

TYPE APPROVAL CERTIFICATE

Certificate No:
TAM00000AF

This is to certify:

That the Diesel Engine

with type designation(s)
175D

Issued to

MAN Diesel & Turbo SE
Augsburg, Germany

is found to comply with

DNVGL Rules for Classification: Ships/ High Speed and Light Craft/ Naval Vessels - Surface ships

Application :

propulsion, multi engine plant / auxiliary

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

This Certificate is valid until **28th June, 2022**.

Issued at **Hamburg** on **29th June, 2017**

DNV GL local station: **Augsburg**

for **DNV GL**

Approval Engineer: **Ralph Michael**

.....
Burkhard Lilienthal
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.

Job Id: **262.1-024990-1**
Certificate No: **TAM00000AF**

Product description

four stroke, v-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, liquid fuel

Cylinder bore [mm] : 175
Piston stroke [mm] : 215
No. of cylinders : 20, 16, 12

Additional place of production

Frederikshavn, Denmark

Application/Limitation

Rated power [kW/cyl.] 185
Rated speed [rpm] 1900
Mean effective pressure [bar] 22.6
Definition MCR

Type Approval documentation

Tests carried out

Documentation:
Test report titel Type Approval Test 12V175D
Place of test Frederikshavn
Date of test 2017-05-22 until 2017-05-24

Test engine:
Model 12V175D
Serial no. 4460071
No. of cylinders 12
Power [kW/cyl.] 185
Speed [rpm] 1900

Marking of product

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

Periodical assessment

Periodical assessment is to be performed after 2 years and after 3.5 years. 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 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