

Translation

# EU-Type Examination Certificate Supplement 5

**Equipment intended for use in potentially explosive atmospheres  
Directive 2014/34/EU**

EU-Type Examination Certificate Number: **BVS 05 ATEX E 023**

Product: **Adjustment and indication unit VEGADIS 81, type DIS81(\*)**\*

Manufacturer: **VEGA Grieshaber KG**

Address: **Am Hohenstein 113, 77761 Schiltach, Germany**

This supplementary certificate extends EU-Type Examination Certificate No. BVS 05 ATEX E 023 to apply to products designed and constructed in accordance with the specification set out in the appendix of the said certificate but having any acceptable variations specified in the appendix to this certificate and the documents referred to therein.

DEKRA Testing and Certification GmbH, Notified Body number 0158, in accordance with Article 17 of Directive 2014/34/EU of the European Parliament and of the Council, dated 26 February 2014, 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 Annex II to the Directive.

The examination and test results are recorded in the confidential Report No. BVS PP 05.2012 EU.

The Essential Health and Safety Requirements are assured in consideration of:

**EN IEC 60079-0:2018  
EN 60079-31:2014**

**General requirements  
Protection by Enclosure "t"**

If the sign "X" is placed after the certificate number, it indicates that the product is subject to the Special Conditions for Use specified in the appendix to this certificate.

This EU-Type Examination Certificate relates only to the design and construction of the specified product. Further requirements of the Directive apply to the manufacturing process and supply of this product. These are not covered by this certificate.

The marking of the product shall include the following:

 **II 2D Ex tb IIIC T75°C Db**

DEKRA Testing and Certification GmbH  
Bochum, 2022-03-22

Signed: Jörg-Timm Kilisch

Managing Director

Page 1 of 3 of BVS 05 ATEX E 023 / N5 – Jobnumber 342492600  
This certificate may only be reproduced in its entirety and without any change.



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Certification body: Dinnendahlstr. 9, 44809 Bochum, Germany  
Phone +49.234.3696-400, Fax +49.234.3696-401, e-mail DTC-Certification-body@dekra.com



13 **Appendix**  
 14 **EU-Type Examination Certificate**

**BVS 05 ATEX E 023  
 Supplement 5**

15 **Product description**

15.1 **Subject and type**

Adjustment and indication unit  
 VEGADIS81, type DIS81(\*) .abcdefghi

- a A Europe
- b R ATEX II 2D Ex tb IIIC T\* Db IP66  
 More markings are possible in case the version is separately certified according to an additional certificate.  
 The detailed encoding of the type code is part of the safety instructions.
- c Electronics
  - I digital (I<sup>2</sup>C-communication)
- d Enclosure
  - A aluminium
  - V stainless steel (precision casting) 316L
  - H aluminium special colour
- e Degree of protection
  - I IP66/IP67
  - N IP66/IP68 (0.2 bar)
- f cable entry / connection
  - 1, D M20x1.5
  - Q, N 1/2NPT
  - \* M20x1.5 or 1/2NPT/ separately certified cable glands and blind plugs
- g Indication- adjustment module PLICSCOM
  - X without
  - A built in
  - F without, cover with glass window
  - K built in, with Bluetooth, handling via magnetical pen
  - U built in, with Bluetooth, battery, handling via magnetical pen
- h Kind of installation
  - E for pipe mounting (29...60 m)
  - A wall-mounted aluminium- or stainless steel enclosure
  - D frame for aluminium- or stainless steel enclosure
- i Certificate
  - X without
  - M with

15.2 **Description**

The adjustment and indicating unit with integrated adjustment and indicating module is used for parameter adjustment and visualisation of measurement data in areas with combustible, dust generating solids.

**Reasons for the supplement:**

- Updating of the EN IEC 60079-0 to the current version
- Use of a different, separately certified enclosure





15.3 **Parameters**

15.3.1 Electrical data

Supply and signal circuit (terminals 5, 6, 7, 8)

only for connection to the adjustment and indication unit of certified VEGA sensors.

Adjustment and indication circuit (spring contacts in the terminal compartment)

only for connection to the VEGA display and adjustment module PLICSCOM

15.3.2 Thermal data

15.3.2.1 Permitted ambient temperature at the electronics enclosure

-40 °C...+60 °C

15.3.2.2 Maximum surface temperature

ambient temperature +12 K

15.3.3 Degrees of protection according to EN 60529

IP66

16 **Report Number**

BVS PP 05.2012 EU, as of 2022-03-22

17 **Special Conditions for Use**

None

18 **Essential Health and Safety Requirements**

The Essential Health and Safety Requirements are covered by the standards listed under item 9.

