



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 16.0017X

Issue No: 2

Certificate history:

Issue No. 2 (2018-08-29)

Issue No. 1 (2017-10-10)

Issue No. 0 (2017-04-06)

Status: **Current**

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Date of Issue: **2018-08-29**

Applicant: **Tideland Signal Corporation**
4310 Directors Row
Houston
Texas
77092-8708
USA
United States of America

Equipment: **SS/GS-## Battery Boxes**

Optional accessory:

Type of Protection: **Ex eb**

Marking:

Ex eb IIC T6 Gb

T_{amb} -20°C to +55°C

IECEX ITS 16.0017X

*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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Date of Issue: **2018-08-29** Page 2 of 4
Manufacturer: **Tideland Signal Corporation**
4310 Directors Row
Houston
Texas
77092-8708
USA
United States of America

Additional Manufacturing location(s):

Tideland Signal Limited UK
Suite E, KBF House,
Victoria Road,
Burgess Hill,
West Sussex
RH15 9LH
United Kingdom

Aanderaa Data Instrument 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 : 2011 Explosive atmospheres - Part 0: General requirements
Edition:6.0
IEC 60079-7 : 2015 Explosive atmospheres – Part 7: Equipment protection by increased safety "e"
Edition:5.0

*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/ExTR16.0019/00](#) [GB/ITS/ExTR16.0019/01](#) [GB/ITS/ExTR16.0019/02](#)

Quality Assessment Report:

[GB/ITS/QAR12.0012/03](#) [GB/ITS/QAR12.0015/02](#) [NO/NEM/QAR14.0006/04](#)



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Schedule

EQUIPMENT:

Equipment and systems covered by this certificate are as follows:

The SS/GS-## X range of battery boxes are available in two materials and can be configured for 12v or 24v with various Ah capacities. The SS-03 X boxes are manufactured from 316L stainless steel where as the GS-03 X boxes are manufactured from hot dip galvanised mild steel.

The enclosures measure approximately:

Size 1 (345 x 480 x 450) mm

Size 2 (655 x 480 x 450) mm

Size 3 (860 x 650 x 450) mm

Boxes are available in either 12v or 24v Lead acid Battery systems using Tideland's VIVA range of AGT batteries. No other battery types are permitted but smaller capacity batteries from the same range may be used.

The following charging parameters apply:

12v 165Ah	Maximum charging current = 22A
12v 255Ah	Maximum charging current = 22A
24v 165Ah	Maximum charging current = 22A

Maximum charging voltage = 13.8v
Maximum charging voltage = 13.8v
Maximum charging voltage = 27.6v

The full range detailed on the appendix.

SPECIFIC CONDITIONS OF USE: YES as shown below:

- The battery container shall be positioned so that the ventilation of the container remains unobstructed in service.
- The battery terminal connections and associated wiring shall be installed such that the cell vents remain unobstructed as shown on the certified drawings.
- The battery container shall only be used in fixed installations and as such shall not be exposed to mechanical shock.
- The charging system shall be such that the charging voltage and current listed on the certification label cannot be exceeded even with one fault condition on the charging system.

Conditions of Manufacture:

- The battery container is subject to a routine dielectric strength test in accordance with clause 7.2 of IEC60079-7:2015 Ed 5. Results shall be recorded.



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

Issue 1

Increase in ambient temperature to +55°C (from + 50°C)

Issue 2

Updating manufacturing address in the UK and correcting the manufacturing address in Norway on controlled drawings and in the manual.

Adding Notified Body numbers 0359 for UK and US manufacturing address and 0470 for Norway manufacturing address on label drawings.

Annex:

[IEC C of C annex.pdf](#)

Schedule of Drawings for Certificate: IECEx ITS 16.0017X Issue 2

Manufacturer:

Tideland Signal Corporation
4310 Directors Row,
Houston,
TX 77092
USA

Tideland Signal Limited
Suite E, KBF House,
Victoria Road,
Burgess Hill,
West Sussex,
RH15 9LH, UK

Aanderaa Data Instruments AS
Sanddalsringen 5b, N-5225 Nesttun, Norway

Technical Description

The SS/GS-## X range of battery boxes are available in two materials and can be configured for 12v or 24v with various Ah capacities. The SS-03 X boxes are manufactured from 316L stainless steel whereas the GS-03 X boxes are manufactured from hot dip galvanised mild steel.

The enclosure measures approximately
Size 1 (345 x 480 x 450) mm
Size 2 (655 x 480 x 450) mm
Size 3 (860 x 650 x 450) mm

Boxes are available in either 12v or 24v Lead acid Battery systems using Tideland's VIVA range of AGT batteries. No other battery types are permitted but smaller capacity batteries from the same range may be used.

