

EC Type-Examination (Module B)

Directive for Marine Equipment

Certificate No.: **DK-0200-MarED-147 version 7**

Issued by FORCE Certification A/S - EC-notified body number 0200

This is to certify that:

FORCE Certification A/S did undertake the relevant type approval procedures for the equipment identified below which was found to be in compliance with the Life Saving Appliance requirements of Marine Equipment Directive (MED) 2014/90/EU, as amended, last amended by Regulative 2017/306/EU subject to any conditions in the schedule attached hereto.

Applicant and Manufacturer: **Alcares ApS
Rugmarken 10
3650 Ølstykke
Denmark**

Identification of Marine Equipment:
Item: **MED/1.2c**
Product Type: **Position-indicating lights for life-saving appliances**
Product Designation: **Jack A
Jack A-Alk**

Specified Standard: **LSA code MSC.48(66) adopted on 4 June 1996 and MSC.81(70)
adopted on 11th December 1998**

(Tested in accordance with):

Amendments to LSA code:

MSC.207(81) adopted on 18 May 2006

MSC.218(82) adopted on 8 December 2006

Amendments to testing methods:

MSC.200(80) adopted on 13 May 2005

MSC.226(82) adopted on 8 December 2006

MSC.323(89) adopted on 20 May 2011

The examined samples are found to fulfil the requirements stated in:

The International Testing Standard IMO Res. MSC.81(70) and the applicable reg. SOLAS 74 as amended, where the relevant requirements are specified in the amendment to The Directive, item MED/1.2c

Documentation for observance of relevant requirements stated in ANNEX II (Module B) of the Directive and the basis for the type examination are described in the appendix to this certificate.

This certificate will remain valid unless cancelled or revoked, provided the conditions in the attached appendix are complied with and the equipment remains satisfactory in service.

The certificate will not be valid if the manufacturer makes any changes or modifications to the approved equipment, which have not been notified to, and agreed with the notified body named on this certificate.

Should the specified regulations or standards be amended during the validity of this certificate, the product(s) is/are to be reapproved prior to it/they being placed on board vessels to which the amended regulations or standards apply.

This new version of EC-Type Examination Certificate DK-0200-MarED-147 version 6 dated 2016-08-29 is issued due to the implementation of the new Marine Equipment Directive.

FORCE Certification A/S task No.: 117-24664


FORCE Certification A/S ID No.: 02152

Date of issue: 2017-02-22

Date of expiry: 2022-02-22



Niels Jørgen Sibbersen
Certification Manager



Philippa Weirup Osted
Examiner



The Mark of Conformity may only be affixed to the above type approved equipment and a Manufacturer's Declaration of Conformity may only be issued when the production/product assessment module (D, E or F), ANNEX II of the Directive is fully complied with and controlled by a written inspection agreement with a notified body.

Extracts from this EC Type-Examination Certificate may only be reproduced with a written permission from FORCE Certification A/S

Appendix to EC Type-Examination Certificate

Directive for Marine Equipment

Certificate No.: DK-0200-MarED-147 version 7
Issued by FORCE Certification A/S - EC-notified body number 0200

Applicant and
Manufacturer: **Alcares ApS**
Rugmarken 10
3650 Ølstykke
Denmark

Identification of Marine Equipment:

Item: **MED/1.2c**

Product Type: **Position-indicating lights for life-saving appliances**

Product Designation: **Jack A**
Jack A-Alk

Design:



"Jack A"

Appendix to EC Type-Examination Certificate

Directive for Marine Equipment



Certificate No.: DK-0200-MarED-147 version 7

Issued by FORCE Certification A/S - EC-notified body number 0200

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History:

Issue/change:	Document:	Date:
- Original certificate	DK-0200-MarED-147 ver. 1	2010-06-18
- Use of alternative battery (alkaline type)	DK-0200-MarED-147 ver. 2	2010-07-14
- Use of Lithium battery from Great Powers, and use of Kendal alkaline battery Updating of certificate to 6th Amendment	DK-0200-MarED-147 ver. 3	2011-12-15
- Update of certificate – 7th amendment, new version added, use of alternative battery from Wuxi Noran Battery Co. and separated "List of materials"	DK-0200-MarED-147 ver. 4	2013-09-30
- Alternative batteries	DK-0200-MarED-147 ver. 5	2016-07-04
- Address corrected	DK-0200-MarED-147 ver. 6	2016-08-29
- Update due to the implementation of new Marine Equipment Directive and new expiry date	DK-0200-MarED-147 ver. 7	2017-02-22

Appendix to EC Type-Examination Certificate

Directive for Marine Equipment



Certificate No.: DK-0200-MarED-147 version 7
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Documentation for observance of the relevant requirements:

Test House	File No.	Testing/Inspection of:
FORCE Technology	109-24341.a	Type Testing of Jack M*
FORCE Certification A/S	DK-0200-MarED-129 v. 3	(Type identical light Jack M)
Delta - Danish Electronics, Lights and Acoustics	DELTA-L102003-3168 rev.1	Light Test
	DELTA-L102003-3169	Light Test
	DELTA-L102007-3227	Chromaticity Test, Drop Test
	DELTA-A506584	Vibration Test
FORCE Technology	110-26415.b	Supplementary testing of Jack A
DELTA- Danish Electronics, Lights and Acoustics	DELTA-L102253-3417	Supplementary testing of Jack A
FORCE Technology	110-26415.d	Supplementary testing of the use of alternative battery (Jack A-ALK)
DELTA - Danish Electronics, Lights and Acoustics	DELTA-L102253-3433	Supplementary testing of the use of alternative battery (Jack A-ALK)
FORCE Technology	110-34454	Use of alternative batteries:
DELTA - Danish Electronics, Lights and Acoustics	DELTA-L102372-3525	Supplementary testing of the use of Kendal alkaline battery
DELTA - Danish Electronics, Lights and Acoustics	DELTA-L102372-3524	Supplementary testing of the use of lithium battery from Great Powers
DELTA - Danish Electronics, Lights and Acoustics	DELTA -L102692-4191 rapport(UK)	Supplementary testing of the use of Reiden battery
DELTA - Danish Electronics, Lights and Acoustics	DELTA L102798-4783	Supplementary testing of the use of Varta battery on type identical light
FORCE Technology	116-26028.b	Supplementary testing of the use of Varta battery on type identical light

*) Type testing was performed on lifejacket light model Jack M which is type-identical to model Jack A, except that model Jack A has an automatic water activation mechanism (print circuit board).

Partial conclusion:

The device designated "Jack A" and "Jack A-Alk" is found to fulfil the requirements in The International Testing Standard IMO Res. MSC.81(70) and the applicable reg. SOLAS 74 as amended, where the relevant requirements are specified in the amendment to The Directive, item MED/1.2c as well as the requirements in ANNEX II (Module B) of the Directive.

The following documentation was available:

Description of quality management system:
User Manual and marking:
List of materials/manufacturers used for
manufacturing the device:
Technical documentation:

Module D certificate - DK-0200-MarED-QA-132/10
FORCE Technology report 109-24341.a
"List of Materials for DK-0200-MarED-147" valid on the date
of production.
- Drawings
- Specification of battery
- Specification of print circuit

Conclusion

Based on the above mentioned attestation it can be concluded that the position indicating light designated, "Jack A" and "Jack A-Alk" meets the conditions of EC type-examination in accordance with the Marine Equipment Directive (MED) 2014/90/EU as amended, last amended by Regulative 2017/306/EU (1st Amendment).

FORCE Certification A/S task No.: 117-24664

Date: 2017-02-22

Philippa Weirup Osted
Examiner