

ICEPOWER A/S
Trade mark: CRESTRON

Audio Amplifier

Model:
M1845006
(SKU: AMP-X300)

Australia
EMC Compliance Folder

ICEPOWER A/S
VANDTARNSVEJ 62A, 3B
2860 SOBORG, DENMARK

**Table
Of
Contents**

Section 1
Declaration of Conformity

Section 2
List of Applied Standards

Section 3
Product Description

Section 4
Test Data and Reports

Section 5
Additional Information

Section 1

Declaration of Conformity

Supplier's declaration of conformity



As required by the following Notices:

- > *Radiocommunications (Compliance Labelling - Devices) Notice 2014* made under section 182 of the *Radiocommunications Act 1992*;
- > *Radiocommunications Labelling (Electromagnetic Compatibility) Notice 2017* made under section 182 of the *Radiocommunications Act 1992*
- > *Radiocommunications (Compliance Labelling – Electromagnetic Radiation) Notice 2014* made under section 182 of the *Radiocommunications Act 1992* and
- > *Telecommunications (Labelling Notice for Customer Equipment and Customer Cabling) Instrument 2015* made under section 407 of the *Telecommunications Act 1997*.

Instructions for completion

- > **Do not return this form to the ACMA.** This completed form must be retained by the supplier as part of the documentation required for the compliance records and must be made available for inspection by the ACMA when requested.

Supplier's details (manufacturer, importer or authorised agent)

Company Name (OR INDIVIDUAL)

Crestron ANZ Pty Limited
TRADING AS:

ACN/ARBN

ACN 604 568 461 / ARBN 13 604 567 461

OR

New Zealand IRDN

--

Street Address (AUSTRALIAN or NEW ZEALAND)

Level 5, 16 Help Street
Chastwood, NSW, Australia
POSTCODE NWS 2067
Phone: 1800 555 040

Product details and date of manufacture

Product description – brand name, type, current model, lot, batch or serial number (if available), software/firmware version (if applicable)

Audio Amplifier, Brand: CRESTRON, model: M1845006 (SKU: AMP-X300)
Ratings: 100-240V~, 1.2-0.6A, 50/60Hz,
Date of manufacture or importation of the original/modified item:

Compliance – applicable standards and other supporting documents

Evidence of compliance with applicable standards may be demonstrated by test reports, endorsed/accredited test reports, certification/competent body statements.

Having had regard to these documents, I am satisfied the above mentioned product complies with the requirements of the relevant ACMA Standards made under the *Radiocommunications Act 1992* and the *Telecommunications Act 1997*.

List the details of the documents the above statement was made, including the standard title, number and, if applicable, number of the test report/endorsed test report or certification/competent body statement

EMC test report issued by EKTOS TRS A/S; test report number: P19-0165-1 rev. 2
EN 55032:2012 + AC:2013: Electromagnetic compatibility of multimedia equipment – Emission requirements
EN 55024:2010 + A1:2015: Information technology equipment – Immunity characteristics – Limits and methods of measurements
EN 55035:2017: Electromagnetic compatibility of multimedia equipment – Immunity requirements

Declaration

I hereby declare that:

1. I am authorised to make this declaration on behalf of the Company mentioned above,
2. the contents of this form are true and correct, and
3. the product mentioned above complies with the applicable above mentioned standards and all products supplied under this declaration will be identical to the product identified above.

Note: Under section 137.1 of the *Criminal Code Act 1995*, it is an offence to knowingly provide false or misleading information to a Commonwealth entity.

Penalty: 12 months imprisonment

SIGNATURE OF SUPPLIER OR AGENT
PRINT NAME Gary Freed

POSITION IN ORGANISATION Compliance Manager
DATE

The *Privacy Act 1988* (Cth) (the Privacy Act) imposes obligations on the ACMA in relation to the collection, security, quality, access, use and disclosure of personal information. These obligations are detailed in the Australian Privacy Principles.

The ACMA may only collect personal information if it is reasonably necessary for, or directly related to, one or more of the ACMA's functions or activities.

The purpose of collecting the personal information in this form is to ensure the supplier is identified in the 'Declaration of conformity'. If this Declaration of Conformity is not completed and the requested information is not provided, a compliance label cannot be applied.

