

TYPE EXAMINATION CERTIFICATE (MODULE B)

Certificate No:
MERB000060Z
Revision No:
0

This Certificate is issued by DNV UK Limited based on authorisation of the Maritime & Coast Guard Agency (MCA) as an UK Approved Body to undertake conformity assessments on marine equipment in accordance with the requirements of the Merchant Shipping (Marine Equipment) Regulations 2016 as amended.

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, United Kingdom

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

Regulation **MSN 1874 Amendment 6**,
item No. **UK/1.2b. SOLAS 74 as amended, Regulation III/4, III/7, III/22, III/32, III/34 & X/3, LSA Code, 2000 HSC Code 8**

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

This Certificate is valid until **2024-10-10**.

Issued at **London** on **2022-12-15**

DNV local unit:
Denmark CMC



for **DNV UK Ltd.**

Approval Engineer:
Marcin Tobiasz

Approved Body No.: **0097**

Christine Mydlak-Röder
MER Service Responsible



**Maritime &
Coastguard
Agency**

UK Approved Body Authorised
by the MCA

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-control phase module (D, E or F) of Schedule 2 of the Merchant Shipping (Marine Equipment) Regulations 2016, as amended is fully complied with and controlled by a written inspection agreement with an approved body. The product liability rests with the manufacturer or his representative in accordance with the Merchant Shipping (Marine Equipment) Regulations 2016.

This certificate is valid for equipment, which is conform to the approved type. The manufacturer shall inform DNV UK Ltd. of any changes to the approved equipment. 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. This certificate remains valid unless suspended, withdrawn, re-called, or cancelled.

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

Self-activated lights for lifebuoys L160, L160 Hansson and L160 Apollo

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 05 (C6495)

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
	"Evaluation and test report per MSC 81(70), dated 09-03A"	2009-08-06

Tests carried out

-IMO Resolution MSC.81(70), part 1, as amended

-IEC 60945:2002 incl. IEC 60945 Corr. 1 (2008)

Marking of product

To be marked with information requested by the LSA Code Paragraph 1.2.2.9 and 1.2.3

- Manufacturer name
- Type identification
- Serial or Lot number
- Date of expiry
- Mark of Conformity

END OF CERTIFICATE