

EC-TYPE EXAMINATION CERTIFICATE (MODULE B)

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 Low-Location Lighting Systems

with type designation(s)
Electrically powered LED-System

Issued to
BAREL AS
Kirkenes, Norway

is found to comply with the requirements in the following Regulations/Standards:
Regulation **(EU) 2017/306**,
item No. MED/3.40. SOLAS 74 as amended, Regulation II-2/13, FSS Code 11, IMO
Res.A.752(18) and ISO 15370:2010

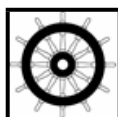
Further details of the equipment and conditions for certification are given overleaf.

This Certificate is valid until **2022-12-21**.

Issued at **Hamburg** on **2017-12-22**

DNV GL local station:
Tromsø

Approval Engineer:
Didier Girardin



Notified Body
No.: **0098**

for **DNV GL SE**

Sven Dudzus
Head of Notified 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-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 This certificate remains valid unless suspended, withdrawn, recalled or cancelled.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.



Product description

Type name: Electrically Powered LED-System

LED type: as per below stated drawing number
2-wire LED Strip B00 808 521 00
3-wire LED Strip B00 808 112 00

The BAREL LED Strips are manufactured in a so called "endless" system configuration with about 250 m on each spool, LED distance according to ISO 15370. The LED Strip can be mounted into aluminium-, plastic- or wooden profiles for floor or wall mounting with/without decor foil or protective polycarbonate cover on top. Further details as per 3L-System Installation Manual.

Application/Limitation

Approved for use as Low-Location Lighting, escape route signs

Extent of arrangement and placing of the low location lighting units are to be in accordance with IMO Resolution A.752 (18) or ISO 15370 (2010) and is to be approved by the administration or competent authority in each case/project.

Each product is to be supplied with its manual for installation, maintenance and use.

Type Approval documentation

Test Reports:

TREO Report document No.: 320-17 dated 18.12.2017
RISE Report document No.: MTt7P04293-1 dated 28.08.2017
Light Measurement Protocol: LS3L002

Documents:

BAREL/Lighting Solutions 3L-Installation Manual

Drawings:

B00 802 114 00, B00 802 115-00, B00 803 01X-00, B00 803 021-00, B00 803 07X-00,
B00 803 09X-00, B00 803 11X-00, B00 803 5X9-11, B00 803 610-00, B00 803 62X-01,
B00 804 X06-00, B00 806 021-00, B00 806 07X-00, B00 806 08X-00, B00 806 09X-00,
B00 806 109-00, B00 806 209-00, B00 807 221-00, B00 807 221-01, B00 807 320-00,
B00 807 389-00, B00 808 112-01, B00 808 112-02, B00 808 203-00, B00 808 421-00,
B00 808 432-00, B00 808 433-00, B00 808 435-10, B00 808 501-00, B00 808 512-00,
B00 808 521-00, B20 802 024-00, B20 802 025-00, B20 805 001-06

Tests carried out

Tested according to ISO 15370:2010 and IMO Res.A.752(18)

Marking of product

- According to Article 10 of the Council Directive (MED)
- Manufacturer name
- Type Identification