DNV·GL

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 19 ATEX 14396X** **Issue 1**

[4] Product: **Hydrogen Generator System**

[5] Manufacturer: **H2-Supply AS**

[6] Address: **Borgeskogen 37**
3160 Stokke
Norway

[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 60079-0:2012/A11:2013 and EN 60079-1:2014, EN 60079-2:2014, EN 60079-7:2015, EN 60079-11:2012 and EN 60079-18:2015

[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 eb ib mb pxb IIC T4 Gb +5°C ≤ Ta ≤ +30°C

Date of issue:
2019-05-20

NORSK AKKREDITERING
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 19 ATEX 14396X Issue 1

[15] **Description of Product**

Hydrogen Generator System.
The system consists of an enclosure with Parker H2PEM-260/510 Hydrogen Generator, Westermo fiber switch/ethernet modem or switch or both and Vortex cooler 711 BSP. Cabinet is pressurized by air, and controlled by the certified system Gönnheimer FS870S/850S Automatic Purge Unit and Dräger P8200 w/remote H2 Sensor.

Type designation
Exp-H2 Gen H2-S-510

Electrical Data
230VAC, 235W

Safety Data for Purging and Pressurisation

Minimum flow rate:	2,0 L/min.
Minimum continuous flow in normal operation:	0,5 L/s.
Minimum purge time:	12 min.
Min. purge air volume:	1005 L
Minimum overpressure:	0,8 mbar
Normal operation pressure:	3,0 mbar
Max . overpressure:	15 mbar
Max. permitted leakage rate:	10 L/min.
Air Supply max. pressure:	6,0 bar
Air Supply max. pressure (after regulator):	2,0 bar

Degrees of protection (IP Code)
At least IP4X according to IEC 60529: 2013

Ambient temperature:
+5°C to +30°C

Routine tests
Routine tests shall be performed according to clauses 17.1 and 17.2 in IEC 60079-2:2014

[16] **Report No**.: D0003864/01

[17] **Specific Conditions of Use**

H2 Detector shall be in normal operation before generator is switched on. Startup sequence described in System description, Doc Nr. P01-DOC-SYS-01 shall be followed.

The cable glands are tested with a reduced tensile force (25%) inn accordance with clause A.3.1 of IEC 60079-0 and may only be used for fixed installation apparatus. The user shall ensure adequate clamping of the cable. The cable glands sizes M12, M16 and NPT 3/8" are tested for low risk of mechanical danger (drop height 0.4m with 1 kg mas) and shall be protected against higher impact energy levels. The cable glands are with O-ring sealings made of NBR, additionally they can also be used with FKM or VMQ sealings.

[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
Exp H2 Gen application note-system description	P01-DOC-SYS-01	05	04.02.2018
GA drawing Internal	P01-DWG-GA-02	01	26.03. 2019
GA drawing External	P01-DWG-GA-01	01	26.03. 2019
System diagram	P01-DWG-SYS-01	04	26.03. 2019
Schematic wiring	P01-DWG-EL-01	03	26.03. 2019
List of nameplates	P01-DWG-LST-01	07	30.03. 2019
Exp H2 Gen application note-system description	P01-DOC-SYS-01	05	04.02.2018

[20] **Certificate History**

Issue	Description	Issue date	Report no.
0	Original issue	2019-04-11	D0003864
1	Update of manufacturer address	2019-05-20	D0003864/01

END OF CERTIFICATE