



EC-TYPE EXAMINATION CERTIFICATE (MODULE B)

Certificate No:
MEDB00008DE

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 406 MHz EPIRB (COSPAS-SARSAT)

with type designation(s)
NEB-2000, NEB-2000C-VDR

Issued to
New Sunrise Co.,Ltd.
Suzhou City, Jiangsu, China

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

Regulation (EU) 2022/1157,

item No. MED/5.6. SOLAS 74 as amended, Regulations IV/ 7, IV/14 & X/ 3, IMO Res. A.662(16), A.694(17), IMO Res. MSC.36(63), MSC.97(73), MSC.471(101), IMO MSC/Circ.862, IMO COMSAR/Circ.32, ITU- R M.633-4 (12/10) and 690-3 (03/15)

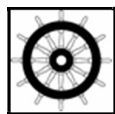
Further details of the equipment and conditions for certification are given overleaf.

This Certificate is valid until **2028-05-10**.

Issued at **Hamburg** on **2023-05-11**

DNV local unit:
Shanghai

Approval Engineer:
Steinar Kristensen



Notified Body
No.: **0098**

for **DNV GL SE**

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Christine Mydlak-Roeder
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 This certificate remains valid unless suspended, withdrawn, recalled or cancelled.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.

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

The NEB-2000 and NEB-2000C-VDR are Class II 406 MHz EPIRBs (COSPAS-SARSAT) as specified below:

Product	Description	Hardware and Firmware versions
NEB-2000	EPIRB with built in GNSS receiver and AIS transmitter, including container housing and automatic release device activated underwater within a depth of 4 meters.	Hardware: NEB-2000, ver. 1.0 Firmware: NEB-2201, ver. 1.0x
NEB-2000C-VDR	EPIRB with built in GNSS receiver and AIS transmitter, including container housing and automatic release device activated underwater within a depth of 4 meters, and VDR float free capsule functionality with a memory of 64GB, Ethernet interface and 24VDC power supply interface.	Hardware: NEB-2000C-VDR, ver. 1.0 Firmware: NEB-2201, ver. 1.0x

Application/Limitation

The NEB-2000 and NEB-2000C-VDR have been approved by COSPAS-SARSAT according to the below specifications/standards:

- Specification for COSPAS-SARSAT 406 MHz Distress Beacons C/S T.001 Issue 4 – Revision 8 (June 2021)
- COSPAS-SARSAT 406 MHz Beacon Type Approval Standard C/S T.007 Issue 5 – Revision 7 (June 2021)
- Interim Procedure for the Determination of Compliance of 406 MHz Beacons Equipped with a TCXO with COSPAS-SARSAT Type Approval Requirements C/S IP (TCXO) – Revision 5 October 2013

Type Examination documentation

DNV No	Document ID	Rev.	Description
22	371	2022-12-13	Certificate: Cospas-Sarsat Type Approval certificate for NEB-2000C-VDR Float Free EPIRB with VDR
21	A22-008-ZC-02	2022-06-21	Report: SITIIAS, Report: SITIIAS, Environmental and EMC immunity test report for NEB-2000C-VDR
20	202215011607G	2022-12-29	Report: JEPSI, GNSS test report for NEB-2000C-VDR
19	202215011484	2022-12-09	Report: JEPSI, Radio beacon test report for NEB-2000C-VDR
14	NSR-2000C-VDR UM.E 20230320-02	02	Manual: NSR Marine, User Manual 406 MHz EPIRB and VDR Float-free Capsule (COSPAS-SARSAT) NEB-2000C-VDR
13	NEB-2000 UM.E 20230320-02	02	Manual: NSR Marine, User Manual 406 MHz EPIRB (COSPAS-SARSAT) NEB-2000
11	A14-047-WT	2014-10-11	Report: SITIIAS, EMC and environmental test report for NEB-2000C Floating Protected Data Capsule
10	202215011606	2022-12-30	Report: JEPSI, GNSS test report for NEB-2000 EPIRB
9	202215011483	2022-12-09	Report: JEPSI, Radio beacon test report for NEB-2000 EPIRB
6	NSR-NEB2000CVDR - TEST230224	2023-03-10	Report: NSR Marine, Performance test report for NEB-2000C-VDR Float Free Capsule & EPIRB
5	ER 2022-033	2022-06-25	Report: CSIRT, Oil resistance and solar radiation test report for NEB-2000 and NEB-2000C-VDR
3	A22-008-ZC-01	2022-06-21	Report: SITIIAS, Environmental and EMC immunity test report for NEB-2000 EPIRB
1	374	2023-01-06	Certificate: Cospas Sarsat, Type Approval certificate for NEB-2000 Float Free EPIRB

Tests carried out

- Environmental testing: IEC 60945 (2002) incl. Corr.1 (2008)
- Performance testing: IEC 61097-2 (2021)

Marking of product

The following requirements applies to marking of the EPIRB:

- IEC 61097-2, Sect. 4.12:
 - Equipment labelling:
 - brief operating instructions, to enable manual activation, deactivation and self-test, with any text used provided in at least English
 - a warning to the effect that the EPIRB shall not be operated except in an emergency
 - class, type of battery and expiry date for the primary battery used
 - the name of the ship and beacon identification data:
 - the location of the GNSS antenna and to provide this with a clear view of the sky during operation
 - Float-free arrangement labelling
 - the operating instructions for manual release in pictorial form
 - the category
 - the stowage and operating temperature ranges of the float-free arrangement
 - the maintenance and/or replacement date for the release mechanism, if applicable
 - Battery labelling
 - indelibly and legibly marking with the battery type, voltage, expiration date (month and year) and as appropriate, precautions associated with handling and disposal
 - a label shall be applied to either the interior of the EPIRB in a conspicuous place or on the battery pack itself warning that unauthorized battery replacement may lead to failure such as the following.
WARNING! Regulated lifesaving device. Unauthorized battery replacement may lead to failure.
- IEC 60945, Sect.4.9:

The product to be marked with following information, where practicable:

 - Identification of the manufacturer,
 - Equipment type number or model identification under which it was type tested,
 - Serial number of the unit,
 - Compass safe distance.

Alternatively, the marking may be presented on a display at equipment start-up, and in case of fixed equipment compass safe distance may be given in the equipment manual.

END OF CERTIFICATE