1 # EU - TYPE EXAMINATION CERTIFICATE

2 **Equipment or Protective System Intended for use in Potentially Explosive Atmospheres Directive 2014/34/EU**

3 EU - Type Examination Certificate Number: **Baseefa11ATEX0221X – Issue 7**

3.1 In accordance with Article 41 of Directive 2014/34/EU, EC-Type Examination Certificates referring to 94/9/EC that were in existence prior to the date of application of 2014/34/EU (20 April 2016) may be referenced as if they were issued in accordance with Directive 2014/34/EU. Supplementary Certificates to such EC-Type Examination Certificates, and new issues of such certificates, may continue to bear the original certificate number issued prior to 20 April 2016.

4 Product: **TraceTek TT-FFS Series Discrete Fuel Sensor**

5 Manufacturer: **Chemelex LLC**

6 Address: **899 Broadway Street, CA, 94063-3104 United States of America**

7 This re-issued certificate extends EC Type Examination Certificate No. **Baseefa11ATEX0221X** to apply to product designed and constructed in accordance with the specification set out in the Schedule of the said certificate but having any variations specified in the Schedule attached to this certificate and the documents therein referred to.

8 SGS Fimko Oy, Notified Body number 0598, in accordance with Article 17 of Directive 2014/34/EU of the European Parliament and of the Council, dated 26 February 2014, certifies that this product has been found to comply with the Essential Health and Safety Requirements relating to the design and construction of products intended for use in potentially explosive atmospheres given in Annex II to the Directive.

8.1 The original certificate was issued by SGS Baseefa Ltd (UK Notified Body 1180). It, and any supplements previously issued by SGS Baseefa Ltd have been transferred to the supervision of SGS Fimko Oy (EU Notified Body 0598). The original certificate number is retained.

The examination and test results are recorded in confidential Report No. **See Certificate History.**

9 Compliance with the Essential Health and Safety Requirements has been assured by compliance with:

EN IEC 60079-0:2018 **EN 60079-11:2012**

except in respect of those requirements listed at item 18 of the Schedule.
This certificate issue is for the sole purpose of recording a change to the certificate holder's name/address. A technical review has not been undertaken and the standards remain at the editions listed previously.

10 If the sign "X" is placed after the certificate number, it indicates that the product is subject to the Specific Conditions of Use specified in the schedule to this certificate.

11 This EU - TYPE EXAMINATION CERTIFICATE relates only to the design and construction of the specified product. Further requirements of the Directive apply to the manufacturing process and supply of this product. These are not covered by this certificate.

12 The marking of the product shall include the following:

Ex II 1G **Ex ia IIA T4 Ga (-40°C ≤ Ta ≤ +85°C) (Ui = 28V)**
Ex ia IIC T4 Ga (-40°C ≤ Ta ≤ +85°C) (Ui = 15V)

SGS Fimko Oy Customer Reference No. **0865** Project File No. **25/0111**

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S003 (EN ISO/IEC 17065)

Mikko Välimäki
SGS Fimko Oy

13 # Schedule

14 ## Certificate Number Baseefa11ATEX0221X – Issue 7

15 Description of Product

The TraceTek TT-FFS, TT-FFS-I and TT-FFS-WR Discrete Fuel Sensors are fast acting probes designed to detect hydrocarbon fuel floating on water, spreading on a flat surface or collecting in a sump. The probes ignore water but are capable of detecting a thin film floating on the surface. The probes are available in two lengths for fixed position installations and can be fitted on to a float assembly if the water level is unpredictable.

The TT-FFS, TT-FFS-I and TT-FFS-WR are mounted within orange tubular enclosures; slots in the side of the enclosure allow the passage of the monitored medium to the sensing element. A short integral cable connects the equipment to the monitoring circuitry.

The TT-FFS-WS differs from the TT-FFS and TT-FFS-I models in construction only. The TT-FFS-WS is provided with a single sensing film mounted to the PCB. A slot is provided so that the monitored medium can come into contact with the sensing film and completely surround it.

Input Parameters
U_i = 15V (IIC) or 28V (IIA)
I_i = 300mA
P_i = 1.125W
C_i = 0.24µF
L_i = 0

16 Report Number

See Certificate History.

17 Specific Conditions of Use

1. The enclosure poses a potential electrostatic hazard; clean only with a damp cloth
2. The equipment may not be able to withstand a 500V isolation test between the circuitry and the monitored medium; this should be taken into account during installation.

