



中国船级社
CHINA CLASSIFICATION SOCIETY

证书格式号/Form: T01.02-
HQ001928

型式认可证书 CERTIFICATE OF TYPE APPROVAL

证书编号/Certificate No. HB14T00019

兹证明本证书所述制造厂生产的下列产品能够满足下面列明认可标准的要求。

This is to certify that the following products produced by the manufacturer stated in the certificate can meet the requirements of the approval standards listed below.

认可产品/ Product Approved

柴油机及其零部件

Diesel Engine and Engine Parts

船用柴油机

Marine Diesel Engine

制造厂/ Manufacturer

Deutz AG

Deutz AG

Ottostrasse 1, 51149 Koeln, Germany

Ottostrasse 1, 51149 Koeln, Germany

附加标志/ Notations

无/Nil.

认可标准/ Approval Standard

1.CCS批准的图纸

Drawings Approved by CCS

2.中国船级社《钢质海船入级规范》(2012)及其修改通报第3篇 第9章

Chapter 9, Part Three of CCS Rules for the Classification of Sea-going Steel Ships 2012 and its Amendments

证书有效期至/ This Certificate is valid until 2018年2月14日 / Feb. 14, 2018

发证机构 中国船级社汉堡分社
Issued by CCS Hamburg Branch

签发日期 2014年5月19日
Date May. 19, 2014

本证书根据中国船级社《钢质海船入级规范》及有关程序规定签发。关于证书的有关规定见本证书背面的说明。当本证书包括多页纸张时，则所有证书页为一个整体，必须同时使用。每一页证书均须由本社盖章方为有效。证书复印件无效。任何单位和个人均不应摘录或节选本证书的部分内容。本认可证书不代表本社对个体产品质量的检验。有关各方对所持证书的真实性负责。可以向本社检验机构咨询。
This Certificate is issued pursuant to the Rules for Classification of Sea-going Steel Ships and related procedures of the Society. Refer to the back of the certificate for detailed requirements of the certificate. When the certificate consists of more than one page, all pages of the certificate are taken as a whole and are used simultaneously. No certificate page is valid without bearing the stamp of the Society and no copied form of the certificate is regarded as valid. Any part of the certificate is not to be extracted or abridged by any unit or individual in any form. This approval certificate does not constitute the inspection of the Society about the quality of the unit/batch product. Related parties who are in doubt of the certificate may inquire of the Society or its offices.



HB05190301

中国船级社总部/CCS headquarters: 北京市东直门南大街9号船检大厦 邮编: 100007 电话/Tel: +86(10)58112288 传真/Fax: +86(10)58112811
CCS Mansion, 9 Dongzhimen Nan Da Jie, Beijing 100007, China 网址/Web Site: <http://www.ccs.org.cn>

本地检验机构/CCS Local Office: 中国船级社汉堡分社 CCS Hamburg Branch 电话/Tel: 0049-40-3860890 传真/Fax: 0049-40-38608918

第 1 页 共 3 页 / Page 1 of 3

Nº 13165881

产品明细/ Product Description

船用柴油机/Marine Diesel Engine
型号/Type

: For the details, please refer to
the attachment.

批准的图纸和设计计算书/ Approved Drawings and Design Calculations

图纸批准号/ Drawings Approval No. : NP09A00306

产品认可试验报告/ Approval Test Report

试验报告编号/Test Report No. : K-2196-1
试验报告日期/Test Report Date : 2010-02-09
试验单位/ Laboratory :
Fachhochschule Dortmund
试验单位地址/ Test Address :
Sonnenstr. 96-100, 44139 Dortmund, Germany
试验报告编号/Test Report No. : K-2196-2
试验报告日期/Test Report Date : 2101-02-08
试验单位/ Laboratory :
Fachhochschule Dortmund
试验单位地址/ Test Address :
Sonnenstr. 96-100, 44139 Dortmund, Germany

产品适用范围/ Application of the Product

船用/Marine Application

认可保持条件/ Maintenance Requirements of Approval

1. 型式认可后, 如果产品及其重要零部件的设计、所用材料或制造方法有所改变, 且影响到产品的主要特性、特征; 或产品的性能指标有所更改, 且超过认可的范围, 则有关图纸和文件应经检验机构审批。并在检验机构认为必要时, 经本社检验人员见证有关试验和进行检查, 其结果应能证实仍符合认可条件。
After type approval, if there are changes to the design, materials used or manufacturing method of the product and important components and such changes affect major characteristics and properties of the product, or property indexes of the product are changed and exceed the scope of approval, related drawings and documents are to be examined and approved by the concerned survey office. Where deemed necessary by the survey office, the surveyor to the Society will go to witness relevant tests and conduct inspection and the results should be able to demonstrate compliance with the approval conditions.

2. 工厂的专业质量管理体系应保持有效运行, 并且与认可时一致。如果质量管理体系发生改变, 应经原体系认证机构审核并报本社批准。
The professional quality management system of the factory shall be ensure effective operation, and shall be the same as the situation of approval. If there are any changes to the quality management system, auditing of the original certification organization for quality management system and the society's approval shall be obtained.

