

型号认可证数据单

THE VALIDATION DATA SHEET

编号/No.: VTC0369P

版次/Revision: 0

型号/Type:

AV-725-1

批准人/Approved By: Yang Zhenmei



职务/Title: Director General of CAAC-AAD

日期/Date: 2022 年 5 月 31 日

本数据单是型号认可证（编号：VTC0369P）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: VTC0369P), 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:

Avia Propeller Ltd.
Beranových 65/666
199 00 Praha 9 – Letňany
Czech Republic

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	VTC0369P, 第0版, 2022年5月31日颁发 VTC0369P, Revision 0, May 31, 2022	EASA TCDS No. P.031, 第5版, 2013年8月12日 EASA TCDS No. P.031, issue 5, August 12, 2013

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

CAAC 认可数据单修订情况说明 / CAAC VTCDS Change Record

不适用/NA

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:

欧盟航空安全局/EASA

4. 型号合格证持有人/Type Certificate Holder:

Avia Propeller Ltd.

Beranových 65/666

199 00 Praha 9 - Letňany

Czech Republic

5. 双发延程飞行/ETOPS:

不适用/NA

6. CAAC专用要求/CAAC Special Requirements:

无/NONE

第2部分 数据单

SECTION 2 DATA SHEET

I. 概述/ General

1. 型号/Type/Models

AV-725/AV-725-1

2. 型号合格证持有人/Type Certificate Holder

Avia Propeller Ltd.
Beranových 65/666
199 00 Praha 9 – Letňany
Czech Republic

设计组织批准号: EASA.21J.072

Design Organisation Approval No.: EASA.21J.072

3. 制造商/Manufacturers

Avia Propeller Ltd.
Beranových 65/666
199 00 Praha 9 – Letňany
Czech Republic

4. 申请日期/Date of Application

AV-725-1: 29 June 2010

5. 确定适用要求的参考日期/ Reference Date for determination of the applicable requirements

29 June 2010

6. 审定日期/Certification Date

AV-725-1: 04 July 2011

II. 审定基础/Certification Basis

1. 适航标准/ Airworthiness Standards

CS-P 修正案第 1 号随同 ED 决定 2006/09/R 一起在 2006 年 11 月 16 日公布, 除了在 CS-P 10 (b) 中允许的 CS-P 550 和 CS-P 560, 见注 1。

CS-P Amendment 1 as published with ED Decision 2006/09/R dated 16 November 2006 except the CS-P 550 and CS-P 560 as allowed by CS-P 10(b), see note 1.

重大设计更改批准 10041433 表明了对 CS-P550 的符合性。

Compliance with CS-P550 has been shown with Major Change Approval 10041433.

重大设计更改批准 10041932 表明了对 CS-P560 的符合性。

Compliance with CS-P560 has been shown with Major Change Approval 10041932.

III. 技术特性/Technical Characteristics

1. 型号设计定义/Type Design Definition

AV-725-1 螺旋桨型号涵盖了以下设计构型。每个设计构型都由一个主装配图和一个适当的部件列表来定义。

The AV-725-1 propeller model covers the following design configurations. Each design configuration is defined by a main assembly drawing and an appropriate parts list.

AV-725-1-()-C-F-R(W)

设计构型 “恒速，顺桨，反桨（Walter 系统）”

图纸编号 116-0000，2011 年 2 月 3 日(*1)

零件清单编号 R-116-0000，2011 年 2 月 3 日(*1)

Design Configuration “Constant Speed, Feather, Reverse (System Walter)”

Drawing No. 116-0000 dated February 3, 2011 (*1)

Parts List No. R-116-0000 dated February 3, 2011 (*1)

AV-725-1()-C-F-R(P)

设计构型 “恒速，顺桨，反桨（普惠系统）”

图纸编号 116-0002，2012 年 5 月 14 日(*1)

零件清单编号 R-116-0002，2012 年 3 月 13 日(*1)

Design Configuration “Constant Speed, Feather, Reverse (System Pratt&Whitney)”

Drawing No. 116-0002 dated May 14, 2012(*1)

Parts List No. R-116-0002 dated March 13, 2012 (*1)

(*1) 有效性是已经发布的版本，或者之后批准的版本。

(*1) effective is the declared issue or a later approved revision.

