

EC-TYPE EXAMINATION CERTIFICATE (MODULE B)

Certificate No: MEDB00003FK Revision No:

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)

DV24RME, DV29RME, DV32RME, DV36RME, DV48RME

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 2028-09-07.

Issued at Høvik on 2023-09-08

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 This certificate remains valid unless suspended, withdrawn, recalled or cancelled.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



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Job Id: **344.1-001841-8** Certificate No: **MEDB00003FK**

Revision No: 2

Product description

Four stroke diesel engine with reduction gear.

Cylinder bore: 85 mm Piston stroke: 85 mm No. of cylinders: 2 and 3

Engine model	Rating (kW)	Engine speed (RPM)	Gearbox
DV24RME	17.6	3600	PRM 125 D or ZF/ISA BW 7 or Baysan M60
DV29RME	21.3	3600	PRM 125 D or ZF/ISA BW 7 or Baysan M60
DV32RME	23.5	3600	PRM 125 D or ZF/ISA BW 7 or Baysan M60
DV36RME	26.5	3600	PRM 125 D or ZF/ISA BW 7 or Baysan M60
DV48RME	35.3	3600	PRM 150 D or ZF/ISA BW 7 or Baysan M60

Application/Limitation

The engine models are approved for use in life/rescue boats.

Type Examination documentation

Drawing no	Date/rev.	Drawing title
008E9172	000404	Longitudinal and cross section drawing of DV32
008E7964	850320	Longitudinal and cross section drawing of DV24
008E7474	830210	Cross section drawing of DV36 with reduction gear BW7
008E7474	830210	Longitudinal section drawing of DV36 with reduction gear BW7
009M4643	121120	Engine outline drawing DV24 RME with M60 gear
009M4710	121203	Engine outline drawing DV29 RME with M60 gear
009M4208	121203	Engine outline drawing DV32 RME with M60 gear
009M3655	121203	Engine outline drawing DV36 RME with M60 gear
009M4125	121204	Engine outline drawing DV48 RME with M60 gear
009E0209	850822	Fuel system DV24/29
009E0207	850822	Keel cooling diagram DV24/29
009E0208	850822	Lubricating oil system DV24/29
009E0210	850822	Fuel system DV36/48
009E0193	830202	Keel cooling diagram DV36/48
009E0194	830203	Lubricating oil system DV36/48
W4825-18		Technical data for Bukh engine type DV24 – DV29
W4327-16.		Technical data for Bukh engine type DV36 – DV48
W4120-18		Technical data for Bukh engine type DV24 – DV32

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,
 4.3.2.5 Submerged engine test,
 LSA Code 4.4.6.3; MSC 81(70) 1/6.10.5
 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

Tests documented by Test Report from Danish Maritime Authority J.Nr. Y9-6-1 dated 1988-12-23

Test documented by Test Report for engine model DV32RME, serial nos. 116064/116470 attended by DNV. Test report signed and stamped by DNV 01-07-12

Test report from cold start test with DV48RME and DV24RME at minus 40 deg. C

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

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