3. 认可证书有效期内, 如果出现可能导致本社取消认可的情况, 工厂应及时采取有效的纠正措施。
Within the validity of the approval certificate, if cases occur that may cause the Society to withdraw the approval, the manufacturer should take corrective actions in a prompt and effective manner.

4. 在认可证书有效期内, 本社检验人员可在未经事先通知的情况下对工厂的产品制造过程进行审核, 以验证产品的生产是否符合业经本社批准的图纸和文件。工厂应予以配合。
Within the validity of the approval certificate, the surveyor to the Society may pay unannounced audit to the manufacturing process of the product in order to confirm whether it is in compliance with the drawings and documents approved by the Society. The factory should provide an active cooperation and necessary for the surveyor.

认可后的产品检验方式/ Method of Product Inspection after Approval

按照规范逐件检验的产品/The product inspected one by one in term of the rules:

认可后的产品检验应由本社验船师根据本社规范规定逐件按批准的产品检验计划进行检验, 经检验合格后由本社颁发产品证书。

After approval, product inspection should be carried out one by one by the Surveyor of the Society in accordance with the approved product inspection scheme, and the Product Certificate will be issued by the Society upon satisfactory inspection.



对于原材料和零部件的检验要求/ Inspection Requirements for Materials and Components

产品如下原材料和零部件应经本社检验, 持有本社产品证书/The following materials and components of the product should be inspected and certificated by the Society:

Required as regulation 7.3b of Appendix 1 list of certification requirements for classed marine products of Chapter 3, Part 1 of the CCS Rules.

责任声明/Statement of Responsibility

本社的认可不影响、替代与本社授权或检验无关的各方对上述工厂的认可和发证, 并且不对与本社授权或检验无关的各方负责, 不承担其未经应允而承认、接受本社认可所导致的法律和经济责任。

The approval of the Society does not affect and replace any approval and certification of the manufacturer by any parties that bear no relation with this Society's authorization or survey and therefore takes no responsibility for these parties. The Society does not undertake any legal and economic liabilities arising from accepting this Society's certificate without prior permission from this Society.

其他/Others

本证书由原型式认可证书(HB09T00035)换新并替代原证书。

This certificate is renewed from and supersedes the previous Type Approval Certificate No. HB09T00035.

Initial Certificate Date: 03 March 2002

Place of Production: Deutz AG
Plant Cologne-Porz
Ottostrasse 1
51149 Koeln
Germany

Deutz AG
Plant Ulm-Donautal
Nicolaus-Otto-Strasse 25
89079 Ulm
Germany

船级
CATION



*****本证书正文完/ End of Text*****

注: 本证书含有附页, 共2页

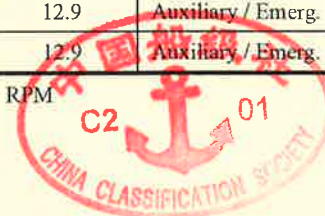
Note: The certificate is attached with 2 additional page(s)



PARTICULARS OF AB VOLVO PENTA-DIESEL ENGINE

(Vertical, single acting, 4 cycle, trunk piston type)

Engine Model	Cylinder Diameter / Stroke (mm)	Cylinder No.	Rated Power (kW) /speed (rpm)	*Max. Power 110% (kW) / Speed (rpm)	Max. Cyl. Pressure (MPa)	Application (Main / Auxiliary / Emerg.)
D5A T	108/130	4	95 at 2300	104.5 at 2300	12.9	Main / Auxiliary / Emerg.
D5A T	108/130	4	89 at 2100	97.9 at 2100	12.9	Main / Auxiliary / Emerg.
D5A T	108/130	4	83 at 1900	91.3 at 1900	12.9	Main / Auxiliary / Emerg.
D5A T	108/130	4	81 at 1800	89.1 at 1800	12.9	Main / Auxiliary / Emerg.
D5A T	108/130	4	74 at 1500	81.4 at 1500	12.9	Main / Auxiliary / Emerg.
D5A TA	108/130	4	118 at 2300	129.8 at 2300	12.9	Main / Auxiliary / Emerg.
D5A TA	108/130	4	110 at 2100	121.0 at 2100	12.9	Main / Auxiliary / Emerg.
D5A TA	108/130	4	103 at 1900	113.3 at 1900	12.9	Main / Auxiliary / Emerg.
D5A TA	108/130	4	100 at 1800	110.0 at 1800	12.9	Main / Auxiliary / Emerg.
D5A TA	108/130	4	91 at 1500	100.1 at 1500	12.9	Main / Auxiliary / Emerg.
D5A BTA	108/130	4	118 at 2300	129.8 at 2300	12.9	Main / Auxiliary / Emerg.
D5A BTA	108/130	4	102 at 2300	112.2 at 2300	12.9	Main / Auxiliary / Emerg.
D5A BTA	108/130	4	103 at 1900	113.3 at 1900	12.9	Main / Auxiliary / Emerg.
D5A BTA	108/130	4	89 at 1900	97.9 at 1900	12.9	Main / Auxiliary / Emerg.
D5A T	108/130	4	85 at 1800	93.5 at 1800	12.9	Auxiliary / Emerg.
D5A T	108/130	4	81 at 1500	89.1 at 1500	12.9	Auxiliary / Emerg.
D5A TA	108/130	4	105 at 1800	115.5 at 1800	12.9	Auxiliary / Emerg.
D5A TA	108/130	4	97 at 1500	106.7 at 1500	12.9	Auxiliary / Emerg.
D5A BTA	108/130	4	100 at 1800	110.0 at 1800	12.9	Auxiliary / Emerg.
D5A BTA	108/130	4	92 at 1500	101.2 at 1500	12.9	Auxiliary / Emerg.

