DNV·GL

Certificate No:
MEDB0000448

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)
4LV150, 4LV150Z, 4LV170, 4LV170Z, 4LV195, 4LV195Z, 4LV230, 4LV230Z, 4LV250, 4LV250Z

Issued to
Yanmar Co., Ltd. Tsukaguchi Plant
Amagasaki, Hyogo Pref, Japan

is found to comply with the requirements in the following Regulations/Standards:
Regulation **(EU) 2018/773,**
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 **2023-07-01**.

Issued at **Høvik** on **2018-07-02**

DNV GL local station:
Kobe

Approval Engineer:
Tin Nguyen

Notified Body
No.: **0575**

for **DNV GL AS**

Roald Vårheim
Head of Notified Body

NORWEGIAN ACCREDITATION PROD 019

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 This certificate remains valid unless suspended, withdrawn, recalled or cancelled.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

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Job Id: **344.1-008200-1**
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Product description
4-stroke in-line diesel engine.

Engine model	**4LV150 4LV150Z**	**4LV170 4LV170Z**	**4LV195 4LV195Z**	**4LV230 4LV230Z**	**4LV250 4LV250Z**
Cylinder bore (mm)	92				
Piston stroke (mm)	103.6				
Maximum rating (kW)	110	125	143	169	184
Engine speed (RPM)	3500			3800	

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

Type Examination documentation

Tests carried out
Test carried out on 2018-06-18 by Yanmar Norge AS, witnessed by DNV GL.

Tests according to:
LSA Code 4.4.6.2; MSC 81(70) 1/6.10.2 – 6.10.4
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
LSA Code 4.6.4.2; MSC 81(70) 1/6.14.6 – 6.14.8

Marking of product
The product is to be indelibly marked with name and address of manufacturer, type designation, and date of manufacture. In addition, the manufacturer shall affix the Mark of Conformity followed by the DNV GL Notified Body No. 0575 and the production year (4 digits).

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