

# CERTIFICATE

## (1) EU-Type Examination

(2) **Equipment or protective systems intended for use in potentially explosive atmospheres - Directive 2014/34/EU**

(3) EU-Type Examination Certificate Number: **DEKRA 24ATEX0018X** Issue Number: **0**

(4) Product: **Portable gas detector type GX-Force**

(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) DEKRA Certification B.V., Notified Body number 0344 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 confidential test report number NL/DEK/ExTR24.0019/00.

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

**EN IEC 60079-0 : 2018**

**EN 60079-1 : 2014**

**EN 60079-11 : 2012**

except in respect of those requirements listed at item 18 of 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 specified in the schedule to this certificate.

(11) This EU-Type Examination Certificate relates only to the design and construction of the specified product. 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 da ia IIC T4 Ga (with catalytic gas sensor)**

**II 1 G Ex ia IIC T4 Ga (without catalytic gas sensor)**

Date of certification: 15 April 2024

DEKRA Certification B.V.

R. Schuller  
Certification Manager

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(13) **SCHEDULE**

(14) **to EU-Type Examination Certificate DEKRA 24ATEX0018X** Issue No. 0

(15) **Description**

GX-Force is an “Ex ia” portable suction type gas detector which can measure 4 gases. For gas sensors, electrochemical type and catalytic type are used. The electrochemical type sensor detects CO (carbon monoxide), H<sub>2</sub>S (hydrogen sulfide), and O<sub>2</sub> (oxygen). The catalytic type sensor detects flammable gases.

Rechargeable temperature range is between +10 °C and +40 °C.  
Ambient temperature range is between -20 °C and +60 °C.

**Type designation:**

GX-Force

Three different gas sensors are used:

Model ESR-A1DP: measures CO/H<sub>2</sub>S (electrochemical principle)

Model ESR-X13P: measures O<sub>2</sub> (electrochemical principle)

Model NCR-6309: measures flammables (catalytic)

**Electrical data**

Non-user-replaceable Battery powered.

Nominal voltage: 3.6 V.

Maximum open circuit voltage: 4.2 V.

Charging circuit:

Charging shall be done in a non-hazardous location by use of a charger exclusively specified for it.

U<sub>m</sub> = 6.0 V (SELV circuit).

**Installation instructions**

The instructions provided with the product shall be followed in detail to assure safe operation.

(16) **Report Number**

NL/DEK/ExTR24.0019/00.

(17) **Specific conditions of use**

1. The flameproof joints are not intended to be repaired.
2. When using the product in hazardous areas, take the precautions as listed in safety instructions to safeguard against static electricity hazards.

(18) **Essential Health and Safety Requirements**

Covered by the standards listed at item (9).

**Test documentation**

As listed in Report No. NL/DEK/ExTR24.0019/00.