

中国民用航空局
CIVIL AVIATION ADMINISTRATION OF CHINA

型号认可证数据单
THE VALIDATION DATA SHEET

编号/No: VTC0269A

版次/Revision:3

型号/Type:CC18-180

型别/Model:
CC18-180

批准人/Approved By:



职务/Title:Director General

日期/date: 2024年05月14日

本数据单是型号认可证（编号：VTC0269A）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: VTC0269A), 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:

Topcub Aircraft, Inc.
1300 SW Fifth Ave
Suite 2400
Portland, OR 97201

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

	中国民用航空总局认可数据单号、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	No. VTC0269A, 版次 3 2024 年 5 月 14 日	FAA TCDS No. A00006SE, Revision 8, August 13, 2015.
历史 History	No. VTC0269A, 版次 0 2012 年 10 月 18 日	FAA TCDS No. A00006SE, Revision 5, October 5, 2012.
	No. VTC0269A, 版次 1 2015 年 7 月 17 日	FAA TCDS No. A00006SE, Revision 7, June 3, 2014.
	No. VTC0269A, 版次 2 2017 年 3 月 13 日	FAA TCDS No. A00006SE, Revision 8, August 13, 2015.

注：上表中出口国局方型号合格证数据单信息仅供参考

Note: Above TCDS information of Certification Authority is only for reference

认可数据单修订记录/ Change Record of the VTCDS

版次/ Revision	相对上一版的修订记录 Change Record	备注 Remark
版次 3/Rev 3	第一部分/SECTION 1 1. 修改 CAAC 专用要求 (3), 将 “CCAR 23 部” 更新为 “CCAR-23-R3”。 Revise “CCAR part 23” to “CCAR-23-R3” in CAAC Special Requirement (3). 第二部分/SECTION 2 2. 增加注释 4, 批准安装 GTX 335 应答机的设计更改。 Add Note 4 to validate the design change of GTX 335 transponder installation. 3. 修正原认可数据单的一些文字错误。 Correct the text error of VTCDS R2.	

2. 类别/Airworthiness Category: 正常类飞机/Normal Airplanes

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: Topcub Aircraft, Inc.
1300 SW Fifth Ave
Suite 2400
Portland, OR 97201

型号合格证持有人记录

Type Certificate Holder Record

Cub Crafter, Inc.	至 2015 年 8 月 12 日 Until August 12, 2015
Topcub Aircraft, Inc. 1300 SW Fifth Ave Suite 2400 Portland, OR 97201	自 2015 年 8 月 13 日 Since August 13, 2015

5. ETOPS: 不适用/Not applicable

6. CAAC 专用要求/Special Requirements:

交付到中国的每一架 CC18-180 航空器须满足下述特殊要求:

Each of CC18-180 aircraft delivered to China shall meet the following special requirements:

- (1) 必须满足中国民用航空局的运行要求 (例如标记标牌的中文要求)。
The operational requirements of CAAC must be met (e.g. Chinese language requirements for markings and placards).
- (2) 根据 CCAR 91 部的要求, 手持灭火瓶作为在中国运行的该型号飞机型号设计的一部分包含在标准设备当中。
A hand fire extinguisher complying with CCAR part 91, General Operation and Flight Rules, must be included as standard equipment in the type design of aircraft to be operated in China.
- (3) CC18-180 飞机乘员座椅的肩带必须符合 CCAR-23-R3 第 23.2 条的要求。
Shoulder harness on passenger seats of CC18-180 airplane is required to comply with Section 23.2 of CCAR-23-R3.

第 2 部分

SECTION 2

CC18-180 型(正常类飞机), FAA 于 2004 年 12 月 16 日批准, CAAC 于 2012 年 10 月 18 日认可。

Model CC18-180 (Normal Category Aeroplane), Approved on December 16, 2004, Validated on October 18, 2012.

发动机/Engine: 1台Lycoming O-360-C4P或O-360-C1G发动机, 型号合格证E-286, CAAC型号认可证VTC0170E, 或Superior Air Parts发动机 O-360-A3A2, 型号合格证E00001SC, CAAC型号认可证VTC0260E。
1 Lycoming Engine Model O-360-C4P or 1 Lycoming Engine Model O-360-C1G, Engine Type Certificate E-286, CAAC VTC0170E, or 1 Superior Air Parts Engine Model O-360-A3A2 Type Certificate E00001SC, CAAC VTC0260E.

燃油/Fuel: 100 (绿) 或100LL (蓝) 号航空汽油
100 (green) or 100LL (blue) grade aviation fuel.

发动机限制/
Engine Limits: 最大起飞功率和最大连续功率=180马力, 转速2700 rpm
其他限制见发动机型号合格证数据单E-286 (Lycoming发动机), 及发动机型号合格证数据单E00001SC (Superior发动机)。
Maximum takeoff power and maximum continuous power = 180 horsepower at 2700 rpm.
See Engine Type Certificate Data Sheet E-286 for additional limitations for Lycoming Engines and Type Certificate Data Sheet E00001SC for Superior Engine.

