



# 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](http://www.iecex.com)

Certificate No.: IECEx SIR 05.0059 issue No.:2

Status: Current

Certificate history:  
Issue No. 2 (2010-5-26)  
Issue No. 1 (2009-12-3)  
Issue No. 0 (2006-8-8)

Date of Issue: 2010-05-26 Page 1 of 4

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

Electrical Apparatus: **R and M Series Optical Shaft Encoder**  
Optional accessory:


Type of Protection: **Flameproof**

Marking: **Ex d IIC T5 (Ta -20°C to +60°C) or (Ta -40°C to +60°C)**  
**Ex d I (Ta -20°C to +60°C) or (Ta -40°C to +60°C)**  
**Ex tD A21 T92°C (Ta -20°C to +60°C) or (Ta -40°C to +60°C)**

Approved for issue on behalf of the IECEx Certification Body: D R Stubbings BA MIET

Position: Certification Manager

Signature:  
(for printed version)

  
2010-05-26

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**  
Units 14-16 Whitegate Industrial Estate  
Wrexham  
LL13 8UG  
**United Kingdom**

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:

<b>IEC 60079-0 : 2004</b> Edition: 4.0	Electrical apparatus for explosive gas atmospheres - Part 0: General requirements
<b>IEC 60079-1 : 2003</b> Edition: 5	Electrical apparatus for explosive gas atmospheres - Part 1: Flameproof enclosure 'd'
<b>IEC 61241-0 : 2004</b> Edition: 1	Electrical apparatus for use in the presence of combustible dust - Part 0: General requirements
<b>IEC 61241-1 : 2004</b> Edition: 1	Electrical apparatus for use in the presence of combustible dust - Part 1: Protection by enclosures "tD"

*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*

IECEX ATR:	File Reference:
GB/SIR/ExTR06.0075/00	R51L14237B
GB/SIR/ExTR09.0182/00	GB/SIR/QAR06.0038/00
GB/SIR/ExTR10.0107/00	



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## Schedule

### EQUIPMENT:

*Equipment and systems covered by this certificate are as follows:*

The R and M Series Optical Shaft Encoders are manufactured from stainless steel; they are cylindrical in shape and comprise a main body and a cover. The cover is secured to the main body by five, M3, socket head cap screws. The main body contains a PCB assembly and has an M16 threaded hole on its sidewall, towards the base, that will accommodate a suitable cable entry device. The cover contains a shaft and bearing assembly to facilitate the equipment's measuring function.

#### Design options

- \* The Optical Shaft Encoders may be manufactured from aluminium (not Group I).
- \* The cable entry point may be in the base of the main body.

CONDITIONS OF CERTIFICATION: NO



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

<b>Issue 1 – this Issue introduced the following changes:</b>	
1.	The title of the equipment and the description were modified to include the M Series Encoder that was previously omitted in error.
2.	The products were allowed to be used in the presence of combustible dust; the marking of the equipment now shows the following information: Ex tD A21 T92°C (Ta -20°C to +60°C) or (Ta -40°C to +60°C) In consequence, the list of assessment standards now includes: IEC 61241-0:2004 Ed 1 IEC 61241-1:2004 Ed 1
<b>Issue 2 – this Issue introduced the following changes</b>	
1.	The reduction of the outside diameter of the enclosure