* for the Main Engine, the Cube Cure RPM=(Cube Cure kW/rating kW)^{1/3} x Rating RPM

PARTICULARS OF AB VOLVO PENTA-DIESEL ENGINE

(Vertical, single acting, 4 cycle, trunk piston type)

Engine Model	Cylinder Diameter / Stroke (mm)	Cylinder No.	Rated Power (kW) /speed (rpm)	*Max. Power 110% (kW) / Speed (rpm)	Max. Cyl. Pressure (MPa)	Application (Main / Auxiliary / Emerg.)
D7A T	108/130	6	145 at 2300	159.5 at 2300	13.4	Main / Auxiliary / Emerg.
D7A T	108/130	6	134 at 2100	147.4 at 2100	13.4	Main / Auxiliary / Emerg.
D7A T	108/130	6	126 at 1900	138.6 at 1900	13.4	Main / Auxiliary / Emerg.
D7A T	108/130	6	123 at 1800	135.3 at 1800	13.4	Main / Auxiliary / Emerg.
D7A T	108/130	6	111 at 1500	122.1 at 1500	13.4	Main / Auxiliary / Emerg.
D7A TA	108/130	6	174 at 2300	191.4 at 2300	13.4	Main / Auxiliary / Emerg.
D7A TA	108/130	6	162 at 2100	178.2 at 2100	13.4	Main / Auxiliary / Emerg.
D7A TA	108/130	6	153 at 1900	168.3 at 1900	13.4	Main / Auxiliary / Emerg.
D7A TA	108/130	6	149 at 1800	163.9 at 1800	13.4	Main / Auxiliary / Emerg.
D7A TA	108/130	6	134 at 1500	147.4 at 1500	13.4	Main / Auxiliary / Emerg.
D7C TA	108/130	6	182 at 2100	200.2 at 2100	13.4	Main / Auxiliary / Emerg.
D7C TA	108/130	6	169 at 1900	185.9 at 1900	13.4	Main / Auxiliary / Emerg.
D7C TA	108/130	6	163 at 1800	179.3 at 1800	13.4	Main / Auxiliary / Emerg.
D7C TA	108/130	6	142 at 1500	156.2 at 1500	13.4	Main / Auxiliary / Emerg.
D7A BTA	108/130	6	174 at 2300	191.4 at 2300	13.4	Main / Auxiliary / Emerg.
D7A BTA	108/130	6	148 at 2300	162.8 at 2300	13.4	Main / Auxiliary / Emerg.
D7A BTA	108/130	6	153 at 1900	168.3 at 1900	13.4	Main / Auxiliary / Emerg.
D7A BTA	108/130	6	130 at 1900	143.0 at 1900	13.4	Main / Auxiliary / Emerg.
D7C BTA	108/130	6	166 at 2300	182.6 at 2300	13.4	Main / Auxiliary / Emerg.
D7C BTA	108/130	6	182 at 2100	200.2 at 2100	13.4	Main / Auxiliary / Emerg.
D7C BTA	108/130	6	169 at 1900	185.9 at 1900	13.4	Main / Auxiliary / Emerg.
D7C BTA	108/130	6	146 at 1900	160.6 at 1900	13.4	Main / Auxiliary / Emerg.
D7A T	108/130	6	128 at 1800	140.8 at 1800	13.4	Auxiliary / Emerg.
D7A T	108/130	6	122 at 1500	134.2 at 1500	13.4	Auxiliary / Emerg.
D7A TA	108/130	6	155 at 1800	170.5 at 1800	13.4	Auxiliary / Emerg.
D7A TA	108/130	6	146 at 1500	160.6 at 1500	13.4	Auxiliary / Emerg.
D7A BTA	108/130	6	148 at 1800	162.8 at 1800	13.4	Auxiliary / Emerg.
D7A BTA	108/130	6	139 at 1500	152.9 at 1500	13.4	Auxiliary / Emerg.

* for the Main Engine, the Cube Cure RPM=(Cube Cure kW/rating kW)^{1/3} x Rating RPM