

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 17 ATEX 11584** **Issue 4**
- [4] Product: **Pump Unit**
- [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 60079-11:2012
- [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 ia IIC T4 Ga -20°C ≤ Ta ≤ +50°C (use w/ LR6 battery)

Ex ia IIC T4 Ga -20°C ≤ Ta ≤ +40°C (use w/ MN1500 battery)

Ex ia IIC T3 Ga -20°C ≤ Ta ≤ +50°C (use w/ MN1500 battery)



Date of issue:
2020-06-12



PROD 021

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

[13] **Schedule**[14] **EU-Type Examination Certificate No:** Presafe 17 ATEX 11584 Issue 4[15] **Description of Product**

The pump unit model RP-3R series consist of models RP-3R & RP-3R (Pro) & RP-3R (G) & RP-3R (S) & RP-3R (Pro/S), they are optional accessories to manufacturer's Ex certified gas monitors. The sample gas is sucked by the build-in micro pump in these pump units. The model RP-3R (G) is a general gas suction pump. The other four models can be attached to the specific gas monitor type GX-3R or GX-3R Pro, and turn them from a diffusion type of gas monitor to the suction type. The pump unit models have different outer structure, but internal electronics are identical.

The pump is a small hand-held device using a plastic housing with only smaller metallic part on the enclosure. Enclosure material is anti-electrostatic. The pump is supplied by one AA Alkaline battery (cell) which replacement is only allowed in safe area. The battery compartment is separated from electronics. Internal parts are one small PCB and the micro pump

Type designation

RP-3R, RP-3R (Pro), PR-3R (S), RP-3R (Pro/S) and RP-3R (G)

Electrical Data

One AA Alkaline battery.

Use only type Duracell MN1500 or type Toshiba LR6 (the LR6 battery may be marked as LR6T(JE))

Degrees of protection (IP Code)

(IP20 checked)

Ambient temperature:Ambient range $-20^{\circ}\text{C} \leq T_a \leq +50^{\circ}\text{C}$ for T4 and use of Toshiba LR6Ambient range $-20^{\circ}\text{C} \leq T_a \leq +40^{\circ}\text{C}$ for T4 and use of Duracell MN1500Ambient range $-20^{\circ}\text{C} \leq T_a \leq +50^{\circ}\text{C}$ for T3 and use of Duracell MN1500**Routine tests**

None

[16] **Report No.:**
PRJN-187350-2020-PA-NOR[17] **Specific Conditions of Use**
None[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 |
|---------------------|--------------------|------|-----------|
| E4-6991-5816-10-01K | Index RP-3R series | 9 | 2020.5.23 |

[20] **Certificate History**

| Issue | Description | Issue date | Report no. |
|-------|---|------------|--------------------------|
| 0 | Original issue | 2017-12-14 | D0003253-00 |
| 1 | The changes concern alternative components and layout: - New types used for non-safety components: IC4 (power IC), Inductor L2 and zeners ZD5 & ZD6. - Changed layout (PCB RKP-92368P, previous PCB is RKP-92425P) | 2018-03-20 | D0003253-01 |
| 2 | Use of alternative battery, type MN1500 by Duracell | 2018-10-30 | D0003253-02 |
| 3 | Two new models are added to the RP-3R series. The new models are named RP-3R (S) & RP-3R (Pro/S). The difference between the new and previous models is only a structural change of the chamber unit, and no electrical change is involved. New additional manufacturing location. | 2020-02-12 | PRJC-571366-2017-PRC-NOR |
| 4 | Update to latest edition of EN 60079-0. Minor changes to enclosures of RP-3R (S) and RP-3R (Pro/S). | 2020-06-12 | PRJN-187350-2020-PA-NOR |

END OF CERTIFICATE