

INTERNATIONAL ELECTROTECHNICAL COMMISSION **IEC Certification System for Explosive Atmospheres**

for rules and details of the IECEx Scheme visit www.iecex.com

Certificate No.:

IECEx TUR 14.0007X

Page 1 of 4

Certificate history: Issue 0 (2014-05-12)

Status:

Current

Issue No: 1

Date of Issue:

2021-05-28

Applicant:

VEGA Grieshaber KG Am Hohenstein 113 77761 Schiltach Germany

Equipment:

VEGABOX 03, type BOX03.IC/IO*****

Optional accessory:

Type of Protection:

Marking:

Ex ia IIC T6... T1 Ga or Gb

Approved for issue on behalf of the IECEx Certification Body:

Position:

Signature:

(for printed version)

Date:

Christian Mehrhoff

Assigned certifier

2021-05-28

1. This certificate and schedule may only be reproduced in full.

This certificate is not transferable and remains the property of the issuing body.
 The Status and authenticity of this certificate may be verified by visiting www.iecex.com or use of this QR Code.

Certificate issued by:

TUV Rheinland Industrie Service GmbH Am Grauen Stein 51105 Cologne Germany







Certificate No.:

IECEx TUR 14.0007X

Page 2 of 4

Date of issue:

2021-05-28

Issue No: 1

Manufacturer:

VEGA Grieshaber KG Am Hohenstein 113 77761 Schiltach

Germany Germany

Additional

manufacturing locations:

VEGA Americas, Inc 4241 Allendorf Drive

Cincinnati, Ohio 45209 United States of America

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 equipment 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 60079-0:2017

Explosive atmospheres - Part 0: Equipment - General requirements

Edition:7.0 Edition:6.0

IEC 60079-11:2011

Explosive atmospheres - Part 11: Equipment protection by intrinsic safety "i"

60079-26:2021-02

Explosive atmospheres - Part 26: Equipment with Separation Elements or combined Levels of Protection

Edition:4.0

This Certificate does not indicate compliance with 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/TUR/ExTR14.0007/01

Quality Assessment Report:

DE/TUN/QAR06.0002/10



Certificate No.:

IECEx TUR 14.0007X

Page 3 of 4

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FOLIPMENT

Equipment and systems covered by this Certificate are as follows:

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 inrinsically 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 EPL Ga or EPL Gb 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.

SPECIFIC CONDITIONS OF USE: YES as shown below:

- 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.



Certificate No.:

IECEx TUR 14.0007X

Page 4 of 4

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DETAILS OF CERTIFICATE CHANGES (for issues 1 and above)

- · 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

Annex:

Attachment IECEx_TUR_14.0007X_001.pdf



Attachment IECEx TUR 14.0007X issue 01

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:
	● Ui = 30 V
	• li = 150 mA
	● Pi = 1000 mW ● Ci = 0
	• Ci = 0
	When using the supplied connection cable, the following cable in ductances L' and cable capacitances C' have to be taken into account:
e	● Li = 0.6 μH/m
	• C _{i wire/wire} = 133 pF/m
	• C _{i wird/screen} = 215 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:
	• Ui = 30 V
	oli = 100 mA
	•Pi = 500 mW
	• Ci = 0 • li = 0
	● Ci = 0 ● Li = 0
	• Ci = 0
	● Ci = 0 ● Li = 0 When using the supplied connection cable, the following cable in ductances L _i and cable capacitances C _i have to be taken into account:

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

EPL Ga instrument

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

The connection housing must only be operated in a hazardous area requiring EPL Ga instruments 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.

EPL Gb instrument

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.



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Page 1 of 3

Applicant:

VEGA Grieshaber KG Am Hohenstein 113 77761 Schiltach Germany Germany

Electrical Apparatus:

VEGABOX BOX03.10*****

Optional accessory: Type of Protection:

Marking:

Position:

Ex ia IIC T6... T1 Ga or Gb

Approved for issue on behalf of the IECEx

Dipl.-Ing. Klauspeter Graffi

Certification Body:

Head of Certification Body

Signature: (for printed version)

Date:

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TUV Rheinland Industrie Service GmbH Am Grauen Stein 51105 Cologne Germany







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Page 2 of 3

Manufacturer:

VEGA Grieshaber KG Am Hohenstein 113 77761 Schiltach Germany Germany

Additional Manufacturing location

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STANDARDS:

The electrical 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 60079-11: 2011

Explosive atmospheres - Part 11: Equipment protection by intrinsic safety "I"

Edition: 6.0

IEC 60079-26: 2006

Explosive atmospheres - Part 26: Equipment with equipment protection level (EPL) Ga

Edition: 2

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/TUR/ExTR14.0007/00

Quality Assessment Report:

DE/TUN/QAR06.0002/05



of Conformity

Certificate No.:

IECEx TUR 14.0007X

Date of Issue:

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Issue No : 0

Page 3 of 3

Schedule

EQUIPMENT

Equipment and systems covered by this certificate are as follows:

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.IC/IO****** 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.IC/IO***** for connection of intrinsically safe circuit of VEGA pressure transmitters in the version with connection cable with corresponding power supply or signal conditioning instrument. The VEGABOX BOX03.IC/IO***** is an intrinsically safe electrical instrument for installation in hazardous areas with combustible gases, mist or vapour, requiring instruments of category EPL-Ga or EPL-Gb or for installation outside of hazardous areas. The VEGABOX BOX03.IC/IO***** is an intrinsically safe instrument for installation in hazardous areas of all combustible materials of explosion group I/A, IIB and IIC.

CONDITIONS OF CERTIFICATION: YES as shown below:

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

Annex: DE-IECEx_TUR_14.0007X_00_Attachment_20140512_pdf



Attachment to Certificate IECEx TUR 14.0007 X Revison 0

Attachment to to Certificate IECEx TUR 14.0007/00 X

Device:

Breather housing

VEGABOX BOX03.IC/IO******

Manufacturer:

VEGA Grieshaber KG

Address:

Am Hohenstein 113 77761 Schiltach Germany

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.IC/IO****** 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.IC/IO****** for connection of intrinsically safe circuits can be installed. A terminal block is preferably used for connection of an inrinsically safe circuit of VEGA pressure transmitters in the version with connection cable with corresponding power supply or signal conditioning instrument. The VEGABOX BOX03.IC/IO****** is an intrinsically safe electrical instrument for installation in bazardous areas with combustible gases, mist or vapour, requiring instruments of category.

in hazardous areas with combustible gases, mist or vapour, requiring instruments of category EPL-Ga or EPL-Gb or for installation outside of hazardous areas. The VEGABOX BOX03.IC/IO****** is an intrinsically safe instrument for installation in hazardous areas of all combustible materials of explosion group IIA, IIB and IIC.



Attachment to Certificate IECEx TUR 14.0007 X Revison 0

In version VEGABOX BOX03.IC/IO***** with terminal blocks

Permissible ambient temperatures depending on temperature class

EPL-Ga instrument

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 EPL-Ga 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.

EPL-Gb instrument

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.