



1. **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:** ITS12ATEX17407X

4. **Equipment or Protective System:** Seabeacon 2 Ex

5. **Manufacturer:** Tideland Signal Corp

6. **Address:** 4310 Directors Row, Houston, Texas. USA

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. Intertek Testing and Certification Limited, notified body number 0359 in accordance with Article 9 of the 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 Intertek Report Ref 10048754A1 dated October 2013.

9. Compliance with the Essential Health and Safety Requirements has been assured by compliance with standards EN 60079-0:2009, EN 60079-2:2007 & EN 60079-7:2007 except in respect of those requirements referred to at item 16 of the Schedule.

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, examination and tests of the specified equipment or protective system in accordance to the directive 94/9/EC. Further requirements of the Directive apply to the manufacturing process and supply of this equipment or protective system. These are not covered by this certificate.

12. The marking of the equipment or protective system shall include the following:-

 II 2 G Ex e px IIC T4 Gb

Tamb: -40°C to +48°C

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Registered No 3272281 Registered Office: Academy Place, 1-9 Brook Street, Brentwood, Essex, CM14 5NQ.


K R Spence
Certification Officer
28 November 2013

This certificate may only be reproduced in its entirety and without any change, schedule included and is subject to Intertek Testing and Certification's Conditions for Granting Certification.

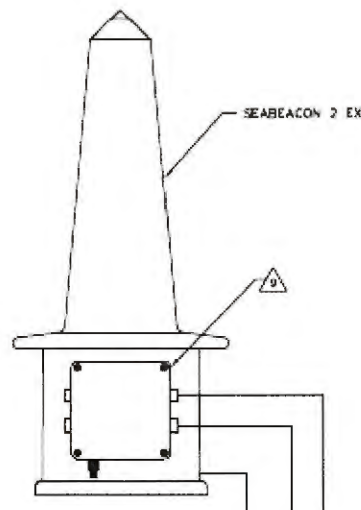
SCHEDULE

EC-TYPE EXAMINATION CERTIFICATE NUMBER ITS12ATEX17407X

13. Description of Equipment or Protective System

The Seabeacon is a statically purged radar transponder intended for use within zone 1 areas. It is made up of a plastic conical top cover under which is fitted the antenna. The base of the enclosure is manufactured from aluminium and contains the PCA Pressure Transducer board which, on loss of purge, removes power from other associated electronics required to operate the Seabeacon, also located in the base of the unit. The plastic (conical) lid is attached to the base of the enclosure by 6 off metal 'Monel' alloy fasteners with an O-ring fitted to maintain the Seabeacon static purge seal.

The Seabeacon has an Ex e terminal enclosure (Sira certificate number 99ATEX3172U) attached to the side which allows for electrical connections to pass through two bushings. These electrical connections provide power to the Seabeacon itself and signal connections between the Seabeacon and the associated control panel. The Ex e terminal box is fitted with Ex e terminals both of which are suitably rated for installation.



The Seabeacon is intended to be used in conjunction with an associated ATEX certified control panel that is separately certified under ATEX certificate Sira 07ATEX3297X. This control panel is fitted with three lights and a reset switch that indicates the condition of the Seabeacon static purge pressure. The Green light indicates that the static purge within the Seabeacon is greater than 5 psi; the Amber light indicates that the static purge has dropped below 5 psi but is greater than 2 psi and the Red light indicates that the static purge has dropped below 2 psi and power has been removed from the internal electronics. Removal of power is via the PCA Pressure Transducer that is housed within the Seabeacon. The internal space within the Seabeacon is considered to be a Zone 2 area and the PCA Pressure Transducer board has been assessed against protection concept 'Ex nA'.

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SCHEDULE

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14. **Report Number**

Intertek Report 10048754A1 Dated: October 2013

15. **Conditions of Certification**

(a). Special Conditions for safe use

- ATEX certified bushings shall not be subject to torque
- No batteries shall be fitted inside the Seabeacon.
- Temperatures could exceed 70°C at the cable gland or 80°C at the branching point, suitably rated cable must be selected.
- On loss of purge the instruction manual shall be adhered to when re-purging the unit.
- The purge status shall be constantly monitored and the Seabeacon shall be de-energized immediately and repaired/re-purged before re-energizing or reinstalling the unit in the hazardous area.
- The Ex e, EPL Gb rated terminals shall be suitably rated for an ambient temperature range of -20°C to + 48°C (minimum).

(b). Conditions of Manufacture (Routine tests)

- Functional test of the enclosure shall be carried out; illumination of LED's (Green, Amber and Red) shall be checked.
- A leakage test in accordance with EN 60079-2:2007 clause 17.2 shall be carried out.
- A 500V test in accordance with EN 60079-7:2007 clause 7.1 shall be carried out between all wiring between the Seabeacon base enclosure and the Ex e terminal enclosure and the external metal enclosures.
- A record of all test results shall be kept.

16. **Essential Health and Safety Requirements (EHSR's)**

The relevant EHSR's have been identified and assessed in Intertek Report 10048754A1 Dated: October 2013

17. **Drawings and Documents**

Title	Drawing No.:	Rev. Level:	Date:
Racon Assy, X+S BAND, SBCN 2 Ex (sheets 1 to 6)	520.1288-CTL	P	-

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