DNV·GL

Certificate No:
TAM000001B

TYPE APPROVAL CERTIFICATE

This is to certify:

That the Dual Fuel Engine

with type designations(s)
L35/44DF

Issued to
MAN Diesel & Turbo SE
Augsburg, Germany

is found to comply with
DNV GL Rules for classification, Ships - Pt.4, Ch.3, Sec. 1, Reciprocating Internal Combustion Engines

Application:

propulsion / auxiliary

Product(s) approved by this certificate is/are accepted for installation on all vessels classed by DNV GL

This Certificate is valid until **22nd September, 2021**
Issued at **Hamburg** on **23rd September, 2016**

DNV GL local station: Augsburg

for **DNV GL**

Approval Engineer: Ralph Michael

Frank Lutz
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.

Product description

four stroke, in-line engine, non-reversible, trunk-piston, with supercharging, with charge air cooling, constant-pressure charging system, direct injection, injection operation electronically controlled, valve operation by cams, dual fuel

Cylinder bore: 350 mm
Piston stroke: 440 mm

Additional place of production

not applicable

Application / Limitation

Rated power [kW/cyl.]	530	510
Rated speed [rpm]	750	720
Mean effective pressure [bar]	20	20
Max. firing pressure [bar]	202	202
Definition	cont.	cont.

Type Approval documentation

14-068679, 15-015751, 15-031627, 16-008032, 262.1-018089-1

Tests carried out

Documentation:

Test report titel	L35/44 DF Type Approval Test
Test report reference	15-026902, 2015-04-13
Place of test	MAN Diesel & Turbo SE, Testbed No. 19
Date of test	2015-03-30 until 2015-04-02

Test engine:

Model	6L35/44DF
Serial no.	1 042 000
No. of cylinders	6
Power [kW/cyl.]	530
Speed [rpm]	750

Marking of product

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

Periodical assessment

For retention of the Type Approval, DNV GL shall perform a Periodical Assessment every second year and before the expiry date of this 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 case 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.

Other conditions

Engine safety, control and monitoring systems, including sensors, cables and actuators are not covered by this type approval certificate. Documentation for engine safety, control including speed governing and monitoring systems shall be submitted for approval according to DNV GL Rule Pt.4 Ch.9 Sec.1

END OF CERTIFICATE