Further information on the Privacy Act and the ACMA's Privacy Policy is available at www.acma.gov.au/privacypolicy. The Privacy Policy contains details about how you may access personal information about you that is held by the ACMA, and seek the correction of such information. It also explains how you may complain about a breach of the Privacy Act and how we will deal with such a complaint.

Should you have any questions in this regard, please contact the ACMA's privacy contact officer on telephone on 1800 226 667 or by email at privacy@acma.gov.au.

Section 2

List of Applied Standards

List of Applied Standards

- **Demonstration of Compliance to Radiocommunications Act 1992 (EMC Requirements)**

EN 55032:2012 + AC:2013, Class B
Electromagnetic compatibility of multimedia equipment -
Emission requirements

EN 61000-3-2:2014 – Electromagnetic compatibility
(EMC) – Part 3-2: Limits – Limits for harmonic current
emissions

EN 61000-3-3:2013 – Electromagnetic compatibility
(EMC) – Part 3-3: Limits – Limitation of voltage changes,
fluctuations and flicker in public low-voltage supply systems,
for equipment with rated current $\leq 16\text{A}$ per phase and not
subject to conditional connection

Section 3

Product Description

Product Description

- **Sales Literature**

The Crestron® AMP-X300 is a high performance, space saving, energy efficient, professional grade amplifier solution that's totally configurable, yet simple to use.

The AMP-X300 is a 4-channel amplifier (at 75 W per channel) which can also be configured for 2-channel bridged operation (at 150 W per channel), with a choice of "LoZ" outputs to drive 4- or 8-Ohm speakers, or "Hi-Z" outputs to drive a distributed speaker system (70 V or 100 V). Balanced and unbalanced inputs are provided for connection to two stereo or four mono source(s) via detachable terminal blocks or RCA connectors.

The AMP-X300 was designed in partnership with ICEpower® to create a custom, flexible, high performance amplifier topology that is suitable for a variety of audio applications.

- **Photographs**

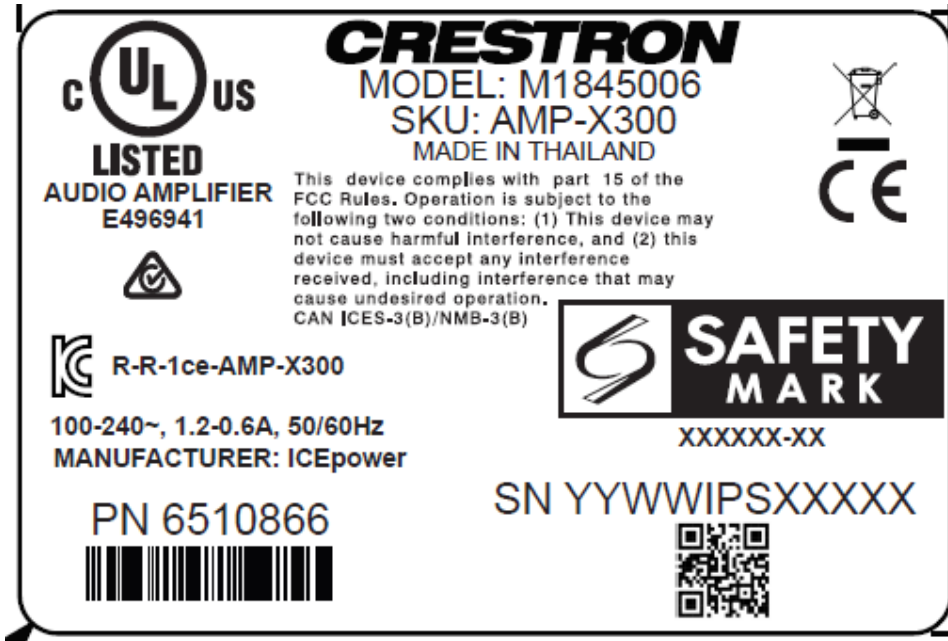
Figure 1a: Overall unit (front view):



Figure 1b: Overall unit (back view):



Figure 2: Marking plate – example:



*For more photographs, please refer to Section 5 of this Technical File
– Additional Information;*

*Photographs can be found in the CB Test Report:
E496941-A6013-CB-1, Enclosures 03-0x*

*For additional Marking Plate, please refer to Section 5 of this Technical
File – Additional Information;*

*Marking Plates can be found in the CB Test Report:
E496941-A6013-CB-1, Enclosures 07-09*

- Operators and Service Manual
 - Quick Start Guide – extract
(available also at: www.crestron.com/model/6510866)

X Series Amplifier

The Crestron® AMP-X300 is a compact, versatile amplifier that can be configured for use on a flat surface or installed in a 1 RU rack space. The supplied joining plates enable two amplifiers to be ganged together in a single rack space.



