

型号认可证数据单
THE VALIDATION DATA SHEET

编号/No.: VTC0325A

版次/Revision: 4

型号/Type:

P2010

P2010 TDI

批准人/Approved By:



职务/Title: Director General of CAAC-AAD

日期/Date: 2022 年 5 月 13 日

本数据单是型号认可证(编号: VTC0325A)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: VTC**0325A**), 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:

Costruzioni Aeronautiche Tecnam S.p.A.
Via Salvo D'acquisto 62
80042 Boscotrecase, Napoli
ITALIA

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

(1) 2016 年 4 月 26 日, CAAC 向 Costruzioni Aeronautiche Tecnam S.r.l. 公司颁发型号认可证 VTC0325A。
VTC0325A was issued to Costruzioni Aeronautiche Tecnam S.r.l. by CAAC on April 26, 2016.

(2) 2019 年 05 月 23 日, 型号认可证持有人由 Costruzioni Aeronautiche Tecnam S.r.l. 变更为 Costruzioni Aeronautiche Tecnam S.p.A.。

Validation of Type Certificate Holder was changed from Costruzioni Aeronautiche Tecnam S.r.l. to Costruzioni Aeronautiche Tecnam S.p.A. on 23, May, 2019.

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第 1 部分 型号认可证概述

SECTION 1: GENERAL OF VTC

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	VTC0325A, Rev 4, May 13, 2022	EASA.A.576, Rev 10, Oct 8, 2021
历史/ History	VTC0325A, Rev 3, Jul 13, 2020 VTC0325A, Rev 2, Mar 14, 2019 VTC0325A, Rev 1, May 11, 2018 VTC0325A, Rev 0, Apr 26, 2016	EASA.A.576, Rev 07, May 23, 2019 EASA.A.576, Rev 05, Mar 29, 2018 EASA.A.576, Rev 03, Dec 16, 2015 EASA.A.576, Rev 03, Dec 16, 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.

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

CAAC 认可数据单版次/ CAAC VTCDS Revision	相对上一版次的修订情况/ CAAC VTCDS Change Record	备注/Remark
VTC0325A 第 4 版/Rev.4	1. 增加第 3 部分:P2010 TDI 1. Add Section 3: P2010 TDI	

2. 适航类别/Airworthiness Category: CS-23 正常类/ CS-23 Normal Category
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/Type Certificate: Number: EASA.A.576
型号合格证持有人/Type Certificate Holder: Costruzioni Aeronautiche Tecnam S.p.A.
Via Salvo D'acquisto 62
80042 Boscotrecase, Napoli
ITALIA
- 型号合格证申请日期/Application for Type Certificate dated:
2010 年 09 月 15 日/ 15 Sep 2010

型号合格证颁发日期/ Issuance for Type Certificate dated:

2014 年 09 月 26 日/ 26 Sep 2014

第 2 部分 P2010

SECTION 2: P2010

I. 总则/General

- | | |
|--------------------------------------|--|
| 1. 型别/Model: | P2010 |
| 2. 适航类别/Airworthiness Category: | CS-23 正常类/ CS-23 Normal Category |
| 3. 型号合格证持有人/Type Certificate Holder: | Costruzioni Aeronautiche Tecnam S.p.A.
Via Salvo D'acquisto 62
80042 Boscorecase, Napoli
ITALIA |
| 4. EASA 批准日期/EASA Approved Date: | 2014.09.26/26 Sep 2014 |
| 5. CAAC 批准日期/CAAC Approved Date: | 2016.04.26/26 April 2016 |

II. 合格审定基础和生产依据/CERTIFICATION BASIS AND PRODUCTION BASIS

CAAC型号认可审定基础 CAAC型号认可审定基础定义如下:

CAAC Validation Certification Basis The CAAC validation certification basis was defined as follows:

CAAC的认可审定基础由EASA的审定基础和CAAC的附加技术条件组成/The CAAC validation certification basis consists of the EASA certification basis and the CAAC additional technical conditions.

1、EASA审定基础/EASA certification basis:

EASA审定基础详见型号合格证数据单EASA.A.576 (版本07) 中的审定基础/ Refer to EASA Type Certificate Data Sheet EASA.A.576 Revision 07.

2、CAAC附加技术条件/CAAC Additional Technical Conditions

2.1 依据CCAR21.29 (5), 机上所有对旅客进行的提示、警告和通知的文字标记和标牌必须至少有中文表述。机上所有向旅客或者机外营救人员指示应急出口和门的位置以及开启方法的文字标记和标牌和乘客可能使用的机上所有应急设备的操作、使用说明必须至少有中文表述。

2.1 As per CCAR 21.29 (5), all literal markings and placards on an airplane used for advising, warning or notifying passengers must be at least in Chinese. All literal markings and placards on an airplane used for indicating passengers or outboard rescue personnel of the location of emergency exits and doors and their means of opening must be at least in Chinese, and all operation instructions of airplane

emergency equipment that may be used by passengers must be at least in Chinese.

