| 1       EU-Type Examination Certificate<br>Supplement intended for use in potentially explosive atmospheres<br>Directive 2014/34/EU         2       Equipment intended for use in potentially explosive atmospheres<br>Directive 2014/34/EU         3       EU-Type Examination Certificate Number: BVS 15 ATEX E 012 X         4       Product: Level limit switch type RFnivo RF 3100°, RF 3200°, RF 3300°         5       Manufacturer: UVT GmbH         6       Address: Westendstraße 5, 87488 Betzigau, Germany         7       This supplementary certificate extends EC-Type Examination Certificate No. BVS 15 ATEX E 012 X         8       DEKRA Testing and Certification GmbH, Notified Body number 0158, in accordance with he specification set out in the appendix to this nertificate and the documents referred to therein.         8       DEKRA Testing and Certification GmbH, Notified Body number 0158, in accordance with Arnipe 17         9       DEKRA Testing and Certification GmbH, Notified Body number 0158, in accordance with Arnipe 17         9       DEKRA Testing and Certification GmbH, Notified Body number 0158, in accordance with Arnipe 17         9       DEKRA Testing and Certification GmbH, Notified Body number 0158, in accordance with Arnipe 17         9       The Essential Health and Safety Requirements frequencempts: Requirements refered to therein.         10       Directive 2014/24/EU of the European Pariament and of the Council, dated 26 February 2014         115       Exel 60079-12018       Enere  |       |   |  |  |
|--|-------|---|--|--|
| <ul> <li>Change to Directive 2014/34/EU</li> <li>Equipment intended for use in potentially explosive atmospheres<br/>Directive 2014/34/EU</li> <li>EU-Type Examination Certificate Number: BVS 15 ATEX E 012 X</li> <li>Product: Level limit switch type RFnivo RF 3100*, RF 3200*, RF 3300*</li> <li>Manufacturer: UWT GmbH</li> <li>Address: Westendstraße 5, 87488 Betzigau, Germany</li> <li>This supplementary certificate extends EC-Type Examination Certificate No. BVS 15 ATEX E 012 X<br/>apply to products designed and constructed in accordance with the specification set out in the appendix<br/>of the said certificate but having any acceptable variations specified in the appendix to this certifica<br/>and the documents referred to therein.</li> <li>DEKRA Testing and Certification GmbH, Notified Body number 0158, in accordance with Article 17<br/>Directive 2014/34/EU of the European Parliament and of the Council, dated 26 February 2014, certificate<br/>to the design and construction of products intended for use in potentially explosive atmospheres give<br/>in Annex II to the Directive.<br/>The examination and test results are recorded in the confidential Report No. BVS PP 15,2023 EU.</li> <li>The Essential Health and Safety Requirements are assured in consideration of:<br/>EN EC 60079-7:2014 Fiameprod enclosure "d"<br/>EN 60079-1:2014 Fiameprod enclosure "d"<br/>EN 60079-1:2015 + A1:2018 Increased Safety "d"<br/>EN 60079-1:2014 Fiameprod enclosure "d"<br/>EN 60079-1:2014 Eigen date the certificate number, it indicates that the product is subject to the Specific<br/>Conditions for Use specified in the appendix to this certificate.</li> <li>This EU-Type Examination Certificate number, it indicates that the product is subject to the Specific<br/>Orditions for Use specified in the Directive apply to the manufacturing process and supply of the<br/>product. Further requirements of the Directive</li></ul> | 1     | Translation<br>EU-Ty  | oe Exa   | mination Certificate   |
