

TYPE EXAMINATION CERTIFICATE

Product or Protective Systems Intended for Use in Potentially Explosive Atmospheres

UKSI 2016:1107 (as amended)

1. **Type Examination Certificate Number:** ITS23UKEX0778X **Issue** 0
 2. **Product:** Flame Sensor
 3. **Manufacturer:** Fireye Inc.
 4. **Address:** 3 Manchester Road,
Derry, NH 03038
USA
 5. This product and any acceptable variation thereto is specified in the schedule to this certificate and the documents therein referred to.
 6. Intertek Testing and Certification Limited, certifies that this product has been found to comply with the Essential Health and Safety Requirements relating to the design and construction of the products intended for use in potentially explosive atmospheres given in Schedule 1 of UKSI 2016:1107 (as amended).
- The examination and test results are recorded in the confidential report 105316524CRT-002a.
7. Compliance with the Essential Health and Safety Requirements has been assured by compliance with EN IEC 60079-0:2018 and EN IEC 60079-7:2015+A1:2018 except in respect of those requirements referred to within item 14 of the Schedule
 8. If the sign "X" is placed after the certificate number, it indicates that the product is subject to the special conditions of use specified in the Schedule to this certificate.
 9. This Type Examination Certificate relates only to the design of the specified product and not to specific items subsequently manufactured.
 10. The marking of the product shall include the following:



II 3 G
Ex ec IIC T3 Gc
 $-15^{\circ}\text{C} \leq T_a \leq 140^{\circ}\text{C}$

Certification Officer:



Todd L. Relyea

Date:

20 November 2023

SCHEDULE:

TYPE EXAMINATION CERTIFICATE NUMBER ITS23UKEX0778X Issue 0

11. Description of Equipment or Protective System

The equipment is a Turbine Flame Sensor which responds to ultraviolet optical energy from the flame (200-400 nanometers) and has a loop-powered 4-20mA output representing flame brightness from a very low level. The Sensor has an electrical connection on one side and a fiber optic cable assembly on the opposite side.

VFS2000-K, NED-GEAC-2000-K, or NED-GEAC-2000; -K may be followed by two numbers.

Used with 59-606XXX or 59-621XXX cable assembly (XXX = length)

12. Report Number

Intertek Report: 105316524CRT-002a Issue: 0 Dated: 13-November-2023.

13. Conditions of Certification

(a). Special Conditions of Use

- WARNING – POTENTIAL ELECTROSTATIC CHARGING HAZARD – CLEAN WITH A DAMP CLOTH ONLY

(b). Conditions of Manufacture - Routine Tests

- Dielectric test at 500 V r.m.s. maintained for at least 1 minute without dielectric breakdown occurring between circuits and dead metal.

Alternatively, a test shall be carried out at 1.2 times the test voltage, but maintained for at least 100 ms.

14. Essential Health and Safety Requirements (EHSRs)

The relevant Essential Health and Safety Requirements (EHSRs) affected by this variation have been identified and assessed in Intertek Report: 105316524CRT-002a Issue: 0 Dated: 8-November-2023.

15. Drawings and Documents

Title:	Drawing No.:	Rev. Level:	Date:
Label, Unit	55-8249	3	11/10/2023
Housing Electronics Turbine	1-1183	1	4/26/2023
Connector, 5 Pin Flanged	21-925	1	4/28/2023
O-Ring Seal	29-441	2	9/1/2023
O-Ring Seal	34-300	2	9/1/2023
O-Ring Seal	34-299	2	9/1/2023
Seal, Gasket, Connector	29-444	2	9/1/2023
Cap Housing Turbine	44-169	1	4/26/2023
Turbine Flame Sensor Assembly	60-2964	3	09/05/2023
Electronic Assembly	60-2986	2	6/9/2023
Turbine sensor PCB	3-2967	8	10/27/2023
Top Level Schematic	75-6825	6	9/22/2023
Cable Assembly, Turbine Sensor, EU	59-621	1	8/28/2023
Cable Assembly, Turbine Sensor	59-606	2	8/28/2023
Lens, Plano Convex	46-202	1	4/28/2023
Objective Lens Assembly	61-7447	2	9/01/2023
Fiber Optic Bundle Turbine	61-7492	1	4/26/2023
Adapter, Lens Turbine	63-167	1	4/26/2023
Turbine Sensor Assembly with Window	60-2989	3	7/13/2023
61-7424_Turbine Sensor PCA Agency Parts List	127-3639	6	9/17/2023
NED-GEAC-2000 Turbine Flame Sensor	CU-123	-	9/21/2023
VFS-2000 Turbine Flame Sensor	CU-125	-	9/27/2023

This Certificate is for the exclusive use of Intertek's client and is provided pursuant to the agreement between Intertek and its Client. Intertek's responsibility and liability are limited to the terms and conditions of the agreement. Intertek assumes no liability to any party, other than to the Client in accordance with the agreement, for any loss, expense or damage occasioned by the use of this Certificate. Only the Client is authorized to permit copying or distribution of this Certificate and then only in its entirety. Any use of the Intertek name or one of its marks for the sale or advertisement of the tested material, product or service must first be approved in writing by Intertek. This Certificate is accredited under UKAS schedule 0010.

Intertek Testing & Certification Limited, Cleeve Road, Leatherhead, Surrey, KT22 7SA
Registered No 3272281 Registered Office: Academy Place, 1-9 Brook Street, Brentwood, Essex, CM14 5NQ.