



IECEX Certificate of Conformity

INTERNATIONAL ELECTROTECHNICAL COMMISSION IEC Certification Scheme for Explosive Atmospheres

for rules and details of the IECEx Scheme visit www.iecex.com

Certificate No.: **IECEX SIR 06.0060X** issue No.:1

Status: **Current**

Certificate history:
Issue No. 1 (2015-2-24)
Issue No. 0 (2006-9-15)

Date of Issue: **2015-02-24** Page 1 of 4

Applicant: **Hohner Automation**
Units 14-16
Whitegate Industrial Estate
Wrexham LL13 8UG
United Kingdom

Electrical Apparatus: **Incremental Shaft Encoder**
Optional accessory:


Type of Protection: **Intrinsically safe**

Marking: **Ex ia I Ma**
Ex ia IIB T4 Ga
(Ta = -20°C to +60°C)

Approved for issue on behalf of the IECEx Certification Body: **C Ellaby**

Position: **Deputy Certification Manager**

Signature:
(for printed version)



2015-02-24

Date:

1. This certificate and schedule may only be reproduced in full.
2. This certificate is not transferable and remains the property of the issuing body.
3. The Status and authenticity of this certificate may be verified by visiting the [Official IECEx Website](http://www.iecex.com).

Certificate issued by:

SIRA Certification Service
Rake Lane
Eccleston
Chester
CH4 9JN
United Kingdom

sira
CERTIFICATION





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Manufacturer: **Hohner Automation Limited**
Units 14-16
Whitegate Industrial Estate
Wrexham LL13 8UG
United Kingdom

Additional Manufacturing location
(s):

This certificate is issued as verification that a sample(s), representative of production, was assessed and tested and found to comply with the IEC Standard list below and that the manufacturer's quality system, relating to the Ex products covered by this certificate, was assessed and found to comply with the IECEx Quality system requirements. This certificate is granted subject to the conditions as set out in IECEx Scheme Rules, IECEx 02 and Operational Documents as amended.

STANDARDS:

The electrical apparatus and any acceptable variations to it specified in the schedule of this certificate and the identified documents, was found to comply with the following standards:

IEC 60079-0 : 2000 Edition: 3.1	Electrical apparatus for explosive gas atmospheres - Part 0: General requirements
IEC 60079-11 : 1999 Edition: 4	Electrical apparatus for explosive gas atmospheres - Part 11: Intrinsic safety 'i'
IEC 60079-26 : 2004 Edition: 1	Electrical apparatus for explosive gas atmospheres - Part 26: Construction, test and marking of Group II Zone 0 electrical apparatus

*This Certificate **does not** indicate compliance with electrical safety and performance requirements other than those expressly included in the Standards listed above.*

TEST & ASSESSMENT REPORTS:

A sample(s) of the equipment listed has successfully met the examination and test requirements as recorded in

Test Report:

[GB/SIR/ExTR06.0084/00](#)

[GB/SIR/ExTR15.0062/00](#)

Quality Assessment Report:

[GB/SIR/QAR06.0038/00](#)



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Schedule

EQUIPMENT:

Equipment and systems covered by this certificate are as follows:

The Incremental Shaft Encoder is an optical reading system that converts light interference patterns from a rotating disc into a digital voltage output. The disc rotates between two circuit boards.

The encoder circuit is designed to be housed in a range of metallic or plastic enclosures with various dimensions. Only metallic enclosures are permitted for mining applications. An encoder is fitted with one of two slightly different circuits.

The equipment has the following safety description:

$U_i = 28 \text{ V}$

$I_i = 100 \text{ mA}$

$P_i = 0.7 \text{ W}$

$C_i = 0.58 \text{ mF}$

$L_i = 0$

See attachment for associated Encoder references.

The Manufacturer shall note the Conditions of Manufacture detailed on associated drawings and ExTR.

CONDITIONS OF CERTIFICATION: YES as shown below:

1. Some versions of the equipment are manufactured with an enclosure made from plastic materials. Under certain extreme circumstances, such parts may generate an ignition-capable level of electrostatic charge. Therefore, when used for applications that specifically require group II, category 1 equipment, it shall not be installed in a location where the external conditions are conducive to the build-up of electrostatic charge on such surfaces. Additionally, the equipment shall only be cleaned with a damp cloth.



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DETAILS OF CERTIFICATE CHANGES (for issues 1 and above):

Issue 1 – this Issue introduced the following changes:	
1.	<p>The introduction of an NAMFPX Series version model number SPNF-XXX that has a duplication of the approved circuit to form a dual circuit version. For clarity, this version is referred to as Build Option 2 and the original version is Build Option 1.</p> <p>Build option 2 – One or Two Circuits: The Incremental Shaft Encoder is an optical reading system that converts light interference patterns from a rotating disc into a digital voltage output. The encoder may contain one or two circuits that are designed to be housed specifically in the NAMFPX series range of enclosures. The encoder is fitted with one of two slightly different circuits. Each circuit of the dual circuit version has the same safety description as the single circuit version (Build Option One). The part numbering system is as follows:</p> <p>SPNF-XXX: where SP = Special Product, NF = NAMFPX Series, XXX = Unique Identifier</p>
2.	<p>Using IEC 60079-0:2007 for guidance, appropriate EPL information was allowed to be applied in the marking.</p>
3.	<p>A Condition of Certification dealing with the build up of electrostatic charge was recognised, this was done to bring this certificate into line with other certification associated with these products; as a consequence, an 'X' suffix was added to the certificate number.</p>