

EU-TYPE EXAMINATION CERTIFICATE

- [2] EQUIPMENT OR PROTECTIVE SYSTEM INTENDED FOR USE IN POTENTIALLY EXPLOSIVE ATMOSPHERES DIRECTIVE 2014/34/EU
- [3] EU-Type Examination Certificate Number: **Presafe 20 ATEX 63097X** **Issue 0**
- [4] Product: **SD-1RI and SD-1DRI Gas detectors**
- [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 GL Presafe AS, notified body number 2460, 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 reports listed in section 16.
- [9] Compliance with the Essential Health and Safety Requirements has been assured by compliance with:
EN IEC 60079-0:2018 and EN 60079-1:2014
- [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 Gb Tamb -20°C to +60°C**

Date of issue:
2020-10-20



Bjørn Spongsveen
For DNV GL Presafe AS
The Certificate has been digitally signed.
See www.dnvgl.com/digitalsignatures for info



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[13] **Schedule**

[14] **EU-Type Examination Certificate No:** Presafe 20 ATEX 63097X Issue 0

[15] **Description of Product**

The SD-1RI and SD-1DRI Gas Detectors are flameproof and rated at 24Vdc, 85mA. They are a range of gas detector sensors, which incorporate an infrared gas sensor.

The SD-1RI and SD-1DRI Flameproof Gas detectors consist of an aluminum body and flanged lid, with a display window, a gas sensor, flame arrestor and guard at the bottom of the gas detector. Cable entry into the enclosure is via an integrated cable gland at the bottom of the enclosure body.

Special fasteners are Stainless steel A2-70 or A4-70 screws.

The Gas Detectors have both an internal and external earth point.

Type designation

SD-1RI & SD-1DRI

Electrical Data

Supply Voltage 24Vdc,

Supply current 85mA

Ambient temperature:

-20°C to +60°C

Routine tests

None.

[16] **Report No.:** 186568

[17] **Specific Conditions of Use**

- 1) Fasteners used for enclosure are from stainless steel property class A2-70 or A4-70
- 2) Cable gland may not provide sufficient clamping. User shall provide additional clamping against the cable pulling and twisting.
- 3) Regarding ATEX specification, the measuring function according to Annex II paragraph 1.5.5 of the Directive is not covered by 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 and safety devices.
- 4) The flameproof joints not intended to be repaired.

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

Essential Health and Safety Requirements (EHSRs) are covered by the standards listed at item 9

[19] **Drawings and documents**

Number	Title	Rev.	Date
M3-4288-11-05K	Gas Detector	5	11/08/2020
M3-4288-11-04K	Details of Internal Part A-A~D-D Section (SD-1RI)	3	11/08/2020
M3-4288-11-06K	Cable Entry	4	12/09/2016
M3-4288-11-03K	Socket	1	28/08/2020
M4-4288-11-05K	Name Plate SD-1RI	0	25/06/2020
M4-4630-11-02K	Gas Sensor – Infrared Method	1	22/01/2015

E4-6991-5327-90-01E	Energy measurement SD-1RI/SD-1DRI	0	26/08/2014
E4-6991-5327-90-02E	Energy measurement SD-1RI(HART) / SD-1DRI(HART)	0	26/08/2014
E3-6991-5328-60-03E	Final Version of Diagram SD-1RI/SD-1DRI	0	09/04/2014
E3-6991-5328-60-04E	Final Version of Diagram SD-1RI(HART) / SD-1DRI(HART)	0	09/04/2014
E4-6991-5321-50-01E	Internal Wiring SD-1RI/SD-1DRI	0	09/04/2014
E4-6991-5321-50-02E	Internal Wiring SD-1RI(HART) / SD-1DRI(HART)	0	09/04/2014
E3-6991-5328-60-01E	Electrical Diagram SD-1RI/SD-1DRI	0	09/04/2014
E3-6991-5328-60-02E	Electrical Diagram SD-1RI(HART) / SD-1DRI(HART)	0	09/04/2014
M4-4287-35-12K	PCB Holder	0	29/08/2014
M4-4287-4392-02K	Support Plate	0	29/08/2014
M4-4287-35-13K	Packing	0	29/08/2014
M4-4287-35-14K	Ring	0	29/08/2014
M3-4288-12-03K	Gas Sensor	3	12/09/2016
M3-4288-12-02K	Details of Internal Part A-A~E-E Section (SD-1DRI)	2	12/05/2016
M4-4288-12-05K	Name Plate SD-1DRI	0	25/06/2020

[20] **Certificate History**

Issue	Description	Issue date	Report no.
0	Original issue	2020-10-20	186568

END OF CERTIFICATE