



# IECEx Certificate of Conformity

## INTERNATIONAL ELECTROTECHNICAL COMMISSION IEC Certification System for Explosive Atmospheres

for rules and details of the IECEx Scheme visit [www.iecex.com](http://www.iecex.com)

Certificate No.: **IECEx PRE 20.0072X** Page 1 of 3 [Certificate history:](#)  
Status: **Current** Issue No: 0  
Date of Issue: 2020-10-19  
Applicant: **ABB Automation GmbH**  
Stierstädter Str. 5  
60488 Frankfurt  
Germany  
Equipment: **Laser Analyser Module LS25 Ex**  
Optional accessory:  
Type of Protection: **Ex pxb**  
Marking: Ex pxb [op is Ga] IIC T4 Gb, -20°C≤Ta≤+55°C.  
Ex pxb [op is Da] IIIC T100°C Db, -20°C≤Ta≤+55°C.

Approved for issue on behalf of the IECEx  
Certification Body:

**Bjørn Spongsveen**

Position:

**Certification Manager**

Signature:  
(for printed version)

Date:

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\_\_\_\_\_

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 [www.iecex.com](http://www.iecex.com) or use of this QR Code.



Certificate issued by:

**DNV GL Presafe AS**  
Veritasveien 3  
1363 Høvik  
Norway





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

Additional  
manufacturing  
locations:

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 equipment 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 60079-0:2017** Explosive atmospheres - Part 0: Equipment - General requirements  
Edition:7.0

**IEC 60079-2:2014-07** Explosive atmospheres - Part 2: Equipment protection by pressurized enclosure "p"  
Edition:6

**IEC 60079-28:2015** Explosive atmospheres - Part 28: Protection of equipment and transmission systems using optical radiation  
Edition:2

This Certificate **does not** indicate compliance with 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:

[NO/PRE/ExTR20.0074/00](#)

Quality Assessment Report:

[DE/BVS/QAR09.0006/09](#)



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## EQUIPMENT:

Equipment and systems covered by this Certificate are as follows:

Laser Analyser Module LS25 Ex, is an optical instrument based on transmitting infrared laser light from a transmitter unit on one side of the stack to a receiver unit in the diametrically opposite side of the stack. The measurement principle uses infrared single-line absorption spectroscopy.

**Electrical Data:** 18-32VDC

### Purging Conditions:

|                      |           |           |
|----------------------|-----------|-----------|
| Volume of enclosure  | 12 Litre  | 12 Litre  |
| Minimum purge flow   | 11 l/min  | 48 l/min  |
| Minimum purging time | 3m 40 sec | 1m 15 sec |
| Minimum overpressure | 0.8 mbar  | 4 mbar    |
| Maximum overpressure | 20 mbar   | 20 mbar   |
| Maximum leakage rate | 2 l/min   | 2 l/min   |

**Degrees of protection (IP Code):** IP 66 according to EN 60079-0 for the enclosure. Purge system connections are not included

### Routine tests

Leakage test shall be performed according to clause 16.3 according to EN 60079-2

## SPECIFIC CONDITIONS OF USE: YES as shown below:

- Safety control system are not part of the assessment. Ex certified safety control system complying relevant safety integrity level shall be used.
- If not already embodied into the pressurization control system, a safety device limiting the pressure to the specified maximum overpressure of the equipment must be mounted.
- The equipment contains a 3V lithium cell. Do not open equipment when an explosive atmosphere may be present
- Potential risk of electrostatic discharge. See instructions for guidance to minimize risk of electrostatic discharge