| Directive 2014/34/EU         3       EU-Type Examination Certificate Number: BVS 15 ATEX E 012 X         4       Product: Level limit switch type RFnivo RF 3100*, RF 3200*, RF 3300*         5       Manufacturer: UWT GmbH         6       Address: Westendstraße 5, 87488 Betzigau, Germany         7       This supplementary certificate extends EC-Type Examination Certificate No. BVS 15 ATEX E 012 X         8       DEKRA Testing and Certificate extends EC-Type Examination Certificate No. BVS 15 ATEX E 012 No.         8       DEKRA Testing and Certification GmbH, Notified Body number 0158, in accordance with Article 17         9       The stain gand Certification GmbH, Notified Body number 0158, in accordance with Article 17         10       Directive 2014/34/EU of the European Parliament and of the Council, dated 26 February 2014, certific 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 give in Annex II to the Directive.         9       The Essential Health and Safety Requirements are assured in consideration of:         EN IEC 60079-0:2018       General requirements         EN 60079-11:2014       Flameproof enclosure "d"         EN 16C 60079-7:2015 + A1:2018       Increased Safety "e"         EN 60079-11:2012       Intrinsic Safety "i"         EN 60079-11:2014       Protection by Enclosure "d"  |       |   |  |  |
| <ul> <li>Product: Level limit switch type RFnivo RF 3100*, RF 3200*, RF 3300*</li> <li>Manufacturer: UWT GmbH</li> <li>Address: Westendstraße 5, 87488 Betzigau, Germany</li> <li>This supplementary certificate extends EC-Type Examination Certificate No. BVS 15 ATEX E 012 X 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 certificat and the documents referred to therein.</li> <li>DEKRA Testing and Certification GmbH, Notified Body number 0158, in accordance with Article 17 Directive 2014/34/EU of the European Parliament and of the Council, dated 26 February 2014, certific 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 give. The examination and test results are recorded in the confidential Report No. BVS PP 15.2023 EU.</li> <li>The Essential Health and Safety Requirements are assured in consideration of:</li> <li>EN IEC 60079-0:2018 General requirements EN 80079-11:2012 Intrinsic Safety "9" EN 60079-11:2012 Intrinsic Safety "1" EN 60079-11:2012 Intrinsic Safety "10 If the sign "X" is placed after the certificate number, it indicates that the product is subject to the Specific Onditions for Use specified in the appendix to this certificate.</li> <li>This EU-Type Examination Certificate relates only to the design and construction of the specific product. These are not covered by this certificate.</li> <li>The marking of the product shall include the following:</li> <li>Example of the product shall include the following:</li> <li>DEKRA Testing and Certificatio</li></ul>   | 2     |   |  | potentially explosive atmospheres  |
| <ul> <li>Manufacturer: UWT GmbH</li> <li>Address: Westendstraße 5, 87488 Betzigau, Germany</li> <li>This supplementary certificate extends EC-Type Examination Certificate No. BVS 15 ATEX E 012 X apply to products designed and constructed in accordance with the specification set out in the append of the said certificate but having any acceptable variations specified in the appendix to this certificat and the documents referred to therein.</li> <li>DEKRA Testing and Certification GmbH, Notified Body number 0158, in accordance with Article 17 Directive 2014/34/EU of the European Parliament and of the Council, dated 26 February 2014, certific that this product has been found to comply with the Essential Health and Safety Requirements relative to the design and construction of products intended for use in potentially explosive atmospheres give in Annex II to the Directive. The examination and test results are recorded in the confidential Report No. BVS PP 15 2023 EU</li> <li>The Essential Health and Safety Requirements are assured in consideration of:</li> <li>EN IEC 60079-0:2018 General requirements FN 60079-1:2014 Flameproof enclosure "d" EN 60079-1:2015 EN EC 60079-0:2018 Flameproof enclosure "d" EN 60079-1:2014 Flameproof enclosure "d" EN 60079-1:2</li></ul>   | 3     | EU-Type Examin  | ation Certificate  | Number: BVS 15 ATEX E 012 X  |
