



1 **EC TYPE-EXAMINATION CERTIFICATE**

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

3 Certificate Number: Sira 04ATEX2044

4 Equipment: Converter Harness Model No. 799140

5 Applicant: Spectrex Inc.

6 Address: 218 Little Falls Road  
Cedar Grove  
NJ 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 R52V11523A.

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 plus Amendments 1 and 2  
EN 50020:2002  
EN 50281-1-1:1998

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 GD T135°C  
EEx ia IIC T4 (T<sub>a</sub> = -20°C to +50°C)

Project Number 52V11523  
Date 15 September 2005  
C. Index 15

C Ellaby  
Certification Officer

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**SCHEDULE**

**EC TYPE-EXAMINATION CERTIFICATE**

Sira 04ATEX2044

13 **DESCRIPTION OF EQUIPMENT**

The Converter Harness Model No. 799140 is designed to enable the interconnection of a suitably certified gas and flame detector with an intrinsically safe output to suitably certified intrinsically safe handheld data retrieval devices, e.g. the Diagnostic Instruments DI-225 Hand Held Data Collector. It comprises a printed circuit board (PCB), encapsulated within a metal enclosure, and two integral cables terminated with connectors that are detailed below together with their associated safety parameters:

**9 Way D Connector to hand held device**

**Pins 5, 2, 8 and 3**

$U_i$  = 14.3 V  
 $I_i$  = 31 mA  
 $P_i$  = 43 mW  
 $C_i$  = 4.42  $\mu$ F @ 6.51 V  
 $L_i$  = 0

**Pins 2 and 8 wrt 5**

$U_o$  = 6.51 V  
 $I_o$  = 258 mA  
 $P_o$  = 0.42 W

**Pin 3 wrt 5**

$U_o$  = 28.6 V  
 $I_o$  = 75 mA  
 $P_o$  = 0.42 W

**Round 6 pin Connector to Gas detector**

$U_i$  = 6.51 V  
 $I_i$  = 258 mA  
 $P_i$  = 0.42 W  
 $U_o$  = 6.51 V  
 $I_o$  = 31 mA  
 $P_o$  = 43 mW  
 $C_i$  = 4.42  $\mu$ F @ 6.51 V  
 $L_i$  = 0

14 **DESCRIPTIVE DOCUMENTS**

Drawing No.	Sheet	Rev.	Date	Title
799136	1 of 1	-	(Sira stamp) 14 Sep 05	Label

14.2 Report No. R52V11523A

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. R52V11523A.

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 This product shall be uniquely marked with the label identified in section 14.1 of this certificate.

Date 15 September 2005

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