

型号认可证数据单

TYPE VALIDATION CERTIFICATE DATA SHEET

编号/No: VTC0269P
版次/Revision: 2
型号/Type:
Hartzell 系列螺旋桨
HC-D4N-3(P)/D9511F(K)
HC-E4A-3()/E10477()
HC-E4N-3(N)/D8990(S)(K)
HC-D4N-3N/D9511FK
HC-E4A-3J/E10950PB
HC-E4N-3N/D8990K
批准人/Approved By:

日期/Date: 2011-2-15

本数据单是型号认可证(编号: VTC0269P)的组成部分, 它规定了符合中国民用航空局的适航要求所颁发此型号认可证的产品状态和限制。

This data sheet, which is part of Validation of Type Certificate (No: VTC0269P), prescribes condition and limitation under which the product for which the type certificate was issued meets the airworthiness requirements of the Chinese Civil Aviation Regulation.

型号认可证持有人/Validation of Type Certificate Holder:

Hartzell Propeller Inc
Piqua, OH 45356 U.S.A

注: HC-E4A-3J/E10950PB 经 VTC106P 批准。

NOTE: HC-E4A-3J/E10950PB is approved by VTC106P.

有效页清单/List of effective pages :

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第1部分 概述/Section 1 GENERAL

1. CAAC认可数据单和型号合格证数据单/CAAC Validation Data Sheet and Type Certificate Data Sheet

	中国民用航空局认可数据单号、版次和颁发日期 CAAC Validation Data Sheet Number, Revision and issuance date	型号合格证数据单号、版次和颁发日期 Type Certificate Data Sheet Number, Revision and issuance date
当前 Current	编号: VTC0269P; 版次: 2; 颁发日期: 2011年2月15日 No. VTC0269P; Revision 1; Date of Issue: 2011-02-15	编号: P10NE; 版次: 18; 颁发日期: 2009年11月11日 No. P10NE, Revision 18, Date of Issue: 2009-11-11
历史 History	编号: VTC0203P; 版次: 0; 颁发日期: 2008年2月28日 No. VTC0203P; Revision 0; Date of Issue: 2008-2-28	编号: P10NE; 版次: 17; 颁发日期: 2007年9月4日 No. P10NE, Revision 17, Date of Issue: 2007-9-4

2. 类别/Category: 螺旋桨/ Propeller

3. 认可当局/Validation Authority: 中国民用航空局/CAAC

审定当局/Certifying Authority: 美国联邦航空局/FAA

4. 型号合格证持有人/Type Certificate Holder: Hartzell Propeller Inc

Address: Piqua, OH 45356 U.S.A

5. 制造厂/Manufacturer: Hartzell Propeller Inc

6. ETOPS: 不适用/NA

7. CAAC专用要求/CAAC Special Requirements: 无/NONE

第2部分/Section 2

A. 审定基础/Certification Basis

1. 适航标准/Airworthiness Standards:

1980年10月14日生效的美国14CFR35部及其35-1至5修正案/14 CFR Part 35 effective October 14, 1980 with amendments 1 through 5 thereto.

1985年1月18日根据14CFR21部J分部DOA程序美国颁发的型号合格证P10NE号/ Type Certificate No. P10NE issued January 18, 1985 under Delegated Option Authorization procedures of 14 CFR Part 21 Subpart J.

下列型号根据原审定基础批准: HC-D4N-(2, 3, 5); HC-D4P-5; HC-E4N-3; HC-E4P-5/ Models approved to the original certification basis include the following: HC-D4N-(2, 3, 5); HC-D4P-5; HC-E4N-3; HC-E4P-5

下列型号按照1990年8月18日生效的美国14CFR35部35-1至35-6修正案增加或修订: HC-D4N-5; HC-E4N-(2, 3); HC-E4N-(2, 3, 5); HC-E4P-5; HC-E4W-(3, 5)/ Models added, updated or revised in accordance with 14 CFR Part 35 effective August 18, 1990 with amendments 35-1 through 35-6 include the following: HC-D4N-5; HC-E4N-(2, 3); HC-E4N-(2, 3, 5); HC-E4P-5; HC-E4W-(3, 5)