19 **Drawings and Documents**

Drawings and documents are listed in the confidential report.

We confirm the correctness of the translation from the German original. In the case of arbitration only the German wording shall be valid and binding.

DEKRA Testing and Certification GmbH  
Bochum, 2022-03-22  
BVS-Hk/Mu A20211152

Managing Director



Translation

# EU-Type Examination Certificate Supplement 4

Change to Directive 2014/34/EU

Equipment intended for use in potentially explosive atmospheres  
Directive 2014/34/EU

EU-Type Examination Certificate Number: **BVS 05 ATEX E 023**

Product: **Adjustment and indication unit type VEGADIS DIS81.A\*\*\*\*\***

Manufacturer: **VEGA Grieshaber KG**

Address: **Am Hohenstein 113, 77761 Schiltach, Germany**

This supplementary certificate extends EC-Type Examination Certificate No. BVS 05 ATEX E 023 to apply to products designed and constructed in accordance with the specification set out in the appendix of the said certificate but having any acceptable variations specified in the appendix to this certificate and the documents referred to therein.

DEKRA EXAM GmbH, Notified Body number 0158, in accordance with Article 17 of Directive 2014/34/EU of the European Parliament and of the Council, dated 26 February 2014, 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 Annex II to the Directive.  
The examination and test results are recorded in the confidential Report No. PP 05.2012 EU.

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

**EN 60079-0:2012 + A11:2013    General requirements**  
**EN 60079-31:2014            Protection by Enclosure "t"**

If the sign "X" is placed after the certificate number, it indicates that the product is subject to the Special Conditions for Use specified in the appendix to this certificate.

This EU-Type Examination Certificate relates only to the design and construction of the specified product. Further requirements of the Directive apply to the manufacturing process and supply of this product. These are not covered by this certificate.

The marking of the product shall include the following:

 **II 2D Ex tb IIIC T75°C Db**  
**IP66**

DEKRA EXAM GmbH  
Bochum, 2017-05-10

Signed: Jörg Koch

Certifier

Signed: Dr Michael Wittler

Approver



13 **Appendix**

14 **EU-Type Examination Certificate**

**BVS 05 ATEX E 023  
Supplement 4**

15 **Product description**

15.1 **Subject and type**

Adjustment and indication unit  
type DIS82(\*).abcdefghi

- a A ATEX
- b R ATEX II 2D Ex tb IIIC T\* Db IP66  
More markings are possible in case the version is separately certified according to an additional certificate.  
The detailed encoding of the type code is part of the safety instructions.
- c Electronics
  - I digital (1<sup>2</sup>C-communication)
- d Enclosure
  - A aluminium
  - V stainless steel (precision casting) 316L
  - H aluminium special colour
- e Degree of protection
  - I IP66/IP67
  - N IP66/IP68 (0.2 bar)
- f cable entry / connection
  - 1 M20x1.5 / without
  - D M20x1.5 / blind plug
  - Q 1/2NPT / without
  - N 1/2NPT / blind plug
  - \* other cable entries which are separately certified for this purpose
- g Indication- adjustment module PLICSCOM
  - X without
  - A built in
  - F without, cover with glass window
  - K built in, with Bluetooth, handling via magnetical pen
  - U built in, with Bluetooth, battery, handling via magnetical pen
- h Kind of installation
  - E for pipe mounting (29...60 m)
  - A wall-mounted aluminium- or stainless steel enclosure
  - D frame for aluminium- or stainless steel enclosure
- i Certificate
  - X without
  - M with

15.2 **Description**

The adjustment and indicating unit with integrated adjustment and indicating module is used for parameter adjustment and visualisation of measurement data in areas with combustible, dust generating solids.

