# IBExU Institut für Sicherheitstechnik GmbH

An-Institut der TU Bergakademie Freiberg

#### TYPE EXAMINATION CERTIFICATE - Translation [1]

Equipment [2] of equipment-groups I and II, equipment-categories M2 and 2 plus 3



Type examination certificate number IBExU17ATEXB006 X | Issue 0 [3]

[4] Product: sample gas chiller

Type: EGK 1 Ex2

[5]

Manufacturer: Bühler Technologies GmbH

[6] Address: Harkortstr. 29

40880 Ratingen

**GERMANY** 

- This product and any acceptable variation thereto is specified in the schedule to this certificate and the [7] documents therein referred to.
- IBExU Institut für Sicherheitstechnik GmbH certifies that this product has been found to comply with [8] 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 Directive 2014/34/EU of the European Parliament and of the Council, dated 26 February 2014.

The examination and test results are recorded in the confidential test report IB-16-3-148.

- Compliance with the essential health and safety requirements has been assured by compliance with: [9] EN 60079-0:2012 + A11:2013 EN 60079-7:2015 EN 60079-15:2010 except in respect of those requirements listed at item [18] of the schedule.
- If the sign "X" is placed after the certificate number, it indicates that the product is subject to the specific conditions of use specified in the schedule to this certificate.
- [11] This type examination certificate relates only to the design of the specified equipment and not to specific items of equipment subsequently manufactured or supplied.
- [12] The marking of the product shall include the following:

(a) II 3G Ex ec nA nC IIC T4 Gc

IBExU Institut für Sicherheitstechnik GmbH Fuchsmühlenweg 7 09599 Freiberg, GERMANY

By order

Dipl.-Ing. [FH] A. Henker

S. Hende

IBEXU

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- Stamp -

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Certificates without signature stamp are not valid. Certificates may only be duplicated completely and unchanged. In case of dispute, the German text shall prevail.

Freiberg, 2018-03-07

# IBExU Institut für Sicherheitstechnik GmbH

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[13]

## Schedule

[14]

## Certificate number IBExU17ATEXB006 X | Issue 0

## [15] Description of product

Sample gases contain vapour which has to be withdrawn before it reaches the gas analyzer. The Gas flows through a heat exchanger (impinger) inserted into a cooling block. The latter then is cooled to a preset temperature (5 °C mostly).

Electrical Data:

rated voltage: rated power:

230 V 140 VA

115 V 155 VA

max. current:

1.6 A

3.2 A

## [16] Test report

The test results are recorded in the confidential test report IB-16-3-148 of 2018-03-07.

The test documents are part of the test report and they are listed there.

#### Summary of the test results

The sample gas chiller type EGK 1 Ex2 complies with the requirements of the ignition protection type "increased safety "e" in combination with ignition protection type "n" for an explosion-proof device for group II and category 3 G.

## [17] Specific conditions of use

The sample gas chiller must be installed in a casing suitable for EPL Gc.

The permissible ambient temperature of +5 °C up to +50 °C must be maintained.

Enough space before the ventilation holes has to be provided.

Adequate ventilation has to be ensured.

## [18] Essential health and safety requirements

In addition to the essential health and safety requirements (EHSRs) covered by the standards listed at item [9], the following are considered relevant to this product, and conformity is demonstrated in the test report: none

## [19] Drawings and Documents

The documents are listed in the test report.

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By order

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S. Kenle

Freiberg, 2018-03-07