通过使用14 CFR第21部21.101条款, 下述型别的审定基础被添加、升级或修订至生效于2008年12月23日的14 CFR第35部第1至第8修正案中35.15, 35.35(c)和35.43条款: HC-E4N-3 /The following models were added, updated or revised in accordance 14 CFR Part 35 with amendments 35-1 through 35-8 effective December 23, 2008 using 14 CFR Part 21.101 for paragraphs 35.15, 35.35(c) and 35.43: HC-E4N-3

2. 专用条件/Special Conditions (SC): 无/none

3. 等效安全项目/Equivalent Safety Findings (ESF): 无/none

4. 偏离/Deviations:无/none

5. 环境标准/Environmental Standards:无/none

6. 生产基础/Production Basis: 生产许可证第10号。/ Production Certificate no.10.

B. 技术特性/Technical Characteristics

型号/Type: 恒速型, 液压 (见注3和4) / Constant speed, hydraulic (see Notes 3 and 4).

发动机轴/Engine shaft: 专用安装 (见注1) /Special flange (see Note 1).

桨毂材料/ Hub material: 铝合金/Aluminum Alloy.

桨叶材料/Blade material: 见下/See Below.

桨叶数/ Number of blades: 4/Four.

毂型号/Hub models: HC-D4N-(2, 3, 5); HC-E4N-(2, 3, 5); HC-E4A-(2, 3);

桨叶/Blades (见注2/See Note 2)	最大连续/Maximum Continuous 马力/HP 转数/RPM	起飞/Takeoff 马力/HP 转数/RPM	直径限制/Diameter limits (见注2/See Note 2)	最大全重/Approx. Max. Wt. Complete (供参考/For reference only) (见注3和7/See Notes 3 and 7)	桨叶结构/Blade construction (见注10/See Note 10)
HC-D4N-3					
D9511-0至 D9511-10 D9511-0 to D9511-10	850 2200	850 2200	96英寸至86英寸 (-0至-10) 96" to 86" (-0 to -10)	152磅 152 lb	铝合金 Aluminum Alloy

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HC-E4A-3					
E10950	1400 1735	1400 1735	100英寸 110"	132磅 132 lb	芳香族聚酰胺复合材料 Aramid Composite
E10477-0 至 E10477-10 E10477-0 to E10477-10	1200 1700	1200 1700	105英寸至95英寸 (-0至-10) 105" to 95" (-0 to -10)	160磅 160 lb	铝合金 Aluminum Alloy
HC-E4N-3					
D8990-0 至D8990-10 D8990-0 to D8990-10	750 2200	750 2200	90英寸至80英寸 (-0至-10) 90" to 80" (-0 to -10)	142磅 142 lb	铝合金 Aluminum Alloy

注/NOTE:

1. 桨毂型号标识/ Hub model designation

HC - D 4 N - 2 A

L: 左旋/ when used denotes left-hand rotation

Y: 当与-3型使用时指可选启动锁/ when used with -3 models indicates optional start locks

任何其它字母指不影响交换性与适用性的小改款型号/ Any other character denotes minor change not affecting interchangeability or eligibility

指特定的设计特性（见注4）/ Denotes specific design features (see Note 4)

-2: 无beta反馈机构/ no beta feedback mechanism

-3: 外部beta反馈机构/ external beta feedback mechanism

-5: 内部beta反馈机构/ start locks, internal beta feedback mechanism

N: 安装边有8个9/16英寸螺栓和4.25英寸螺栓孔上的两个1/2英寸销子/ N denotes flange with eight 9/16" bolts and two 1/2" dowels on a 4.25 bolt circle

P: 除用四个1/2英寸销子外与N安装边相同/ P is identical to N flange except uses four 1/2" dowels

A: 安装边有12个9/16英寸螺栓和5.125英寸螺栓孔上的两个5/8英寸销子/ A denotes flange with twelve 9/16" bolts and two 5/8" dowels on a 5.125 bolt circle

