DNV·GL

Certificate No:
MEDB00000F0

EC-TYPE EXAMINATION CERTIFICATE

Application of: Council Directive 96/98/EC of 20 December 1996 on Marine Equipment as amended by directive 2014/93/EU, issued as "Forskrift om Skipsutstyr" by the Norwegian Maritime Directorate. This Certificate is issued by DNV GL AS under the authority of the Government of the Kingdom of Norway.

This is to certify:

That the Lifeboat/rescue boat propulsion engine

with type designation(s)
4LHA-HTP/DTP/STP, 6LYA-STP, 6LY2A-STP, 6LY2A-UTP

Issued to
Yanmar Norge AS
SKJETTEN, Norway

is found to comply with the requirements in the following Regulations/Standards:
Annex A.1, item No. A.1/1.36-1.37 and Annex B, Module B in the Directive and as applicable SOLAS 74 Regulation III/4 & III/34 and LSA Code.

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

Høvik, 2015-12-08
for **DNV GL AS**

This Certificate is valid until
2020-12-07

Notified Body No.: **0575**

Vidar Dolonen	DNV GL local office:	**Tin Nguyen**
Head of Department	**Station Oslo Maritime and CAP**	**Surveyor**

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Product description

4 stroke in-line diesel engine

Engine model	4LHA-HTP	4LHA-DTP	4LHA-STP	6LYA-STP	6LY2A-STP	6LY2A-UTP
Cylinder bore (mm)	100	100	100	100	105.9	105.5
Piston stroke (mm)	110	110	110	110	110	110
Maximum output (kW)	118	147	177	272	324	272
Engine speed (RPM)	3300	3300	3300	3300	3300	3300
Electric starter	S13-41A	S13-41A	S13-41A	S13-68A	S13-68A	S13-68A
Alternator	LR180-03	LR180-03	LR180-03	LR180-03B	LR180-03B	Bosch 80A

Application/Limitation

The engines are approved for use as propulsion engines for life/rescue boats.

Type Examination documentation
Tests carried out

Tests according to IMO Reolution MSC 81(70) as documented by ABS EC Type Examination Certificates nos. 99-LD 6351-X , 99-LD 6468-X-1 and testing of Yanmar engine models with SOLAS Conversion kit (ref. bilag 53, 54 and DNV EC Type-Examination Certificate MED-B-559).

Function Test Report Document No. G2-19175-1710 Engine Inversion Test 4LHA-STP with Ashi Denso turnover switch arrangement. Test carried out 2010-05-25.

Marking of product

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

The manufacturer is allowed to affix the Mark of Conformity according to Article 11 in the Council Directive 96/98/EC 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