2.2 进口要求/Import Requirement

为具备在中国运行的资格，按本型号认可证制造的每架航空器必须具有一份出口适航证，其上签注有出口国适航当局的审定声明，即：本架航空器符合CAAC所批准的型号设计，并处于可安全运行的状态。

2.2 To be considered eligible for operation in China, each aircraft manufactured under this Validation of Type Certificate must be accompanied by a certificate of airworthiness for export endorsed by Export Authority which states (in English language): This aircraft conforms to its CAAC type design and is in a condition for safe operation.

CAAC型号认可证申请日期 2019-08-29

CAAC Validation of Type

Certificate Application Date

生产基础/ Production Basis IT.21G.0032

III. 技术特征和运行限制/Technical Characteristics and Operational Limitations

型号设计定义 文件 no. 2010/010 “型号设计定义”

Type Design Definition: Document no. 2010/010 “Type Design Definition”

1.发动机和发动机限制

Engine And Engine

Limitations

1.1 基本型

Basic

1.1.1 发动机 1 台 Lycoming 发动机: IO-360-M1A

Engines FAA 型号合格证: No. 1E10

EASA 型号合格证 No. EASA.IM.E.032

CAAC 型号认可证: VTC0149E, 认可数据单版次: 3

1 Lycoming Engines: IO-360-M1A

FAA Type Certificate : No. 1E10

EASA Type Certificate No. EASA.IM.E.032

CAAC VTC No. VTC0149E. VTCDS Revision: 3

1.1.2 发动机限制 起飞功率 134 kW (180 HP) 在 2700 RPM

Engine Limitations 最大连续功率 134kW (180HP) 在 2700 RPM

其它发动机限制见文件号为 doc. No. 2010/100“P2010 飞机飞行手册”，第 2 章

Take-Off Power 134 kW (180HP) at 2700 RPM

Max continuous power 134kW (180HP) at 2700 RPM

Other engine's limitations are listed in doc. No.2010/100 "P2010 Aircraft Flight Manual", Section 2

当安装了 MOD 2010/002 (EASA 批准 10052750)时(见注释 1):

起飞功率 134 kW (180 HP) 在 2700 RPM

最大连续功率 129kW (173HP)在 2600 RPM

其它发动机限制见文件号为 doc. No. 2010/100 "P2010 飞机飞行手册", 第 2 章

When MOD 2010/002 (EASA approval 10052750) is installed (See note 1):

Take-Off Power 134 kW (180HP) at 2700 RPM

Max continuous power 129 kW (173HP) at 2600 RPM

Other engine's limitations are listed in doc. No.

2010/100 "P2010 Aircraft Flight Manual", Section 2

1.2 选装(见注释 3)

Optional (See note 3)

1.2.1 发动机

Engine

1 台 Lycoming 发动机: IO-390-C3B6

FAA 型号合格证: No. E00006NY

EASA 型号合格证 No. EASA.IM.E.097

CAAC 型号认可证: VTC0299E, 认可数据单版次:R1

1 Lycoming Engines: IO-390-C3B6

FAA Type Certificate : No. E00006NY

EASA Type Certificate No. EASA.IM.E.097

CAAC VTC No. VTC0299E. VTCDS Revision: 1

1.2.2 发动机限制(见注释 3)

Engine Limitations(See note 3)

起飞功率 160.3 kW (215 HP) 在 2700 RPM

最大连续功率 160.3kW (215HP) 在 2700 RPM

其它发动机限制见文件号为 doc. No. 2010/100 "P2010 飞机飞行手册", 第 2 章

Take-Off Power 160.3 kW (215HP) at 2700 RPM

Max continuous power 160.3 kW (215HP) at 2700 RPM

Other engine's limitations are listed in doc. No.2010/100 "P2010 Aircraft Flight Manual", Section 2

2 螺旋桨和螺旋桨限制

Propeller and Propeller Limitations

MT 螺旋桨: MT 188 R 145-4G

国外适航当局螺旋桨 TC: EASA Type Certificate No. EASA.P.006

CAAC 型号认可证编号: VTC163P, 认可数据单版次: 0

桨叶数量: 2

直径: 1.880 m (74 in) – 不允许减小

旋转方向:顺时针 (驾驶员视角)

MT Propeller: MT 188 R 145-4G

Foreign Authority Propeller TC: EASA Type Certificate No. EASA.P.006

CAAC VTC No. VTC163P, VTCDS Revision: 0

Number of blades: 2

Diameter: 1.880 m (74 in) – No reduction is permitted

Sense of Rotation: Clockwise (pilot's view)