**Reasons for the supplement:**

- Change to Directive 2014/34/EU
- type DIS 61 is omitted
- modification of the type code
- adjustment to the current standards








## Translation

# (1) 3. Supplement to the EC-Type Examination Certificate

- (2) Equipment and protective systems intended for use in potentially explosive atmospheres - Directive 94/9/EC Supplement accordant with Annex III number 6
- (3) No. of EC-Type Examination Certificate: **BVS 05 ATEX E 023**
- (4) Equipment: **Adjustment and indication unit type VEGADIS DIS61.\*\*\*, VEGADIS DIS81.A\*\*\*\*\***
- (5) Manufacturer: **VEGA Grieshaber KG**
- (6) Address: **Am Hohenstein 113, 77761 Schiltach, Germany**
- (7) The design and construction of this equipment and any acceptable variation thereto are specified in the appendix to this supplement.
- (8) The certification body of DEKRA EXAM GmbH, notified body no. 0158 in accordance with Article 9 of the Directive 94/9/EC of the European Parliament and the Council of 23 March 1994, certifies that 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 atmospheres, given in Annex II to the Directive. The examination and test results are recorded in the Test and Assessment Report BVS PP 05.20.12 EG.
- (9) The Essential Health and Safety Requirements are assured by compliance with:  
**EN 60079-0:2012 General requirements**  
**EN 60079-1:2007 Flameproof enclosure „d“**  
**EN 60079-31:2009 Protection by enclosures „t“**
- (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 appendix to this certificate.
- (11) This supplement to the EC-Type Examination Certificate relates only to the design, examination and tests of the specified equipment in accordance to Directive 94/9/EC. Further requirements of the Directive apply to the manufacturing process and supply of this equipment. These are not covered by this certificate.
- (12) The marking of the equipment shall include the following:

|                                                                                     |                                                                                                                                        |                               |
|-------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------|-------------------------------|
|  | <b>II 1D Ex ta IIIC T75°C Da or II 2D Ex tb IIIC T75°C Db</b><br><b>IP66</b>                                                           | DIS61.GX***,<br>DIS81.AR***** |
|  | <b>II 1G Ex ia IIIC T6 Ga or II 2G Ex ia IIIC T6 Gb</b><br><b>II1D Ex ta IIIC T75°C Da or II 2D Ex tb IIIC T75°C Db</b><br><b>IP66</b> | DIS61.CK***,<br>DIS81.AH***** |
|  | <b>II 2G Ex d IIIC T6 Gb</b><br><b>II1D Ex ta IIIC T75°C Da or II 2D Ex tb IIIC T75°C Db</b><br><b>IP66</b>                            | DIS81.AJ*****                 |

DEKRA EXAM GmbH  
Bochum, dated 2013-11-04

Signed: Simanski

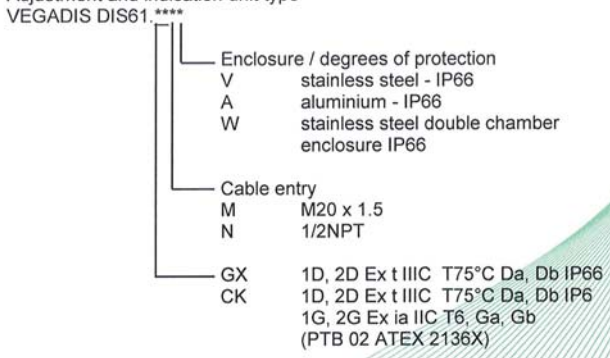
Certification body

Signed: Dr. Eickhoff

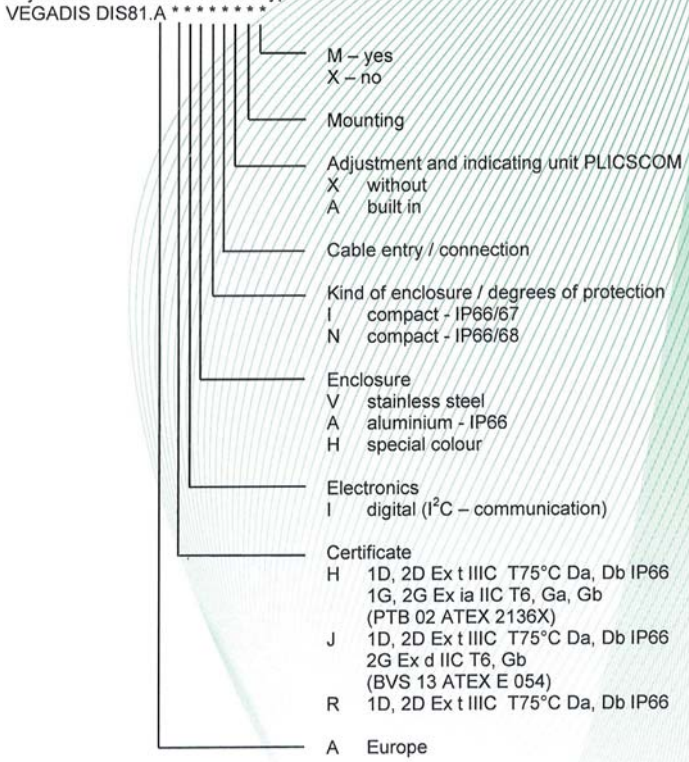
Special services unit

- (13) Appendix to
- (14) **3. Supplement to the EC-Type Examination Certificate  
BVS 05 ATEX E 023**
- (15) 15.1 Subject and type