In the Box

- 1 AMP-X300, X Series Amplifier

Additional Items

- 4 Plate, Joining (2055198)
- 8 Screw, 8-32 x 5/16 in., Flat Head, Phillips, Black (2055195)
- 4 Screw, 6-32 x 3/8 in., Undercut Head, Phillips (2055196)
- 4 Foot, Adhesive, Black (2055200)
- 2 Rack Ear Assembly, 1U, Quarter-width (2055197), includes Bracket, Rack Ear, 1U (2055199)
- 2 Connector, Speaker (2055206)
- 4 Connector, Input (2055207)
- 1 Power cord (2055205)



1

AMP-X300

Quick Start

X Series Amplifier



Assemble

Prepare for Installation

The amplifier can be installed in a rack, mounted on a surface, or placed on a surface.

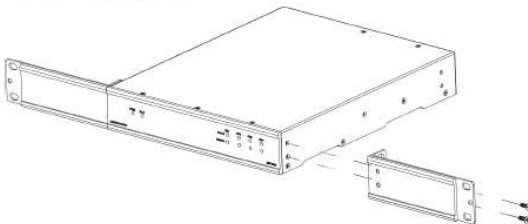
Rack Installation

Before an amplifier can be installed in a rack, rack ears must be attached.

Single Amplifier

Attach the rack ears to the amplifier with the four included 6-32 x 3/8 in. screws.

Attach Rack Ear, Single Amp

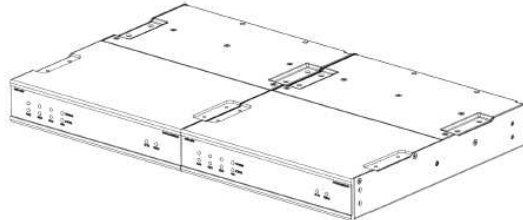


Ganged Amplifiers

Two amplifiers can be ganged together while occupying only 1 RU of rack space. When ganged together, the amplifier assembly occupies the entire width of the rack.

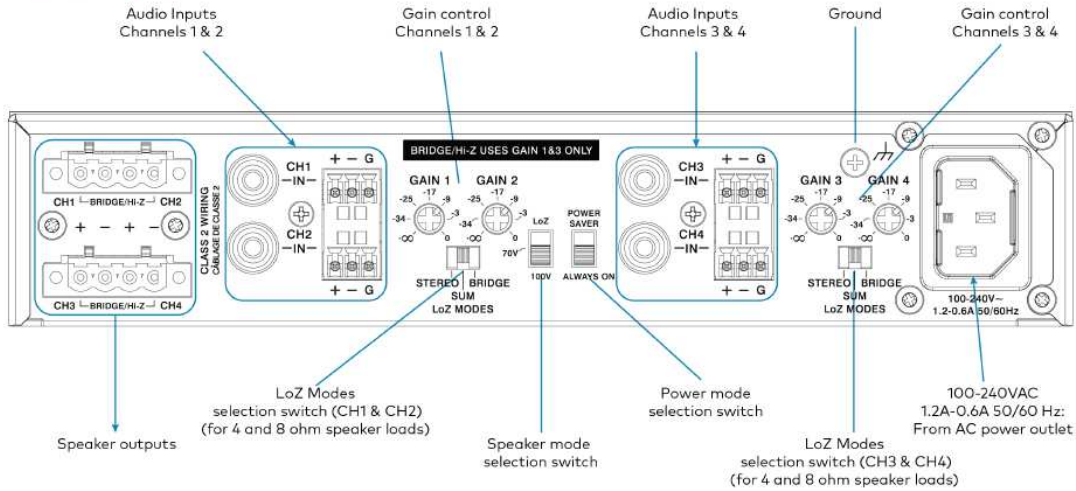
1. Place amplifiers upside-down and adjacent to each other, on a flat surface.