当安装了 MOD 2010/002 (EASA 批准 10052750)时(见注释 1):

MT 螺旋桨: MTV-15-B/193-52

国外适航当局螺旋桨 TC: EASA Type Certificate No. EASA.P.098

CAAC 型号认可证编号: VTC0341P, 认可数据单版次: 0

桨叶数量: 2

直径: 1.930 m (76 in) – 不允许减小

旋转方向:顺时针 (驾驶员视角)

When MOD 2010/002 (EASA approval 10052750) is installed (See note 1):

MT Propeller: MTV-15-B/193-52

Foreign Authority Propeller TC: EASA Type Certificate No. EASA.P.098

CAAC VTC No. VTC0341P, VTCDS Revision: 0

Number of blades: 2

Diameter: 1.930 m (76 in) — No reduction is permitted

Sense of Rotation: Clockwise (pilot's view)

当安装了 MOD 2010/078 (EASA 批准 10065113)时(见注释 3):

MT 螺旋桨: MTV-12B/183-59

国外适航当局螺旋桨 TC: EASA Type Certificate No. EASA.P.013

CAAC 型号认可证编号: VTC0159P, 认可数据单版次: 0

桨叶数量: 3

直径: 1.830 m (72 in)–不允许减小

旋转方向:顺时针 (驾驶员视角)

When MOD 2010/078 (EASA approval 10065113) is installed (See note 3):

MT Propeller: MTV-12B/183-59

Foreign Authority Propeller TC: EASA Type Certificate No. EASA.P.013

CAAC VTC No. VTC0159P, VTCDS Revision: 0

Number of blades: 3

Diameter: 1.830 m (72 in) – No reduction is permitted

Sense of Rotation: Clockwise (pilot's view)

3 涡轮转速限制

不适用

Turbo RPM Limitation	N/A		
4 传动系统扭矩限制	不适用		
Transmission Torque	N/A		
Limits			
5.辅助动力装置和辅助动力装置限制	不适用		
Auxiliary Power Unit (APU) and APU Limitations	N/A		
6 燃油	航空汽油等级 91/96 或 100 LL (ASTM D910) (见注释 3)		
Fuel	AVGAS Grade 91/96 or 100 LL (ASTM D910) (See note 3)		
	车用汽油 EN 228 (E) (见注释 2)		
	MOGAS EN 228 (E) (See note 2)		
	更多详细信息见文件. No. 2010/100 “P2010 飞机飞行手册”.		
	Refer to doc. No. 2010/100 “P2010 Aircraft flight Manual” for further details.		
6.1 燃油容量	2 油箱: 每个 120 升 (31.7 美加仑)		
Fuel capacities	共: 240 升 (63.4 美加仑)		
	可用: 231 升 (61 美加仑)		
	2 Tanks: 120 litres each (31.7 US gallons)		
	Total: 240 litres (63.4US gallons)		
	Usable: 231 litres (61US gallons)		
7 滑油	Average	MIL-L-6082B or	MIL-L-22851 or
Oil	Ambient	SAEJ1966	SAEJ1899
	Temperature	Spec.	Spec.
		Mineral Grades	Ashless
			Dispersant Grades
	All Temperatures	----	SAE15W50 or SAE20W-50
	Above 80°F	SAE60	SAE60
	Above 60°F	SAE50	SAE40 or SAE50
	30°F to 90°F	SAE40	SAE40
	0°F to 70°F	SAE30	SAE40, SAE30, SAE20W40
	Below 10°F	SAE20	SAE30 or SAE20W30
	可替代滑油参考 Lycoming (L)LIO-360-M1A“使用和安装手册”和		

	Lycoming (L)IO-390-C1B3“使用和安装手册”所列的可替代滑油商用牌号。	
	Refer to Lycoming (L)IO-360-M1A “Operation and Installation Manual” and Lycoming (L)IO-390-C1B3 “Operation and Installation Manual” for list of alternative recommended commercial brands and types.	
7.1 滑油容量	共: 7.57 升	
Oil capacities	最少: 3.78 升	
	Total: 7.57 litres	
	Minimum: 3.78 litres	
7.2 滑油容量(见注释 3)	共: 6.62 升	
Oil capacities (see note 3)	最少: 3.78 升	
	Total: 6.62 litres	
	Minimum: 3.78 litres	
8 空速限制	不可超越速度 VNE	164 KCAS
Airspeed limits	最大结构巡航速度 V _{NO}	130 KCAS
	设计机动速度 V _A	119 KCAS
	使用机动速度 V _O	119 KCAS
	最大襟翼展开速度 V _{FE}	92 KCAS
	Never exceed speed V _{NE}	164 KCAS
	Maximum Structural Cruising Speed V _{NO}	130 KCAS
	Design Manoeuvring speed V _A	119 KCAS
	Operating Manoeuvring speed V _O	119 KCAS
	Maximum flaps extended speed V _{FE}	92 KCAS
9. 最大使用升限	12,000 ft	
Maximum Operating Altitude:		
9.1 使用限制	昼间/夜间目视飞行规则	
Operating Limitations:	参考 AFM 文件号 No. 2010/100 第 2 章中的 KOEL。	
一般	禁止在已知结冰条件下飞行	
General:	Day/Night-VFR, IFR	
	Refer to KOEL contained in the AFM, doc. No.2010/100, Section 2.	
	Flight into expected or actual icing conditions is prohibited	
10. 重心范围	前限: 基准后 0.262 m (19% MAC)	
Centre of Gravity Range:	后限: 基准后 0.440 m (32% MAC)	
	Forward Limit: 0.262 m (19% MAC) behind datum	
	Aft Limit: 0.440 m (32% MAC) behind datum	
11. 最大重量	最大起飞: 1160 kg (2557 lb)	
Maximum Weights:	最大着陆: 1160 kg (2557 lb)	

