



1 **EC TYPE-EXAMINATION CERTIFICATE**

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

3 Certificate Number: Sira 00ATEX1164

4 Equipment: 7806 Series IR, IR³ & CCTV Flame 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.

8 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 R51A6989A.

9 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

10 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.

12 The marking of the equipment shall include the following:




II 2 G

EEx de IIB+H₂ T5 Amb. Temp. -20°C to +55°C

EEx de IIB+H₂ T5 Amb. Temp. -40°C to +70°C

Project Number 51V9536
Date 4 February 2002
Re-issued 9 December 2002
C. Index 18


C Ellaby
Certification Officer

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Sira Certification Service

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SCHEDULE

EC TYPE-EXAMINATION CERTIFICATE

Sira 00ATEX1164

Re-issued 9 December 2002

To permit report number R51A6989A to be replaced by R51A6989B, to allow the correction of minor typographical errors and to include appropriate label drawings with subsequent changes to section 14.

13 DESCRIPTION OF EQUIPMENT

The 7806 Series IR, IR³ & CCTV Flame Detector Units comprise a two part aluminium alloy enclosure. This consists of a main housing assembly and a cover assembly secured by four M6 x 1.0 stainless steel cap head bolts.

The main housing assembly incorporates a sapphire window, protected by a permanently fixed guard plate 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.

able 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 Drawing no: Sheets Rev Date Description

780931	1 of 1	C	16 Oct 02	Label
788931	1 of 1	-	20 Oct 02	Label
7780682	1 of 1	A	06 Nov 01	Label
7788631	1 of 1	-	14 Oct 02	Label

14.2 Report No. R51A6989B

14.3 Certificate number Sira 00ATEX1230 last amended 9 December 2002

15 SPECIAL CONDITIONS FOR SAFE USE (denoted by X after the certificate number)

None

16 ESSENTIAL HEALTH AND SAFETY REQUIREMENTS OF ANNEX II (EHSRs)

The relevant EHSRs that are not addressed by the standards listed in this certificate have been identified and individually assessed in Report No. R51A6989B.

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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 the 7806 Series IR, IR³ & CCTV Flame Detector Units, 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

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