

# 中国船级社 证书格式号/Form: T01.01-

CHINA CLASSIFICATION SOCIETY

# 型式认可证书

# CERTIFICATE OF TYPE APPROVAL

证书编号/Certificate No. NY12T00001 01

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

# 船用主柴油机 MARINE MAIN DIESEL ENGINE

制造厂/ Manufacturer

# Cummins Inc.

#### Cummins Inc.

4500 leeds Ave, Suite 301 Charleston, SC USA 4500 leeds Ave, Suite 301 Charleston, SC USA

# 认可标准/Approval Standard

LCCS《沿海小船入级与建造规范》(2005)第4章

Chapter 4 of CCS Rules for the Construction and Classification of Coastal Boats 2005

2.CCS《内河小型船舶建造规范》(2006)第1章和第5章

Chapter 1&5 of CCS Rules for the Construction of Small Inland Boats 2006

3.CCS《游艇入级与建造规范》(2012)第1篇第3章

Chapter 3, Part 1 of CCS Rules for the Construction and Classification of Yachts 2012

证书有效期至/ This Certificate is valid until

2016年10月30日 / Oct. 30, 2016

发证机构 Issued by

中国船级社组约办事处

CCS New York Office

签发日期

2012年10月31日

Oct. 31, 2012

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是本证书页背面的说明。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高章方为有效。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有疑问时,可以向我社检验机构咨询。

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 doubted about the authenticity of the certificate may inquire of the Society or its offices





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 佳真 Tax; +86(10)58112811 CCS Mansion, 9 Dongzhimen Nan Da Jie, Beijing 100007, China With Web Site: http://www.ccs.org.cn

### 产品明细/ Product Description

船用主柴油机/MARINE MAIN ENGINE型号/Model

: QSB5.9 Series, QSC8.3 Series, QSL9 Series, QSM11 Series (详见附页) | Detail see attacthment

气缸数目/No. of Cylinder 气缸直径/Cylinder Bore 活塞行程/Piston Stroke 额定功率(MCR)/Rated Output 额定转速/Rated Rev. 增压器型号/Turbocharger Model

: 6 : 102, 114, 114, 125 mm : 120, 135, 145, 147 mm : 169~526 | 169~448 kW : 1800~3400 r/min. : HOLSET HX43M, HOLSET HX55WM, HOLSET HX55WM, HOLSET

HX55WM,

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

图纸批准号/ Drawings Approval No.

NP10A02136

## 产品认可试验报告/Approval Test Report

试验报告编号/Test Report No. : 109716-QSC8.3 试验报告日期/Test Report Date : 2012-01-17 试验单位/Laboratory : Cummins Ins

试验单位地址/ Test Address : 4500 Leeds Ave. #500, Charleston, SC 29405 USA

试验报告编号/Test Report No. : 109585-QSB5.9 试验报告日期/Test Report Date : 2008-12-19

试验单位/ Laboratory : Cummins-MerCruiser Diesel Marine LLC.

试验单位地址/ Test Address : 4500 Leeds Ave. #500, Charleston, SC 29405 USA

试验报告编号/Test Report No. : 23136-QSC8. 3/-QSL8. 9/-QSM11

试验报告日期/Test Report Date

试验单位/ Laboratory : Cummins-MerCruiser Diesel Marine LLC.

试验单位地址/ Test Address : 4500 Leeds Ave. #500, Charleston, SC 29405 USA

#### 产品适用范围/Application of the Product

用于不超过20m的沿海小船,不超过20m的内河小船或不超过24m的游艇。 Intended for the coastal small craft which less than 20m in length, inland water small craft which less than 20m in length, or yachts which less than 24m in length.

#### 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

按照规范每批抽样检验的产品(适用于中国船级社《沿海小船建造规范》(2005)和《内河小型船舶建造规范》(2006))/The product inspected by sampling in term of the rules(Intended for CCS Rules for the Construction and Classification of Coastal Boats 2005 and CCS Rules for the Construction of Small Inland Boats 2006):

认可后的产品检验应由本社验船师根据本社规范规定每批抽样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 by sampling 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.

按照规范只认可不进行产品检验的产品(适用于中国船级社《游艇建造规范》2012)/The product approved only in term of the rules (Intended for CCS Rules for the Construction and Classification of Yachts 2012)

认可后的产品检验由制造厂按本社批准的产品检验计划进行检验,经检验合格后由制造厂签发合格证则,并连同该产品的本社认可证书复印件一并交付用户,制造厂对产品符合公约、法规、本社规范和本社认可的标准规定负责。 After approval, product inspection should be carried out by the Manufacturer in accordance with the product inspection scheme approved by the Society. Upon satisfactory inspection, and the Quality Certificate issued by the Manufacturer should be provided to the purchaser together with the copy of the approval certificate issued by the Society. The manufacturer should take responsibility for the product being in compliance with the convention, statutory regulation, the Society rules and the standard accepted by the Society.

### 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:

机体/Engine Frame, 曲轴/Crank Shaft, 连杆/Connecting Rod, 缸套/Cylinder liner, 热交换器/Heat exchanger,增压器/Turbocharger

产品如下原材料和零部件的制造厂清单,经本社批准方可变更/The list of manufacturer for the following materials and components of the product should not be changed without the Society's approval: 参见批准的合格供方清单/Refer to approval qualified supplier list.

