



TYPE APPROVAL CERTIFICATE

Certificate No:
TAM00000DY
Revision No:
3

This is to certify:

That the Diesel Engine

with type designation(s)
STEYR / BUKH + STEYR 4 and 6 cylinder diesel engines

Issued to
Steyr Motors Betriebs GmbH
Steyr, Oberösterreich, Austria

is found to comply with
IMO Resolution MSC. 81(70) Testing of Lifesaving Appliances
DNV standard DNV-ST-E406 – Design of free-fall lifeboats

Application :

The approval is valid for propulsion of free fall lifeboats.

Product(s) approved by this certificate is/are accepted for installation on all vessels classed by DNV.
Rating See page 2

Issued at **Høvik** on **2023-02-28**

This Certificate is valid until **2027-01-09**.

DNV local unit: **Essen**

for **DNV**

Approval Engineer: **Dag Harald Williksen**

Olaf Drews
Head of Section

This Certificate is subject to terms and conditions overleaf. Any significant change in design or construction may render this Certificate invalid.
The validity date relates to the Type Approval Certificate and not to the approval of equipment/systems installed.

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

Cylinder bore : 85 mm
 Piston stroke : 94 mm
 No. of cylinders : 4 and 6 in line

Engine Model	Rating (kW)	Engine speed (RPM)	Gearbox
4 Cylinder Marine Engines			
MO54NA33	40	3300	ZF25, ZF25A, ZF45-1, ZF45A, ZF45C, ZF45IV, ZF63, ZF63A, ZF63C, ZF63IV, ZF68, ZF68A, ZF68IV, ZF220, ZF220A, MerCruiser Bravo I-II-III
MO84K32	55	3200	
MO94K33	66	3300	
MO114K33	81	3300	
MO144M38	106	3800	
MO144V38	106	3800	
MO164M40	120	4000	
MO174V40	125	4000	ZF45-1, ZF45A, ZF45C, ZF45IV, ZF63, ZF63A, ZF63C, ZF63IV, ZF68, ZF68A, ZF68IV, ZF220, ZF220A, MerCruiser Bravo I-II-III
SE114E33	81	3300	ZF25, ZF25A, ZF45-1, ZF45A, ZF45C, ZF45IV, ZF63, ZF63A, ZF63C, ZF63IV, ZF68, ZF68A, ZF68IV, ZF220, ZF220A, MerCruiser Bravo I-II-III
SE144E38	106	3800	ZF45-1, ZF45A, ZF45C, ZF45IV, ZF63, ZF63A, ZF63C, ZF63IV, ZF68, ZF68A, ZF68IV, ZF220, ZF220A, MerCruiser Bravo I-II-III
SE164E40	120	4000	
SE174S40	125	4000	
6 Cylinder Marine Engines			
MO126M28	90	2800	ZF45-1, ZF45A, ZF45C, ZF45IV, ZF63, ZF63A, ZF63C, ZF63IV, ZF68, ZF68A, ZF68IV, ZF220, ZF220A, MerCruiser Bravo I-II-III
MO166M28	120	2800	
MO196K35	140	3500	
MO236K43	156	4300	
MO236K42	170	4200	
MO256K43	184	4300	
MO256H45	184	4500	
MO286H43	205	4300	ZF63, ZF63A, ZF63C, ZF63IV, ZF68, ZF68A, ZF68IV, ZF220, ZF220A, MerCruiser Bravo I-II-III
MO306H43	215	4300	ZF63, ZF63A, ZF63C, ZF63IV, ZF68, ZF68A, ZF68IV, ZF220, ZF220A
SE126E25	88	2500	ZF45-1, ZF45A, ZF45C, ZF45IV, ZF63, ZF63A, ZF63C, ZF63IV, ZF68, ZF68A, ZF68IV, ZF220, ZF220A, MerCruiser Bravo I-II-III
SE126E32	88	3200	
SE156E26	110	2600	
SE156E32	110	3200	
SE156E34	110	3400	
SE186E38	129	3800	
SE196E35	140	3500	
SE236E40	170	4000	
SE236S36	170	3600	
SE266E40	195	4000	ZF63, ZF63A, ZF63C, ZF63IV, ZF68, ZF68A, ZF68IV, ZF220, ZF220A, MerCruiser Bravo I-II-III
SE266S36	195	3600	
SE286E40	205	4100	ZF63, ZF63A, ZF63C, ZF63IV, ZF68, ZF68A, ZF68IV, ZF220, ZF220A
SE306J38	215	3800	

Application/Limitation

The approval is valid for propulsion of free fall lifeboats according to DNVGL-ST-E406, Section 7.3.3, 7.5.4 and 11.1.11.

In case of using the external mounted fuel system, the manufacturer's installation instructions must be followed.



Job Id: **262.1-013796-7**
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Marking of product

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

Periodical assessment

For retention of the type approval, a DNV surveyor shall perform an assessment after 2 years and after 3,5 years to verify that the conditions of the type approval are complied with. A renewal assessment will be performed at renewal of the certificate.

The objective of the periodical assessment is to verify that the conditions for the type approval are not altered since the type approval certificate was issued.

In cases where the type approved product is manufactured at other companies, the periodical assessment shall verify that the type approval applicant has a quality control system for consistent production at their licensees/subcontractors. Furthermore, periodical assessment shall be carried out randomly at these companies.

END OF CERTIFICATE