Adjustment and indication unit type



Adjustment and indication unit type







15.3.1.3 VEGADIS DIS81.AJ\*\*\*\*\*  
Supply and signal circuit  
(terminals 5, 6, 7, 8)

Only for connection to the adjustment and indication unit, terminals 5, 6, 7, 8 of VEGAFLEX FX8\*(\*)AR\*\*\*\*\* and the analogical certified VEGA sensors

15.3.1.4 VEGADIS DIS81.AH\*\*\*\*\*  
Supply and signal circuit  
(terminals 5, 6, 7, 8)

In type of protection Intrinsic Safety Ex ia IIC only for connection to a certified intrinsically safe circuit with the following maximum values:

$U_i = 6.4 \text{ V}$   
 $P_i = 332 \text{ mW}$   
effective internal capacitance negligible  
effective internal inductivity negligible

Only for connection to the adjustment and indication unit, terminals 5, 6, 7, 8 of VEGAPULS PS6\*  
VEGAFLEX FX6\*/8\*  
VEGABAR BR5/6\*  
VEGACAL CL6\*  
or VEGASON SN6\*

The maximum  $L_o$ - and  $C_o$ -values of the cable connecting VEGADIS61 and the sensor have to be taken from the applicable EC Type Test Certificate.

Adjustment and indication circuit  
(spring contacts in the terminal compartment)

Only for connection to the adjustment and indication unit (PLICSCOM)

15.3.2 Thermal data

15.3.2.1 Permitted ambient temperature at the electronics enclosure -40 °C...+60 °C

15.3.2.2 Maximum surface temperature Ambient temperature + 12 K

15.3.3 Degrees of protection according to EN 60529 IP66

(16) Test and Assessment Report

BVS PP 05.2012 EG as of 2013-11-04

(17) Special conditions for safe use

None

We confirm the correctness of the translation from the German original.  
In the case of arbitration only the German wording shall be valid and binding.

DEKRA EXAM GmbH  
44809 Bochum, 2013-11-04  
BVS-Hk/Mu A 20100131

  
\_\_\_\_\_  
Certification body

  
\_\_\_\_\_  
Special services unit





## 2nd Supplement

(Supplement in accordance with Directive 94/9/EC Annex III number 6)

### to the EC-Type Examination Certificate BVS 05 ATEX E 023

**Equipment:** Adjustment and indication unit type VEGADIS DIS61.\*\*\*\*  
**Manufacturer:** VEGA Grieshaber KG  
**Address:** 77757 Schiltach

#### Description

The adjustment and indicating unit type VEGADIS DIS61.GX\*\* with integrated adjustment and indicating module, also called A/B module or PLICSCOM, meets the requirements of the standards EN 61241-0:2006 and EN 61241-1:2004, protection by enclosures "tD".  
The adjustment and indicating unit can also be used with a stainless steel double chamber enclosure.

The complete type code is as follows:

Adjustment and indication unit type VEGADIS DIS61.\*\*\*\*

|    |                                                 |
|----|-------------------------------------------------|
| V  | enclosure / degrees of protection               |
| V  | stainless steel/IP66                            |
| A  | Aluminium/IP66                                  |
| W  | stainless steel double chamber enclosure IP66   |
|    | cable entry                                     |
| M  | M20x1.5                                         |
| N  | 1/2NPT                                          |
| GX | ATEX II 2D Ex tD A21 IP66 T65°C                 |
| CK | ATEX II 1G, 2G Ex ia IIC T6 (PTB 02 ATEX 2136X) |
|    | ATEX II 2D Ex tD A21 IP66 T65°C                 |

The Essential Health and Safety Requirements of the modified equipment are assured by compliance with:

