



1 **EC TYPE-EXAMINATION CERTIFICATE**

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

3 Certificate Number: Sira 03ATEX2183

4 Equipment: Hyvision Switchbox Models 2-GC and 2-P+F

5 Applicant: Emerson Process Management

6 Address: Valve Automation Division
Asveldweg 11
7556 BR Hengelo
The Netherlands

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 numbers R52A9967A, R53A10788A, V52V12415A and R51A13643A.

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 (including Amendments A1 to A2)

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 G D

EEx ib IIC T6 (Ta = -20°C to +60°C)

EEx ib IIC T4 (Ta = -20°C to +85°C)

D R Stubbings BA MIEE
Certification Manager

Project Number 51A13643
Date 12 June 2003
Latest issue 28 March 2006
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This certificate and its schedules may only be reproduced in its entirety and without change

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



SCHEDULE

EC TYPE-EXAMINATION CERTIFICATE

Sira 03ATEX2183

Re-issued 9 November 2004 to incorporate variation 1 dated 13 February 2004 and to recognise the change of ownership detailed in report number V52V12415A.

Re-issued 25 October 2005 to introduce the changes described in report number R51A13643A.

Re-issued 28 March 2006 to correct drawing revision number.

13 DESCRIPTION OF EQUIPMENT

The Hyvision switchbox comprises a central, stainless steel driveshaft and two limit switches, which detect the angular position of the shaft. The enclosure is manufactured from a non-conducting plastic material ('Zytel') and incorporates a polycarbonate dome to allow visual indication of shaft position. The equipment has six terminals, three for each of the two limit switches, and has the following safety description:

	Switch 1	Switch 2	
U _i	16 V	16 V	The two switches shall be installed as separate intrinsically safe circuits.
I _i	25 mA	25 mA	
P _i	64 mW	64 mW	
C _i	40 nF	40 nF	
L _i	50 μH	50 μH	

14 DESCRIPTIVE DOCUMENTS

14.1	Drawing No.	Sheet	Rev.	Date	Title
	ATHI0001	1 of 1	D	05 Oct 05	Label
	ATHI0101	1 of 1	B	05 Oct 05	General arrangement

14.2 Report numbers R52A9967A, R53A10788A, V52V12415A and R51A13643A

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 numbers R52A9967A, R53A10788A, V52V12415A and R51A13643A.

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 certificate relies on the following previously-certified product. When used as part of the Hyvision Switchbox, the key attributes listed in the table below shall still be maintained by the original certificate.

Product	Certificate no.	Key attributes
Pepperl & Fuchs Type NJ2-V3N Inductive Switch	PTB 00ATEX2032X	EEx ia IIC T6 (Ta = -20°C to +66°C)
		EEx ia IIC T4 (Ta = -20°C to +100°C)
		Ci = 40 nF Li = 50 μH

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