



1 **EC TYPE-EXAMINATION CERTIFICATE**

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

3 Certificate Number: Sira 02ATEX2123X

4 Equipment: I/P Converter Type 122

5 Applicant: IMI Watson Smith Limited

6 Address: Cross Chancellor St  
Leeds  
LS6 2RT  
England

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 R52A8700A.

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  
EN 50020:2002  
EN 50284:1999

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 1G

EEx ia IIC T4 ( $P_i = 1.1 \text{ W}$ ,  $T_a = -40^\circ\text{C}$  to  $+80^\circ\text{C}$ )

EEx ia IIC T6 ( $P_i = 0.33 \text{ W}$ ,  $T_a = -40^\circ\text{C}$  to  $+55^\circ\text{C}$ )

M D Shearman  
Certification Manager

Project Number 52A8700  
Date 6 November 2002  
C. Index 12

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: exhazard@siratc.co.uk

Sira Certification Service is a service of Sira Test & Certification Ltd



## SCHEDULE

### EC TYPE-EXAMINATION CERTIFICATE

Sira 02ATEX2123X

#### 13 DESCRIPTION OF EQUIPMENT

The 122 I/P Converter comprises a single printed circuit board mounted on an electro-magnetic coil assembly. A five-sided cover fits over the end of the assembly. A two-way connector is fitted to the circuit board for external connections. As an alternative to the two-way connector, the apparatus is fitted with a flying lead. The whole assembly is then mounted into a loosely-specified enclosure by the end-user.

The I/P Converter has two safety descriptions:

	Temperature class T4	Temperature class T6
$U_i$	30 V	30 V
$I_i$	110 mA	110 mA
$P_i$	1.1 W	0.33 W
$C_i$	0	0
$L_i$	0	0

#### 14 DESCRIPTIVE DOCUMENTS

##### 14.1 Drawing Rev. Sheet Date Title

94-140	I	1 of 1	25 Sep 02	Type 122 I/P I.S Electrical Details
96-062	A	1 of 1	11 Apr 96	Type 120 I.S. Coil Detail
96-078	A	1 of 1	25 Apr 96	Type 120 CENELEC I.S. Optional Base Details
96-079	B	1 of 1	27 Feb 02	Type 120 Module I.S. Mechanical Detail (Sira)
96-105	C	1 of 1	27 Sep 02	Type 122 Watson Smith I.S. Label (Certification – Sira)
96-186	B	1 of 1	25 Sep 02	Type E5-IS (PMV) alternative terminal connections

14.2 Report No. R52A8700A

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

15.1 The I/P Converter shall be installed in an enclosure that provides a minimum degree of protection of IP54. If the enclosure material is manufactured from alloys containing significant quantities of zirconium or light metals (e.g. aluminium, magnesium, titanium), then, in rare cases, ignition sources due to impact and friction sparks could occur. This shall be considered when the equipment is installed in locations that specifically require group II, category 1G equipment.

15.2 When installed, the electrical equipment in the hazardous area must be capable of withstanding a test of 500 Vrms to earth or frame for 1 minute in accordance with clause 10.6 of EN 50020:2002.

#### 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. R52A8700A.

#### 17 CONDITIONS OF CERTIFICATION

17.1 The use of this certificate is subject to the Regulations Applicable to Holders of SCS 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 6 November 2002

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: exhazard@siratc.co.uk

Sira Certification Service is a service of Sira Test & Certification Ltd