



1 **EC TYPE-EXAMINATION CERTIFICATE**

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

3 Certificate Number: Sira 03ATEX1182

4 Equipment: Safevision Switch Box
BettiSwitch Switch Box

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 R51A9966A, R51A11540A, R51A12307A and R51A15043A.

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 to A2)

EN 50018:2000 (amendment A1)

EN50281-1-1:1998 (amendment A1)

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 d IIB T6 Tamb -20°C to +55°C

EEx d IIB T4 Tamb -20°C to +80°C

Project Number 51A15043
Date 10 November 2003
Latest issue 27 April 2006
C. Index 13

C. Ellaby
Certification Officer



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 03ATEX1182

Re-issued 16 November 2005 to introduce the changes described in report number R51A12307A and to incorporate Variation 1 dated 7 June 2004.

Re-issued 27 April 2006 to introduce the changes described in report number R51A15043A.

13 DESCRIPTION OF EQUIPMENT

The Switch Box is a valve position indicator. It has a sand cast, aluminium alloy construction and consists of a base and lid that are secured together by 8 fixing screws. A polycarbonate, visual indicator is fastened to the lid by a fixing screw. The base has two, three or four M20 x 1.5 – 6H, or 1/2" or 3/4" NPT cable entries that are used with appropriate, ATEX certified, cable glands thus allowing the equipment to be connected to an external power source; unused cable entries are closed off with ATEX certified, blanking devices. A drive shaft passing through bearings within the base and lid operates internal switches; it also rotates the position indicator within the indicator cover to show the status of the valve.

Design Options

- Alternative internal switches:

Model	Description	Maximum rating		Standard/option
		Voltage	Current	
2-V3	V3 contact switches	250 V AC	5 A	Standard
3-V3	V3 contact switches	250 V AC	5 A	Option
4-V3	V3 contact switches	250 V AC	5 A	Option
2-Imax	Magnetic reed switches	24 V DC	2 A	Option
3-Imax	Magnetic reed switches	24 V DC	2 A	Option
4-Imax	Magnetic reed switches	24 V DC	2 A	Option
2-V3 I2	2 wire inductive switches	16 V DC	76 mA	Option
3-V3 I2	2 wire inductive switches	16 V DC	76 mA	Option
4-V3 I2	2 wire inductive switches	16 V DC	76 mA	Option
2-V3 I3	3 wire inductive switches	30 V DC	250 mA	Option
3-V3 I3	3 wire inductive switches	30 V DC	250 mA	Option
4-V3 I3	3 wire inductive switches	30 V DC	250 mA	Option

14 DESCRIPTIVE DOCUMENTS

14.1	Drawing no.	Sheet	Rev.	Date	Description
				(Sira stamp)	
	ATSA0004	1 of 1	A	04 Oct 03	General arrangement
	ATSA0005	1 of 1	D	26 Apr 06	General arrangement sectional drawing & B.O.M.
	ATSA0052	1 of 1	B	07 Nov 05	2 switch variants and B.O.M.
	ATSA0053	1 of 1	A	07 Nov 05	3 switch variants and B.O.M.
	ATSA0054	1 of 1	A	07 Nov 05	4 switch variants and B.O.M.
	ATSA0103	1 of 1	D	26 Apr 06	Safevision label details
	ATSA0105	1 of 1	B	26 Apr 06	Bettiswitch label details
	ATSA0104	1 of 1	C	07 Nov 05	Standards compliance detail e.g. FLP

Date 10 November 2003

Latest issue 27 April 2006

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 03ATEX1182

- 14.2 Report numbers R51A9966A, R51A11540A, R51A12307A and R51A15043A
- 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 R51A9966A, R51A11540A, R51A12307A and R51A15043A.
- 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.

Date 10 November 2003

Latest issue 27 April 2006

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