| <ul> <li>Address: Westendstraße 5, 87488 Betzigau, Germany</li> <li>This supplementary certificate extends EC-Type Examination Certificate No. BVS 15 ATEX E 012 X apply to products designed and constructed in accordance with the specification set out in the append of the said certificate but having any acceptable variations specified in the appendix to this certificat and the documents referred to therein.</li> <li>DEKRA Testing and Certification GmbH, Notified Body number 0158, in accordance with the specification set out in the appendix to this certificat and the documents referred to therein.</li> <li>DEKRA Testing and Certification GmbH, Notified Body number 0158, in accordance with Article 17 Directive 2014/34/EU of the European Parliament and of the Council, dated 26 February 2014, certifie that this product has been found to comply with the Essential Health and Safety Requirements relative to the design and construction of products intended for use in potentially explosive atmospheres over in Annex II to the Directive. The examination and test results are recorded in the confidential Report No. BVS PP 15 2023 EU.</li> <li>The Essential Health and Safety Requirements are assured in consideration of:</li> <li>EN EC 60079-0:2018 Encode after the certificate number, it indicates that the product is subject to the Specified in the appendix to this certificate.</li> <li>If the sign 'X' is placed after the certificate number, it indicates that the product is subject to the specified in the appendix to this certificate.</li> <li>This EU-Type Examination Certificate relates only to the design and construction of the specified in the order end y this certificate.</li> <li>The marking of the product shall include the following:</li> <li>EXRA Testing and Certification GmbH Bochum, 2020-07-28</li> <li>Signed: Jörg-Timm Killsch</li> </ul>  | 4     | Product:  | Level limit sw   | witch type RFnivo RF 3100*, RF 3200*, RF 3300*   |
| <ul> <li>7 This supplementary certificate extends EC-Type Examination Certificate No. BVS 15 ATEX E 012 X apply to products designed and constructed in accordance with the specification set out in the append of the said certificate but having any acceptable variations specified in the appendix to this certificat and the documents referred to therein.</li> <li>8 DEKRA Testing and Certification GmbH, Notified Body number 0158, in accordance with Article 17 Directive 2014/34/EU of the European Parliament and of the Council, dated 26 February 2014, certifie that this product has been found to comply with the Essential Health and Safety Requirements relative to the design and construction of products intended for use in potentially explosive atmospheres give in Annex II to the Directive. The examination and lest results are recorded in the confidential Report No. BVS PP 15.2023 EU</li> <li>9 The Essential Health and Safety Requirements are assured in consideration of:</li> <li>EN IEC 60079-0:2018 General requirements</li> <li>EN 60079-1:2014 Flamporof enclosure "d"</li> <li>EN 60079-1:2014 Flamporof enclosure "d"</li> <li>EN 60079-1:2014 Flamporof enclosure "d"</li> <li>EN 60079-1:2014 Protection by Enclosure "d"</li> <li>EN 60079-1:2014 Protection by Enclosure "d"</li> <li>EN 60079-1:2014 Protection by Enclosure "d"</li> <li>EN 60079-1:2014 Flamporof enclosure "d"</li> <li>EN 60079-1:2014 E condition the appendix to this certificate.</li> <li>10 If the sign "X" is placed after the certificate number, it indicates that the product is subject to the Specified for the appendix to this certificate.</li> <li>11 This EU-Type Examination Certificate relates only to the design and construction of the specifie product. These are not covered by this certificate.</li> <li>12 The marking of the product shall include the following:</li> <li>IEX See "Subject and Type"</li> <li>DEKRA Testing and Certification GmbH Bochum, 2020-07-28</li> <li>Signed: Jörg-Timm Kilisch</li> </ul>  | 5     | Manufacturer:   | UWT GmbH   |  |
