



TYPE EXAMINATION CERTIFICATE (MODULE B)

Certificate No:
MERB000060Z
Revision No:
1

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 7**,
item No. UK/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 **2029-01-27**.

Issued at **London** on **2024-01-28**

DNV local unit:
**UK & Ireland CMC &
VMC**



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

This certificate will not be valid if the manufacturer makes any changes or modifications to the approved type of equipment, which have not been notified to, and agreed with the approved body named on this certificate.
During the period of validity of this certificate the applicable regulations (international conventions and the relevant resolutions and circulars of the IMO) and testing standards may change, therefore the product conformity may need to be re-assessed by the Approved Body.
"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. In case limitations of use apply, these should be indicated in the Annex.

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
	“Evaluation and test report per MSC 81(70), dated 09-03A”	2009-08-06
123-29294-1 Rev. 3	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