

# 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 9500 X Issue 0
- [4] **Product:** Control system for Habitat
- [5] **Manufacturer:** Bartec Technor AS
- [6] **Address:** Vestre Svanholmen 24  
4313 Sandnes  
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 Nemko 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, EN 60079-1:2007, EN 60079-7:2007 and EN 60079-18:2009.
- [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 d e mb IIB T4 Gb

\_\_\_\_\_  
Ståle Sandstad  
For DNV GL Nemko Presafe AS

The Certificate has been digitally signed.  
See [www.presafe.com/digital\\_signatures](http://www.presafe.com/digital_signatures) for more info



Date of issue: 2017-06-29

*This certificate may only be reproduced in its entirety and without any change, schedule included.*

[13]

## Schedule

[14] **EU-TYPE EXAMINATION CERTIFICATE No.:** Presafe 17 ATEX 9500 X Issue 0

[15] **Description of Product**

“EXguard” is an assembly of certified equipment/component. The assessment for each component/equipment are covered by the individual certificate. “EXguard” system is a control system designed to be used with hot work habitat with mobile gas detection. This is an assessment only for Ex related aspects of the system. Performance aspects are not part of the assessment. The system involves in purging the clean air and maintains the over pressure inside the habitat. The assessment involves the checking the suitability of control system for Zone 1 atmosphere.

The system consists of

- Hot work habitat system (Not part of assessment)
- Mobile control unit, MCU
- Power control unit PCU
- Pressure monitor unit PMU
- Sensor dummy plyg SDP
- Differential pressure transducer DPT
- Pressure switch PS-01
- Uninterruptible power supply UPS
- Air supply unit, ASU
- Air supply unit damper, ASD)
- Sensor units for gas detection GD1-4 and GD-5
- Remote alarm station RAS

Formal analyses for non-electrical part of evaluated equipment haven't found any potential ignition source.

Marking includes the Ex marking plate for whole assembly and info marking plates on each of the of sub-modules.

**Type designation:** “EXguard”

**Electrical data:**

Voltage: 690 V AC 50 Hz

Current: 63 A

**Ambient temperature:**

-20°C to +45°C

**Routine tests:** Dielectric strength test for TNCN box according to EN 60079-7:2007, Clause 7.1. (500V R.M.S.) (0-5%) maintained 60s or 1.2 x test voltage maintained at least 100 ms.

[16] **Report No.:** D0001425

## [17] Specific Conditions of Use

- Some parts of the assembly must only be placed in areas with low risk of mechanical danger (ref clause 26.4.2 in EN/IEC 60079-0). Hence assembly shall be placed in the area where there is a low risk of mechanical danger.
- The socket shall be checked for conditions & cleanliness before the use.
- The cable glands shall be provided with additional clamping to prevent accidental pulling and twisting.
- The line bushing shall be secured against rotation and self-loosening.
- Equipment shall be earthed according to IEC 60079-14 requirement during normal operation.
- Appropriate Ex safety requirements shall be applied to non-electrical equipment.
- Repairs of flameproof joints must be made in accordance with structural specifications provided by the manufacturer. Repairs must not be made on the basis of the values provided in Table 1 of IEC 60079-1: 2007.
- A fuse corresponding to the magnet's rated current (max. 3xI<sub>B</sub> in compliance with DIN 41571 or IEC 60127) or a motor protecting switch with short-circuit or thermal instantaneous tripping (adjusted to rated current) shall be connected in series to each magnet of type 6...-...-A and L. For very low rated magnet currents, the fuse with the lowest current rating according to the above referenced IEC standard will suffice. The fuse may be accommodated in the corresponding power supply unit or it shall be separately connected in series. The fuse voltage rating shall be the same or higher than the magnet voltage rating specified. The breaking capacity of the fuse link shall be the same or higher than the maximum short-circuit current expected to occur at the place of installation (normally 1500 A).
- The magnet voltage rating tolerance of  $\pm 20\%$  does apply.
- The components used in the assembly have potential risk to electrostatic charge. Appropriate manufacturer's instructions shall be followed.