2. 描述 / Description

桨叶变距机构使用 5 叶片液压控制可变距的螺旋桨，具有恒速，顺桨和反桨的操作模式。桨毂和桨叶为铝合金整体铣制。

螺旋桨可选择安装整流罩和防冰保护设备。

5-blade variable pitch propeller with a hydraulically operated blade pitch change mechanism providing the operation modes “Constant Speed”, “Feather”, and “Reverse”. The hub and the blades are

milled out of aluminium alloy.

Optionally the propeller may have installed a spinner and ice protection equipment.

3. 设备 / Equipment

整流罩: 按照 Avia-Propeller 服务通告 No.2

Spinner: according to Avia Propeller Service Bulletin No. 2

调速器: 按照 Avia-Propeller 服务通告 No.3

Governor: according to Avia Propeller Service Bulletin No. 3

防冰: 按照 Avia-Propeller 服务通告 No.4

Ice Protection: according to Avia Propeller Service Bulletin No. 4

4. 尺寸 (毫米) / Dimensions (mm)

螺旋桨直径: 最大 235 cm

Propeller-Diameter: max. 235 cm

5. 重量 (千克) / Weight (kg)

螺旋桨设计构型

“恒速, 顺桨, 反桨”: 约 77kg

Propeller-Design Configuration

“Constant Speed, Feather, Reverse”: approx. 77 kg

6. 桨毂/叶片组合 Hub / Blade Combinations

桨毂 / Hub	桨叶类型/ Blade-Type
AV-725-1	-433

7. 控制系统 / Control System

第 3 号 Avia 螺旋桨服务公告中列出了螺旋桨的调速器。

Propeller governors as listed in Avia Propeller Service Bulletin No. 3.

8. 与发动机的匹配 / Adaptation to Engine

ARP 880 法兰

ARP 880 Flange.

9. 旋转方向 / Direction of Rotation

右旋牵引式（顺飞行方向看）

Right-hand tractor (viewed in flight direction).

IV. 运行限制/Operating Limitations**1. 螺旋桨转速/ Propeller Speed**

最大 2080 RPM

max. 2080 min-1

2. 最大起飞功率 / Maximum Take Off Power

635 kW

3. 最大连续功率和转速 Maximum Continuous Power and Speed

635 kW

4. 螺旋桨桨距角 / Propeller Pitch Angle

在 75%半径位置测量的最大桨距变化范围为 105°

maximum pitch change range 105° - measured at 75% radius station

V. 使用和服务说明/Operating and Service Instructions

使用 and 安装手册 Operation and Installation Manual	编号 EN-1320, 2010年11月5日发布的最新的第3版(*) P/N EN-1320 Date of Latest Issue/Revision Issue 3, November 5, 2010(*)
大修手册/Overhaul Manual	编号 EN-1291, 2012年9月17日发布的最新的第4版(*) P/N EN-1291 Date of Latest Issue/Revision Issue 4, September 17, 2012 (*)
金属叶片大修手册/Overhaul Manual for Metal Blades	编号 EN-1370, 2012年2月6日发布的最新的第5版(*) P/N EN-1370 Date of Latest Issue/Revision Issue 5, February 06, 2012 (*)
服务通告/Service Bulletins	在目前服务通告列表中注释的 as noted in the current List of Service Bulletins

(*) 有效性是已经发布的版本或之后批准的版本

(*) effective is the declared issue or a later approved revision

VI. 注释/Notes

1. 该螺旋桨已根据 CS-P 分部分 A、B 和 C 的要求进行审定。针对具体的飞机安装, EASA 批准的重大的变更设计 10041433 和 10041932 表明了对 D 分布的符合性。

1. The suitability of the propeller for a given aircraft/engine-combination must be demonstrated within the scope of the type certification of the aircraft.

