

Translation

EU-Type Examination Certificate

Directive 2014/34/EU of the European Parliament and of the Council of 26 February 2014

EU-Type Examination Certificate Number: **BVS 10 ATEX E 022 X** Issue: **01**

Equipment: **Level Measuring System type Nivobob NB 4x00**

Manufacturer: **UWT GmbH**

Address: **Westendstraße 5, 87488 Betzigau, Germany**

This product and any acceptable variations thereto are 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 10.2120 EU. This issue of the EU-Type Examination Certificate replaces the previous issue of the EC-Type Examination Certificate BVS 10 ATEX E 022 including supplement 1.

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

EN IEC 60079-0:2018

IEC 60079-26:2021

IEC 60079-31:2022

General requirements

Equipment with Separation Elements or combined

Levels of Protection

Protection by Enclosure "t"

Where additional criteria beyond those given here have been used, they are listed at item 18 in the Schedule.

If the sign "X" is placed after the certificate number, it indicates that the product is subject to the "Specific Conditions of Use" listed under item 17 of this certificate.

This EU-Type Examination Certificate relates only to the technical design of the specified product in accordance to the Directive 2014/34/EU. 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 1/2D Ex ta/tb IIIC T* Da/Db**

* see manual

DEKRA Testing and Certification GmbH
Bochum, 2023-05-05

Signed: Dr. Rolf Krökel

Managing Director

13 **Appendix**

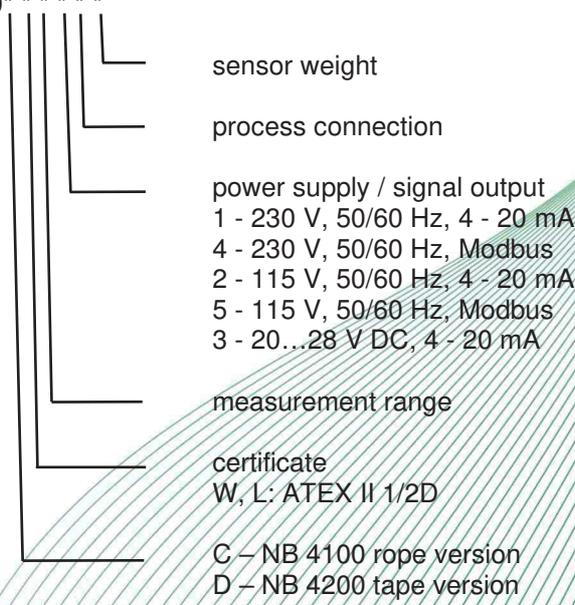
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15 **Product description**

15.1 **Subject and type**

Level Measuring System type
Nivobob NB 4x00* * * * * *



15.2 **Description**

The Level detector type Nivobob NB 4x00* * * * * * is a multifunctional unit for discontinuous level monitoring of any inflammable solid and bulky goods and interface levels. It consists of a two-part aluminium housing (electronic compartment and separated process compartment), wherein the process chamber with internal mechanical components is conform to Category 1D whereas the electronic chamber with electrical components is conform to Category 2D. The heating can be optionally built in into the electronic chamber.

Reasons for this issue:

- Change to Directive 2014/34/EU
- Updating to the current standards
- IEC 60079-26 is added
- A special condition for safe (electrostatics) use is added and due to that an X-marking is given.

No components used referring to older standards.

15.3 Parameters

15.3.1 Electrical data

15.3.1.1 Supply circuit

Rated voltage

AC 115 V or 230 V +10 % / -15 %
(incl. 10 % of EN 61010)

Frequency
or

50 / 60 Hz
DC 20 up to 28 V
(incl. 10 % of EN 61010)

Power consumption (without heater)

max. 100 VA or 100 W

15.3.1.2 Heating circuit

Power consumption of the heater

max. 80 W

15.3.1.3 Signal-Output

Current output

4 up to 20 mA; max. load 500 Ω

Relay contacts (max. 2 relays)
Maximum contact rating

AC 250 V / max. 2 A; 500 VA

Communication Modbus RTU

15.3.2 Thermal data

Ambient temperature T_a ¹⁾	Process temperature T_p	Max. surface temperature (EPL Da) ²⁾	Max. surface temperature (EPL Db) ³⁾
-20 °C / -40 °C up to +60 °C	-40 °C up to +80 °C	$T_{200}117$ °C	T117 °C
-20 °C / -40 °C up to +50 °C	-40 °C up to +90 °C	$T_{200}117$ °C	T117 °C
-20 °C / -40 °C up to +40 °C	-40 °C up to +100 °C	$T_{200}117$ °C	T117 °C
-20 °C / -40 °C up to +40 °C	-40 °C up to +110 °C	$T_{200}117$ °C	T117 °C
-20 °C / -40 °C up to +40 °C	-40 °C up to +120 °C	$T_{200}120$ °C	T120 °C
-20 °C / -40 °C up to +40 °C	-40 °C up to +130 °C	$T_{200}130$ °C	T130 °C
-20 °C / -40 °C up to +40 °C	-40 °C up to +135 °C	$T_{200}135$ °C	T135 °C
-20 °C / -40 °C up to +40 °C	-40 °C up to +140 °C	$T_{200}140$ °C	T140 °C
-20 °C / -40 °C up to +40 °C	-40 °C up to +150 °C	$T_{200}150$ °C	T150 °C

1) depending on the used cable gland the permitted ambient temperature range can be limited

2) max. surface temperature inside process limited by max. process temperature

3) max. surface temperature on electronics limited by thermal fuse to +117 °C

15.3.3 Degree of protection according to EN 60529

IP 66

16 Report Number

BVS PP 10.2120 EU, as of 2023-05-05

17 Specific Conditions of Use

The apparatus shall be installed in a way that danger caused by electrostatic charges is avoided.

18 **Essential Health and Safety Requirements**

Met by compliance with the requirements mentioned in item 9.

For this equipment the standards IEC 60079-31:2022 and IEC 60079-26:2021 are equivalent in safety terms to the harmonized standards EN 60079-31:2014 and EN 60079-26:2015

19 **Remarks and additional information**

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, 2023-05-05
BVS-Hk/Mu A 20230153 / 343011100



Managing Director