螺旋桨/Propeller: 对于Lycoming发动机O-360-C4P或O-360-C1G:
With Lycoming Engine Models O-360-C4P or O-360-C1G:
1副Sensenich螺旋桨制造公司, 型号76EM8, 螺旋桨型号合格证P4EA, CAAC型号认可证VTC168P。2150和2350 RPM之间的转速仅限于瞬时过渡工况。
1 Sensenich Propeller Manufacturing Company Model 76EM8, Propeller Type Certificate P4EA. CAAC VTC168P. Operation between 2150 and 2350 RPM restricted to transient operation only.

对于Superior Air Parts发动机O-360-A3A2:
With Superior Air Parts Engine Models O-360-A3A2:
1副Sensenich螺旋桨制造公司, 型号76EM8, 螺旋桨型号合格证P4EA, CAAC型号认可证VTC168P。2150和2350 RPM之间的转速仅限于瞬

时过渡工况。

1 Sensenich Propeller Manufacturing Company Model 76EM8, Propeller Type Certificate P4EA, CAAC VTC168P. Operation between 2150 and 2350 RPM restricted to transient operation only.

螺旋桨限制/

Propeller Limits:

Sensenich 76EM8螺旋桨

最小直径=76英寸

最大直径=76英寸

桨距=52到56英寸

Sensenich Propeller Manufacturing Company Model 76EM8

Minimum diameter = 76 inches

Maximum diameter = 76 inches

Pitch = 52 to 56 inches

空速限制/

Airspeed Limits:

V_O (2300 lbs) 102 mph IAS

V_O (1300 lbs) 76 mph IAS

V_{FE} (Fully extended) 89 mph IAS

V_{FE} (22° at first notch) 98 mph IAS

V_{NO} 133 mph IAS

V_{NE} 152 mph IAS

安装Wipaire W2100两栖浮筒，起落架操纵或伸出时，V_{LO} = 133 mph IAS

Maximum speed for landing gear operation or extended when equipped with Wipaire W2100 amphibious floats, V_{LO} = 133 mph IAS

重心范围/

C.G. Range

两点间直线上变化

Straight line variation between points.

后限制 1300 lbs到2300 lbs，基准后81英寸

Aft Limits 81 inches aft of datum from 1300 lbs to 2300 lbs.

前限制 1300 lbs到1600 lbs，基准后70.5英寸；直到2300 lbs，基准后79.1英寸

Forward Limits 70.5 inches aft of datum from 1300 lbs to 1600 lbs then to 79.1 inches aft of datum at 2300 lbs.

安装Wipaire W2100两栖浮筒时：

两点间直线上变化

When equipped with Wipaire W2100 amphibious floats:

Straight line variation between points.

后限制 1300 lbs到2300 lbs，基准后79英寸

Aft Limits 79 inches aft of datum from 1300 to 2300 lbs.

前限制 1300 lbs到1600 lbs，基准后70.5英寸；直到2300 lbs，基准后75英寸

Forward Limits 70.5 inches aft of datum from 1300 lbs to 1600

lbs then to 75 inches aft of datum at 2300 lbs.

基准/Datum:	机翼前缘之前60英寸 60 inches forward of wing leading edge.		
水平测量方法/ Leveling Means:	参考FAA批准的维修手册TC10000AMM的最新版本 Refer to latest FAA approved revision of the Maintenance Manual, Document TC10000AMM.		
重量限制/ Weight limits:	最大起飞重量/Maximum ramp and takeoff = 2300 lbs. 最大着陆重量/Maximum landing weight = 2300 lbs. 最小运行重量/Minimum operating weight = 1300 lbs.		
最小机组/ Minimum Crew:	1名飞行员 1 Pilot.		
座位数/No. of Seats:	总共2个:	一个位于基准之后71英寸 一个位于基准之后97英寸	
	2 seats total:	1 located at 71 inches aft of datum. 1 located at 97 inches aft of datum.	
最大行李重/ Maximum Baggage:	乘员座椅下/Under passenger seat storage 5 lbs. 前货舱（乘员后面）/Forward cargo compartment (behind passenger) 180 lbs. 补充货舱/Extended cargo compartment 20 lbs. 附加存储舱/Storage/accessory compartment 5 lbs.		
燃油量/ Fuel Capacity:	总共50加仑，44加仑可用 （加仑的油箱位于两个25机翼内基准之后84英寸） 50 gallons total; 44 gallons useable. (Two 25 gallon tanks in wings at 84 inches aft of datum).		
滑油类型和容量/ Oil Type and Capacity:	8夸脱。见发动机型号合格证数据单E-286（Lycoming发动机 O-360-C4P或O-360-C1G），及发动机型号合格证数据单E00001SC （Superior Air Parts发动机O-360-A3A2）。 8 qts. See Engine Type Certificate Data Sheet E-286 f for Lycoming Engine Models O-360-C4P or O-360-C1G, and Engine Type Certificate Data Sheet E00001SC for Superior Air Parts Engine Models O-360-A3A2.		
最大运行高度/ Maximum Operating Altitude:	14,000英尺，未安装经FAA批准的氧气系统 14,000 feet without FAA approved oxygen system installed. 14,600英尺，安装经FAA批准的氧气系统 14,600 feet with FAA approved oxygen system installed.		
控制面运动/	襟翼/Wing flaps: 0° ±2° 起飞/Take off 22° ±2° 着陆/Landing 50° ±2°		