| <ul> <li>apply to products designed and constructed in accordance with the specification set out in the append of the said certificate but having any acceptable variations specified in the appendix to this certificat and the documents referred to therein.</li> <li>DEKRA Testing and Certification GmbH, Notified Body number 0158, in accordance with Article 17 Directive 2014/34/EU of the European Parliament and of the Council, dated 26 February 2014, certificate 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 give in Annex II to the Directive.</li> <li>The examination and test results are recorded in the confidential Report No. BVS PP 15.2023 EU</li> <li>The Essential Health and Safety Requirements are assured in consideration of:</li> <li>EN IEC 60079-0:2018 General requirements EN 60079-1:2014 Flameproof enclosure "d" EN IEC 60079-7:2015 + A1:2018 Increased Safety "ie" Intrinsic Safety "ii" EN 60079-1:2014 Protection by Enclosure "d"</li> <li>EN 60079-1:2015 + A1:2018 Increased Safety "ie" Intrinsic Safety "iii" EN 60079-1:2014 Protection by Enclosure "d"</li> <li>EN 60079-1:2015 + A1:2018 Increased Safety "ie" Intrinsic Safety "iiii Anney Protection by Enclosure "d"</li> <li>EN 60079-1:2015 + A1:2018 Increased Safety is certificate.</li> <li>If the sign "X" is placed after the certificate number, it indicates that the product is subject to the Specific product. Further requirements of the Directive apply to the manufacturing process and supply of the product. Further requirements of the Directive apply to the manufacturing process and supply of the product. These are not covered by this certificate.</li> <li>The marking of the product shall include the following:</li> <li>EKRA Testing and Certification GmbH Bochum, 2020-07-28</li> <li>Signed: Jörg-Timm Kilisch</li> </ul>   | 6     | Address:  | Westendstraß   | aße 5, 87488 Betzigau, Germany   |
| <ul> <li>Directive 2014/34/EU of the European Parliament and of the Council, dated 26 February 2014, certific 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 give in Annex II to the Directive.</li> <li>The examination and test results are recorded in the confidential Report No. BVS PP 15.2023 EU.</li> <li>The Essential Health and Safety Requirements are assured in consideration of:</li> <li>EN IEC 60079-0:2018 General requirements FIN 60079-1:2014 Flameproof enclosure "d" EN IEC 60079-7:2015 + A1:2018 Increased Safety "e" Intrinsic Safety "I" EN 60079-1:2014 Protection by Enclosure "d"</li> <li>If the sign "X" is placed after the certificate number, it indicates that the product is subject to the Specific Conditions for Use specified in the appendix to this certificate.</li> <li>This EU-Type Examination Certificate relates only to the design and construction of the specific product. Further requirements of the Directive apply to the manufacturing process and supply of the product. These are not covered by this certificate.</li> <li>The marking of the product shall include the following:</li> <li>See "Subject and Type"</li> <li>DEKRA Testing and Certification GmbH Bochum, 2020-07-28</li> <li>Signed: Jörg-Timm Kilisch</li> </ul>  | 7     | apply to products<br>of the said certifi  | designed and co  | constructed in accordance with the specification set out in the appendix<br>any acceptable variations specified in the appendix to this certificate  |
