

# 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 24ATEX0017X** Issue Number: **1**

(4) Product: **Gas detectors type SD-3 and GD-3**

(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/ExTR24.0018/01.

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

**EN IEC 60079-0 : 2018**  
**EN 60079-28 : 2015**

**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 2 G Ex db IIC T6...T4 Gb**  
**II 2 G Ex db ia IIC T4 Gb**  
**II 2 G Ex db [op is] IIC T4 Gb**

Date of certification: 22 August 2024

DEKRA Certification B.V.

R. Schuller  
Certification Manager



Throughout this document, a point is used as the decimal separator.

© Integral publication of this certificate and adjoining reports is allowed. This Certificate may only be reproduced in its entirety and without any change.

(13) **SCHEDULE**

(14) **to EU-Type Examination Certificate DEKRA 24ATEX0017X** Issue No. 1

(15) **Description**

The gas detectors type SD-3 and GD-3 are stationary, continuous-monitoring detectors which operate in accordance with two detection principles (diffusion and suction) and six detection methods (non-dispersive infrared absorption method, solid sensor semi-conductor, catalytic combustion method, hot wire type semiconductor method, thermal conductivity method and potentiostatic electrolysis method).

They consist of flameproof enclosures with included sensor unit which can be either intrinsically safe (EC barrier) or flameproof with or without inherently safe optical radiation source.

Remote sensor head RIP models include a heater and optical radiation source mounted inside a flameproof enclosure.

Equipment contains the connection terminals for field connection and is provided with threaded holes M25, NPT 1/2" or NPT 3/4" intended for Ex certified threaded entry devices.

The examination of the gas detector does not include a judgment of the functional performance of the equipment.

For more information about Type designation, Thermal data and Electrical data see Annex 1 to Report No. NL/DEK/ExTR24.0018/01.

**Installation instructions**

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

(16) **Report Number**

NL/DEK/ExTR24.0018/01.

(17) **Specific conditions of use**

1. The equipment with glass window plate must only be placed in areas with low risk of mechanical danger.
2. Refer to manufacturer's instructions for ambient temperature and T-class.
3. The flameproof joints are not intended to be repaired.
4. The manufacturer's instructions provide guidance for the user to minimize the risk from electrostatic discharge. Maximum capacitance of 6 nF can occur.
5. If the surge protection device are attached to the flameproof enclosure it shall be provided with a high strength locking compound on the mounting thread.
6. The property class of (M5) fastening screws used for fixing of the parts of the sensor head flameproof enclosure of "RIP" models specified by the manufacturer is A4-70.

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

Covered by the standards listed at item (9).

(19) **Test documentation**

As listed in Report No. NL/DEK/ExTR24.0018/01.