EN 61241-0:2006 General requirements  
EN 61241-1:2004 Protection by enclosures

Parameters
Electrical data

BUS- supply and signal circuit  
(terminals 5, 6, 7, 8)

in type of protection Intrinsic Safety Ex ia IIC  
only for connection to a certified intrinsically safe  
circuit with the following maximum values:

$$U_i = 6.4 \text{ V}$$

$$P_i = 332 \text{ mW}$$

effective internal capacitance negligible

effective internal inductivity negligible

communication circuit  
(I<sup>2</sup>C-BUS socket in the terminal  
compartment)

in type of protection Intrinsic Safety Ex ia IIC  
only for connection to the intrinsically safe signal  
circuit of the VEGA interface converter  
VEGACONNECT according  
to PTB 01 ATEX 2007, PTB 07 ATEX 2013 X

adjustment and indication circuit  
indication unit

in type of protection Intrinsic Safety Ex ia IIC  
only for connection to the adjustment and  
(A/B-module, PLCSCOM)

Thermal data

Permitted ambient temperature at the electronics enclosure

-40 °C...+60 °C

Maximum surface temperature

ambient temperature + 3 K

Degrees of protection according to EN 60529

IP66

The marking of the equipment shall include the following:



**II 2D Ex tD A21 IP66 T65°C**

Type VEGADIS DIS61.GX\*\*



**II 1G Ex ia IIC T6 or II 2G Ex ia IIC T6  
II 2D Ex tD A21 IP66 T65°C**

Type VEGADIS DIS61.CK\*\*



Special conditions for safe use

none

Test and assessment report

BVS PP 05.2012 EG as of 18.11.2008

**DEKRA EXAM GmbH**

Bochum, dated 18. November 2008

Signed: Dr. Jockers

\_\_\_\_\_  
Certification body

Signed: Dr. Eickhoff

\_\_\_\_\_  
Special services unit

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We confirm the correctness of the translation from the German original.  
In the case of arbitration only the German wording shall be valid and binding.

44809 Bochum, 18. November 2008  
BVS-Hk / Her            A 20080508

**DEKRA EXAM GmbH**

Bochum, dated 18. November 2008

  
\_\_\_\_\_  
Certification body

  
\_\_\_\_\_  
Special services unit



Translation

# 1st Supplement

(Supplement in accordance with Directive 94/9/EC Annex III number 6)

## to the EC-Type Examination Certificate BVS 05 ATEX E 023

**Equipment:** Adjustment and indication unit type VEGADIS DIS61.\*\*\*\*  
(former type VEGADIS DIS61.GX\*\*)

**Manufacturer:** VEGA Grieshaber KG

**Address:** 77757 Schiltach, Germany

### Description

To the adjustment and indicating unit type VEGADIS DIS61.GX\*\* with integrated adjustment and indicating module, also called A/B module or PLICSCOM, type VEGADIS DIS61.CK\*\* is added.

This type is intrinsically safe EEx ia IIC T6 acc. to PTB 02 ATEX 2136X incl. the 1. Supplement dated 18.01.06 and meets category 1G or 2G as well as category 2D.

The adjustment and indicating unit type VEGADIS DIS61.\*\*\*\* can be modified according to the descriptive documents as mentioned in the pertinent test and assessment report.

The complete type code is as follows:

Adjustment and indication unit type VEGADIS DIS61.\*\*\*\*

enclosure / degrees of protection  
V stainless steel/IP66  
A Aluminium/IP66

cable entry  
M M20x1.5  
N 1/2NPT

GX ATEX II 2D IP66 T 65 °C  
CK ATEX II 1G, 2G EEx ia IIC T6  
(PTB 02 ATEX 2136X)  
ATEX II 2D IP66 T 65 °C

The Essential Health and Safety Requirements of the modified equipment are assured by compliance with:

EN 50281-1-1:1998+A1

Dust explosion protection



The marking of the equipment shall include the following:

 II 2D IP66 T 65 °C

Type VEGADIS DIS61.GX\*\*

 II 1G EEx ia IIC T6 or II 2G EEx ia IIC T6  
II 2D IP66 T 65 °C

Type VEGADIS DIS61.CK\*\*

Special conditions for safe use  
none

Test and assessment report  
BVS PP 05.2012 EG as of 14.02.2006

**EXAM BBG Prüf- und Zertifizier GmbH**

Bochum, dated 14. February 2006

Signed: Dr. Jockers

Signed: Dr. Eickhoff

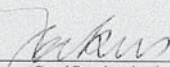
\_\_\_\_\_  
Certification body

\_\_\_\_\_  
Special services unit

We confirm the correctness of the translation from the German original.  
In the case of arbitration only the German wording shall be valid and binding.

