



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 BVS 13.0013X

Issue No: 3

Certificate history:

Status: **Current**

Issue No. 3 (2018-10-15)

Issue No. 2 (2016-06-27)

Date of Issue: **2018-10-15**

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Issue No. 1 (2013-08-26)

Issue No. 0 (2013-01-30)

Applicant: **ABB Automation GmbH**
Stierstädter Str. 5
60488 Frankfurt
Germany

Equipment: **Gas-Analyzer type LS4060**

Optional accessory:

Type of Protection: **Equipment protection by flameproof enclosures "d", Protection of equipment and transmission systems using optical radiation, Equipment dust ignition protection by enclosure "t"**

Marking:

Ex db [op is Ga] IIC T6 Gb
Ex tb [op is] IIIC T90°C Db

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


Jörg Koch

Position:

Head of Certification Body

*Signature:
(for printed version)*

Date:


15.10.18

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:

DEKRA EXAM GmbH
Dinnendahlstrasse 9
44809 Bochum
Germany

 **DEKRA**
On the safe side.



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Manufacturer: **ABB Automation GmbH**
Stierstädter Str. 5
60488 Frankfurt
Germany

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 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 : 2011 Edition:6.0	Explosive atmospheres - Part 0: General requirements
IEC 60079-1 : 2014-06 Edition:7.0	Explosive atmospheres - Part 1: Equipment protection by flameproof enclosures "d"
IEC 60079-28 : 2015 Edition:2	Explosive atmospheres - Part 28: Protection of equipment and transmission systems using optical radiation
IEC 60079-31 : 2013 Edition:2	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:

[DE/BVS/ExTR13.0009/03](#)

Quality Assessment Report:

[DE/BVS/QAR09.0006/07](#)



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Schedule

EQUIPMENT:

Equipment and systems covered by this certificate are as follows:

Subject and Type

Gas-Analyzer type LS4060

Description

The Gas-Analyzer type LS4060 in type of protection "d" Flameproof Enclosure and "t" Protection by Enclosure is used for measuring the concentration of oxygen. The Gas-Analyzer consists of a transmitter and a receiver which are designed in the same enclosure construction. The Gas-Analyzer is an optical transmitting instrument which has a separately tested laser unit inside.

Rating

Nominal voltage 18 ... 32 V

Nominal current 0.4 A

Nominal power 10 W

Ambient temperature range -20 °C ... +55 °C

SPECIFIC CONDITIONS OF USE: YES as shown below:

- 1 The dimensions of the flameproof joints are in parts other than the relevant minimum or maximum values of IEC 60079-1:2014. For information on the dimensions of the flameproof joints contact the manufacturer.
- 2 The glass lens must be protected against mechanical damage.
- 3 The measuring function concerning the explosion protection is not subject of this IECEx certificate.



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

- Updating to the standards IEC 60079-1:2014, IEC 60079-28:2015 and IEC 60079-31:2013.
- Use of an alternative Laser unit.