Control Surface Movements:	副翼/Ailerons: 上/Up $18^{\circ} \pm 2^{\circ}$ 下/Down $18^{\circ} \pm 2^{\circ}$ 升降舵/Elevator: 上/Up $25^{\circ} \pm 2^{\circ}$ Down $15^{\circ} \pm 2^{\circ}$ 水平安定面/Stabilizer: 上/Up $2.5^{\circ} \pm 0.5^{\circ}$ 下/Down $4^{\circ} \pm 0.5^{\circ}$ 方向舵/Rudder: 右/Right $25^{\circ} \pm 2^{\circ}$ 左/Left $25^{\circ} \pm 2^{\circ}$
附加限制/ Additional Limitations:	机身寿命限制: 参考FAA批准的维修手册TC10000AMM的最新版本 Airframe life limits: Refer to latest FAA approved revision of the Maintenance Manual, Document TC10000AMM.
运行种类: Kinds of operations:	白天, 目视飞行准则 (VFR) Day, Visual Flight Rules (VFR).
必需的维护/ Required Maintenance:	飞机必须按照FAA批准的维修手册TC10000AMM的最新版本中持续适航说明进行维护 The airplane must be maintained in accordance with the instructions for continued airworthiness contained in the latest FAA approved revision of the Maintenance Manual, Document TC10000AMM.
必需的设备/ Required Equipment:	适航规章 (见审定基础) 规定的基本必需设备必须安装到飞机上 The basic required equipment as prescribed in the applicable airworthiness regulations (see Certification Basis) must be installed in the aircraft for airworthiness certification. 除了上述必需设备, 下列设备也是必需的: In addition to the above required equipment, the following equipment is also required: FAA批准/接受的“CC18-180飞行员操作手册和飞行手册” TC10000AFM的最新版本 The latest FAA Approved/Accepted Revision of “CC18-180 Pilots Operating Handbook and FAA Approved Flight Manual,” Document No. TC10000AFM.
设计资料/ Design Data:	飞机应按照FAA批准的“主文档清单” TC10000MDL的最新版本, 或其他FAA批准的资料生产 The airplane shall be manufactured in accordance with the latest FAA approved revision of “Master Document List”, Document No. TC10000MDL, or other FAA approved data.
合格的序列号/ Serial Numbers Eligible:	从CC18-0002开始 CC18-0002 and on
审定基础/ Certification Basis:	FAR 23部, 1964年12月18日生效, 23-1到23-55修正案; FAR 36部申请之日有效的修正案。申请日期2002年8月28日。

Part 23 of the Federal Aviation Regulations (FAR) effective December 18, 1964, as amended by 23-1 through 23-55. FAR 36 as amended on the date of certification. Application for type certificate, dated August 28, 2002.

等效安全/
Equivalent Level of
Safety (ELOS)
Findings: FAR 23.807应急出口的要求依照FAA2002年10月17日的备忘录中的
ELOS No. ACE-02-11 (FAA备忘录索引号190S-02-625)
Emergency exit requirements of FAR 23.807 in accordance with ELOS
No. ACE-02-11 as detailed in FAA memo dated October 17, 2002 (FAA
memo reference no. 190S-02-625).

生产基础/
Production Basis: FAA生产合格证722NM
FAA Production Certificate 722NM.

注释/Notes

注1/NOTE 1: 颁发初始适航证时必须提供包含审定空重包括的设备清单的重量平衡报告

A current weight and balance report with a list of equipment included in the certificated empty weight must be provided for each aircraft at the time of original airworthiness certification.

注2/NOTE 2: 必须展示FAA批准/接受的“CC18-180飞行员操作手册和飞行手册”AFM-CC18-180的最新版本中规定的标牌

The placards specified in the latest FAA Approved/Accepted Revision of “CC18-180 Pilots Operating Handbook and FAA Approved Flight Manual,” Document No. TC10000AFM, must be displayed.

注3/NOTE 3: 按照FAA批准的图纸TC10000最新版本进行结构改装，符合安装Wipaire W2100两栖浮筒的条件。安装浮筒要求经批准的飞行手册补充页。

Airplanes are eligible for installation of Wipaire W2100 amphibious floats when structural modifications and installation are accomplished in accordance with the latest FAA approved revision of Drawing No. TC10000. Installation requires approved flight manual supplement pages.

注4/NOTE 4: CAAC在型号认可证后认可安装Garmin GTX 335型应答机的设计更改，该设计更改列在CC18-180 Master Drawing List TC10000MDL (Revision V, dated June 15, 2020) 及以后经批准的版本中。

The design change of Garmin GTX 335 transponder installation which incorporated in the CC18-180 Master Drawing List TC10000MDL Revision V, dated June 15, 2020 and latest approved version has been validated post Type Validation by CAAC.

结束
END