W: 除用螺栓替代螺栓外与N相似/ W is similar to N except uses studs in place of bolts

桨叶数/ Number of blades

D: 基本桨毂和桨叶保持/ D specifies basic hub and blade retention

E: 更改的桨毂和桨叶保持/ E specifies modified hub and blade retention

哈策尔公司管理产品/ Hartzell Controllable

2. 桨叶的型号标识/ Blade model designation

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E 90 83 A K - 2

				表示从基本直径减少或增加的英寸数/ Number of inches cut off from (or added to if +) basic diameter
				B或K指除冰套/ B or K denotes deicing boots
				S指使用铝桨叶时外部喷丸（见注6）/ when used with aluminum blades denotes a shot-peened exterior (see Note 6)
				C当与10950型桨叶使用时指可交替配重（见注6）/ when used with 10950 blade model indicates alternate counterweight (see Note 6)
				任何其它字母指不影响适用性的小改款型号/ Any other character denotes a minor modification not affecting eligibility
				基本叶片模型/ Basic blade model
				以英寸为单位的基本直径。对所有叶片模型增加一英寸的修正量/ Basic diameter in inches. Add one inch correction for all blade models
				桨叶柄构型: D或E指右旋/ Blade shank configuration: D or E denotes right-hand tractor
				HD或HE指右推进器/ HD or HE denotes right-hand pusher
				LD或LE指左推进器/ LD or LE denotes left-hand pusher
				JD或JE指左旋/ JD or JE denotes left-hand tractor

3. 桨距控制（桨距控制附加重量）/ Pitch Control (weight of pitch control extra)

最大输出压力/ Maximum output pressure:

HC-E4A-(2,3) models: 700 psig

HC-(D,E)4(N)-3 models: 500 psi

- (a) 所有型号螺旋桨具有配重桨叶和使用调节器滑油减小桨距。（见注4）/ All propeller models have counterweighted blades and use governor oil to decrease pitch. (see Note 4)
- (b) 任何影响或可能影响包括控制系统的发动机的改变，必须证明其结合已改变的发动机（包括其控制系统在内）的螺旋桨仍符合审定基础。同时，任何由螺旋桨的改变导致发动机的改变也必须证明发动机的更改仍然符合发动机审定基础。/ Any change to the engine, including its control system, which affects or may affect the propeller approval must be substantiated to demonstrate that the propeller as integrated with the changed engine, including its control system, still complies with the propeller certification basis. Also, any change to the engine resulting from a change to the propeller must be substantiated to demonstrate that the changed engine still complies with the engine certification basis.
- (c) 无论何制造商，所有调节器和螺旋桨控制系统必须作为航空器安装的一部分获得批准。（见注10）/ All governors and propeller control systems must be approved as part of the aircraft installation regardless of manufacturer. (See Notes 10)

4. 顺桨 / Feathering: -2、-3和-5型具备顺桨和非顺桨特性。/ The -2, -3 and -5 models incorporate feathering and unfeathering features.

反桨 / Reversing: -3和-5型与适当的反转控制一同批准作为反转螺旋桨进行安装。/ The -3 and -5 models are approved for installation as reversing propellers with appropriate reversing controls.

5. 左向型号/ Left-Hand Models

左向型号螺旋桨型号的批准版本与右向型号所列的级别和直径相同。(见注1和2) / The left-hand version of an approved propeller model is approved at the same rating and diameter as listed for the right-hand model. (See Notes 1 and 2)

6. 互换性/ Interchangeability

- (a) 喷丸桨叶可单个或整套替换非喷丸桨叶。(见注2) / Shot-peened blades may replace non shot-peened blades either individually or as a set. (see Note 2)
- (b) E10950()CB桨叶可成对或整套更换E10950PB 型桨叶。桨毂上相对的桨叶应相同。(见注2) / E10950()CB blades may replace E10950PB blades models either in pairs or as a set. Opposing pairs of blades in the hub must have the same designation. (See Note 2)
- (c) 防冰系统部件的互换性, 参考Hartzell服务信函HC-SL-30-260。 / Refer to Hartzell Service Letter HC-SL-30-260 for ice protection system component interchangeability.

