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

Certificate No.: **IECEx DNV 24.0101X**

Certificate history:

Status: **Current**

Issue No: 0

Date of Issue: 2024-11-28

Applicant: **Archigas Gmbh**
Eisenstraße 3
Rüsselsheim am Main 65428
Germany

Equipment: **Gas Analyzer**

Optional accessory:

Type of Protection: **Ex d**

Marking: **Ex db IIC T4/T3 Gb, Tamb: -40°C to +90°C/+125°C**

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

Position: **Certification Manager**

Signature:
(for printed version)

Date:
(for printed version)

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 or use of this QR Code.

Certificate issued by:

DNV Product Assurance AS
Veritasveien 1
1363 Høvik
Norway

IECEx Certificate of Conformity

Certificate No.: **IECEx DNV 24.0101X**

Date of issue: 2024-11-28 Issue No: 0

Manufacturer: **Archigas Gmbh**
Eisenstraße 3
Rüsselsheim am Main 65428
Germany

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 60079-1:2014 Explosive atmospheres - Part 1: Equipment protection by flameproof enclosures "d"
Edition:7.0

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/DNV/ExTR24.0094/00

Quality Assessment Report:

NO/DNV/QAR24.0014/00

IECEx Certificate of Conformity

EQUIPMENT:
Equipment and systems covered by this Certificate are as follows:

The TCD3000 is a thermal conductivity detector used in gas analysis for monitoring the concentration of binary and quasi-binary gas mixtures of flammable gasses under the pressure. It consists of metallic flameproof enclosure, Ex certified cable glands and connection cable.

Flame proof enclosure is divided by two compartments.

Bottom of the flameproof enclosure (sensing compartment) includes sensor and breather device welded to the enclosure. It is intended to be exposed to the process pressure which exceeds the 1.1 bar while the connection department must be isolated from process pressure by pressure barrier located inside the flameproof enclosure (between sensing and connection compartment).

During the maintenance (when process pressure is not present) the sensing compartment can be also exposed to explosive gas atmosphere.

Equipment is to be delivered with permanently mounted cable and cable gland. The free end of the permanently connected cable shall be protected by type of protection listed in clause 1 of IEC 60079-0:2017.

Type designation: TCD 3000

Applicable models: TCD 3000 SiA

Electrical Data
Supply voltage: 24 VDC ± 25 %, 5W
Output: 4-20 mA, < 750 Ω

Routine tests
Routine overpressure test at 29 bar for duration of at least 10 seconds acc. Cl. 16 of IEC 60079-1:2014 (for welded joint of the sinter element).

SPECIFIC CONDITIONS OF USE: YES as shown below:

1. The cable gland is only suitable for fixed installations. Cables shall be effectively clamped to prevent pulling or twisting.
2. The measuring function of the EUT is not covered by this type examination. It shall comply with the requirements from the relevant harmonized standards which provide guidance on the performance of gas detection equipment and safety devices.