[1]

EU-TYPE EXAMINATION CERTIFICATE

[2] Directive 2014/34/EU of the European Parliament and of the Council of 26 February 2014

[3] EU-Type Examination Certificate Number: **DNV 24 ATEX95061X** **Issue 2**

[4] Product: **Gas Analyzer**

[5] Manufacturer: **Archigas Gmbh**

[6] Address: **Eisenstraße 3**
65428 Rüsselsheim am Main
Germany

[7] This product and any acceptable variation thereto is specified in the schedule to this certificate and the documents therein referred to.

[8] DNV Product Assurance AS, notified body number 2460, in accordance with Article 17 of Directive 2014/34/EU of the European Parliament and of the Council, dated 26 February 2014, certifies that this product has been found to comply with the Essential Health and Safety Requirements relating to the design and construction of products intended for use in potentially explosive atmospheres, given in Annex II to the Directive.

The examination and test results are recorded in confidential reports listed in item 16.

[9] Compliance with the Essential Health and Safety Requirements has been assured by compliance with:
EN IEC 60079-0:2018 and 60079-1:2014

Where additional criteria beyond those given here have been used, they are listed at item 18 in the Schedule.

[10] If the sign “X” is placed after the certificate number, it indicates that the product is subject to the “Specific Conditions of Use” listed under item 17 of this certificate.

[11] This EU-TYPE EXAMINATION CERTIFICATE relates only to the technical design of the specified product in accordance to the Directive 2014/34/EU. Further requirements of the Directive apply to the manufacturing process and supply of this product. These are not covered by this certificate.

[12] The marking of the product shall include the following:

Ex II 2 G Ex db IIC T4/T3 Gb, -40°C to +90°C/+125°C

Date of issue:
2025-12-09

NORSK AKKREDITERING
PROD 021

Ståle Sandstad
For DNV Product Assurance AS
The Certificate has been digitally signed.

[13] **Schedule**

[14] **EU-Type Examination Certificate No:** DNV 24 ATEX95061X Issue 2

[15] **Description of Product**

The TCD3000 is a thermal conductivity detector used in gas analysis for monitoring the concentration of binary and quasi-binary gas mixtures of flammable gases under pressure. It consists of metallic flameproof enclosure, Ex certified cable glands and connection cable.
Flame proof enclosure is divided into two compartments.
Bottom of the flameproof enclosure (sensing compartment) includes sensor and breather element sintered in 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 an 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 EN IEC 60079-0:2018.

Type designation: TCD 3000
Applicable models: TCD 3000 SiA

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

Ambient temperature:
-40°C to +90°C/+125°C

Ingress protection
IP68 10 bar (100 m), 1 hour

Routine tests
N/A

[16] **Report No**.: PRJN-979701/00
Project No.: PRJN-979701

[17] **Specific Condition(s) of Use**
1. The cable gland is only suitable for fixed installations. Cables shall be effectively clamped to prevent pulling or twisting.
2. The measuring function according to Annex II paragraph 1.5.5 of the Directive is not covered by this EU-type examination. It shall comply with the requirements from the relevant European harmonized standards which provide guidance on the performance of gas detection equipment and safety devices

[18] **Essential Health and Safety Requirements**

Met by compliance with the requirements mentioned in item 9.
Bottom of the flameproof enclosure (sensing compartment) is intended to be exposed to the process pressure up to 200 bars (exceeds the 1.1 bar). Pressure barrier located inside the flameproof enclosure (between sensing and connection compartment) shall protect the connection compartment

from the exposure to process pressure. Manufacturer has responsibility the product is designed and manufactured according to the Sound Engineering Practice (SEP).

[19] **Drawings and documents**

Number	Title	Rev.	Date
1080-3190-0001-0100	Laserbeschriftung für TCD3000 SiA	Rev.1	2024-11-18
1000-6880-0001-0400	*Stückliste TCD3000 SiA	Rev.4	2025-08-08
1700-3120-0001-0300	TCD3000 SiA Montageanweisung	Rev.3	2025-08-18
1700-3130-0001-0200	TCD3000 SiA Prüfanweisung	Rev.2	2025-08-18
10000230826 S04 AA YEA.580.0129	Anschlussnippel M12x1 mit Dichtkante	AA	2024-10-28
10000230829 S04 AA YEA.580.0302	Gehäusedeckel M16x1.5	AA	2023-10-28
0050-0000-0013-0003 YEA.BGR.0003	*Einschraubgehäuse G1/2 OR inkl. Filter	Rev.3	2025-08-08
0050-0000-0016-0003 YEA.BGR.0006	*NPT 1/2 Einschraubgehäuse (ATEX) mit Filter	Rev.3	2025-08-08
10000209104 S01 YEA.580.0132	*Einschraubgehäuse G1/2 OR	AD	2024-12-20
10000224703 S01 YEA.580.0324	*Einschraubgehäuse NPT 1/2	AC	2024-12-20
0050-0000-0015-0001	Kabeldurchführung für Ex-d Gehäuse	Rev.1	2024-11-18
0010-0019-0007-0003	*Kabel für SIA- Gerät	Rev.3	2025-08-06

[20] **Certificate History**

Issue	Description	Issue date	Report no.
0	Original issue	2024-11-28	PRJN-760612/00
1	-sintering applied in the “bottom” for the breather element (to replace welded joint). - equipment tested with cable (0.2 m) as part of the equipment -minor documentation changes	2025-09-02	PRJN-979701/00
2	“typo” correction (one document number)	2025-12-09	PRJN-979701/00

Compliance of the product with the applicable safety requirements of the relevant industrial standards has not been verified and is not covered by this certificate.

END OF CERTIFICATE