	Max Take-Off: 1160 kg (2557 lb)
	Max Landing: 1160 kg (2557 lb)
11.1. 最大行李/货物装载	最大允许装载: 40 kg (88 lb)
Maximum Baggage/Cargo	位置: 1.56 m (61.41 in)从基准
Loads:	Max Allowable Load: 40 kg (88 lb)
	Location: 1.56 m (61.41 in) from datum
12. 测量基准	与机翼前缘相切的垂直平面
Datum:	Vertical plane tangent to wing leading edge
13. 水平测量措施	座椅滑轨支撑横梁 (见文件 No. 2010/100“P2010 飞行手册”,第 6 章程
Leveling Means:	序)
	seat track supporting beams (see procedure in doc. No. 2010/100 “P2010
	Aircraft Flight Manual”, Section 6)
14.平局气动弦	平局气动弦 1.378 m (54.2 in)
MAC	Mean Aerodynamic Chord is 1.378 m (54.2 in)
15. 最小飞行机组	1
Minimum Flight Crew:	
16.座位数量	3
Passenger Seating	
Capacity:	
17 操纵面运动范围	安定面: $17^{\circ} \pm 2^{\circ}$ 俯仰上 / $6^{\circ} \pm 2^{\circ}$ 俯仰下
Control movement:	安定面配平调整片: $15^{\circ} \pm 1^{\circ}$ 下 / $3^{\circ} \pm 1^{\circ}$ 上
	安定面配平调整片: $6^{\circ} \pm 1^{\circ}$ 下 / $3^{\circ} \pm 1^{\circ}$ 上(见注释 4)
	副翼: $19^{\circ} \pm 2^{\circ}$ 上 / $14^{\circ} \pm 2^{\circ}$ 下
	方向舵: $25^{\circ} \pm 2^{\circ}$ 左 / $25^{\circ} \pm 2^{\circ}$ 右
	方向舵配平调整片: $20^{\circ} \pm 2^{\circ}$ 左 / $20^{\circ} \pm 2^{\circ}$ 右
	襟翼: 0° 完全收起 / $40^{\circ} \pm 1^{\circ}$ 完全放下
	Stabilator: $17^{\circ} \pm 2^{\circ}$ to pitch up / $6^{\circ} \pm 2^{\circ}$ to pitch down
	Stabilator Trim Tab: $15^{\circ} \pm 1^{\circ}$ downward / $3^{\circ} \pm 1^{\circ}$ upward
	Stabilator Trim Tab: $6^{\circ} \pm 1^{\circ}$ downward / $3^{\circ} \pm 1^{\circ}$ upward(see note 4)
	Aileron: $19^{\circ} \pm 2^{\circ}$ upward / $14^{\circ} \pm 2^{\circ}$ downward
	Rudder: $25^{\circ} \pm 2^{\circ}$ left / $25^{\circ} \pm 2^{\circ}$ right
	Rudder Trim Tab: $20^{\circ} \pm 2^{\circ}$ left / $20^{\circ} \pm 2^{\circ}$ right
	Flaps: 0° Fully Retracted / $40^{\circ} \pm 1^{\circ}$ Fully Extended
18.制造序号	002 及之后
Eligible serial numbers:	002 to subsequent
19. 设备	设备清单, 飞行手册, 文件号.No. 2010/100, 第 6 章
Equipment	Equipment list, AFM, doc. No. 2010/100, Section 6

20.其他

Other

20.1.机轮和轮胎

Wheels and Tyres

前机轮尺寸: 5.00-5, Type III

主机轮尺寸: 6.00-6, Type III

批准的机轮等级见维护手册 AMM 文件号 No. 2010/101

Nose Wheel Tyre Size: 5.00-5, Type III

Main Wheel Tyre Size: 6.00-6, Type III

For approved Types and rati

ng see AMM, doc No. 2010/101

21.注释

Note

(1) 当安装了 MOD 2010/002 (EASA 批准 10052750)

