

# EC-TYPE EXAMINATION CERTIFICATE (MODULE B)

Application of: Directive 2014/90/EU of 23 July 2014 on marine equipment (MED), issued as "Forskrift om Skipsutstyr" by the Norwegian Maritime Authority. This Certificate is issued by DNV GL AS under the authority of the Government of Norway.

## This is to certify:

**That the Lifeboat/rescue boat propulsion engine**

with type designation(s)  
**BUKH SeasAll R210 & S270 SOLAS marine engines**

Issued to  
**BUKH A/S**  
**Kruså, Denmark**

is found to comply with the requirements in the following Regulations/Standards:  
Regulation **(EU) 2017/306**,  
**item No. MED/1.36. SOLAS 74 as amended, Regulation III/4 & X/3 and LSA Code**

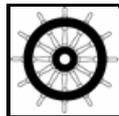
Further details of the equipment and conditions for certification are given overleaf.

This Certificate is valid until **2022-10-17**.

Issued at **Høvik** on **2017-10-18**

DNV GL local station:  
**Fredericia**

Approval Engineer:  
**Tin Nguyen**



Notified Body  
No.: **0575**



for **DNV GL AS**  
Digitally Signed By: Hannevik, Svein-Olav

Location: DNV GL Høvik, Norway  
, on behalf of

**Vidar Dolonen**  
**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 AS 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 This certificate remains valid unless suspended, withdrawn, recalled or cancelled.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

Four stroke diesel engine with reduction gear  
The engines are manufactured by Hyundai - SeasAll Co., Ltd. but SOLAS certified and equipped with accessories by Bukh A/S.

Engine model	Bukh SeasAll R210	Bukh SeasAll S270
Cylinder bore (mm)	85.4	84
Piston stroke (mm)	96	89
No. of cylinders:	4 in line	6 in V

Engine model	Rating (kW)	Engine speed (RPM)	Gearbox
<b>Bukh SeasAll R210</b>	154	3800	Jet Adaptor, ZF, TTM, PRM or Mercruiser Sterndrive
<b>Bukh SeasAll S270</b>	199	3800	Jet Adaptor, ZF, TTM, PRM or Mercruiser Sterndrive

## Application/Limitation

The engine models are approved for SOLAS purposes.

## Type Examination documentation

Bukh doc.	R210 Dimensions
Bukh doc.	S Series Dimensions
009Z6020-R01	S1 & S2 Engine Specification
009Z5524-R01	Bukh S270J Technical Specifications
009Z5424-R01	Bukh R210J Technical Specifications
009Z4521-R01	Installation & operation manual R-Series Engine
009Z4421-R02	Installation & operation manual S-Series Engine
009Z2520-R01	Workshop manual for R Engine series General information
009Z2523-R01	Workshop manual for R Engine series Fuel System
009Z2521-R01	Workshop manual for R Engine series Mechanical System
009Z2522-R01	Workshop manual for R Engine series Engine Electrical System
009Z2421-R01	Workshop manual for S2 Engine series Engine Mechanical System

## Tests carried out

Solas Test Report for Bukh SeasAll R210 dated 2017-06-21, witnessed by DNV GL  
Solas Test Report for Bukh SeasAll S270 dated 2017-05-16, witnessed by DNV GL  
Cold Start at -30°C Test Report for SeasAll R210 dated 2017-07-14, witnessed by DNV GL  
Cold Start at -30°C Test Report for SeasAll S270 dated 2017-07-14, witnessed by DNV GL

## Marking of product

The product to be marked with manufacturer's name or trademark and type number identification

Job Id: **344.1-007097-1**  
Certificate No: **MEDB00002VM**

## Mark of Conformity

The manufacturer is allowed to affix the Mark of Conformity  according to Directive 2014/90/EU on Marine Equipment and shall issue a Declaration of Conformity, only when the module D or E or F of Annex B in the same directive is fully complied with.

Module D: The quality system for production and testing shall be approved by the Notified Body.

Module E: The quality system for inspection and testing shall be approved by the Notified Body.

Module F: Compliance of the products to type as described in this EC Type-Examination Certificate must be verified by the Notified Body who also shall issue a Certificate of Conformity.

END OF CERTIFICATE