| <ul> <li>EN IEC 60079-0:2018<br/>EN 60079-1:2014<br/>EN IEC 60079-7:2015 + A1:2018<br/>Increased Safety "e"<br/>EN 60079-31:2014<br/>Intrinsic Safety "i"<br/>Protection by Enclosure "t"</li> <li>If the sign "X" is placed after the certificate number, it indicates that the product is subject to the Speci<br/>Conditions for Use specified in the appendix to this certificate.</li> <li>This EU-Type Examination Certificate relates only to the design and construction of the specified<br/>product. Further requirements of the Directive apply to the manufacturing process and supply of the<br/>product. These are not covered by this certificate.</li> <li>The marking of the product shall include the following:</li> <li>See "Subject and Type"</li> <li>DEKRA Testing and Certification GmbH<br/>Bochum, 2020-07-28</li> <li>Signed: Jörg-Timm Kilisch</li> </ul>  | 8     | Directive 2014/34<br>that this product<br>to the design and<br>in Annex II to the | 4/EU of the Europ<br>has been found t<br>d construction of<br>Directive. | opean Parliament and of the Council, dated 26 February 2014, certifies<br>to comply with the Essential Health and Safety Requirements relating<br>f products intended for use in potentially explosive atmospheres given |
| <ul> <li>EN 60079-1:2014 Flameproof enclosure "d"</li> <li>EN IEC 60079-7:2015 + A1:2018 Increased Safety "e"</li> <li>EN 60079-11:2012 Intrinsic Safety "i"</li> <li>EN 60079-31:2014 Protection by Enclosure "t"</li> </ul> 10 If the sign "X" is placed after the certificate number, it indicates that the product is subject to the Specific Conditions for Use specified in the appendix to this certificate. 11 This EU-Type Examination Certificate relates only to the design and construction of the specifie product. Further requirements of the Directive apply to the manufacturing process and supply of the product. These are not covered by this certificate. 12 The marking of the product shall include the following: <ul> <li> Ex See "Subject and Type" DEKRA Testing and Certification GmbH Bochum, 2020-07-28 Signed: Jörg-Timm Kilisch</li></ul>   | 9     | The Essential He  | alth and Safety I  | Requirements are assured in consideration of:  |
| <ul> <li>Conditions for Use specified in the appendix to this certificate.</li> <li>11 This EU-Type Examination Certificate relates only to the design and construction of the specific product. Further requirements of the Directive apply to the manufacturing process and supply of the product. These are not covered by this certificate.</li> <li>12 The marking of the product shall include the following:</li> <li>(Ex) see "Subject and Type"</li> <li>DEKRA Testing and Certification GmbH Bochum, 2020-07-28</li> <li>Signed: Jörg-Timm Kilisch</li> </ul>  |       | EN 60079-1:201<br>EN IEC 60079-7<br>EN 60079-11:20                                | 4<br>2015 + A1:2018<br>12  | Flameproof enclosure "d"<br>8 Increased Safety "e"<br>Intrinsic Safety "i"   |
| <ul> <li>product. Further requirements of the Directive apply to the manufacturing process and supply of th product. These are not covered by this certificate.</li> <li>12 The marking of the product shall include the following:</li> <li>(Ex) see "Subject and Type"</li> <li>DEKRA Testing and Certification GmbH Bochum, 2020-07-28</li> <li>Signed: Jörg-Timm Kilisch</li> </ul>  | 10    |   |  |  |
| See "Subject and Type"          DEKRA Testing and Certification GmbH         Bochum, 2020-07-28         Signed: Jörg-Timm Kilisch  | 11    | product. Further  | requirements of  | f the Directive apply to the manufacturing process and supply of this  |
| DEKRA Testing and Certification GmbH<br>Bochum, 2020-07-28<br>Signed: Jörg-Timm Kilisch  | 12    | The marking of the  | ne product shall i   | include the following:   |
| Bochum, 2020-07-28<br>Signed: Jörg-Timm Kilisch  |       | <b>⟨£x⟩</b> see "Subje  | ect and Type"  |  |
|  |       |   |  | n GmbH   |
| Managing Director  |       | Signed: Jörg  | -Timm Kilisch  |  |
|  |       | Managing  | g Director   | _  |
|  | ( DAk | kkS   |  | Page 1 of 5 of BVS 15 ATEX E 012 X / N1<br>ay only be reproduced in its entirety and without any change.   |
| Page 1 of 5 of BVS 15 ATEX E 012 X / N1 This certificate may only be reproduced in its entirety and without any change.  |       | Akkreditlerungsstelle<br>D-ZE-17438-02-00   | DEKRA Testing and Ce   | Certification GmbH, Handwerkstr. 15, 70565 Stuttgart, Germany  |

