



IECEX Certificate of Conformity

INTERNATIONAL ELECTROTECHNICAL COMMISSION IEC Certification Scheme for Explosive Atmospheres

for rules and details of the IECEx Scheme visit www.iecex.com

Certificate No.: IECEx ITS 14.0019X Issue No: 0 Certificate history:
Issue No. 0 (2014-10-02)

Status: **Current** Page 1 of 3

Date of Issue: **2014-10-02**

Applicant: **Tideland Signal Corporation**
4310 Directors Row
Houston
Texas
77092
United States of America

Electrical Apparatus: **TDA-24450-Ex Marine Signal Driver Unit**
Optional accessory:

Type of Protection: **Flameproof 'Ex d'**

Marking:
Ex d IIB T4 Tamb -40°C to +60°C Gb
IECEX ITS 14.0019X

*Approved for issue on behalf of the IECEx
Certification Body:*

Andrew Dickinson

Position:

Certification Officer

*Signature:
(for printed version)*

Date:

1. This certificate and schedule may only be reproduced in full.
2. This certificate is not transferable and remains the property of the issuing body.
3. The Status and authenticity of this certificate may be verified by visiting the [Official IECEx Website](http://www.iecex.com).

Certificate issued by:

Intertek Testing & Certification Limited
ITS House, Cleeve Road,
Leatherhead,
Surrey, KT22 7SB
United Kingdom





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Manufacturer: **Tideland Signal Corporaion**
4310 Directors Row
Houston
Texas
77092
United States of America

Additional Manufacturing
location(s):

This certificate is issued as verification that a sample(s), representative of production, was assessed and tested and found to comply with the IEC Standard list below and that the manufacturer's quality system, relating to the Ex products covered by this certificate, was assessed and found to comply with the IECEx Quality system requirements. This certificate is granted subject to the conditions as set out in IECEx Scheme Rules, IECEx 02 and Operational Documents as amended.

STANDARDS:

The electrical apparatus and any acceptable variations to it specified in the schedule of this certificate and the identified documents, was found to comply with the following standards:

IEC 60079-0 : 2011 Explosive atmospheres - Part 0: General requirements
Edition:6.0

IEC 60079-1 : 2007-04 Explosive atmospheres - Part 1: Equipment protection by flameproof enclosures "d"
Edition:6

*This Certificate **does not** indicate compliance with electrical safety and performance requirements other than those expressly included in the Standards listed above.*

TEST & ASSESSMENT REPORTS:

A sample(s) of the equipment listed has successfully met the examination and test requirements as recorded in

Test Report:

[GB/ITS/ExTR14.0021/00](#)

Quality Assessment Report:

[GB/ITS/QAR12.0012/01](#)



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Schedule

EQUIPMENT:

Equipment and systems covered by this certificate are as follows:

The TDA-24450-Ex Marine Signal Driver Unit comprises of a manganese bronze alloy cover and a ductile iron back plate. It has a sintered stainless steel flame arrestor fitted to the enclosure which allows it to deliver a sound signal. The TDA-24450-Ex is supplied as part of a Fog Signal Array which comprises of between two and six TDA-24450-Ex driver units stacked together which are supplied with power and signal from either an ECMU-800 Electronics Assembly or a single or dual ECU-800 Electronics Assembly.

CONDITIONS OF CERTIFICATION: YES as shown below:

- Temperatures could exceed 70°C at the cable gland or 80°C at the branching point. Suitably rated cable must be selected.

Routine Tests:

A routine test in accordance with IEC 60079-1:2008, Clause 16.1 at a pressure of at least 11.31bar for a period of between 10 and 60 seconds is required on all enclosures (including the sintered element) and must be recorded. There shall be no deformation of the joints or damage to the enclosure.