

EC-TYPE EXAMINATION CERTIFICATE (MODULE B)

Certificate No:
MEDB000060Z
Revision No:
2

Application of: Directive 2014/90/EU of 23 July 2014 on marine equipment (MED). This Certificate is issued by DNV GL SE based on the notification of the Federal Maritime and Hydrographic Agency of Germany.

This is to certify:

That the Position indicating lights for life-saving appliances: (b) for lifebuoys

with type designation(s)
L160, L160 Hansson and L160 Apollo

Issued to

Daniamant Ltd
Portsmouth, Hampshire, United Kingdom

is found to comply with the requirements in the following Regulations/Standards:

Regulation **(EU) 2023/1667**,

item No. MED/1.2b. SOLAS 74 as amended, Regulation III/4, III/7, III/22, III/32, III/34 & X/3, LSA Code, 1994/2000 HSC Code 8 and IMO MSC.1/Circ.1628

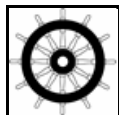
Further details of the equipment and conditions for certification are given overleaf.

This Certificate is valid until **2028-12-10**.

Issued at **Hamburg** on **2023-12-11**

DNV local unit:
UK & Ireland CMC & VMC

Approval Engineer:
Marcin Tobiasz



Notified Body
No.: **0098**

for **DNV GL SE**

Mydlak-Röder, Christine
Head of Notified Body

A U.S. Coast Guard approval number will be assigned to the equipment when the production module has been completed and will appear on the production module certificate (module D, E or F) of Annex B of the MED is fully complied with and controlled by a written inspection agreement with a Notified Body. The product liability rests with the manufacturer or his representative in accordance with Directive 2014/90/EU. This certificate remains valid unless suspended, withdrawn, recalled or cancelled. Should the specified regulations or standards be amended during the validity of this certificate, the product is to be re-approved before being placed on board a vessel to which the amended regulations or standards apply.

The mark of conformity may only be affixed to the above type approved equipment and a Manufacturer's Declaration of Conformity issued when the production-surveillance module (D, E or F) of Annex B of the MED is fully complied with and controlled by a written inspection agreement with a Notified Body. The product liability rests with the manufacturer or his representative in accordance with Directive 2014/90/EU.

This certificate is valid for equipment, which is conform to the approved type. The manufacturer shall inform DNV GL SE of any changes to the approved equipment. This certificate remains valid unless suspended, withdrawn, recalled or cancelled.

Should the specified regulations or standards be amended during the validity of this certificate, the product is to be re-approved before being placed on board a vessel to which the amended regulations or standards apply.

LEGAL DISCLAIMER: Unless otherwise stated in the applicable contract with the holder of this document, or following from mandatory law, the liability of DNV AS, its parent companies and their subsidiaries as well as their officers, directors and employees ("DNV") arising from or in connection with the services rendered for the purpose of the issuance of this document or reliance thereon, whether in contract or in tort (including negligence), shall be limited to direct losses and under any circumstance be limited to 300,000 USD.



Product description

“L160, L160 Hansson and L160 Apollo”
 Self-activated lights for lifebuoys.

Application/Limitation

Lights powered by batteries shall be marked with means of determining their age or the date by which they are to be replaced.

For compliance with SOLAS Regulation III/35 and III/36, fully detailed operations and maintenance manuals shall be supplied with each light.

Maximum installation Height: 76 m.

Type Examination documentation

Technical file doc. No. TF012, revision 06, September 2017
 Installation and Maintenance Instruction, Daniament Version, 62-127-001 Issue 06 (C6931)
 Installation and Maintenance Instruction, Hanson Version, 62-139 Issue 02 (C6327)
 Installation and Maintenance Instruction, Apollo Version, 62-146 Issue 03 (C6395)

Test report No	Title	Date
14-05	“L160, L161, L162 and L163 Life test”, witnessed by TUV product service Ltd	2014-04-24
J-5036	Microbiological test report	2013-10-15
09-10	Alternative cell CR123A cell and Able CR17505	2009-10-20
75925967, report 01, Issue 1	“Temperature cycling test, Luminous intensity test, Chromatic test, Vibration test”, witnessed by TUV product service Ltd	2014-06
123-29294-1 Rev. 3	“Evaluation and test report per MSC 81(70), dated 09-03A”	2009-08-06
	Switch operation used to activate lights	2023-08-03

Tests carried out

IMO Res. MSC.81(70), as amended.
 EN 60945:2002 incl. IEC 60945 Corr. 1:2008.
 ISO 24408: 2005.

Marking of product

The product is to be marked with manufacturers name, type designation, serial or lot number, date of expire and Mark of Conformity. The expiring date shall be marked in accordance with the LSA Code, item 1.2.3 as amended by IMO Res. MSC 48(66).

END OF CERTIFICATE