18 Essential Health and Safety Requirements

In addition to the Essential Health and Safety Requirements (EHSRs) covered by the standards listed at item 9, the following are considered relevant to this product, and conformity is demonstrated in the report:

Clause	Subject
1.2.7	LVD type requirements
1.2.8	Overloading of equipment (protection relays, etc.)
1.4.1	External effects
1.4.2	Aggressive substances, etc.

19 Drawings and Documents

New drawings submitted for this issue of certificate:

None.

Current drawings which remain unaffected by this issue:

Number	Sheet	Issue	Date	Description
1027-0930*	1	J	20-JUN-2022	TT-FFS APPROVAL LABEL-BSF TRACETEK FAST FUEL SENSOR H59112
1027-0931*	1	F	28-JUN-2022	TT-FFS APPROVAL LABEL-BSF TRACETEK FAST FUEL SENSOR H59192 18/05
1027-0932*	1	B	20-JUN-2022	TT-FFS-WR APPROVAL LABEL-BSF TRACETEK FAST FUEL SENSOR H60677
1027-0110	1 to 8	A	18-Oct-2018	TT-FFS-WR-100: A/W & Drill DWG
1027-0210	1 of 1	A	10-Oct-2018	Tracetek TT-FFS-WR-XXX (Tabulated) Schematic
1027-0260	1 to 8	A	18-Oct-2018	TT-FFS-WR-250: A/W & Drill DWG
1027-0310	1 to 2	A	18-Oct-2018	Tracetek TT-FFS-WR-100 Assembly Drawing
1027-0460	1 to 2	A	18-Oct-2018	Tracetek TT-FFS-WR-250 Assembly Drawing
1027-1001	1 of 1	D	15-Oct-2018	Tracetek TT-FFS Final Cable Assembly
1027-1002	1 of 1	D	17-Oct-2018	TT-FFS Assembly and Potting Summary
1027-1005	1 of 1	D	05/05/16	TT-FFS-I Tip Potting Summary
1027-0200	1 of 1	F	05/05/2016	Tracetek TT-FFS-XXX (Tabulated) Schematic

*These drawings are common to BAS21UKEX0508X

All drawings are common to IECEx BAS 11.0111X

20 Certificate History

Certificate No.	Date	Comments
Baseefa11ATEX0221X	21 May 2012	The release of the prime certificate. The associated test and assessment is documented in Test Report No. GB/BAS/ExTR12.0089/00.
Baseefa11ATEX0221X Issue 1	20 November 2014	To permit minor drawing changes not affecting the intrinsic safety of the equipment. To permit minor optional modification to the equipment, the modified equipment will form a new model; The TraceTek TT-FFS-I Discrete Fuel Sensor. The associated test and assessment is documented in Test Report No. GB/BAS/ExTR14.0263/00.
Baseefa11ATEX0221X Issue 2	20 May 2015	To permit the use of alternative potting material for encapsulation and update the filling process of the sensor. The associated test and assessment is documented in Test Report No. GB/BAS/ExTR15.0135/00.
Baseefa11ATEX0221X Issue 3	9 June 2016	To change the Upper Ambient Temperature to 85°C The associated test and assessment is documented in Test Report No. GB/BAS/ExTR16.0075/00. And held in Project file 15/0908
Baseefa11ATEX0221X Issue 4	17 January 2019	To confirm the certificate is now held in the name of nVent Thermal LLC. To update the product marking labels to show the name of nVent Thermal LLC. SGS Baseefa certification report GB/BAS/ExTR18.0123/00 refers.

Certificate No.	Date	Comments
Baseefa11ATEX0221X Issue 5	1 July 2019	To permit the addition of the TraceTek TT-FFS-WR model to the TraceTek TT-FFS Series Discrete Fuel Sensor. New sensor is electronically and functionally identical to previously certified models with the exception of minor constructional changes not affecting certification. The associated test and assessment is documented in Test Report No. GB/BAS/ExTR19.0162/00 and held with Project File 19/0313.
Baseefa11ATEX0221X Issue 6	25 March 2024	This issue of the certificate incorporates previously issued primary & supplementary certificates into one certificate and confirms the current design meets the requirements of EN IEC 60079-0:2018. Certification report GB/BAS/ExTR21.0184/00 refers.
Baseefa11ATEX0221X Issue 7	19 November 2025	The issue of this certificate permits existing information (for example on Certificate Schedule Drawings or label marking) to be updated to show the new name, no other changes may be made to the certified design. A technical review has not been undertaken, and the standards remain at the editions listed previously. Report Number: None Project Number: 25/0111
For drawings applicable to each issue, see original of that issue.		