The following charging parameters apply:

12v 165Ah	Maximum charging current = 22A	Maximum charging voltage = 13.8v
12v 255Ah	Maximum charging current = 22A	Maximum charging voltage = 13.8v
24v 165Ah	Maximum charging current = 22A	Maximum charging voltage = 27.6v

The box is a Lead Acid Battery system using Tideland's VIVA range of AGT batteries. No other battery types are permitted but smaller capacity batteries from the same range may be used.

The full range is as follows:

Size 1

Box Model Number	Part Number	Material of Construction	Battery Type	Voltage	Capacity
SS-01X	060.8050-01	316L Stainless Steel	VIVA Lead Acid (AGT)	12V	165Ah
GS-01X	060.8050-11	Galvanised Steel	VIVA Lead Acid (AGT)	12V	165Ah

Size 2

Box Model Number	Part Number	Material of Construction	Battery Type	Voltage	Capacity
SS-02X	060.8050-02	316L Stainless Steel	VIVA Lead Acid (AGT)	12V	2x165Ah
GS-02X	060.8050-12	Galvanised Steel	VIVA Lead Acid (AGT)	12V	2x165Ah

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

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SS-02X	060.8050-02	316L Stainless Steel	VIVA Lead Acid (AGT)	24V	165Ah
GS-02X	060.8050-12	Galvanised Steel	VIVA Lead Acid (AGT)	24V	165Ah

Size 3

Box Model Number	Part Number	Material of Construction	Battery Type	Voltage	Capacity
SS-03X	060.8050-03	316L Stainless Steel	VIVA Lead Acid (AGT)	12v	6x165Ah
GS-03X	060.8050-13	Galvanised Steel	VIVA Lead Acid (AGT)	12v	6x165Ah
SS-03X	060.8050-03	316L Stainless Steel	VIVA Lead Acid (AGT)	24v	3x165Ah
GS-03X	060.8050-13	Galvanised Steel	VIVA Lead Acid (AGT)	24v	3x165Ah

A bolt is provided with the battery enclosure in order to secure it.

Technical Documents			
Title:	Drawing No.:	Rev. Level:	Date:
*Detail Drawing Nameplate Type SS-01X 12V Lead Acid Box	304.8046-01-CD	I	13 OCT 17
*Detail Drawing Nameplate Type SS-02X 12/24V Lead Acid Box	304.8046-02-CD	J	13 OCT 17
*Detail Drawing Nameplate Type SS-03X 12/24V Lead Acid Box	304.8046-03-CD	I	13 OCT 17
*Detail Drawing Nameplate Type GS-01X 12V Lead Acid Box	304.8046-11-CD	I	16 OCT 17
*Detail Drawing Nameplate Type GS-02X 12/24V Lead Acid Box	304.8046-12-CD	J	16 OCT 17
*Detail Drawing Nameplate Type GS-03X 12/24V Lead Acid Box	304.8046-13-CD	I	16 OCT 17
General Arrangement Aids to Navigation SS/GS-## X Range of Exe Battery Boxes	060.8050-[]-CD	H	24 FEB 17
Details Drawing Aids to Navigation SS/GS-1X Battery Box	630.8045-[]-CD	C	13 OCT 16
Details Drawing Aids to Navigation SS/GS-2X Battery Box	630.8046-[]-CD	E	13 OCT 16
Details Drawing Aids to Navigation SS/GS-3X Battery Box	630.8047-[]-CD	C	19 OCT 16
Detail Drawing Aids to Navigation Battery Terminal Kit for AGT12165 Battery	901.8005-00-CD	B	13 JAN 12
Battery Link Details Aids to Navigation SS/GS-## X Range of Exe Battery Boxes	511.8000-[]-CD	C	12 JUL 11
*Instructions for Safe Installation and Safe Operation	-	K	16-OCT-17

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

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Conditions of Certification

(a). Specific Conditions of Safe Use

- The battery container shall be positioned so that the ventilation of the container remains unobstructed in service;
- The battery terminal connections and associated wiring shall be installed such that the cell vents remain unobstructed as shown on the certified drawings;
- The battery container shall only be used in fixed installations and as such not be exposed to mechanical shock;
- The charging system shall be such that the charging voltage and current listed on the certification label cannot be exceeded even with one fault condition on the charging system.

(b). Conditions of Manufacture - Routine Tests

- The battery container is subject to a routine dielectric test in accordance with clause 7.2 & 6.6.2 of IEC 60079-7:2015. Results shall be recorded.

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