Position amplifiers together



2

X Series Amplifier



6

X Series Amplifier



Operation

Configuration

Each amplifier channel has its own gain control on the rear of the amplifier that can be adjusted to balance the sound between inputs or to accommodate different audio sources.

To configure a channel, a test signal must be sent to the amplifier while a Phillips screwdriver is used to adjust the amplifier's gain control (turn the gain control knob clockwise to increase the gain or counterclockwise to reduce the gain).

WARNING: This amplifier is capable of delivering high power to the loudspeakers. Please use caution and adequate ear protection if listening to content at high volume levels, as continued exposure to high sound pressure levels can cause permanent hearing impairment or loss.

1. Set the source's output signal level to maximum.
2. Set the amplifier's gain to the lowest setting (full counterclockwise).
3. Apply power to the amplifier.
4. Increase the amplifier's gain control until the desired volume level is reached in the audio playback zone.

NOTE: If clipping is exhibited in the playback audio, check the gain levels at the amplifier first. If the clipping is not remedied by adjusting the gain at the amplifier, troubleshoot at any other gain stage earlier in the audio chain.

LED Operation

The LEDs on the front panel provide the following information:

LED	Description
PWR	White: The amplifier is operating normally. Red: The amplifier has entered Standby (Power Saver) mode.
FAULT	Red: There is a fault, clip, or limiting on the indicated channel.
SIGNAL	White: An audio signal is present on the indicated channel.




15

- Safety Instructions – extract

Crestron

English

Important Safety Instructions

- Read these instructions.
- Keep these instructions.
- Heed all warnings.
- Follow all instructions.
- Do not use this apparatus near water.
- Clean only with dry cloth.
- Do not block any ventilation openings. Install in accordance with the manufacturer's instructions.
- Do not install near any heat sources such as radiators, heat registers, stoves, or other apparatus (including amplifiers) that produce heat.
- Do not defeat the safety purpose of the polarized or grounding-type plug. A polarized plug has two blades with one wider than the other. A grounding-type plug has two blades and a third grounding prong. The wide blade or the third prong are provided for your safety. If the provided plug does not fit into your outlet, consult an electrician for replacement of the obsolete outlet.
- Protect the power cord from being walked on or pinched particularly at plugs, convenience receptacles, and the point where they exit from the apparatus.
- Only use attachments/accessories specified by the manufacturer.
- Use only with the cart, stand, tripod, bracket, or table specified by the manufacturer, or sold with the equipment. When a cart is used, use caution when moving the cart/equipment combination to avoid injury from tipping over. 
- Unplug this apparatus during lightning storms or when unused for long periods of time.
- Refer all servicing to qualified service personnel. Servicing is required when the apparatus has been damaged in any way, such as power-supply cord or plug is damaged, liquid has been spilled or objects have fallen into the apparatus, the apparatus has been exposed to rain or moisture, does not operate normally, or has been dropped.
- Disconnect power prior to connecting or disconnecting equipment.
- Do not install in direct sunlight.
- The apparatus must be installed in a way that the power cord can be removed either from the wall outlet or from the device itself in order to disconnect the mains power.
- Prevent foreign objects from entering the device.

WARNING:

TO REDUCE THE RISK OF FIRE OR ELECTRIC SHOCK, DO NOT EXPOSE THIS APPARATUS TO RAIN OR MOISTURE. THE APPARATUS SHALL NOT BE EXPOSED TO DRIPPING OR SPLASHING. OBJECTS FILLED WITH LIQUIDS, SUCH AS VASES, SHOULD NOT BE PLACED ON THE APPARATUS.

WARNING:

TO PREVENT ELECTRIC SHOCK, DO NOT REMOVE COVER. THERE ARE NO USER SERVICEABLE PARTS INSIDE. ONLY QUALIFIED SERVICE PERSONNEL SHOULD PERFORM SERVICE.



AVIS: RISQUE DE CHOC ELECTRIQUE NE PAS OUVRIIR



The lightning flash with arrowhead symbol, within an equilateral triangle, is intended to alert the user to the presence of uninsulated "dangerous voltage" within the product's enclosure that may be of sufficient magnitude to constitute a risk of electric shock to persons.



The exclamation point within an equilateral triangle is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the appliance.

WARNING:

THIS IS AN APPARATUS WITH CLASS I CONSTRUCTION. IT SHALL BE CONNECTED TO AN ELECTRICAL OUTLET WITH AN EARTHING GROUND TERMINAL.

