



EC-TYPE EXAMINATION CERTIFICATE (MODULE B)

Certificate No:
MEDB00003FJ
Revision No:
2

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 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 Beta SOLAS 28 EPA, 36 EPA, 48 EPA

Issued to
BUKH A/S
Kruså, Syddanmark, Denmark

is found to comply with the requirements in the following Regulations/Standards:
Regulation (EU) 2022/1157,
item No. MED/1.36. SOLAS 74 as amended, Regulation III/4, III/34 & X/3 and LSA Code

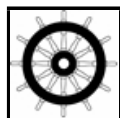
Further details of the equipment and conditions for certification are given overleaf.

This Certificate is valid until **2028-09-10**.

Issued at **Høvik** on **2023-09-11**

DNV local unit:
Denmark CMC

Approval Engineer:
Dag Harald Williksen



Notified Body
No.: **0575**

for **DNV AS**

Digitally Signed By:
Svein-Olav Hannevik
Location: DNV Høvik, Norway
on behalf of

Sverre Olav Bergli
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 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 This certificate remains valid unless suspended, withdrawn, recalled or cancelled.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.

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

Four stroke diesel engine with reduction gear

	24/36 EPA	48 EPA
Cylinder bore:	78,0 mm	87,0 mm
Piston stroke:	78,4 mm	92,4 mm
No. of cylinders:	3 and 4	4

Engine model	Rating (kW)	Engine speed (RPM)	Gearbox
28 EPA	20.6	3600	BW 7 or PRM 125 D or Baysan M60
36 EPA	26.5	3600	BW 7 or PRM 125 D or Baysan M60
48 EPA	35.3	2800	Newage PRM 150 or Baysan M60

Application/Limitation

The engines are approved for use in life/rescue boats.

Type Examination documentation

Drawing no	Date/rev.	Drawing title
009M8101		Diesel engine BBV1105 with BW 7 gear and keel cooling (28 EPA)
009M8301		Diesel engine BBV1505 with BW 7 gear and keel cooling (36 EPA)
009M8501		Diesel engine BBV2203 with PRM 150 gear and keel cooling (48 EPA)
		Technical Specifications for engine models 28 EPA, 36 EPA and 48 EPA
009YHCS1	R01	Hydraulic Starting Product Manual
		Operator's Maintenance Manual for 28 EPA, 36 EPA and 48 EPA.
009Y4326	R01	Operator's Maintenance Manual for BUKH+Beta Solas 28 EPA, 36 EPA

Tests carried out

Passed the tests required in IMO Resolution A.689(17) as amended by IMO Resolution MSC.81(70) with reference to MSC.1/Circ.1630 for rescue boat propulsion engine-outboard as follows:

- 4.3.2.3 Cold start test, LSA Code 4.4.6.2; MSC.81(70) 1 /6.10.2 - 6.10.4
- 4.3.2.4 Engine-out-of-water test, LSA Code 4.4.6.3; MSC 81(70) 1/6.10.5
- 4.3.2.5 Submerged engine test, LSA Code 4.4.6.4; MSC.81(70) 1 /6.10.6
- 4.3.2.6 Engine inversion test, LSA Code 4.6.4.2; MSC.81(70) 1 /6.14.6 - 6.14.8

Test reports for engine models 28 EPA, 36 EPA and 48 EPA carried out 2007-05-31 to 2007-06-01, witnessed by DNV. Reports dated 2007-06-01.

Test reports Bukh Diesel Engines EPA 28 - 36 (3 & 4 cylinders) carried out 2013-10-08, witnessed by DNV

Marking of product

The product is to be indelibly marked with name, address of manufacturer and type designation. The Mark of Conformity (wheel-mark) can be affixed when the conditions on page 1 have been met.

END OF CERTIFICATE