

TYPE APPROVAL CERTIFICATE

This is to certify:

That the Diesel Engine

with type designation(s)
Caterpillar C7.1 ACERT / Perkins 1206D E70TA

Issued to

Caterpillar Inc.
Lafayette IN, United States

is found to comply with
Det Norske Veritas' Rules for Classification of Ships/High Speed and Light Craft
DNV's Offshore Standard DNV-OS-D101 "Marine and Machinery Systems and Equipment"

Application :

The approval is valid for auxiliary and emergency duty.

Products approved by this certificate are accepted for installation on all vessels classed by DNV GL.

Rating see page 2

This Certificate is valid until **2018-06-30**.

Issued at **Høvik** on **2015-11-18**

DNV GL local station: **New York**

Approval Engineer: **Amir Dzaferi**

for **DNV GL**

Oddvar Deinboll
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: **262.1-014847-3**
Certificate No: **TAM000003S**

Product description

Four stroke diesel engine

Cylinder bore: 105 mm
Piston stroke: 135 mm
No. of cylinders: 6 in line

Place of production

For generator sets: Caterpillar Marine Power Systems, Wimborne, Dorset, United Kingdom.
For engines: Perkins Engines Company Ltd., Peterborough, United Kingdom.

Application/Limitation

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, a DNV GL surveyor shall perform a survey every second year and before the expiry date of this certificate to verify that the conditions of the type approval are complied with.

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. The main scope of the Periodical Assessment will normally include:

- Verification of the Type Approval applicant's production and quality system w.r.t. ensuring continued consistent production of the Type Approved products at the Type Approval applicant's own premises and at other companies that are given the responsibility for manufacturing of the products.
- Review of the Type Approval documentation and that this is still used as basis for the production
- Review of possible changes to the design, the material and the performance of the product
- Verification of the product marking.

In cases 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.

When a Type Approved product is manufactured at other companies, the Type Approval applicant takes the sole responsibility for the conformity of the product to the applicable requirements.

Other conditions

Flexible hoses for flammable fluids to be type approved by DNV GL.

Documentation for engine safety, control (including speed governing) and monitoring systems shall be submitted for approval according to Pt.4 Ch.9 Sec.1 Table C2 and/or as listed in relevant type approval certificates.

The engine control unit ADEM V (A5E2v1) to be approved before the first delivery to DNV GL Class.



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Electric cables and installation of this is not covered by this approval and must be verified to comply with the requirement of DNV Rules for Ships/ High, Speed Light Craft and Naval Surface Craft Pt.4 Ch.8 - Electrical Installation.

All field instrumentation, including test facilities, shall comply with DNV Rules for Ships Pt.4, Ch.9.

DNV GL Product Certificate is not required for engines with rating below 200 kW when type approved.

This approval does not cover driven member.

END OF CERTIFICATE