(2) 当安装了 MOD 2010/032 (EASA 批准 10055692)

(3) 当安装了 MOD 2010/078(EASA 批准 10065113)

(4) 当安装了 MOD 2010/133(EASA 批准 10069356)

(1) When MOD 2010/002 (EASA approval 10052750) is installed

(2) When MOD 2010/032 (EASA approval 10055692) is installed

(3) When MOD 2010/078 (EASA approval 10065113) is installed

(4) When MOD 2010/133(EASA approval 10069356) is installed

IV. 经批准的中文标记标牌/ The Approved Chinese Placards

中文标牌和标识包含在图纸“Marking & Placards for TC validation in China (Report n° 2010/107)”1st Edition, Rev.1 或 CAAC 接受的更新版本中。

Chinese Placards and markings are included in Drawing“Marking & Placards for TC validation in China (Report n°2010/107)”1st Edition, Rev. 1 or later revisions CAAC accepted.

V. 使用和维修技术资料/ Operating and Service Instructions

1.飞行手册文件号

文件号 No. 2010/100 “P2010 飞行手册” 最后版本

Flight Manual, Document No

Doc. No. 2010/100 “P2010 Aircraft Flight Manual” Last issue

2.维护手册文件号

文件号 No. 2010/101“P2010 飞机维护手册”最后版本

Maintenance Manual, Document

适航限制在 ATA 第 4 章

No:

Doc. No. 2010/101 “P2010 Aircraft Maintenance Manual” Last issue

Airworthiness Limitations are reported in ATA chapter 4.

3.备件目录

文件号 No. 2010/102“P2010 图解零件目录”最后版本

Spare Parts Catalogue:

Doc. No. 2010/102 “P2010 Illustrated Parts Catalogue” Last issue

4.仪表及集成

文件号 No. 2010/101“P2010 飞机维护手册”最后版本

Instruments and aggregates:

Doc. No. 2010/101 “P2010 Aircraft Maintenance Manual” Last issue

第 3 部分 数据（型别： P2010TDI）

SECTION 3 DATA (Models: P2010TDI)

1. 总则/General

型别/Model:	P2010 TDI
适航类别/Airworthiness Category:	CS-23 正常类/ CS-23 Normal Category
型号合格证持有人/Type Certificate Holder:	Costruzioni Aeronautiche Tecnam S.p.A. Via Salvo D'acquisto 62 80042 Boscotrecase, Napoli ITALIA
EASA 批准日期/EASA Approved Date:	2020.10.8/8 Oct 2020
CAAC 批准日期/CAAC Approved Date:	2022.05.13/13 May 2022

2. 认可审定基础和生产依据/Certification Basis and Production Basis

CAAC 的认可审定基础由 EASA 审定基础（详见 EASA 型号合格证数据单：编号 EASA.A.576, Issue 10）和 CAAC 的附加技术条件组成。

The CAAC validation basis consists of the EASA certification basis (see EASA TCDS: NO. EASA.A.576, Issue 10) and the CAAC additional technical conditions.

EASA 审定基础/EASA certification basis

确定适用要求的参照日期为 2019 年 4 月 29 日

Reference Date for determining the applicable requirements April 29th, 2019

(1) 适航要求/Airworthiness Requirements

EASA CS-23 第 2 修正案, 2010 年 9 月 28 日颁布

EASA CS-ACNS 机载通讯导航和监视审定标准

EASA CS-23 amdt.2 dated 28 September 2010

EASA CS-ACNS

(2) 专用条件/Special Conditions

CRI B-52 (SC-B23.div-01 人为因素-综合航电系统)；

CRI F-58 (SC-F23.1353-02 锂电池装置)；

CRI E-103 (para.1) 柴油发动机 TAE 125-02 的安装；

CRI E-104 (SC-CS-23.1305-燃油低油面报警方法)。

CRI B-52 (SC-B23.div-01 Human Factors-Integrated Avionic System);

CRI F-58 (SC-F23.1353-02 Lithium Battery Installations);

CRI E-103 (para.1) Installation of the diesel engine TAE 125-02;

CRI E-104 (SC-CS-23.1305- Fuel low level annunciation means).

