

(1) EU-TYPE EXAMINATION CERTIFICATE



- (2) Equipment and Protective Systems intended for use in Potentially Explosive Atmosphere - **Directive 2014/34/EU**
- (3) EU-Type Examination Certificate Number

TÜV 13 ATEX 7478 X

Issue: 01

- (4) Equipment: **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) The TÜV Rheinland Zertifizierungsstelle für Explosionsschutz of TÜV Rheinland Industrie Service GmbH, Notified Body No. 0035 in accordance with Article 21 of the Council Directive 2014/34/EU of 26th February 2014, certifies this product which has been found to comply with the Essential Health and Safety Requirements relating to the design and construction of equipment and protective systems intended for use in potentially explosive atmosphere, given in Annex II to the Directive.

The examination and test results are recorded in the confidential report 557 / Ex 478.01 / 13
- (9) Compliance with the Essential Health and Safety Requirements, with the exception of those listed in the schedule of this certificate, has been assessed by reference to:

EN IEC 60079:2018 EN 60079-11:2012 EN 60079-26:2015
- (10) If the sign "X" is placed after the certificate number, it indicates that the equipment is subject to special conditions for safe use specified in the schedule to this certificate.
- (11) This EU-Type Examination Certificate relates only to the design and specification for construction of the equipment or protective system. It does not cover the process for actual manufacture or supply of the equipment or protective system, for which further requirements of the directive are applicable.
- (12) The marking of the equipment shall include the following:



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

TÜV Rheinland Zertifizierungsstelle für Explosionsschutz

Cologne, 2021-05-28

Dipl.-Ing. Christian Mehrhoff

This EU-Type Examination Certificate without signature and stamp shall not be valid.

This EU-Type Examination Certificate may be circulated only without alteration. Extracts or alterations are subject to approval by the TÜV Rheinland Industrie Service GmbH TÜV Rheinland Group Am Grauen Stein 51105 Köln
Tel. +49 (0) 221 806-0 Fax. + 49 (0) 221 806 114



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(13) Annex

(14) **EU Type Examination Certificate**
TÜV 13 ATEX 7478 X Issue: 01

(15) Description of equipment

15.1 Equipment and type:

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

15.2 General product information:

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 1G 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.

Details of Change

- Minor adjustments of manuals
- Minor adjustment of type designation
- Standard update of IEC 60079-0 and 60079-26, checklists omitted since there are no applicable major technical changes

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Zertifizierungsstelle of TÜV Rheinland Industrie Service GmbH

Technical Data

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: <ul style="list-style-type: none"> ● $U_i = 30 \text{ V}$ ● $i_i = 150 \text{ mA}$ ● $P_i = 1000 \text{ mW}$ ● $C_i = 0$ ● $L_i = 0$
	When using the supplied connection cable, the following cable inductances L_c' and cable capacitances C_c' have to be taken into account: <ul style="list-style-type: none"> ● $L_i = 0.6 \mu\text{H/m}$ ● $C_{i \text{ wire/wire}} = 133 \text{ pF/m}$ ● $C_{i \text{ wire/screen}} = 215 \text{ pF/m}$
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: <ul style="list-style-type: none"> ● $U_i = 30 \text{ V}$ ● $i_i = 100 \text{ mA}$ ● $P_i = 500 \text{ mW}$ ● $C_i = 0$ ● $L_i = 0$
	When using the supplied connection cable, the following cable inductances L_c' and cable capacitances C_c' have to be taken into account: <ul style="list-style-type: none"> ● $L_i = 0.6 \mu\text{H/m}$ ● $C_{i \text{ wire/wire}} = 188 \text{ pF/m}$ ● $C_{i \text{ wire/screen}} = 555 \text{ pF/m}$

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

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Environmental Data
Category 1G (EPL Ga instruments)

Temperature class	T6 ... T1
Permissible ambient temperature	-20 ... +60 °C

The connection housing must only be operated in a hazardous area 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)

Temperature class	T6 ... T1
Permissible ambient temperature	-50 ... +80 °C

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

(16) Test-Report No. 557 / Ex 7478.01 / 13

(17) Special Conditions for safe use

1. 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.
2. The enclosure may only get into contact with products which it is resistant to. The safety instruction of the manufacturer must be observed.
- 3.

