



# 1 EC TYPE-EXAMINATION CERTIFICATE

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

3 Certificate Number: Sira 00ATEX1165

4 Equipment: 7946 Series UV/IR Flame & Gas Detectors

5 Applicant: Spectrex Inc.

6 Address: Peckman Industrial Park

218 Little Falls Road

Cedar Grove N.J. 07009 USA

- 7 This equipment and any acceptable variation thereto is specified in the schedule to this certificate and the documents therein referred to.
- 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 confidential report number R51A6990A.

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 50014:1997 Amendments A1 & A2

EN 50018:1994 EN 50019:1994

- If the sign 'X' is placed after the certificate number, it indicates that the equipment or protective system 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.
- The marking of the equipment shall include the following:

 $\langle \varepsilon_{\rm x} \rangle_{\rm II 2 C}$ 

EEx de IIB+ $H_2$  T6 Amb. Temp. = -40°C to +55°C EEx de IIB+ $H_2$  T5 Amb. Temp. = -40°C to +70°C

Project Number

51A6990A

Date

04 February 2002

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Sira Certification Service

Rake Lane, Eccleston, Chester, CH4 9JN, England Tel: +44 (0) 1244 670900 Fax: +44 (0) 1244 681330

Email: exhazard@siratc.co.uk

R Cooper /Eng LInstMC

Deputy Chief Executive

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#### **SCHEDULE**

#### EC TYPE-EXAMINATION CERTIFICATE

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### 13 DESCRIPTION OF EQUIPMENT

The 7946 Series UV/IR Flame & Gas Detectors Units comprise a two part aluminium alloy enclosure. This consists of a main housing assembly and a cover assembly secured by four M6  $\times$  1.0 stainless steel cap head bolts.

The main housing assembly incorporates a quartz window, protected by a permanently fixed guard and an optional window cover assembly, and contains the differing detection circuitry that distinguishes the variants within the series.

The cover assembly has two compartments, one of which directly communicates with the free volume of the flameproof housing assembly, the other being an increased safety terminal compartment which contains terminals manufactured by Bartec and component certified as detailed in Certificate No. PTB 99ATEX3117U.

The terminal compartment incorporates a flameproof line bushing manufactured by Bartec and component certified as detailed in Certificate No. PTB 97ATEX1047U that provides separation from the flameproof interior and a lid which is secured by four M5 captive slotted screws.

Cable entry is made through two cable entry points of metric threadform, up to a maximum size M25 situated on one face of the terminal compartment.

### Design options:

Stainless steel as an alternative enclosure material of manufacture;

PG, up to a maximum size PG21 as an alternative cable entry threadform.

## 14 DESCRIPTIVE DOCUMENTS

- 14.1 Drawings specified under certificate Sira 00ATEX1231.
- 14.2 Report No. 51A6990A.
- 15 SPECIAL CONDITIONS FOR SAFE USE (denoted by X after the certificate number)

None.

# 16 ESSENTIAL HEALTH AND SAFETY REQUIREMENTS OF ANNEX II (EHSR'S)

The relevant EHSRs that are not addressed by the standards listed in this certificate have been identified and individually assessed in Report No. 51A6990A.

Date 04 February 2002

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### **SCHEDULE**

### **EC TYPE-EXAMINATION CERTIFICATE**

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- 17 CONDITIONS OF CERTIFICATION
- 17.1 The use of this certificate is subject to the Regulations Applicable to Holders of SCS Certificates.
- 17.2 An electrical strength test of 500 V rms shall be applied between the terminal block and the outer case for at least 60 s and no more than 63 s as required by EN 50019:1994 clause 5.1.
- 17.3 This certificate relies upon the following previously certified products. When they are used as part of he 8306 Series UV, UV-IR Flame Detectors, the key attributes as listed below shall still be maintained by their original certificate.

Description	Certificate No.	Key Attribute
Bartec 07-9102-E06D Line Bushing	PTB 97ATEX1047U	EEx d IIC
Bartec 07-9702-0320/1 Mini-Terminals	PTB 99ATEX3117U	EEx e II

Date 04 February 2002

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## EC TYPE-EXAMINATION CERTIFICATE VARIATION

CERTIFICATE NUMBER Sira 00ATEX1165 Dated 4 February 2002

Latest Issue 9 December 2002

VARIATION NUMBER 1 (ONE) Dated 1 September 2006

# VARIATION TO EQUIPMENT

To permit:

1. The model numbers that are covered by this certificate to be clarified, as listed below:

794 Series UV-IR Flame and Gas Detector. Gas Detector models 200,300 and 400 series. Flame Detector 20/20F-C and 20/20F-C-ST

#### **DESCRIPTIVE DOCUMENTS**

There are no changes to existing documentation.

### ADDITIONAL CONDITIONS OF CERTIFICATION

None.

File No. 51A13638

Report No. R51A13638B

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C Ellaby Certification Officer

Sira Certification Service

Rake Lane, Eccleston, Chester, CH4 9JN, England

Tel: +44 (0) 1244 670900 Fax: +44 (0) 1244 681330 Email: info@siracertification.com Web: www.siracertification.com