(3) 豁免/Exemptions

无
None

(4) 偏离/Deviations

无
None

(5) 等效安全/Equivalent Safety Findings

CRI E-103 (para.3) 柴油发动机 TAE 125-02 的安装
CRI E-103 (para.3) Installation of the diesel engine TAE 125-02

(6) 选择符合的要求/Requirements elected to comply

EASA CS-23 第 4 修正案 23.1306 条
EASA CS-23 第 4 修正案 23.1308 条
EASA CS-23 amdt.4 para. 23.1306
EASA CS-23 amdt.4 para. 23.1308

(7) 环境标准/Environmental Standards:

CS-36 第 5 修正案涉及国际民航组织附件 16, 卷 I, 第 8 版, 2017 年 7 月
CS-36 amdt. 5 reference to ICAO Annex 16, Volume I, 8th Edition, July 2017

生产依据/Production Basis

EASA 生产许可证 IT.21G.0032
EASA production certificate IT.21G.0032

中国民用航空局附加技术条件/CAAC Additional Technical Conditions

交付到中国的每一架 P2010TDI 飞机须满足下述附加技术条件:

Each of Model P2010TDI aircraft delivered to China shall meet the following Additional Technical Conditions:

(1) 中文标记与标牌/Chinese Markings and Placards

依据 CCAR21.29 (5) 有关适航规章、噪声规定所要求的手册、标牌、目录清单和仪表标记应当用中文或英文书写, 下类各项应当至少有中文表述:

- (a) 机上所有对旅客进行的提示、警告和通知的文字标记和标牌。
- (b) 机上所有向旅客或者机外营救人员指示应急出口和门的位置以及开启方法的文字标记和标牌。
- (c) 旅客可能使用的机上所有应急设备的操作、使用说明。

As per CCAR21.29 (5) The manuals, placards, listings and instrument markings required by the applicable airworthiness regulation, noise requirements, are presented in Chinese or English language. Below items must be at least in Chinese language.

- (a) All literal markings and placards on an airplane used for indicating, warning and informing passengers
- (b) All literal markings and placards on an airplane used for indicating passengers or outboard rescue personnel of the location of doors and their means of opening.
- (c) The operation and use instructions of emergency equipment which passengers will use.

(2) 进口要求/Import Requirement

为具备在中国运行的资格, 按本型号认可证制造的每架航空器必须具有一份出口适航证, 其上签

注有出口国适航当局的审定声明，即：本架航空器符合 CAAC 所批准的型号设计，并处于可安全运行的状态。

To be considered eligible for operation in China, each aircraft manufactured under this Validation of Type Certificate must be accompanied by a certificate of airworthiness for export endorsed by Export Authority which states (in English language): This aircraft conforms to its CAAC type design and is in a condition for safe operation.

(3) 3 号喷气燃料/No.3 Jet Fuel

符合“中华人民共和国国家标准“3 号喷气燃料”(GB 6537)”要求的燃料可以在 P2010 TDI 飞机上使用。

Fuel conforming to National Standard of the People's Republic of China “No.3 Jet Fuel” (GB 6537) should be used on P2010 TDI.

3. 技术特征和使用限制/Technical Characteristics and Operational Limitations

型号设计定义/Type Design definition:

文件号 2010/637“型号设计定义”

Document no. 2010/637 “Type Design Definition”

描述/Description:

基本型/Basic:

单发，可变距螺旋桨，四座，固定式三轮起落架，具有复合材料，铝和钢结构的高翼飞机。

Single-engine, variable pitch propeller, four seats, high wing aeroplane equipped with fixed tricycle landing gear, featuring composite, aluminium and steel construction.

中文标牌和标识/Chinese Placards and marking:

中文标牌和标识包含在文件号 2010/107“对于申请中国认可证的 P2010 and P2010 TDI 型别飞机的标识 & 标牌”第 2 版本第 0 次修订或 CAAC 接受的更新版本中。

Chinese Placards and markings are included in doc.No.2010/107 “Marking & Placards for TC validation in China of P2010 and P2010 TDI Models”2nd Edition, Rev. 0 or later revisions CAAC accepted.

设备/Equipment:

设备清单，飞机飞行手册，文件号 2010/552，第 6 章
Equipment list, AFM, doc. No. 2010/552, Section 6

几何尺寸/Dimensions:

翼展/Span:10.30 m (33.79ft)

长/Length:7.91 m (25.95ft)

高/Height:2.84 m (9.32ft)

机翼面积/Wing Area:13.9 m² (149.6ft²)

发动机和发动机限制/Engine And Engine Limitations:

基本型/Basic:

发动机/Engine:

1 台大陆发动机
 型别: TAE 125-02-125
 EASA 型号合格证号: EASA.E.055
 CAAC 型号认可证号: VTC0158E, 认可数据单版次: 3
 1 Continental Engines
 Model: TAE 125-02-125
 EASA Type Certificate No. EASA.E.055
 CAAC VTC No. VTC 0158E, VTCDs Revision: 3

发动机限制/ Engine Limitations:

在 2300 RPM, 起飞功率 125 kW (168 HP)
 在 2250 RPM, 最大连续功率 114kW (153HP)
 其它发动机限制见文件号为 2010/552“P2010TDI 飞机飞行手册”, 第 2 章。
 Take-Off Power 125 kW (168HP) at 2300 RPM
 Max continuous power 114kW (168HP) at 2250 RPM
 Other engine's limitations are listed in doc. No.2010/552 “P2010 TDI Aircraft Flight Manual”, Section 2.