IMPORTANT:

This device can be used with Class 2 output wiring.

For additional user instructions, please refer to Section 5 of this Technical File – Additional Information; User manual and instructions can be found in the CB Test Report: E496941-A6013-CB-1, Enclosure 06-0x

Section 4

Test Data and Reports

Test Data and Reports

- EMC Test Report: P19-0165-1 rev. 2,
- Dated: 2019-10-24
- Issued by: EKTOS TRS A/S

Standards:

EN 55032:2012 + AC:2013

Electromagnetic compatibility of multimedia equipment –
Emission requirements

EN 55024:2010 + A1:2015

Information technology equipment – Immunity
characteristics – Limits and methods of measurement

EN 55035:2017 – Electromagnetic compatibility of
multimedia equipment – Immunity requirements

Result (compliance) pages shown below, complete test
reports available upon request.

1 SUMMARY

1.1 Test plan

The test plan is made according to the most severe test specifications from the following standards:

EN 55032:2012+AC:2013

EN 55024:2010+A1:2015

EN 55035:2017

Test method	Name of the test	Test	Result
EN 55032:2012+AC:2013, Class B	Radiated emission	X	PASSED
EN 55032:2012+AC:2013, Class B	Conducted emission	X	PASSED
EN 61000-4-3:2006+A1+A2	Radio frequency electromagnetic field	X	PASSED
EN 61000-4-2:2009	Electrostatic discharge	X	PASSED
EN 61000-4-4:2012	Fast transients	X	PASSED
EN 61000-4-5:2014+A1	Surge	X	PASSED
EN 61000-4-6:2014	Radio frequency common mode	X	PASSED
EN 61000-4-8:2010	Power frequency magnetic field	NR ¹	-
EN 61000-4-11:2004+A1	Voltage dips and interruptions	X	PASSED
EN 61000-3-2:2014	Harmonic current	X	PASSED
EN 61000-3-3:2013	Voltage fluctuations and flicker	X	PASSED

PASSED

The test specimen complies with the essential requirements in the standard.

FAILED

The test specimen does not comply with the essential requirements in the standard.

REF

The test is covered by a test in another report and/or on a similar test specimen.

NR

The test is not relevant for the test specimen or has been waived by the manufacturer.

X

The test is performed.

Note 1: The test specimen has no magnetisable parts and is not susceptible to magnetic fields.

Section 5

Additional Information

Additional Information

- Electrical Safety Test Reports

CB Test Report: E496941-A6013-CB-1-Original

CB Test Certificate: DK-91116-UL

Issued: 2019-12-18

CB Test Report: E496941-A6013-CB-1-Amendment-1

CB Test Certificate: DK-91116-M1-UL

Issued: 2020-03-02

CB certificates shown below, complete test reports available upon request.

IEC SYSTEM FOR MUTUAL RECOGNITION OF TEST CERTIFICATES FOR ELECTRICAL EQUIPMENT (IECEE)
CB SCHEME

CB TEST CERTIFICATE

Product	Audio Amplifier
Name and address of the applicant	ICEPOWER A/S Vandtarnsvej 62A, 3B Soborg, 2860 Denmark
Name and address of the manufacturer	ICEPOWER A/S Vandtarnsvej 62A, 3B Soborg, 2860 Denmark
Name and address of the factory	SVI Public Company Limited 141 - 142 Moo 5 Tiwanon Rd Bangkadi Muang Pathumthani, 12000 Thailand
<i>Note: When more than one factory, please report on page 2</i>	<input type="checkbox"/> Additional Information on page 2
Ratings and principal characteristics	100 - 240V~, 1.2 - 0.6A, 50/60 Hz
Trademark / Brand (if any)	CRESTRON
Type of Customer's Testing Facility (CTF) Stage used	
Model / Type Ref.	M1845006 See Page 2
Additional information (if necessary may also be reported on page 2)	Additionally evaluated to EN 62368-1:2014 / A11: 2017; National Differences specified in the CB Test Report. <input type="checkbox"/> Additional Information on page 2
A sample of the product was tested and found to be in conformity with	IEC 62368-1:2014
As shown in the Test Report Ref. No. which forms part of this Certificate	E496941-A6013-CB-1 issued on 2019-12-18

