



[1] **UNITED KINGDOM CONFORMITY ASSESSMENT**
UK-TYPE EXAMINATION CERTIFICATE

[2] **Product or Protective System Intended for use in Potentially Explosive Atmospheres**
UKSI 2016:1107 (as amended by UKSI 2019:696) – Schedule 3A, Part 1

[3] UK-Type Examination Certificate No.: **UL22UKEX2282X Rev. 0**
[4] Product: **Breather housing VEGABOX03, type BOX03.AC/AO*******
[5] Manufacturer: **VEGA Grieshaber KG**
[6] Address: **Am Hohenstein 113, 77761 Schiltach, Germany**

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

[8] UL International (UK) Ltd, Approved Body number 0843, in accordance with Regulation 44 of the Equipment and Protective Systems Intended for Use in Potentially Explosive Atmospheres Regulations 2016, UKSI 2016:1107 (as amended by UKSI 2019:696), 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 Schedule 1 of the Regulations.
The examination and test results are recorded in the confidential report **UKRCC-4790229873.8.1**.

[9] Compliance with the Essential Health and Safety Requirements has been assured by compliance with:

EN IEC 60079-0:2018 EN 60079-11:2012 EN 60079-26:2015

Except in respect of those requirements listed at section 19 of the schedule to this certificate.

[10] 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 UK-TYPE EXAMINATION CERTIFICATE relates only to the design and construction of the specified product. Further requirements of the Regulations 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:

 **II 1 G Ex ia IIC T6...T1 Ga or**
 **II 2 G Ex ia IIC T6...T1 Gb**

Certification Officer
Andrew Moffat



This is to certify that the sample(s) of the Product described herein ("Certified Product") has been investigated and found in compliance with the Standard(s) indicated on this Certificate, in accordance with the UKEx Product Certification Program Requirements. This certificate and test results obtained apply only to the product sample(s) submitted by the Manufacturer. UL did not select the sample(s) or determine whether the sample(s) provided were representative of other manufactured product. UL has not established Follow-Up Service or other surveillance of the product. The Manufacturer is solely and fully responsible for conformity of all product to all applicable Standards, specifications, requirements or Regulations. The test results may not be used, in whole or in part, in any other document without UL's prior written approval.

Date of issue: 2022-11-11

Approved Body UL International (UK) Ltd Unit 1-3 Horizon Kingsland Business Park Wade Road, Basingstoke RG24 8AH, UK
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Description of Product

Breather housing VEGABOX03, type BOX03.AC/AO*****

The VEGABOX 03 is preferably used for field mounting for separated connection of sensor circuits and as breather housing. The VEGABOX 03 of type series VEGABOX 03 with integrated connection terminals are preferably used for pressure compensation of the pressure measuring cell and as terminal box in conjunction with pressure transmitters of Messrs. VEGA in the cable version with capillary cable.

In VEGABOX 03 only terminal blocks as type VEGABOX 03 for connection of intrinsically safe circuits can be installed. A terminal block is preferably used for connection of an intrinsically safe circuit of VEGA pressure transmitters in the version with connection cable with corresponding power supply or signal conditioning instrument.

The VEGABOX 03 is an intrinsically safe electrical instrument for installation in hazardous areas with combustible gases, mist or vapour, requiring instruments of category 1 G or 2G or for installation outside of hazardous areas. The VEGABOX 03 is an intrinsically safe instrument for installation in hazardous areas of all combustible materials of explosion group IIA, IIB and IIC. If the VEGABOX 03 are installed and operated in hazardous areas, the general Ex installation regulations EN 60079-14 as well as these safety instructions must be observed.

Electrical data

Supply and signal circuit:	
Terminals 1, 2	In type of protection intrinsic safety Ex ia IIC/IIB
	For connection to a certified, intrinsically safe circuit Maximum values: $U_i = 30V$ $I_i = 150mA$ $P_i = 1000mW$ $C_i = 0$ $L_i = 0$
	When using the supplied connection cable, the following cable inductances L_i' and cable capacitances C_i' have to be taken into account: $L_i = 0.6 \mu H/m$ $C_{i \text{ wire/wire}} = 133 \text{ pF/m}$ $C_{i \text{ wire/screen}} = 215 \text{ pF/m}$

Temperature measuring circuit:	
Terminals 3, 4, 5, 6	In type of protection intrinsic safety Ex ia IIC/IIB
	For connection to a certified, intrinsically safe circuit Maximum values: $U_i = 30V$ $I_i = 100mA$ $P_i = 500mW$ $C_i = 0$ $L_i = 0$
	When using the supplied connection cable, the following cable inductances L_i' and cable capacitances C_i' have to be taken into account: $L_i = 0.6 \mu H/m$ $C_{i \text{ wire/wire}} = 188 \text{ pF/m}$ $C_{i \text{ wire/screen}} = 555 \text{ pF/m}$

The intrinsically safe circuits are electrically isolated from each other and from parts which can be grounded.

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Temperature range

Category 1G (EPL Ga instruments)

The relation between ambient temperature and the assigned temperature class is as follows:

Ambient temperature range	Temperature class
-20 °C to +60 °C	T6...T1

The connection housing must only be operated in a hazardous area (EPL Ga) requiring instruments of Category 1 if there are atmospheric conditions (pressure of 0.8 bar to 1.1 bar). If there is no explosive atmosphere, then the permissible operating temperatures and pressures must be taken from the manufacturer specifications.

Category 2G (EPL Gb instruments)

The relation between ambient temperature and the assigned temperature class is as follows:

Ambient temperature range	Temperature class
-50 °C to +80 °C	T6...T1

The permissible operating temperatures without explosion-endangered atmosphere are mentioned in the respective manufacturer Instructions, e.g. operating instructions manuals.

Routine tests

None.

[16]

Test Report No. (associated with this certificate issue)

The test report no. is provided under item no. [8] on page 1 of this UK-Type Examination Certificate.

[17]

Specific conditions of use:

- Risk of electrostatic discharge. Avoid friction, no dry cleaning and don't install this device in areas with flowing, non-conductive products. The safety instruction of the manufacturer must be observed.
- The enclosure may only get into contact with products which it is resistant to. The safety instruction of the manufacturer must be observed.

[18]

Conditions of certification:

None.

[19]

Essential Health and Safety Requirements (Regulations Schedule 1)

In addition to the Essential Health and Safety Requirements covered by the standards listed at item 9, all other requirements are demonstrated in the relevant reports.

Additional information

The manufacturer shall inform the approved body concerning all modifications to the technical documentation as described in Annex III to UKSI 2016:1107 (as amended by UKSI 2019:696) – Schedule 3A, Part 1.

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Drawings and Documents

Title:	Drawing No.:	Rev. Level:	Date:
VEGABOX 03 pressure compensation housing	GE3183	-	2013-12-09
Specification Type-Plate UL22UKEX2282X VEGABOX 03	VEGAZW-6-79727	00	2022-04-08
Safety instructions VEGABOX 03 Intrinsic safety "I"	1010679	-	2022-03-25