44809 Bochum, 14. February 2006  
BVS-HK/Kw A 20060085

**EXAM BBG Prüf- und Zertifizier GmbH**

  
\_\_\_\_\_  
Certification body

  
\_\_\_\_\_  
Special services unit



Translation

**EC-Type Examination Certificate**

- (1)
- (2) **- Directive 94/9/EC -**  
Equipment and protective systems intended for use  
in potentially explosive atmospheres
- (3) **BVS 05 ATEX E 023**
- (4) **Equipment:** Adjustment and indication unit type VEGADIS DIS61.GX\*\*
- (5) **Manufacturer:** VEGA Grieshaber KG
- (6) **Address:** D 77757 Schiltach
- (7) The design and construction of this equipment and any acceptable variation thereto are specified in the schedule to this type examination certificate.
- (8) The certification body of EXAM BBG Prüf- und Zertifizier GmbH, notified body no. 0158 in accordance with Article 9 of the Directive 94/9/EC of the European Parliament and the Council of 23 March 1994, certifies that 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 atmospheres, given in Annex II to the Directive.  
The examination and test results are recorded in the test and assessment report BVS PP 05.2012 EG.
- (9) The Essential Health and Safety Requirements are assured by compliance with:  
EN 50281-1-1:1998+A1 Dust explosion protection
- (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, examination and tests of the specified equipment in accordance to Directive 94/9/EC.  
Further requirements of the Directive apply to the manufacturing process and supply of this equipment. These are not covered by this certificate
- (12) The marking of the equipment shall include the following:

II 2D IP66 T 65 °C

**EXAM BBG Prüf- und Zertifizier GmbH**

Bochum, dated 03. February 2005

Signed: Dr. Jockers

Certification body

Signed: Dr. Eickhoff

Special services unit



(13) Appendix to

(14) **EC-Type Examination Certificate**

**BVS 05 ATEX E 023**

(15) 15.1 Subject and type

Adjustment and indication unit type VEGADIS DIS61.GX\*\*

- enclosure / degrees of protection
- V stainless steel /IP66
- A aluminium/IP66
- cable entry
- M M20x1.5
- N 1/2NPT

15.2 Description

The adjustment and indicating unit type VEGADIS DIS61.GX\*\* with integrated adjustment and indicating module, also called A/B module or PLICSCOM, is used for parameter adjustment and visualisation of measurement data in areas with combustible, dust generating solids.

The adjustment and indicating unit type VEGADIS DIS61.GX\*\* is intrinsically safe EEx ia IIC T6 acc. to PTB 02 ATEX 2136X.

15.3 Parameters

15.3.1 Electrical data

BUS- supply and signal circuit  
(terminals 5, 6, 7, 8)

in type of protection Intrinsic Safety EEx ia IIC  
only for connection to a certified intrinsically safe  
circuit with the following maximum values:

$U_i = 6,4 \text{ V}$   
 $P_i = 332 \text{ mW}$   
 effective internal capacitance negligible  
 effective internal inductivity negligible

communication circuit  
(I<sup>2</sup>C-BUS socket in the terminal  
compartment)

in type of protection Intrinsic Safety EEx ia IIC  
only for connection to the intrinsically safe signal  
circuit of the VEGA interface converter  
VEGACONNECT3 according to PTB 01 ATEX 2007

adjustment and indication circuit

in type of protection Intrinsic Safety EEx ia IIC  
only for connection to the adjustment and indication  
unit (A/B-module, PLICSCOM)

15.3.2 Thermal data

- |                                                                     |                           |
|---------------------------------------------------------------------|---------------------------|
| 15.3.2.1 Permitted ambient temperature at the electronics enclosure | - 40 °C...+ 60 °C         |
| 15.3.2.2 Maximum surface temperature                                | ambient temperature + 3 K |
| 15.3.3 Degrees of protection according to EN 60529                  | IP66                      |

(16) Test and assessment report  
BVS PP 05.2012 EG as of 03.02.2005

(17) Special conditions for safe use  
None

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We confirm the correctness of the translation from the German original.  
In the case of arbitration only the German wording shall be valid and binding.

44809 Bochum, 03.02.2005  
BVS-Hk/Mi A 20040536

**EXAM BBG Prüf- und Zertifizier GmbH**

  
\_\_\_\_\_  
Certification body

  
\_\_\_\_\_  
Special services unit