(18) Basic Safety and Health Requirements

Covered by afore mentioned standard

TÜV Rheinland Zertifizierungsstelle für Explosionsschutz

Cologne, 2021-05-28

Dipl.-Ing. Christian Meinhof



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 Zertifizierungsstelle of TÜV Rheinland Industrie Service GmbH


(1) EC TYPE-EXAMINATION CERTIFICATE



- (2) Equipment and Protective Systems intended for use in Potentially Explosive Atmosphere - **Directive 94/9/EC**
- (3) EC Type-Examination Certificate Number


TÜV 13 ATEX 7478 X

- (4) **Equipment:** Breather housing
VEGABOX BOX03.AC*****
- (5) **Manufacturer:** VEGA Grieshaber KG
- (6) **Address:** Am Hohenstein 113
77761 Schiltach
- (7) This equipment and any acceptable variation thereto are specified in the schedule to this certificate and the documents therein referred to.
- (8) The TÜV Rheinland Zertifizierungsstelle for ex-protected products of TÜV Rheinland Industrie Service GmbH, Notified Body No. 0035 in accordance with Article 9 of the Council Directive 94/9/EC of 23 March 1994, certifies this equipment has been found to comply with the Essential Health and Safety Requirements relating to the design and construction of equipment and protective systems intended for use in potentially explosive atmosphere, given in Annex II to the Directive.
The examination and test results are recorded in the confidential report 557/Ex 478.00/13
- (9) Compliance with the Essential Health and Safety Requirements, with the exception of those listed in the schedule of this certificate, has been assessed by reference to:
EN 60079-0: 2012 EN 60079-11:2012 EN 60079-26: 2007
except the requirements, which are listed under item (18).
- (10) If the sign "X" is placed after the certificate number, it indicates that the equipment is subject to special conditions for safe use specified in the schedule to this certificate.
- (11) This EC-Type-Examination Certificate relates only to the design and specification for construction of the equipment or protective system. It does not cover the process for actual manufacture or supply of the equipment or protective system, for which further requirements of the directive are applicable.
- (12) The marking of the equipment shall include the following:

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

TÜV Rheinland ExNB for explosion protected equipment

Cologne, 2014-05-12


Dipl.-Ing. Klauspeter Graff

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Tel. +49 (0) 221 806-0 Fax. + 49 (0) 221 806 114

(13) Annex to

(14) **EC-Type Examination Certificate**
TÜV 13 ATEX 7478 X

(15) **Description of equipment**

15.1 Equipment and type:

VEGABOX BOX03.AC*****

15.2 Description

General product information

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 BOX03.AC/AO***** 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 BOX03.AC/AO***** 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 BOX03.AC/AO***** is an intrinsically safe electrical instrument for installation in hazardous areas with combustible gases, mist or vapour, requiring instruments of category 1G or 2G or for installation outside of hazardous areas. The VEGABOX BOX03.AC/AO***** is an intrinsically safe instrument for installation in hazardous areas of all combustible materials of explosion group IIA, IIB and IIC.

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15.3 Technical Data

Um= 30V Im= 100/150mA Pm= 500/1000mW

In version VEGABOX BOX03.AC/AO***** with terminal blocks

Permissible ambient temperatures depending on temperature class

Category 1G instruments

Temperature class	T6 ... T1
Permissible ambient temperature	-20 ... +60 °C

The connection housing must only be operated in a hazardous area 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 instruments

Temperature class	T6 ... T1
Permissible ambient temperature	-50 ... +80 °C

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

(16) **Test-Report No.** 557/Ex478.00/13

Parts of the device, which already fulfill the requirements for the category, were not approved and assessed by TÜV Rheinland Industrie Service.

The applicability and assembly of mechanical and electrical parts and components were assessed and approved by TÜV Rheinland Industrie Service with respect to the requirements of explosion protection.

(17) **Special Conditions for safe use**

1. 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.
2. The enclosure may only get into contact with products which it is resistant to.
The safety instruction of the manufacturer must be observed.

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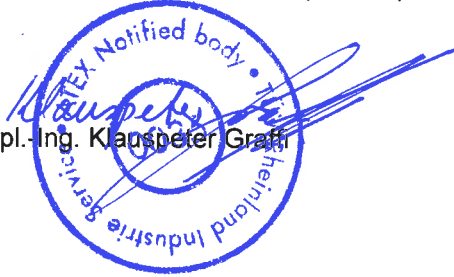
(18) **Basic Safety and Health Requirements**

Covered by afore mentioned standard

TÜV Rheinland ExNB für explosion protected equipment

Cologne, 2014-05-12

Dipl.-Ing. Klauspeter Graff



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