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 DNV 22.0029X**	Page 1 of 3	Certificate history:
Status:	**Current**	Issue No: 0	
Date of Issue:	2022-07-07		

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

Equipment: **Portable gas detector, GX-Force**

Optional accessory:

Type of Protection: **Ex da ia and Ex ia**

Marking: Ex da ia IIC T4 Ga, T_{amb} -20°C to +60°C   (Including flammable gas sensor.)

Ex ia IIC T4 Ga, T_{amb} -20°C to +60°C   (Not including flammable gas sensor.)

Approved for issue on behalf of the IECEx
Certification Body: **Asle Kaastad**

Position: **Certification Manager**

Signature:
(for printed version)

Date:
(for printed version)   2022-07-07

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 3
1363 Hovik .
Norway

DNV

IECEx Certificate of Conformity

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

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 Report:

NO/DNV/ExTR21.0088/00

Quality Assessment Report:

NO/PRE/QAR19.0018/04

EQUIPMENT:
Equipment and systems covered by this Certificate are as follows:

GX-Force is a portable suction type gas detector which can measure 4 kinds of gases. For gas sensors, electrochemical type and catalytic type are used. For the battery, one cell of 18650 type lithium ion secondary battery is used, which must be charged in a non-hazardous location. Users will never have to replace the battery.

This unit contains 2 buttons, LCD display screen, and LEDs for alarm on both sides and top. Internally, one each pump, buzzer, and vibration motor are mounted. When the power is supplied, the pump will be activated for suction, and the unit starts gas detection. Gas concentration is always displayed on the LCD screen. When a gas is detected, the indicator value on the LCD screen goes up, and when it reaches to the alarm level, LED buzzer, vibration motor will be activated and notify the user that the gas was detected.

The sensors to be mounted are electrochemical type and catalytic type. The electrochemical type sensor detects CO (carbon monoxide), H_2S (hydrogen sulfide), and O2 (oxygen). The catalytic type sensor detects flammable gases. It uses catalyst, and therefore needs to apply with "da".

Charging shall be done in a non-hazardous location. The charging terminal is USB TYPE C, and only a use of a charger exclusively specified for it, IEC60950-certified SELV power supply, or IEC62368-1-certified ES1 power supply is approved for charging. Charging method is CCCV, and a control is performed by a dedicated IC. Rechargeable temperature range is between +10°C and +40°C.

SPECIFIC CONDITIONS OF USE: YES as shown below:
Charging terminal, Um: 6,0V.