



1 **EC TYPE-EXAMINATION CERTIFICATE**

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

3 Certificate Number: **Sira 11ATEX2153X** Issue: **0**

4 Equipment: **Type 50 Head Series of Ex certified assemblies**

5 Applicant: **H and B Sensors Ltd**

6 Address: **Odyssey House  
Durban Rd.  
Bognor Regis  
West Sussex PO22 9RH  
UK**

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 the confidential reports listed in Section 14.2.

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 60079-0:2006      EN 60079-11:2007      EN 60079-26:2007      EN 61241-11:2006  
EN 60079-0:2009 (used for guidance in respect of marking)

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 1 GD  
Ex ia IIC T4 Ga  
Ex iaD 20 T135°C Da

D R Stubbings BA MIET  
Certification Manager

Project Number 24078

This certificate and its schedules may only be reproduced in its entirety and without change.



**SCHEDULE**

**EC TYPE-EXAMINATION CERTIFICATE**

Sira 11ATEX2153X  
Issue 0

**13 DESCRIPTION OF EQUIPMENT**

Each Type 50 Head Series assembly comprises a metal enclosure housing a certified temperature transmitter and an optional indicator with a sensor, or terminal blocks and a sensor. The sensor is typically an RTD or thermocouple classed as simple apparatus. An assembly is supplied by a certified intrinsically safe barrier with output parameters not exceeding  $U_o=28V$ ,  $I_o=100mA$  and  $P_o=700mW$ .

The certified transmitters and indicator are as follows:-

Manufacturer	Transmitter/Indicator	Certificate number
Siemens	Sitrans TH400	KEMA 06ATEX0264
PR Electronics A/S	2 wire programmable Transmitter Type 5331B3B, 5331C3B, 5331D3B, 5334B3B	KEMA 06ATEX0062
PR Electronics A/S	2 wire Transmitter with HART protocol Type 5335B, 5335C, 5335D	KEMA 03ATEX1537
PR Electronics A/S	2 wire programmable Transmitter Type 5333B, 5333C, 5333D	KEMA 03ATEX1535
Baumer A/S	Temperature transmitter Type 2202, 2203, 2204	TUV 08ATEX364662
Status Instruments	DM700X/I, DM700HM/XI, HBS160001X Loop powered digital process indicator	TRL05ATEX21087X
Status Instruments	Loop powered Temperature Transmitters TTC200X, TTR200X	TRAC09ATEX11232X
WIKA Alexander Wiegand SE & Co. KG	DIH**-B Digital Indicator	BVS 10ATEXE016X

**14 DESCRIPTIVE DOCUMENTS**

**14.1 Drawings**

Refer to Certificate Annexe.

**14.2 Associated Sira Reports and Certificate History**

Issue	Date	Report number	Comment
0	07 June 2011	R24078A/00	The release of the prime certificate.

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

15.1 The conditions applied to the transmitter and indicator certificates listed shall also be applied to this certificate.

15.2 Where the enclosure material is an alloy that may exceed the permitted aluminium, magnesium, titanium and zirconium content the equipment shall be installed such that the protection from impact and abrasion is afforded. Regular checks shall be carried out for signs of damage to the exterior finish and the equipment replaced should damage be apparent.

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**Sira Certification Service**

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**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 the reports listed in Section 14.2.

**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 All of the assemblies shall meet 500V isolation requirements between circuits and the enclosure.

# Certificate Annexe

Certificate Number: Sira 11ATEX2153X  
Equipment: Type 50 Head Series of Ex certified assemblies  
Applicant: H and B Sensors Ltd

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## Issue 0

Drawing	Sheets	Rev	Date (Sira stamp)	Title
HBS/0/01191	1 of 1	A	24 May 11	Series 50 Head Label
HBS/13/6967	1 of 1	P	24 May 11	System diagram
HBS/13/7283	1 of 1	A	24 May 11	Head 50 Tx ASS'Y
D33	1 of 1	A	24 May 11	Typical assembly
D34	1 of 1	A	24 May 11	Sample Exia assembly
D35	1 of 1	A	24 May 11	Sample Exia assembly

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