This CB Test Certificate is issued by the National Certification Body



- UL (US), 333 Pfingsten Rd IL 60062, Northbrook, USA
- UL (Demko), Borupvang 5A DK-2750 Ballerup, DENMARK
- UL (JP), Marunouchi Trust Tower Main Building 6F, 1-8-3 Marunouchi, Chiyoda-ku, Tokyo 100-0005, JAPAN
- UL (CA), 7 Underwriters Road, Toronto, M1R 3B4 Ontario, CANADA

Date: 2019-12-18

Signature:

For full legal entity names see www.ul.com/nbcnames

Jan-Erik Storgaard



Ref. Certif. No.

DK-91116-UL

Model Details:
M1845006 (SKU: AMP-X300)

Additional information (if necessary)



- UL (US), 333 Pfingsten Rd IL 60062, Northbrook, USA
- UL (Demko), Borupvang 5A DK-2750 Ballerup, DENMARK
- UL (JP), Marunouchi Trust Tower Main Building 6F, 1-8-3 Marunouchi, Chiyoda-ku, Tokyo 100-0005, JAPAN
- UL (CA), 7 Underwriters Road, Toronto, M1R 3B4 Ontario, CANADA

For full legal entity names see www.ul.com/ncbnames

Date: 2019-12-18

Signature: 
Jan-Erik Storgaard

IEC SYSTEM FOR MUTUAL RECOGNITION OF TEST CERTIFICATES FOR ELECTRICAL EQUIPMENT (IECEE)
CB SCHEME

CB TEST CERTIFICATE

Product	Audio Amplifier
Name and address of the applicant	ICEPOWER A/S Vandtarnsvej 62A, 3B Soborg, 2860 Denmark
Name and address of the manufacturer	ICEPOWER A/S Vandtarnsvej 62A, 3B Soborg, 2860 Denmark
Name and address of the factory <i>Note: When more than one factory, please report on page 2</i>	SVI Public Company Limited 141 - 142 Moo 5 Tiwanon Rd Bangkadi Muang Pathumthani, 12000 Thailand
Ratings and principal characteristics	Additional Information on page 2 100 - 240V~, 1.2 - 0.6A, 50/60 Hz
Trademark / Brand (if any)	CRESTRON
Type of Customer's Testing Facility (CTF) Stage used	
Model / Type Ref.	M1845006 See Page 2
Additional information (if necessary may also be reported on page 2)	The report was revised to include technical modifications Additional Information on page 2
A sample of the product was tested and found to be in conformity with	IEC 62368-1:2014
As shown in the Test Report Ref. No. which forms part of this Certificate	E496941-A6013-CB-1 issued on 2020-03-02

This CB Test Certificate is issued by the National Certification Body



UL (US), 333 Pfingsten Rd IL 60062, Northbrook, USA
UL (Demko), Borupvang 5A DK-2750 Ballerup, DENMARK
UL (JP), Marunouchi Trust Tower Main Building 6F, 1-8-3 Marunouchi, Chiyoda-ku, Tokyo 100-0005, JAPAN
UL (CA), 7 Underwriters Road, Toronto, M1R 3B4 Ontario, CANADA

Date: 2020-03-02
Original Issue Date: 2019-12-18

Signature:

Jan-Erik Storgaard

For full legal entity names see www.ul.com/ncbnames



Ref. Certif. No.

DK-91116-M1-UL

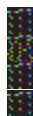
Model Details:
M1845006 (SKU: AMP-X300)

Additional Information:
Additionally evaluated to EN 62368-1:2014 / A11: 2017; National Differences specified in the CB Test Report.

The original report was modified to include the following changes/additions:

- Added new main fuse (F100)

Additional information (if necessary)



- UL (US), 333 Pfingsten Rd IL 60062, Northbrook, USA
- UL (Demko), Borupvang 5A DK-2750 Ballerup, DENMARK
- UL (JP), Marunouchi Trust Tower Main Building 6F, 1-8-3 Marunouchi, Chiyoda-ku, Tokyo 100-0005, JAPAN
- UL (CA), 7 Underwriters Road, Toronto, M1R 3B4 Ontario, CANADA

For full legal entity names see www.ul.com/nbcnames

Date: 2020-03-02
Original Issue Date: 2019-12-18

Signature: 
Jan-Erik Storgaard