载荷系数/Load factors:

	襟翼收起/Flap UP	襟翼放下/Flap DOWN
正/Positive	+3.8g	+2.0g
负/Negative	-1.52g	-0.0g

螺旋桨/Propeller :

基本型/Basic:

MT 螺旋桨: MTV-6-R/190-69
 EASA 型号合格证号: EASA.P.094
 CAAC 型号认可证号: VTC0254P, 认可数据单版次: 1
 桨叶数量: 3
 直径: 1.900 m (75 in)–不允许减小
 旋转方向: 顺时针 (驾驶员视角)
 MT Propeller: MTV-6-R/190-69
 EASA Type Certificate No. EASA.P.094
 CAAC VTC No. VTC0254P, VTCDs Revision: 1
 Number of blades: 3
 Diameter: 1.900 m (75in)–No reduction is permitted
 Sense of Rotation: Clockwise (pilot's view)

燃油/Fuel:

JET A-1 (ASTM-D-1655)

柴油 (EN 590)

中华人民共和国国家标准 “3 号喷气燃料” (GB 6537)

更多详细信息见文件号 2010/552“P2010 TDI 飞机飞行手册”。

JET A-1 (ASTM-D-1655)

Diesel (EN 590)

National Standard of the People's Republic of China “No.3 Jet Fuel” (GB 6537)

Refer to doc. No. 2010/552 “P2010 TDI Aircraft Flight Manual” for further details.

燃油容量/Fuel capacities:

2 油箱: 每个 120 升 (31.7 美加仑)

共计: 240 升 (63.4 美加仑)

可用: 231 升 (61 美加仑)

2 Tanks: 120 litres each (31.7 US gallons)

Total: 240 litres (63.4US gallons)

Usable: 231 litres (61US gallons)

滑油/Oil:

发动机: 航空壳牌石油公司超级柴油, 壳牌超级喜力 5W30 或见适用的飞机飞行手册, 第 2 章

齿轮箱: Centurion 齿轮箱滑油 N1, 或见适用的飞机飞行手册, 第 2 章

Engine: Aero Shell Oil Diesel Ultra, Shell Helix Ultra 5W30 or see applicable AFM, Section 2.

Gearbox: Centurion Gearbox Oil N1, or see applicable AFM, Section 2.

滑油容量 / Oil capacities:

共计: 6 升

最少: 4.5 升

Total: 6 litres

Minimum: 4.5 litres

冷却液/Coolant:

水/冷却器保护的更多详细资料见适用的飞机飞行手册, 第 2 章

Water/Cooler Protection for more details see applicable AFM, Section 2

防冰液体/Ice Protection Fluids:

Liqui Moly“Fliess-Fit 柴油”或见适用的飞机飞行手册, 第 2 章

Liqui Moly “Diesel Fliess-Fit” or see applicable AFM, Section 2

空速/Air Speed :

不可超越速度 V_{NE}	164 KCAS
最大结构巡航速度 V_{NO}	130 KCAS
设计机动速度 V_A	119 KCAS
使用机动速度 V_O	119 KCAS

最大襟翼展开速度 V_{FE}	92 KCAS LND 101 KCAS TO
Never exceed speed V_{NE}	164 KCAS
Maximum Structural Cruising Speed V_{NO}	130 KCAS
Design Manoeuvring speed V_A	119 KCAS
Operating Manoeuvring speed V_O	119 KCAS
Maximum flaps extended speed V_{FE}	92 KCAS LND 101 KCAS TO

最大使用升限/Maximum Operating Altitude :

18000 英尺
18,000 ft

重心范围/Centre of Gravity Range:

前限: 基准后 0.275m (19% MAC) , 最高 1000Kg
基准后 0.330m (23%MAC) , 最高 MTOW
Forward Limit:
0.275 m (19% MAC) behind datum up to 1000Kg
0.330 m (23% MAC) behind datum up to MTOW
后限: 基准后 0.454 m (32% MAC)
Aft Limit:
0.454 m (32% MAC) behind datum
平均气动弦 1.378 m (54.2 in)
Mean Aerodynamic Chord is 1.378 m (54.2 in)

全天候的运行能力/All-weather Operations Capability:

昼间/夜间-目视飞行规则、仪表飞行规则
参考文件号为 2010/552 的飞机飞行手册第 2 章中的 KOEL
禁止在预知或实际的结冰条件下飞行
Day/Night-VFR, IFR
Refer to KOEL contained in the AFM, doc. No.2010/552, Section 2.
Flight into expected or actual icing conditions is prohibited

