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 19.0055X

Issue No: 0

Certificate history:
Issue No. 0 (2019-09-02)

Status: **Current**

Date of Issue: **2019-09-02**

Applicant: **Union Instruments GmbH**
Zeppelinstrasse 42
76185 Karlsruhe
Germany

Equipment: **Combustion calorimeter type CWD3000 EXP**
Optional accessory:

Type of Protection: **Pressurized Enclosure "p"**

Marking:
Ex pxb IIC T4 Gb

Approved for issue on behalf of the IECEx Certification Body: Jörg Koch

Position: Head of Certification Body

Signature:
(for printed version)

Date: 2.9.19

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.

Certificate issued by:

DEKRA Testing and Certification GmbH
Certification Body
Dinnendahlstrasse 9
44809 Bochum
Germany

DEKRA
On the safe side.

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Manufacturer: **Union Instruments GmbH**
Zeppelinstrasse 42
76185 Karlsruhe
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 Explosive atmospheres - Part 0: General requirements
Edition:6.0

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

*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/ExTR19.0054/00

Quality Assessment Report:

DE/TPS/QAR19.0003/00

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Schedule

EQUIPMENT:

Equipment and systems covered by this certificate are as follows:

Description

The combustion calorimeter type CWD3000 EXP is an analyzer for determining the Wobbe index, density and caloric value of process gas (fuel gas).
The calorimeter consists of three sections:

Cell 1: Input fuel gas, pressure regulation and solenoid valves.
Cell 2: Combustion calorimeter with compressed air inlet, flue gas outlet and outlet for ventilation of cell 1.
Cell 3: Control with display and operating elements, electrical terminals and outlet to the overpressure monitoring system.

Cells 2 and 3 are designed in type of protection Pressurized Enclosures (cell 2 with continuous flow, cell 3 with leakage compensation); the FS 870 S system (IECEx BVS 10.0095) is used to monitor purging, overpressure and indirectly (through the minimum overpressure in cells 2 and 3) the continuous flow. Compressed air is used as protective gas.
Cell 1 is technically ventilated with protective gas from cell 2. The solenoid valves used are certified separately.

Parameters

See Annex

SPECIFIC CONDITIONS OF USE: YES as shown below:

1 The escaping fumes must be safely removed.

2 The tightness of the gas paths of the combustion calorimeter must be checked during regular inspections.

3 The permissible ambient temperature range is -10 °C ≤ T_a ≤ 50 °C.

Annex:

BVS_19_0055X_UnionInstruments_Annex.pdf