



## 1 EU-TYPE EXAMINATION CERTIFICATE

2 Equipment intended for use in Potentially Explosive Atmospheres Directive 2014/34/EU

3 Certificate Number: CSANe 23ATEX1067X Issue: 0

4 Equipment: NivoRadar NR4100 & NivoRadar NR7200

5 Applicant: UWT GmbH

6 Address: Westendstraße 5

87488 Betzigau

Germany

7 This equipment and any acceptable variation thereto is specified in the schedule to this certificate and the documents therein referred to.

8 CSA Group Netherlands B.V., notified body number 2813 in accordance with Articles 17 and 21 of Directive 2014/34/EU of the European Parliament and of the Council, dated 26 February 2014, certifies that this equipment has been found to comply with the Essential Health and Safety Requirements relating to the design and construction of equipment intended for use in potentially explosive atmospheres given in Annex II to the Directive.

The examination and test results are recorded in the confidential reports listed in Section 14.2.

9 Compliance with the Essential Health and Safety Requirements, with the exception of those listed in the schedule to this certificate, has been assured by compliance with the following documents:

EN IEC 60079-0:2018

EN 60079-11:2012

EN 60079-26:2015

- If the sign 'X' is placed after the certificate number, it indicates that the equipment is subject to Specific Conditions of Use identified in the schedule to this certificate.
- This EU-Type Examination Certificate relates only to the design and construction of the specified equipment. If applicable, further requirements of this Directive apply to the manufacture and supply of this equipment.
- 12 The marking of the equipment shall include the following:

NivoRadar 7200

 $\langle \epsilon_x \rangle$ 

II 1G,1/2G

Ex ia IIC T4 Ga, Ga/Gb

NivoRadar 4100:



II 1G,1/2G Ex ia IIC T4 Ga, Ga/Gb II 1D,1/2D Ex ia IIIC T<sub>200</sub> 134°C Da, Da/Db

 $Ta = -40^{\circ}C \text{ to } +80^{\circ}C$ 

 $Ta = -40^{\circ}C \text{ to } +70^{\circ}C$ 

Signed: Michelle Halliwell

Title: Director of Operations

Project Number 80159358

This certificate and its schedules may only be reproduced in its entirety and without change CSA Group Netherlands B.V. Utrechtseweg 310, Building B42, 6812AR Arnhem, The Netherlands

DQD 544.11 Issue Date: 2022-04-14

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#### **SCHEDULE**

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#### 13 DESCRIPTION OF EQUIPMENT

Radar sensors types NivoRadar 7200, 4100 for use in explosive atmospheres caused by the presence of combustible gases or dusts, are used for monitoring and control of filling levels by means of microwave technology. The electronics, mounted in an plastic enclosure converts the reflected microwave echo, indicating the filling level, into an 2-wire 4...20mA HART signal. Operation and control of the sensor can either be through the wired connection or via smart phone and UWT Level App (Bluetooth).

The sensor is either equipped with a fixed cable (NivoRadar 4100) of 5m, 10 m, 25m or selectable length with a G1", 1"NPT or R1" threaded connection or a 2 wire terminal (NivoRadar 7200) via a M20x1.5 or  $\frac{1}{2}$ " NPT cable entry.

NivoRadar 7200 (without display) and NivoRadar 7200 (with display) are electrically identical where type NivoRadar 7200 (without display) is equipped without a display module and a blind cover and type NivoRadar 7200 (with display) is equipped with a display module and a windowed cover.

Ambient temperature range for NivoRadar 7200: -40 °C to +70 °C Ambient temperature range for NivoRadar 4100: -40 °C to +80 °C

Process temperature range : -40 °C to +80 °C

## **Electrical Data**

NivoRadar 4100:

Supply and output circuit (+ (Brown wire), - (Blue wire)):

in type of protection intrinsic safety Ex ia IIC or Ex ia IIIC, only for connection to a certified intrinsically safe circuit, with the following maximum values:

Ui = 30 V; Ii = 131 mA; Pi = 983 mW; Ci = 0.18 nF/m; Li = 0.65  $\mu$ H/m

NivoRadar 7200:

Supply and output circuit (+ (terminals 1), - (terminal 2)):

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

Ui = 30 V; Ii = 131 mA; Pi = 983 mW; Ci  $\approx$  0 nF; Li  $\approx$  0  $\mu$ H

#### 14 DESCRIPTIVE DOCUMENTS

#### 14.1 Drawings

Refer to Certificate Annexe.

#### 14.2 Associated Reports and Certificate History

Issue	Date	Report number	Comment
0	15 May 2023	R80159358A	The release of the prime certificate.

- 15 SPECIFIC CONDITIONS OF USE (denoted by X after the certificate number)
- 15.1 For electrical and thermal data refer to equipment section.
- 15.2 The equipment shall be installed and maintained such that hazards caused by electrostatic discharge are excluded.





## **SCHEDULE**

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16 ESSENTIAL HEALTH AND SAFETY REQUIREMENTS OF ANNEX II (EHSRs)

The relevant EHSRs that are not addressed by the standards listed in this certificate have been identified and individually assessed in the reports listed in Section 14.2.

- 17 CONDITIONS OF MANUFACTURE
- 17.1 The use of this certificate is subject to the Regulations Applicable to Holders of CSA Group Netherlands B.V. certificates.
- 17.2 Holders of EU-Type Examination Certificates are required to comply with the conformity to type requirements defined in Article 13 of Directive 2014/34/EU.

# **Certificate Annexe**

Certificate Number: CSANe 23ATEX1067X



Applicant: UWT GmbH



## Issue 0

Drawing	Sheets	Rev.	Date (Stamp)	Title
6-84223	1 to 10	-	12 May 23	Specification Typeplate NivoRadar 4200 NivoRadar
			-	7100 Ex ia