic under controlled drawing no. FS-9004-60S-CERT.
Entity Parameters
Ui=30Vdc
Ii=110mA
Pi=770mW
Ci=455nF
Li=303uH
See annex for manufacturer's documents

*Note: The inductance is entirely due to the interconnect cable that carries the 4-20 mA current. There is no inductance in the sensor itself. As such the mixed circuit conditions do NOT apply when calculating the IS barrier. 100% of entity parameters can be used.

SPECIFIC CONDITIONS OF USE: NO
NONE

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DETAILS OF CERTIFICATE CHANGES (for issues 1 and above)

- Updated Ingress Protection from IP20 to IP54
- Updated drawing FS-9004-24-CB from “Rev G Date 02/03/2022” to “Rev H Date 11/08/2023”
- Updated drawing FS-9004-60B-CERT from “Rev B Date 03/02/2022” to “Rev C Date 07/12/2023”
- Updated drawing FS-9004QSM from “Drawing# FS-9004QSM, Rev F Date 03/02/2022” to “Drawing#FS-9004QSM-CERT, Rev NC Date July 2023”
- Updated drawing FS-9004QSM from “Title: QUICK START GUIDE MODEL RS-FS-9004 , Drawing# FS-9004QSM, Rev F Date 03/02/2022” to “Title: QUICK START MANUAL, Drawing#FS-9004QSM-CERT, Rev NC Date July 2023”
- Updated General product information:
  - Text from “The inductance is entirely due to the cable, there is no inductance in the sensor itself. “ to “The inductance is entirely due to the interconnect cable that carries the 4-20 mA current. There is no inductance in the sensor itself.”
  - Text from “photo diode” to “photodiode”
- Text from “The RS-FS-9004 has a cooling option allowing installation in an ambient up to 200ºC with a T2 temperature classification” to “The RS-FS-9004 has a cool end allowing installation in an ambient up to 200ºC with a T2 temperature classification”

Annex:

105603871DAL-001-SFT-IECEx-OP-19f - Annex for IECEx Certificate of Conformity.pdf

Annex to IECEx Certificate of Conformity

Certificate No:	IECEx ETL 16.0006X	Issue No. 2
Annex No. 1		

Technical Documents			
Title:	Drawing No.:	Rev. Level:	Date:
SCH, FLAME SENSOR DIV 1	FS-9004-20S-CERT	A	02/08/2022
SCH, SMT FLAME SENSOR	FS-9004-60S-CERT	A	02/08/2022
*CERT, FLAME SENSOR PCB	FS-9004-60B-CERT	C	07/12/2023
INTRINSICALLY SAFE CONTROL DRAWING	FS-9004-IWD	K	12/16/2021
FLAME SENSOR (UV)	FS-9001-CERT	A	02/07/2022
PCB FLAME SENSOR DIV1	FS-9004-20B-CERT	A	03/02/2022
*QUICK START MANUAL	FS-9004QSM-CERT	NC	July 2023
*CERTIFICATION MARKING CB	FS-9004-24-CB	H	11/08/2023
FLAME SENSOR INTERCONNECTING CABLE	RS-E2-0285-CERT	NR	04/07/2014

*Note: An * is included before the title of documents that are new or revised.*