



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 & R51A13638B.

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 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 51A13638
Date 4 February 2002
Latest Issue 1 September 2006
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Certification Officer

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SCHEDULE

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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.

Re-issued 1 September 2006 to recognise the changes described in report number R51A13638B.

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

Available model numbers

20/20CTINE-C	-	CCTV NTSC IR3 "de" Version Flame Detector, Aluminium Housing
20/20CTIPE-C	-	CCTV PAL IR3 "de" Version, Flame Detector Aluminium Housing
20/20CTINE-C-ST	-	CCTV NTSC IR3 "de" Version Flame Detector, St.St. Housing
20/20CTIPE-C-ST	-	CCTV PAL IR3 "de" Version Flame Detector, St.St. Housing
20/20HE-C	-	Hydrogen Flame Detector "de" Version, Aluminium Housing
20/20HE-C-ST	-	Hydrogen Flame Detector "de" Version, St.St. Housing
20/20SIE-C	-	IR3 "de" Version Flame Detector, Aluminium Housing
20/20SIE-C-ST	-	IR3 "de" Version Flame Detector, St.St. Housing
20/20FIE-C	-	Fast IR3 "de" Version Flame Detector, Aluminium Housing
20/20FIE-C-ST	-	Fast IR3 "de" Version Flame Detector, St.St. Housing
20/20RE-C	-	Single IR "de" Version, Flame Detector Aluminium Housing
20/20RE-C-ST	-	Single IR "de" Version Flame Detector, St.St. Housing
20/20IE-C	-	IR3 "de" Version Flame Detector, Aluminium Housing
20/20IE-C-ST	-	IR3 "de" Version Flame Detector, St.St. Housing
20/20SHE-C	-	Hydrogen Flame Detector "de" Version, Aluminium Housing
20/20SHE-C-ST	-	Hydrogen Flame Detector "de" Version, St.St. Housing

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14 DESCRIPTIVE DOCUMENTS

14.1	Drawing No.	Sheet	Rev.	Date (Sira stamp)	Description
	780931	1 of 1	C	16 Oct 02	Label
	788931	1 of 1	-	20 Oct 02	Label
	7780681	1 of 1	A	06 Nov 01	Label
	7788631	1 of 1	-	14 Oct 02	Label

14.2 Report number R51A6989A & R51A13638B.

14.3 Certificate number Sira 00ATEX1230 last amended 28 April 2006.

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 number R51A6989A & R51A13638B.

17 CONDITIONS OF CERTIFICATION

17.1 The use of this certificate is subject to the Regulations Applicable to Holders of Sira Certificates.

17.2 Holders of EC type-examination certificates are required to comply with the production control requirements defined in Article 8 of directive 94/9/EC.

17.3 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.

17.4 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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