## 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

1、本发动机燃油系统已将功率锁定在不可超过标定功率。 The fuel delivery system of the engines is adjusted that overload declared power cannot be given in service.

标定功率下的使用限制条件应符合发动机制造厂的操作维护说明要求。 Declared power use limitation condition should accord with the operation and maintenance

requirements of engine manufacturer.

3、本社已审核了产品厂无石棉声明,但本社的审核不免除产品厂按照合同关系向订货方保证产品无石棉的责任。
本认可只基于本社批准盖章的非金属材料和部件供方清单,批准号/清单号为: NY12T00001\_01。 The declaration of asbestos-free submitted by manufacturer has been reviewed by the Society. However, liability of the manufacturer to guarantee the products are asbestos-free to purchaser under contract will not be exempted.

This Approval is only valid according to the suppliers list of nonmetal material and part proved and stamped by the Society, the Approval No./list No. is :NY1200001\_01.

中国船级社纽约办事处。

CCS New York Office

\*\*\*\*\*本证书正文完/ End of Text\*\*\*\*\*



# 产品明细

### **Product Particulars**

# 船用主柴油机/Marine Main Diesel Engine

类型/Model: 4 冲程、直列、单作用、直喷式、增压、中冷或非中冷。 /4-Stroke, In-line, Single acting, Direct-Injected, Turbocharged with or without After-cooler.

序号 S.N.	型 号 Type	缸 数 Number of Cyl.	缸径/冲程 Bore/Stoke (mm)	标定功率 Declared Power (kW)		怠转转速 Idle RPM (rpm)	增压器型号 Turbocharger Type	功率适用工况 Rating applied condition
Q	SB5.9 Series							
1	QSB5.9ES230	6	102/120	169	3000	600	HOLSET ( Model ) HX43M	HO / INT
2	QSB5.9-230	6	102/120	169	2600	600		HO / HD
3	QSB5.9-305	6	102/120	224	2600	600		HO / MCD
4	QSB5.9-330	6	102/120	242	2800	600		НО
5	QSB5.9-355	6	102/120	261	2800	600		HO / INT
6	QSB5.9-380	6	102/120	280	3000	600		HO/GS
7	QSB5.9-425	6	102/120	313	3000	600		HO/GS
8	QSB5.9-440	6	102/120	324	3400	600		НО
9	QSB5.9-480	6	102/120	353	3400	600		HO/GS
(	SC8.3 Series							
10	QSC8.3-500	6	114/135	368	2600	600		HO/INT
11	QSC8.3-550	6	114/135	404	3000	600		НО
12	QSC8.3-600	6	114/135	442	3000	600		HO/GS
QSL9 Series								
13	QSL9-285	6	114/145	209	1800	600	HOLSET	HO / CON
14	QSL9-330	6	114/145	243	1800	600		HO/HD
15	QSL9-405	6	114/145	298	2100	600		HO / MCD
QSM11 Series						HVEEWN		
16	QSM11-300	6	125/147	220	1800	600	HX55WM	HO / CON
17	QSM11-355	6	125/147	261	1800	600		HO / CON
18	QSM11-405	6	125/147	298	2100	600		HO / HD
19	QSM11-455	6	125/147	336	2100	600		HO / MCD
20	QSM11-610	6	125/147	448	2300	600		HO/INT

# 备注/Remark: 标定功率及其定义/Rating and its definitions:

#### CON—持续功率/Continuous Duty:

用于持续全负荷不间断使用的场合,在规定转速和规定环境状况下,按照制造厂规定进行维护保养,发动机能够持续发出的功率。/ Intended for continuous use in applications requiring uninterrupted service at full power, this rated power output at which the engine is designed to run continuously at its rated speed and specified environmental conditions between the normal maintenance intervals recommended by the manufacturer.

#### HD—重载功率/Heavy Duty:

用于持续使用的变负荷场合,每 10 小时里的全功率使用限制在 8 小时以内。年操作时间不超过 5000 小时。/ Intended for continuous use in variable load applications where full power is limited to 8 hours out of every 10 hours of operation. This rating is for applications that operate less than 5,000 hours per year.

## MCD—中等持续功率/ Medium Continuous Duty:

用于持续使用的变负荷场合,每 12 小时里的全功率使用限制在 6 小时以内。年操作时间不超过 3000 小时。/ Intended for continuous use in variable load applications where full power is limited to 6 hours out of every 12 hours of operation. This rating is for applications that operate less than 3,000 hours per year.

# INT—间歇功率 / Intermittent Duty:

用于间歇使用的变负荷场合,每 8 小时里的全功率使用限制在 2 小时以内。年操作时间不超过 1500 小时。/ Intended for intermittent use in variable load applications where full power is limited to 2 hours out of every 8 hours of operation. This rating is for applications that operate less than 1,500 hours per year.

#### GS—公务用途 / Government Service

用于变负荷使用的场合,每 8 小时里的全功率使用限制在 1 小时以内。年操作时间不超过 300 小时。 / Intended for use in variable load applications where full power is limited to 1 hours out of every 8 hours of operation. This rating is for applications that operate less than 300 hours per year.

### HO—高输出功率 / High Output

用于变负荷使用的场合,每 8 小时里的全功率使用限制在 1 小时以内。年操作时间不超过 300 小时。 / Intended for use in variable load applications where full power is limited to 1 hours out of every 8 hours of operation. This rating is for applications that operate less than 300 hours per year.

