



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: 3

Certificate history:

Issue No. 3 (2019-02-26)

Issue No. 2 (2017-02-24)

Issue No. 1 (2016-05-26)

Issue No. 0 (2014-10-02)

Status: **Current**

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Date of Issue: **2019-02-26**

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

Equipment: **TDA-24450-Ex Marine Signal Driver Unit**

Optional accessory:

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

Marking:

Ex db IIB T4 Gb

Tamb -40°C to +60°C

IECEX ITS 14.0019X

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

P Moss

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 7SA
United Kingdom





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

Additional Manufacturing location(s):

Tideland Signal Limited

Suite E
KBF House
Victoria Road
Burgess Hill
West Sussex
RH15 9LH
United Kingdom

Aanderaa Data Instruments AS

Sanddalsringen 5b
N-5225 Nesttun
Norway

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 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 : 2017 Explosive atmospheres - Part 0: Equipment - General requirements
Edition:7.0

IEC 60079-1 : 2014-06 Explosive atmospheres - Part 1: Equipment protection by flameproof enclosures "d"
Edition:7.0

*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/ExTR14.0021/03](#)

Quality Assessment Report:

[GB/ITS/QAR12.0012/04](#)

[GB/ITS/QAR12.0015/03](#)

[NO/NEM/QAR14.0006/05](#)



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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.

SPECIFIC CONDITIONS OF USE: YES as shown below:

- No modifications must be made to the flamepaths of the unit without consultation of the drawings.
- Temperatures could exceed 70°C at the cable gland or 80°C at the branching point. Suitably rated cable must be selected.
- Potential electrostatic charging hazard – clean only with a damp cloth.

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.



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DETAILS OF CERTIFICATE CHANGES (for issues 1 and above):

Issue 01 -

Addition of two more manufacturing locations: Tideland Signal Limited UK and IMT BV Netherlands.

Issue 02 -

Change of manufacturing location:

Aanderaa Data Instrument AS
Sanddalsringen 5
N-5225 Nesttun
Norway

Issue 03 -

- Addition of new manufacturing location in the USA. Will replace 4310 Directors Row address in 2019. - Changed UK manufacturing address from "Tideland Signal Limited, Unit B, Kendal House, Victoria Way, Burgess Hill, RH15 9NF", to "Tideland Signal Ltd, Suite E, KBF House, Victoria Road, Burgess Hill, West Sussex, RH15 9LH".
- Update to latest standards;
- Update to coding, which in turn required an update to drawing number 702.1005-CTL. Marked "Ex db IIB T4 Gb" instead of "Ex d IIB T4 Gb"

Annex:

[Annex IECEX ITS 14.0019X Issue 03.pdf](#)



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Certificate No:	IECEX ITS 14.0019X	Issue No. 03
Annex No. 1		

Routine testing:

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.

Manufacturer's documents			
Title:	Drawing No.:	Rev. Level:	Date:
*Control Drawing, Driver, Assembly, TDA-24450-Ex	702.1005-CTL	ZB	20DEC18
*INSTALLATION, OPERATION, AND MAINTENANCE MANUAL AB-68-Ex & AB-28-Ex Fog Signals, & ECU-800	011.1162-15	D	30JAN19

Note: An * is included before the title of documents that are new or revised.

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