TYPE EXAMINATION CERTIFICATE (MODULE B)

Certificate no.:
MERB0001NAJ
Revision no.:
0

This Certificate is issued by DNV UK Limited, UKAS accredited certification body no. 6086, based on authorisation of the Maritime & Coast Guard Agency (MCA) as an UK Approved Body (no. 0097) to undertake conformity assessments on marine equipment in accordance with the requirements of the Merchant Shipping (Marine Equipment) Regulations 2025.

This is to certify:

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

with type designation(s)
4LV150, 4LV150C, 4LV150Z, 4LV150ZC, 4LV170, 4LV170C, 4LV170Z, 4LV170ZC, 4LV195, 4LV195C, 4LV195Z, 4LV195ZC, 4LV230, 4LV230C, 4LV230Z, 4LV230ZC, 4LV250, 4LV250Z

issued to
Yanmar Power Solutions Co., Ltd. Tsukaguchi Factory
5-3-1 Tsukaguchi-honmachi Amagasaki Hyogo Pref. 661-0001 Japan,

is found to comply with the Regulation **(UK) MSN 1874 Amendment 11** for
Item no. **UK/1.36** (Row **2 of 2**)
according to the following requirements:
SOLAS 74 Reg. III/34, IMO Res. MSC.48(66)-(LSA Code) IV, IMO Res. MSC.48(66)-(LSA Code) V, IMO MSC.1/Circ.1630/Rev.2, SOLAS 74 Reg. III/4, SOLAS 74 Reg. X/3

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

Date of issue: **2026-03-31**

Expiry date: **2028-05-04**

DNV local unit:
Japan CMC

Approval Engineer:
Dag Harald Williksen

Approved Body No:: 0097

for **DNV UK Ltd.**

Christine Mydlak-Röder
MER Service Responsible

Maritime & Coastguard Agency
UK Approved Body Authorised by the MCA

This certificate will not be valid if the manufacturer makes any changes or modifications to the approved type of equipment, which have not been notified to, and agreed with the approved body named on this certificate.
During the period of validity of this certificate the applicable regulations (international conventions and the relevant resolutions and circulars of the IMO) and testing standards may change, therefore the product conformity may need to be re-assessed by the Approved 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-control phase module (D, E or F) of Schedule 2 of the Merchant Shipping (Marine Equipment) Regulations 2025, as amended is fully complied with and controlled by a written inspection agreement with an approved body. In case limitations of use apply, these should be indicated in the Annex.

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 USD 300 000.

Product description
4-stroke, water cooled, inboard diesel engines

Cylinder bore: 92 mm
Piston stroke: 103,6 mm
No. of cylinders: 4 In-line

Power @ speed:
4LV150, 4LV150Z, 4LV150C, 4LV150ZC: 110 kW @ 3500 rpm
4LV170, 4LV170Z, 4LV170C, 4LV170ZC: 125 kW @ 3500 rpm
4LV195, 4LV195Z, 4LV195C, 4LV195ZC: 143 kW @ 3500 rpm
4LV230, 4LV230Z, 4LV230C, 4LV230ZC: 169 kW @ 3800 rpm
4LV250, 4LV250Z: 184 kW @ 3800 rpm

Application/Limitation
The inboard engines are approved for use as propulsion engine for life/rescue boats.

Type Examination documentation

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 lifeboat and rescue boat propulsion inboard engine 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 carried out on 2018-06-18 by Yanmar Norge AS, 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 can be affixed when the conditions on page 1 have been met.