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EU-TYPE EXAMINATION CERTIFICATE

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

[3] EU-Type Examination Certificate Number: **Presafe 15 ATEX 6171X** **Issue 7**

[4] Product: **Portable Gas Monitor**

[5] Manufacturer: **RIKEN KEIKI Co., Ltd.**

[6] Address: **2-7-6, Azusawa, Itabashi-ku,
Tokyo, 174-8744, Japan**

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

[8] DNV Product Assurance AS, notified body number 2460, in accordance with Article 17 and Article 21 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 confidential reports listed in item 16.

[9] Compliance with the Essential Health and Safety Requirements has been assured by compliance with: **EN IEC 60079-0:2018, EN 60079-1:2014 and EN 60079-11: 2012**

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

[10] 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.

[11] This EU-TYPE EXAMINATION CERTIFICATE relates only to the design and construction 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.

[12] The marking of the product shall include the following:



II 1 G

Ex ia IIB T4/T3 Ga -20°C ≤ Ta ≤ +50°C

Ex ia IIC T4/T3 Ga -20°C ≤ Ta ≤ +50°C

Ex da ia IIC T4/T3 Ga -20°C ≤ Ta ≤ +50°C

See [15] Description of product on page 2 for information.



Date of issue:
2023-11-27



Asle Kaastad
For DNV Product Assurance AS
The Certificate has been digitally signed.
See www.dnv.com/digitalsignatures for info

[13]

Schedule

[14] **EU-Type Examination Certificate No:**

Presafe 15 ATEX 6171X

Issue 7

[15] Description of Product







This report covers the portable gas monitor GX-6000 and GX-6100, which is used for measuring flammable gas concentration in hazardous location. GX-6000 and GX-6100 are battery-operated handheld portable devices and are built up by anti-electrostatic plastic enclosure with minor metal parts such as assembly screws. Different alternative battery units may be used, BUL-6000/6100 (rechargeable Li-ion battery) and BUD-6000/6100 (alkaline dry battery). All battery units can be used for GX-6000 and GX-6100. Replacement or charging of battery unit can be performed by end-users and is only allowed in non-hazardous areas. Safety instructions and warnings must be followed. Following parts are also included in the investigation, charger module BC-6000 or SDM-6000, Combustible gas sensor, Toxic gas sensor and Oxygen sensor, Smart sensor type DES, ESS, PIS, SHS & OSS.






GX-6000: When the combustible gas sensor is used the gas group is limited to IIB.


GX-6100: Combustible gas sensor, NCR-6309, is used and the gas group is IIC, as sensor is certified as "da".

Ambient temperature range during battery charging: $-0^{\circ}\text{C} \leq T_a \leq +40^{\circ}\text{C}$

Type designation

GX-6000:			
Ex code	Ambient temperature	Combustible gas sensor	Battery
 II 1 G Ex ia IIB T4 Ga	-20°C to +50°C	Mounted	BUL-6000 / BUL-6100
 II 1 G Ex ia IIC T4 Ga	-20°C to +50°C	Not mounted	BUL-6000 / BUL-6100
 II 1 G Ex ia IIB T4 Ga	-20°C to +50°C	Mounted	BUD-6000 / BUD-6100 LR6 (Toshiba)
 II 1 G Ex ia IIC T4 Ga	-20°C to +50°C	Not mounted	BUD-6000 / BUD-6100 LR6 (Toshiba)
 II 1 G Ex ia IIB T3 Ga	-20°C to +50°C	Mounted	BUD-6000 / BUD-6100 MN1500 (Duracell)
 II 1 G Ex ia IIC T3 Ga	-20°C to +50°C	Not mounted	BUD-6000 / BUD-6100 MN1500 (Duracell)

GX-6100:			
Ex code	Ambient temperature	Combustible gas sensor	Battery
 II 1 G Ex da ia IIC T4 Ga	-20°C to +50°C	Mounted	BUL-6100 / BUL-6000
 II 1 G Ex ia IIC T4 Ga	-20°C to +50°C	Not mounted	BUL-6100 / BUL-6000
 II 1 G Ex da ia IIC T4 Ga	-20°C to +50°C	Mounted	BUD-6100 / BUD-6000 LR6 (Toshiba)
 II 1 G Ex ia IIC T4 Ga	-20°C to +50°C	Not mounted	BUD-6100 / BUD-6000 LR6 (Toshiba)
 II 1 G Ex da ia IIC T3 Ga	-20°C to +50°C	Mounted	BUD-6100 / BUD-6000 MN1500 (Duracell)

 II 1 G Ex ia IIC T3 Ga	-20°C to +50°C	Not mounted	BUD-6100 / BUD-6000 MN1500 (Duracell)
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Electrical Data

Battery operated. BUL-6000/6100 (rechargeable Li-ion battery unit) or BUD-6000/6100 (Alkaline battery unit)
For BUD-6000/6100: use only Toshiba LR6 or Duracell MN1500 AA-batteries (different battery types shall not be mixed).

Degrees of protection (IP Code)

(Compliance with requirement of IP20 is checked)

Ambient temperature:

-20°C to +50°C

Routine tests

N / A

[16] **Report No.:** SC277576_2

[17] **Specific Conditions of Use**

1. The measuring function according to Annex II paragraph 1.5.5 of the Directive is not covered this EU-type examination. It shall comply with the requirements from the relevant European harmonized standards which provide guidance on the performance of gas detection equipment.

[18] **Essential Health and Safety Requirements**

Met by compliance with the requirements mentioned in item 9.

[19] **Drawings and documents**

Number	Title	Rev.	Date
E3-6991-5470-70-01K	INDEX GX-6000	9	2023.03.08
E3-6991-5470-70-02K	INDEX GX-6100	5	2023.11.22
-	Safety Information	9	2023.10.18

[20] **Certificate History**

Issue	Description	Issue date	Report no.
0	Original issue	2015-04-21	D0001494-00
1	- Changed layout of DES sensor PCB in order to change the optical path length. The infrared sensor is then able to measure additional gas type. - Minor changes of non-safety components on charger module SDM-6000.	2015-06-16	D0001494-01
2	Update the notified body number	2020-08-27	184491
3	Removed EN60079-26: 2007	2020-11-02	184491-03
4	Updated to the latest edition of EN 60079-0, include an additional battery cell for use with BUD-6000 and update gas group to IIB when the combustible gas sensor (NC-6264A) is used.	2021-04-30	PRJN-238467-2021-PA-NOR
5	Correct the marking label with new battery cell type.	2021-08-13	277576
6	Added the model GX-6100, new piezo-electric buzzer, backup battery changed and new BLE module.	2022-11-11	SC277576_1
7	New additional secondary cells for use in BUL-6100.	2023-11-27	SC277576_2

END OF CERTIFICATE