注释1 中英文无法对照

1. This Propeller has been certificated in accordance with CS-P subparts A, B and C. Compliance with the requirements of Subpart D, which is specific to each aircraft installation, has been shown with EASA Major Change Approvals 10041433 and 10041932.

2. EASA 批准的持续适航文件中的适航限制章节发布于“螺旋桨使用和安装手册”文件的第 1 章“适航性限制”中。

2. The EASA approved Airworthiness Limitations Section of the Instructions for Continued Airworthiness is published in the applicable “Propeller Operation and Installation Manual” document, chapter 1. “Airworthiness Limitations”.

3 螺旋桨设计系统/Propeller designation system:

桨毂/Hub / 桨叶/Blade

AV - 725 - 1 - E - () - () - () - () / () () 235 - 433 ()

1 2 3 4 5 6 7 8 9 10 11 12 3 4 5

桨毂/Hub

1 Avia 螺旋桨 (制造商) / Avia Propeller (manufacturer)

2 V-可变距螺旋桨/V - Variable Pitch Propeller

3 叶根型/Blade Root Type

4 桨叶数量/Number of Blade

5 不同螺旋桨型号的编号/No. of variant of the propeller model

6 法兰型号的编码代号/code letter for flange type

B = AS-127-D, SAE No.2 模式, ½ 英寸 - 20 UNF 螺栓

D = ARP 502

E = ARP 880

K = M14 法兰

B = AS-127-D, SAE No.2 mod., ½ inch - 20 UNF bolts

D = ARP 502

E = ARP 880

K = M14 Flange

7 配重的代号/code letter for counterweights

空白=无或有较小的配重用于减小桨距

C=配重是用于增加桨距

blank = no or small counterweights for pitch change forces to decrease pitch

C = counterweights for pitch change forces to increase pitch

8 可顺桨的代号/code letter for feather provision

空白=不能顺桨

F=可顺桨

- blank = no feather position possible
F = feather position installed
- 9 可反桨的代号/code letter for reverse provision
空白=不能反桨
R=可反桨
blank = no reverse position possible
R = reverse position installed
- 10 反桨系统的代号/code letter for reverse system
(W)= Walter 系统
(P)=普惠系统
(W) = System Walter
(P) = System Pratt&Whitney
- 11 设计更改的代号/code letter for design changes
小写字母代表不会影响互换性
大写字母代表限制或不允许互换性
small letter for changes which do not affect interchangeability
capital letter for changes which restrict or exclude interchangeability g

桨叶 / Blade

- 1 桨距变化销钉位置的代号/code letter for position of pitch change pin
空白=桨距变化销位置用于减小桨距
C=桨距变化销位置用于增加桨距
CF=桨距变化销位置用于顺桨, 变距力将增加桨距
CR=桨距变化销位置用于反桨, 变距力将增加桨距
CFR=桨距变化销位置用于顺桨和反桨时, 变距力将增加桨距
blank = pitch change pin position for pitch change forces to decrease pitch
C = pitch change pin position for pitch change forces to increase pitch
CF = pitch change pin position for feather provision; pitch change forces to increase pitch
CR = pitch change pin position for reverse provision; pitch change forces to increase pitch
CFR = pitch change pin position for feather and reverse provision; pitch change forces to increase pitch
- 2 桨叶设计和安装的代号/code letter for blade design and installation
空白=右旋牵引式
RD=右旋推进式
L=左旋牵引式
LD=左旋推进式
blank = right-hand tractor
RD = right-hand pusher
L = left-hand tractor
LD = left-hand pusher
- 3 螺旋桨的直径, 厘米/propeller diameter in cm
- 4 根据经审定的桨毂和桨叶组合确定的桨叶类型编号 (包括设计构型和气动数据)
No. of blade type (contains design configuration and aerodynamic data) according to the certified hub/blade – combinations

5 设计更改的代号/code letter for design changes

小写字母代表不会影响桨叶集的互换性

大写字母代表限制或不允许桨叶集的互换性

small letter for changes which do not affect interchangeability of blade set

capital letter for changes which restrict or exclude interchangeability of blade set

----结束----

----END----