



# 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 BAS 12.0048X** issue No.: **0** Certificate history:

Status: **Current**

Date of Issue: **2012-04-23** Page 1 of 3

Applicant: **ABB Limited**  
Oldends Lane  
Stonehouse  
Gloucestershire  
GL10 3TA  
United Kingdom

Electrical Apparatus: **AZ30 Oxygen Probe**  
Optional accessory:

Type of Protection: **Flameproof & Dust Protection by Enclosure**

Marking: **Ex d IIB+H<sub>2</sub> T4 Gb (Ta -20°C to +70°C)**  
**Ex tb IIIC T135°C Db (Ta -20°C to +70°C) IP66**

Approved for issue on behalf of the IECEx  
Certification Body:

*RS* R S Sinclair *MPOWNEY*

Position: General Manager

Signature:  
(for printed version)

*Mpowney*  
\_\_\_\_\_  
23/4/12

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.

Certificate issued by:

**Baseefa**  
Rockhead Business Park  
Staden Lane  
Buxton  
Derbyshire  
SK17 9RZ  
United Kingdom





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Manufacturer: **ABB Limited**  
Oldends Lane  
Stonehouse  
Gloucestershire  
GL10 3TA  
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 : 2011</b> Edition: 6.0	Explosive atmospheres - Part 0: General requirements
<b>IEC 60079-1 : 2007-04</b> Edition: 6	Explosive atmospheres - Part 1: Equipment protection by flameproof enclosures "d"
<b>IEC 60079-31 : 2008</b> Edition: 1	Explosive atmospheres – Part 31: Equipment dust ignition protection by enclosure 't'

*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/BAS/ExTR12.0061/00

Quality Assessment Report:  
GB/BAS/QAR08.0001/01



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## Schedule

### EQUIPMENT:

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

The AZ30 Oxygen Probe comprises a stainless steel tubular assembly of varying lengths intended to be inserted between 0.5m and 2.0m into a flue or similar detection zone. A mounting flange is welded to the probe tube. At the inserted end of the probe tube is a stainless steel sinter assembly to permit the ingress of the sample gas to the detection cell.

At the protruding end is a cylindrical terminal/control housing with a threaded cover containing terminals together and optional flow control devices together with associated pipework for calibration and reference gas/air supplies. The reference gas/air supplies optionally enter the enclosure via ports fitted with sintered metal elements at the rear of the terminal enclosure.

A cable entry boss is provided on the side of the enclosure to facilitate the connection of suitably certified cable entry devices via an insert threaded M20 or M25, or alternatively 1/2 NPT or 3/4 NPT.

Cable entry holes are provided as specified on the certified drawings for the accommodation of flameproof cable entry devices, with or without the interposition of a flameproof thread adapter. Unused entries are to be fitted with certified flameproof stopping plugs.

The cable entry devices, thread adapters and stopping plugs shall be suitable for the equipment, the cable and the conditions of use and shall be certified as Ex Equipment and not an Ex Component.

### CONDITIONS OF CERTIFICATION: YES as shown below:

1. This apparatus is intended for use in atmospheres at, or below, normal pressures and oxygen levels, i.e. no greater than 1.1 bar and 21% respectively.
2. Some flamepath gaps are specified tighter than those permitted by Table 2 of IEC 60079-1. The manufacturers instructions are to be consulted for information on these dimensions if required for inspection and/or maintenance
3. For replacement purposes the fasteners are to be stainless steel grade A2/A4-70 or stronger
4. When used in dust atmospheres the cable entries shall be sealed in accordance with IEC 60079-14 to maintain the IP66 rating