# 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 UL 07.0009X | issue No.:0 | Certificate history: |
| Status: | **Current** | | |
| Date of Issue: | **2007-10-04** | Page 1 of 3 | |

Applicant: **Dräger Safety AG & Co. KGaA**
Revalstrasse 1
D-23560 Lübeck
**Germany**

Electrical Apparatus: **Gas Sensor Type IDS 01xx**
*Optional accessory:*

Type of Protection: **d**

Marking: **IECEx UL 07.0009X**
**Ex d IIC T6/T4**
**T6: -40°C ≤ Tamb ≤ +40°C**
**T4: -40°C ≤ Tamb ≤ +80°C**

*Approved for issue on behalf of the IECEx Certification Body:* Paul T. Kelly

*Position:* Operations Manager

*Signature:*
*(for printed version)*

*Date:* 2007-10-04

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:

**Underwriters Laboratories Inc (UL)**
**333 Pfingsten Road**
**Northbrook IL 60062-2096**
**United States of America**

Working for a safer world

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Manufacturer: **Dräger Safety AG & Co. KGaA**
Revalstrasse 1
D-23560 Lübeck
**Germany**

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 manufacture'rs 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 : 2004**<br>Edition: 4.0 | Electrical apparatus for explosive gas atmospheres - Part 0: General requirements |
| **IEC 60079-1 : 2003**<br>Edition: 5 | Electrical apparatus for explosive gas atmospheres - Part 1: Flameproof enclosure 'd' |

*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:

US/UL/ExTR07.0014/00

Quality Assessment Report:
DE/BVS/QAR06.0001/02

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**Schedule**

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

Type IDS 010x and IDS 011x gas sensors:

The Type IDS 01xx stationary infrared gas sensor is intended for continuous detection of combustible or non-combustible gases and vapors. The sensor is not for use in oxygen-enriched atmospheres. The gas sensor provides a 4 to 20 mA analog output signal that is proportional to the measured gas concentration and an additional digital output. The sensor assembly consists of a stainless steel enclosure cover and body (cuvette) that houses the main PCB, filter PCB, and other various electronic components. A sapphire window is located at the base of the body (cuvette), centered between two heated arms. The cover of the sensor enclosure is provided with a 3/4" NPT or M25 threaded hub for permanent attachment to an approved terminal box. The integrity of the flameproof enclosure is maintained in the sensor cover by a glass feed-through disc welded to the cover and in the body (cuvette) by flameproof joints.

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

Performance Testing:

The measuring function of the Type IDS 01xx gas sensor for explosion protection is not covered in this certificate.

Conditions of Certificate:

1. Ambient Temperature Range: T6 : -40°C < Tamb < +40°C; T4 : -40°C < Tamb < +80°C
2. The device may not be modified.