DNV·GL

TYPE APPROVAL CERTIFICATE

Certificate No:
TAM00000XG

This is to certify:

That the Diesel Engine

with type designation(s)
C4.4 ACERT / Perkins 1204D E44TA

Issued to
Caterpillar, Inc.
IN Lafayette, United States

is found to comply with
DNV GL Rules for classification, Ships - Pt.4, Ch.3, Sec.1, Reciprocating Internal Combustion Engines, DNV GL Offshore Standard, DNVGL-OS-D101, Marine and machinery systems and equipment

Application :

auxiliary / emergency

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

This Certificate is valid until **1st July, 2023**.

Issued at **Hamburg** on **2nd July, 2018**
DNV GL local station: **New York** 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: **262.1-017397-3**
Certificate No: **TAM00000XG**

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, liquid fuel

Cylinder bore [mm]	105
Piston stroke [mm]	127
No. of cylinders	4

Additional place of production

For generator set: Caterpillar Marine Power UK Ltd., Wimborne, Dorset, United Kingdom
For engine: Perkins Engines Co. Ltd., Peterborough, United Kingdom

Application/Limitation

Rated power [kW/cyl.]	32.25	27.15
Rated speed [rpm]	1800	1500
Mean effective pressure [bar]	19.5	19.8
Definition	-	-

Type Approval documentation

Tests carried out

Documentation:

Test report titel	Witness Test Plan C4.4 ACERT Genset 100 Hour Test Results
Place of test	Wimborne Marine Power Centre
Date of test	2014-05-12 until 2014-05-19

Test engine:

Model	C4.4 ACERT	
Serial no.	A5E00253, A5E00262	
No. of cylinders	4	
Power [kW/cyl.]	32.25	27.15
Speed [rpm]	1800	1500

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
The flexible hoses with couplings or expansion bellows for connection to ship’s systems (if applicable) shall be DNV GL type approved according to DNVGL-RU-SHIP Pt.4 Ch.6 Sec.9 [4.1.3], [5.3].
This renewal of Type Approval is based on previous certificate TAM000003T, 11601-14HH.
END OF CERTIFICATE