DEKRA Testing and Certification GmbH, Handwerkstr. 15, 70565 Stuttgart, Germany Certification body: Dinnendahlstr. 9, 44809 Bochum, Germany Phone +49.234.3696-400, Fax +49.234.3696-401, e-mail DTC-Certification-body@dekra.com

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#### 13 Appendix

# 14 EU-Type Examination Certificate

BVS 15 ATEX E 012 X Supplement 1

## 15 Product description

## 15.1 Subject and type

Level limit switch

|  | RFnivo RF 3100*)   | RFnivo RF 3200*) | RFnivo RF 3300*) |  |  |
|--|--------------------|------------------|------------------|--|--|
| Mechanical<br>construction of<br>Probe Extension | standard           | heavy duty       | ceramics         |  |  |
| Electronics<br>Enclosure                         | "t" or "d" or "de" |                  |                  |  |  |
| Probe  |                    | Ex ia IIC/IIIC   |                  |  |  |

\*) this asterix represents further type variants which are documented in drawing 004-01ATEX, IECEx (RFnivo RF3, Type Code)

# Marking

Compact version enclosure 2, 3 and 4 (Ex) II 1/2D Ex ia/tb IIIC T\* Da/Db \*see thermal data enclosure d Il 2G Ex db ia IIC T\* Gb or II 2G Ex db ia IIB T\* Gb II 1/2D Ex ia/tb IIIC T\* Da/Db \*see thermal data enclosure de (Ex) II 2G Ex db eb ia IIC T\* Gb or II 2G Ex db eb ia IIB T\* Gb II 1/2D Ex ia/tb IIIC T\* Da/Db \*see thermal data Remote version enclosure 2, 3 and 4 electronics enclosure (Ex) II 2D Ex tb [ia] IIIC T\* Db \* see thermal data junction box + probe (Ex) II 1/2D Ex ia/tb IIIC T\* Da/Db \* see thermal data enclosure d electronics enclosure Il 2G Ex db [ia] IIC T\* Gb or II 2G Ex db [ia IIC] IIB T\* Gb II 2D Ex tb [ia] IIIC T\* Db \* see thermal data Junction box + probe Ex II 2G Ex ia IIC T\* Gb II 1/2D Ex ia/tb IIIC T\* Da/Db \* see thermal data Enclosure de Electronics enclosure (Ex) II 2G Ex db eb [ia] IIC T\* Gb or II 2G Ex db eb [ia IIC] IIB T\* Gb II 2D Ex tb [ia] IIIC T\* Db \* see thermal data Junction box + probe E II 2G Ex ia IIC T\* Gb II 1/2D Ex ia/tb IIIC T\* Da/Db \* see thermal data



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#### 15.2 Description

With this supplement the certificate is changed to Directive 2014/34/EU. (Annotation: In accordance with Article 41 of Directive 2014/34/EU, EC-Type Examination Certificates referring to 94/9/EC that were in existence prior to the date of application of 2014/34/EU (20 April 2016) may be referenced as if they were issued in accordance with Directive 2014/34/EU. Supplementary Certificates to such EC-Type Examination Certificates, and new issues of such certificates, may continue to bear the original certificate number issued prior to 20 April 2016.)

The level limit switch REnivo RF 3\*00\* is used for level monitoring in all types of containers and silos. It can be used with all powdery and granulated bulk materials, slurry and liquids.

An electric field is created between the probe and container wall to for monitoring the level. An increase of the dielectric constant due to the presence of material changes the electric field. This change is detected by the electronics and converted into an electrical output signal.

The unit consists of the probe extension (optional mounted to a pipe or extended by rod or rope), a process connection and a housing. The electronics is located inside the housing. The enclosure can be fixed directly (normal version) or by cable (max. cable length 25 m, remote version) to the process connection.

The general design of the devices can vary in:

- the type of enclosure
- the cable inlets
- the electronics
- the form of the extension
- the form of the process connection (for example different threaded bushes and flanges)
- the materials for the extension, process connection and housing
- different options

The enclosure can be in type of protection flameproof enclosure "d" or "de" (dependent on the variant) for use in zone 1 - areas or protected by enclosure "t" for use in zone 21 - areas. The probe extension itself is always situated in zone 1 or zone 20

Depending on the bushing the equipment is suitable for use in gas group IIB or IIC.

#### Reasons for the supplement:

- Change to Directive 2014/34/EU
- Updating to the current standards
- A further enclosure variant is added (housing 2)
- Revision of list of sealing materials

#### 15.3 **Parameters**

15.3.1 Electrical data

| 15.3.1.1 | Nominal voltage<br>or   |                                | 1 up to 230 V + | /-10%*, 50-60 Hz<br>/-10%*, max. 1.5<br>+/-10% of EN 61 | W                        |  |
|----------|---|--------------------------------|-----------------|---|--------------------------|--|
|          | Max. voltage  | Um                             | AC              | 265   | V                        |  |
| 15.3.1.2 | Signal output   |                                |                 | 50 V, 5 A non-ind<br>0 V, 5 A non-indu                  |                          |  |
|          | Max. voltage  | Um                             | AC              | 265   | V                        |  |
| 15.3.1.3 | Sensor circuit (Internally, type of protection E<br>Voltage<br>Current<br>Power | x ia IIC, ma<br>U₀<br>P₀<br>P₀ | x. cable length | 2.5<br>183  | n 25 m)<br>V<br>mA<br>mW |  |

