



1 EC TYPE-EXAMINATION CERTIFICATE

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

3 Certificate Number: Sira 01ATEX1181X

4 Equipment: Series 12 Encoder Housing

5 Applicant: Hohner Automation Ltd

6 Address: Units 14-16
Whitegate Industrial Estate
Wrexham LL13 8UG
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 confidential report number R51A7423A.

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 A1 & A2
EN 50018:2000
EN 50281-1-1:1998

In addition, the following documents were used for reference:

EN 13463-1:2001
prEN 13463-5:2001

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
Speed Range 0-1500 rpm
EEx d IIC T6 Ta -20°C to +60°C
Speed Range 0-3600 rpm
EEx d IIC T4 Ta -20°C to +60°C



I M2
Speed Range 0-3600 rpm
EEx d I Ta -20°C to +60°C

M D Shearman
Certification Manager

Project Number 51A7423
Date 28 May 2003
C. Index 13

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



SCHEDULE

EC TYPE-EXAMINATION CERTIFICATE

Sira 01ATEX1181X

13 DESCRIPTION OF EQUIPMENT

The Series 12 Encoder Housing is manufactured from either 303 or 316 stainless steel. It is intended to provide data on angular movement of the shaft to which it is mounted at speeds up to 3600 rpm. The enclosure is a cylindrical two-part enclosure, with a diameter of 90 mm and a length of 85 mm, that has a hollow central shaft passing through it by means of roller element bearings. One half is designated the flange assembly with the other designated the housing assembly. The two halves are secured together by 3 x M4 socket head bolts located on the housing assembly. The housing assembly has three lugs, containing through holes, spaced 120° apart around its circumference and a square raised boss with an M16 cable entry point and facility for the connection of an earthing or equipotential bonding conductor. The flange assembly contains an FEP & PFA encapsulated 'O' ring located within a groove for environmental protection. The equipment operates by detecting light from an LED source shining through a radially graduated disc that rotates with the shaft. Connection is made to external circuitry via a permanently connected cable and a suitably certified flameproof cable gland.

Design options

Alternative metallic materials of manufacture: 2011 Aluminium - Not Group I.
Alternative O ring materials of manufacture: Nitrile rubber and EPDM.

14 DESCRIPTIVE DOCUMENTS

14.1	Drawing No.	Rev.	Sheet	Date	Title
	12LB-001-01	1 of 1	-	07 Apr 03	12 Series EEx d Label (Multiple T and Ta Ranges)
	GA-12-EEXD-RCABLE-01	1 of 1	-	06 May 03	12 Series Radial/Cable General Assembly
	12-OT-TEX-01	1 of 4	-	21 May 03	12 Series Top Outer
	12-OT-BEX-01	2 of 4	-	21 May 03	12 Series EEx d Bottom Outer
	12-HS-XXX-01	3 of 4	-	07 May 03	12 Series EEx d Shaft
	12-CK-T01-01	4 of 4	-	07 May 03	12 Series EEx d Top Cheek
14.2	Report No. R51A7423A				

Date 28 May 2003

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



SCHEDULE

EC TYPE-EXAMINATION CERTIFICATE

Sira 01ATEX1181X

- 15 **SPECIAL CONDITIONS FOR SAFE USE** (denoted by X after the certificate number)
- 15.1 When the equipment is utilised in Group I locations, it may only be mounted where the mechanical risk to the fasteners is low.
- 15.2 The equipment shall be installed such that the supply cable is protected from mechanical damage. The cable shall not be subjected to tension or torque. If the cable is to be terminated within an explosive atmosphere, then appropriate protection of the free ends of the cable shall be provided.
- 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. R51A7423A.
- 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 28 May 2003

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