7. 附件/ Accessories

- (a) 螺旋桨螺旋器 (螺旋器附加的重量) / Propeller spinner. (weight of spinner extra)
当列于型号设计数据上时为批准的Hartzell和其它厂家的螺旋器。 / Approved with Hartzell and other manufacturers' spinners when listed on type design data.
- (b) 螺旋桨除冰 (除冰系统附加的重量) / Propeller deicing (weight of deicing equipment extra)
 - (1) 当特定器材包号列在Hartzell型号设计数据上并按Goodrich报告号ATA 30-60-07、Goodrich图纸no. 7E1284号或 Beech安装图纸50T-389045号安装时与Goodrich 电除冰器材包5EXXXX-X, 7EXXXX-X, 65-XXX, 67-XXX, 或77-XXX一同批准 / Approved with Goodrich electrical deicing kit 5EXXXX-X, 7EXXXX-X, 65-XXX, 67-XXX, or 77-XXX when the specific kit number is listed on Hartzell type design data and installed in accordance with Goodrich Report no. ATA 30-60-07, Goodrich drawing no. 7E1284 or Beech installation drawing no. 50T-389045.
 - (2) 当按Safeway6927或E-5735-14号安装手册和对于铝桨叶Hartzell 133()手册或对于复合桨叶135()手册以及相关STC或PMA文件安装时与Safeway 除冰设备一同批准。 / Approved with Safeway deice equipment when installed in accordance with Safeway Installation Manual no. 6927 or E-5735-14 and, Hartzell Manual 133() for aluminum blades or Manual 135() for composite blades, and associated STC or PMA documentation.
 - (3) 当列于Hartzell 型号设计数据上时与防冰设备一同批准。 / Approved with ice protection equipment when listed on Hartzell type design data.
- (c) 螺旋桨滚筒驱动 (滚筒驱动的附加重量) / Propeller pulley drive (weight of pulley drive extra): 不适用 / Not applicable.

8. 叶柄整流罩: 不适用 / Shank Fairings: Not applicable.

9. 特别限制: 不适用 / Special Limits: Not applicable.

10. 安装螺旋桨的批准必须作为飞机型号合格证的一部分来表明符合适用的飞机适航要求。

螺旋桨型号包括基本桨毂和桨叶型号, 多数螺旋桨型号包括附加符号以表明小变化和注1和2中解释的特征, 参照航空器型号合格证数据单确定适用于安装的审定特定螺旋桨型号。

带复合桨叶的螺旋桨批准装在任何型号航空器之前, 必须评价抗鸟击的能力。Hartzell螺旋桨必须完成测试和/或基于飞机构型和运行条件的分析, 以确定鸟击潜在的危害。

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The propeller installation must be approved as part of the aircraft Type Certificate to demonstrate compliance with the applicable aircraft airworthiness standards.

Propeller models listed herein consist of basic hub and blade models. Most propeller models include additional characters to denote minor changes and specific features as explained in Notes 1 and 2. Refer to the aircraft Type Certificate Data Sheet for the specific propeller model applicable to the installation.

Propellers with composite blades must be evaluated for bird impact resistance prior to approval on any type aircraft. Hartzell Propeller must perform tests and/or analyses based on aircraft configuration and operating conditions to determine the potential hazard as a result of a bird strike.

11. 报废时间/Retirement Time

(a) 寿命限制和强制检查/Life Limits and Mandatory Inspections

(1) 如有适航性限制均列在Hartzell手册141()、142()、143()或156()中。/ Airworthiness limitations, if any, are specified in Hartzell Manual 141(), 142(), 143() or 156().

12. 特别提示/Special Notes

(a) 超速和超扭限制见Hartzell手册第202()。/ Refer to Hartzell Manual no.202 () for overspeed and overtorque limits.

(b) 大修周期参考Hartzell服务信函HC-SL-61-61()。/ Refer to Hartzell Service Letter HC-SL-61-61() for overhaul periods.

结束

END