## [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
EXG-150-5	Exguard MCU Overview	A	2017-02-13
EXG-151-5	Exguard Ex e Enclosure for Mobile Control Unit TNCC 283827	A	2017-02-13
EXG-152-5	EXguard partlist for Ex e Enclosure for Mobile Control Unit TNCC 283827	B	2017-04-07
EXG-153-5	Exguard Ex d Enclosure Mobile Control Unit TNCD 283827	A	2017-02-13
EXG-154-5	Exguard partlist for Ex d Enclosure Mobile Control Unit TNCD 282827 –Part List	B	2017-04-07
EXG-155-5	Exguard Supply W/plug	B	2017-06-26
EXG-156-5	Exguard Bonding cable	A	2017-02-17
EXG-157-5	Exguard Sounder/Beacon	A	2017-02-13
EXG-158-5	Exguard 24VDC cable & plug	A	2017-02-13
EXG-159-5	Exguard Cable & plugs for RAS	A	2017-02-13
EXG-160-5	Exguard Cable & plug ext. signal	A	2017-02-13
EXG-161-5	Exguard Cable & plug for UPS	A	2017-02-13
EXG-162-5	Exguard Cable & plug for OCU	A	2017-02-13
EXG-163-5	Exguard Air Supply Unit	C	2017-06-20

EXG-164-5	Exguard OCU Ex e Enclosure Overpressure control unit	A	2017-02-13
EXG-165-5	Exguard Part list TNCN 282812 OCU Ex e Enclosure Overpressure control unit	A	2017-02-13
EXG-166-5	Exguard Pressure Monitor Unit	A	2017-02-13
EXG-167-5	Exguard EJB 23 Ex d IIB Enclosure in aluminium Uninterrupted Power Supply	A	2017-02-13
EXG-168-5	Exguard Part list EJB 23 Ex d IIB Enclosure in aluminium Uninterrupted Power Supply	A	2017-02-13
EXG-169-5	Exguard Gas Detector on Drum GD1-4	A	2017-02-13
EXG-170-5	Exguard Gas Detector on Drum GD5	A	2017-02-13
EXG-171-5	Exguard Power Control Unit Overview	A	2017-02-13
EXG-172-5	Exguard Power Control Unit TNBCD 252631/TNCN 202515	A	2017-02-13
EXG-173-5	Exguard Part list for Power Control Unit TNBCD 252631/TNCN 202515	A	2017-02-13
EXG-174-5	Exguard Supply Cable w/plug	B	2017-06-08
EXG-175-5	Exguard Cable & plug for ext. signal Power Control Unit	A	2017-02-13
EXG-176-5	Exguard Air supply Damper	C	2017-06-17
EXG-177-5	Exguard Differential Pressure Transducer	B	2017-06-26
EXG-178-5	Exguard Remote Alarm Station	C	2017-06-29
EXG-179-5	Exguard Sensor dummy plug	B	2017-06-29
EXG-180-5	Exguard Gas Detector Unit Framework Work Station	B	2017-06-29
EXG-181-5	Exguard Spark arrestor for DPT	A	2017-04-26
EXG-182-5	Label for Exguard mobile control unit MCU	B	2017-06-26
EXG-183-5	Label for Exguard uninterruptable power unit UPS	B	2017-06-29
EXG-184-5	Label for Exguard air supply damper ASD	B	2017-06-29
EXG-185-5	Label for Exguard remote alarm station RAS	B	2017-06-29
EXG-186-5	Label for Exguard Gas detector on drum GD1-4/GD5	B	2017-06-29
EXG-187-5	Label for Exguard overpressure control unit PS01	B	2017-06-29
EXG-188-5	Label for Exguard differential pressure transducer DPT	B	2017-06-29
EXG-189-5	Label for Exguard electric air supply fan E-ASF	B	2017-06-29
EXG-190-5	Label for Exguard sensor dummy plug SDP	B	2017-06-29
EXG-191-5	Label for Exguard spark arrestor SPA	B	2017-06-29
EXG-192-5	Label for Exguard power control unit PCU	B	2017-06-29
EXG-193-5	Label for Exguard pressure monitor unit PMU	B	2017-06-29
EXG-194-5	Label Type Exguard	B	2017-06-29

## [20] Certificate History

Issue	Description	Issue date	Report no.
0	Original issue	2017-06-29	D0001425

END OF CERTIFICATE