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# 15.3.2 Thermal data

## 15.3.2.1 Compact version

| T <sub>amb</sub>            | max.<br>T <sub>Process</sub> | max. surface<br>temperature<br>T <sub>surface</sub> (EPL Db) | max. surface<br>temperature<br>T <sub>200</sub> (EPL Da) | Temperature-<br>class<br>(EPL Gb) |
|-----------------------------|------------------------------|--|--|-----------------------------------|
| -20 °C+70 °C <sup>(1)</sup> | 80 °C                        | 120 °C   | 120 °C   | T4                                |
| -40 °C+70 °C <sup>(2)</sup> | 120 °C                       | 120 °C   | 120 °C   | T4                                |
| -40 °C+60 °C <sup>(3)</sup> | 250 °C                       | 250 °C   | 250 °C   | T2                                |
|                             | 445 °C (4)                   | 445 °C (4)   | 445 °C (3)   | T1 <sup>(4)</sup>                 |

<sup>(1)</sup> For versions with plastic enclosure (housing 4)

<sup>(2)</sup> For versions with metallic enclosure (housing 2 or 3)

<sup>(3)</sup> For versions with metallic enclosure (housing d or de)

(4) only with RFnivo RF 3300\*

The max. surface temperature at the electronics enclosure is limited to 120 °C by a thermo fuse.

## 15.3.2.2 Remote Version

### 15.3.2.2.1 Electronics enclosure

| $T_{amb}$   | max. surface<br>temperature<br>T <sub>surface</sub> (EPL Db) | Temperature-<br>class<br>(EPL Gb) |
|---|--|-----------------------------------|
| -20 °C+70 °C <sup>(1)</sup><br>-40 °C+70 °C <sup>(2)</sup><br>-40 °C+60 °C <sup>(3)</sup> | 120 °C   | T4                                |

<sup>(1)</sup> For versions with plastic enclosure (housing 4)

<sup>(2)</sup> For versions with metallic enclosure (housing 2 or 3)

<sup>(3)</sup> For versions with metallic enclosure (housing d or de)

The max. surface temperature at the electronics enclosure is limited to 120 °C by a thermo fuse.

#### 15.3.2.2.2 Junction box + probe

| Tamb                        | max.<br>T <sub>Process</sub> | max. surface<br>temperature<br>T <sub>surface</sub> (EPL Db) | max. surface<br>temperature<br>T <sub>200</sub> (EPL Da) | Temperature-<br>class<br>(EPL Gb) |
|-----------------------------|------------------------------|--|--|-----------------------------------|
|                             | 80 °C                        | 80 °C  | 80 °C  | T6 MM                             |
| -20 °C+70 °C (1)            | 120 °C                       | 120 °C   | 120 °C   | annt4mm                           |
| -40 °C+70 °C <sup>(2)</sup> | 250 °C                       | 250 °C   | 250 °C   | T2 MH                             |
|                             | 445 °C (4)                   | 445 °C (4)   | 445 °C (4)   | T1 (4)                            |

<sup>(1)</sup> For versions with plastic enclosure (junction box 4)

<sup>(2)</sup> For versions with metallic enclosure (junction box 3)

(4) only with RFnivo RF 3300\*

15.3.3 Degree of protection for the enclosure

**IP64** 



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## 16 Report Number

BVS PP 15.2023 EU, as of 2020-07-28

### 17 Special Conditions for Use

- 17.1 For remote version: Along the intrinsically safe circuit between electronics enclosure and probe equipotential equalization must exist.
- 17.2 The apparatus shall be installed in a way that danger caused by electrostatic charges is avoided.

#### 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, 2020-07-28 BVS-Hk A20190501

Managing Director



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