



IECEx Certificate of Conformity

INTERNATIONAL ELECTROTECHNICAL COMMISSION IEC Certification System for Explosive Atmospheres

for rules and details of the IECEx Scheme visit www.iecex.com

Certificate No.: **IECEx PRE 15.0011**

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Certificate history:

Status: **Current**

Issue No: 6

[Issue 5 \(2021-08-13\)](#)

[Issue 4 \(2021-04-30\)](#)

[Issue 3 \(2020-08-27\)](#)

[Issue 2 \(2019-10-30\)](#)

[Issue 1 \(2015-06-16\)](#)

[Issue 0 \(2015-04-21\)](#)

Date of Issue: 2022-11-11

Applicant: **RIKEN KEIKI Co., Ltd.**
2-7-6, Azusawa,
Itabashi-ku,
Tokyo, 174-8744,
Japan

Equipment: **Portable Gas Monitors GX-6000 and GX-6100**

Optional accessory:

Type of Protection: **Intrinsic safe and flameproof safety**

Marking: Ex ia IIB T4/T3 Ga
Ex ia IIC T4/T3 Ga
Ex da ia IIC T4/T3 Ga

See *equipment* below for details.

Approved for issue on behalf of the IECEx
Certification Body:

Asle Kaastad

Position:

Certification Manager

Signature:
(for printed version)

Date:
(for printed version)

2022-11-11

1. This certificate and schedule may only be reproduced in full.
2. This certificate is not transferable and remains the property of the issuing body.
3. The Status and authenticity of this certificate may be verified by visiting www.iecex.com or use of this QR Code.



Certificate issued by:

DNV Product Assurance AS
Veritasveien 1
1363 Høvik
Norway





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Manufacturer: **RIKEN KEIKI Co., Ltd.**
2-7-6, Azusawa,
Itabashi-ku,
Tokyo, 174-8744,
Japan

Manufacturing
locations: **RIKEN KEIKI Co., Ltd.**
2-3, Minamisakae-cho,
Kasukabe-shi,
Saitama, 344-0057,
Japan

RIKEN KEIKI NARA MFG. Co., Ltd.
49-1, Abe, Sakurai-shi,
Nara, 633-0054,
Japan

TOKYO MICRO SEIKI Co., Ltd.
1-15-24, Shingashi, Itabashi-ku,
Tokyo, 175-0081,
Japan

See following pages for more locations

This certificate is issued as verification that a sample(s), representative of production, was assessed and tested and found to comply with the IEC Standard list below and that the manufacturer's quality system, relating to the Ex products covered by this certificate, was assessed and found to comply with the IECEx Quality system requirements. This certificate is granted subject to the conditions as set out in IECEx Scheme Rules, IECEx 02 and Operational Documents as amended

STANDARDS :

The equipment and any acceptable variations to it specified in the schedule of this certificate and the identified documents, was found to comply with the following standards

[IEC 60079-0:2017](#) Explosive atmospheres - Part 0: Equipment - General requirements
Edition:7.0

[IEC 60079-1:2014-06](#) Explosive atmospheres - Part 1: Equipment protection by flameproof enclosures "d"
Edition:7.0

[IEC 60079-11:2011](#) Explosive atmospheres - Part 11: Equipment protection by intrinsic safety "i"
Edition:6.0

This Certificate **does not** indicate compliance with safety and performance requirements other than those expressly included in the Standards listed above.

TEST & ASSESSMENT REPORTS:

A sample(s) of the equipment listed has successfully met the examination and test requirements as recorded in:

Test Reports:

[NO/DNV/ExTR21.0088/00](#)

[NO/PRE/ExTR15.0012/05](#)

Quality Assessment Report:

[NO/PRE/QAR19.0018/06](#)



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EQUIPMENT:

Equipment and systems covered by this Certificate are as follows:

This report covers the portable gas monitors 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. Two alternative battery units may be used, BUL-6000 (rechargeable Li-ion battery) and BUD-6000 (alkaline dry battery). 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 & 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: $-0^{\circ}\text{C} \leq T_a \leq +40^{\circ}\text{C}$

SPECIFIC CONDITIONS OF USE: NO



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Equipment (continued):

GX-6000:

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

GX-6100:

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



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DETAILS OF CERTIFICATE CHANGES (for issues 1 and above)

Added the model GX-6100, new piezo-electric buzzer, backup battery changed, new BLE module and added manufacturing locations.



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Additional manufacturing locations:

EBINA DENKI Manufacturing Co., LTD.
23-10, Yananecho,
Kawaguchi-shi,
Saitama, 333-0864,
Japan