

EC-Type Examination Certificate

[2] EQUIPMENT OR PROTECTIVE SYSTEM INTENDED FOR USE IN POTENTIALLY EXPLOSIVE ATMOSPHERES DIRECTIVE 94/9/EC

[3] EC-Type Examination Certificate Number: Presafe 15 ATEX 7188 Issue 0

[4] Equipment or Protective System: Portable Gas Monitor

[5] Applicant – Manufacturer or Authorized Riken Keiki Co., Ltd

representative:

[6] Address: 2-7-6 Azusawa, Itabashi, Tokyo 174-8744, Japan

- [7] This equipment or protective system and any acceptable variation thereto is specified in the schedule to this certificate and the documents therein referred to.
- [8] DNV Nemko Presafe AS, notified body number 2460 in accordance with Article 9 of Council Directive 94/9/EC of 23 March 1994, certifies that this equipment or protective system has been found to comply with the Essential Health and Safety requirements relating to the design and construction of equipment and protective systems 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 14.

- [9] Compliance with the Essential Health and Safety Requirements has been assured by compliance with: EN 60079-0: 2012 & EN 60079-11: 2012
- [10] If the sign "X" is placed after the certificate number, it indicates that the equipment or protective system is subject to special conditions for safe use specified in the schedule to this certificate.
- [11] This EC-TYPE EXAMINATION CERTIFICATE relates only to the design and construction of the specified equipment or protected system. If applicable, further requirements of this Directive apply to the manufacturer and supply of this equipment or protective system.
- [12] The marking of the equipment or protective system shall include the following:



II 1 G

Ex ia IIC T4 Ga -20°C ≤ Ta ≤ +55°C

Asle Kaastad
For DNV Nemko Presafe AS
Information on electronic signature www.presafe.com

NORSK AKKREDITERING PROD 021 Date of issue: 2015-10-26



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[13] Schedule

[14] EC-TYPE EXAMINATION CERTIFICATE No.: Presafe 15 ATEX 7188 Issue 0

Certificate History

Issue	Description	Report no.	Issue date
0	Original issue	D0001993-00	2015-10-26

[15] Description of Equipment or Protective System

This certificate covers the portable gas monitor SP-220 which is used for measuring gas and to provide continuous monitoring of combustible gas (ppm). Gas is sampled by a built-in micro pump. SP-220 is an battery-operated handheld portable device and is built up by anti-electrostatic plastic enclosure with minor metal parts such as assembly screws. The display is located in front and at the bottom is the compartment for battery which is separated from electronic by plastic wall. Battery replacement can be performed by end-users but is only allowed in non-hazardous areas. Internal parts are batteries, main PCB (electronics), a small air pump, LCD module and the gas sensor.

The sensor used inside SP-220 is not a catalytic combustion sensor. It is a semi-conductor type sensor. This sensor does not use platinum but tin oxide as chamber's medium. Tin oxide does not heat even if it is exposed to hydrogen

Type Identification

SP-220

Electrical Data

Battery operated. Use only Alkaline Manganese AA batteries, type LR6T(JE) manufactured by Toshiba.

Degrees of protection (IP Code)

(Compliance with requirement of IP20 is checked)

[16] Project No.: D0001993

Descriptive Documents

Title	Drawing No.	Rev.	Date
INDEX SP-220	E4-6991-5545-00-01K	4	2015-10-26



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[17] Specfic Conditions for Safe Use

None

[18] Essential Health and Safety Requirements

See part 9 of this certificate.

This certificate does not include performance certification of gas detectors. Tests , assessments according to EN 60079-29-1, Gas detectors-Performance requirements of detectors for flammable gases and EN 50271: 2010, Electrical apparatus for the detection and measurement of combustible gases, toxic gases or oxygen — Requirements and tests for apparatus using software and/or digital technologies, are not covered by this EC-Type Examination Certificate.

END OF CERTIFICATE