最大重量/Maximum Weights:

最大起飞/Max Take-Off :1160 kg (2557 lb)
最大着陆/Max Landing : 1160 kg (2557 lb)

测量基准/Datum:

与机翼前缘相切的垂直平面
Vertical plane tangent to wing leading edge

水平测量措施/Leveling Means:

座椅滑轨支撑横梁（见文件号为 2010/552 的“P2010 TDI 飞机飞行手册”，第 6 章程序）

seat track supporting beams (see procedure in doc. No. 2010/552“P2010 TDI Aircraft Flight Manual”, Section 6)

最小飞行机组/Minimum Flight Crew:

1 人

1

最大客座数/Maximum Passenger Seating Capacity:

3 人

3

最大行李/货物装载/Maximum Baggage/Cargo Loads:

最大允许装载: 40 kg (88 lb)

位置: 距基准 1.56 m (61.41 in)

Max Allowable Load: 40 kg (88 lb)

Location: 1.56 m (61.41 in) from datum

操纵面运动范围/Control surface deflections:

安定面: $17^{\circ} \pm 2^{\circ}$ 俯仰上 / $6^{\circ} \pm 2^{\circ}$ 俯仰下

安定面配平调整片: $8^{\circ} \pm 2^{\circ}$ 下 / $6^{\circ} \pm 2^{\circ}$ 上

副翼: $19^{\circ} \pm 2^{\circ}$ 上 / $14^{\circ} \pm 2^{\circ}$ 下

方向舵: $25^{\circ} \pm 2^{\circ}$ 左 / $25^{\circ} \pm 2^{\circ}$ 右

方向舵配平调整片: $20^{\circ} \pm 2^{\circ}$ 左 / $20^{\circ} \pm 2^{\circ}$ 右

襟翼: 0° 完全收起 / $40^{\circ} \pm 1^{\circ}$ 完全放下

Stabilator: $17^{\circ} \pm 2^{\circ}$ to pitch up / $6^{\circ} \pm 2^{\circ}$ to pitch down

Stabilator Trim Tab: $8^{\circ} \pm 2^{\circ}$ downward / $6^{\circ} \pm 2^{\circ}$ upward

Aileron: $19^{\circ} \pm 2^{\circ}$ upward / $14^{\circ} \pm 2^{\circ}$ downward

Rudder: $25^{\circ} \pm 2^{\circ}$ left / $25^{\circ} \pm 2^{\circ}$ right

Rudder Trim Tab: $20^{\circ} \pm 2^{\circ}$ left / $20^{\circ} \pm 2^{\circ}$ right

Flaps: 0° Fully Retracted / $40^{\circ} \pm 1^{\circ}$ Fully Extended

机轮和轮胎/Wheels and Tyres:

前机轮轮胎尺寸: 5.00-5, Type III

主机轮轮胎尺寸: 6.00-6, Type III

批准的型号和等级见文件号为 2010/553 的飞机维护手册

Nose Wheel Tyre Size: 5.00-5, Type III

Main Wheel Tyre Size: 6.00-6, Type III

For approved Types and rating see AMM, doc No. 2010/553

有效序列号/ Serial Numbers Eligible:

序列号 100 及以后（见注释 1）

S/N100 to subsequent (See Note 1)

4. 使用和维护技术资料/Operating and Service Instructions

飞行手册/Flight Manual:

文件号 2010/552“P2010 TDI 飞行手册”最后版本。

Doc. No. 2010/552 “P2010 TDI Aircraft Flight Manual” Last issue.

技术手册/Technical Manual;

文件号 2010/553“P2010 TDI 飞机维护手册”最后版本；

适航限制在 ATA 第 4 章。

Doc. No. 2010/553 “P2010 TDI Aircraft Maintenance Manual” Last issue;

Airworthiness Limitations are reported in ATA chapter 4.

备件目录/Spare Parts Catalogue:

文件号 2010/638“P2010 TDI 图解零件目录”最后版本。

Doc. No. 2010/638 “P2010 TDI Illustrated Parts Catalogue” Last issue.

工具及数量/Instruments and aggregates:

文件号 2010/553“P2010 飞机维护手册”最后版本。

Doc. No. 2010/553 “P2010 Aircraft Maintenance Manual” Last issue.

5. 注释/Notes

注释/NOTE 1:

制造商的合格序列号/Manufacturer’s eligible serial numbers:

由 C.A. Tecnam S.P.A.根据 EASA 生产许可证 IT.21G.0032 生产的飞机的序列号：100 及以后序列号（当安装了 MOD2010/162 时- EASA 批准 10074522）。

S/N 100 to subsequent (when MOD2010/162 is installed - EASA approval 10074522) for A/C manufactured by C.A. Tecnam S.P.A. under certificate EASA production certificate IT.21G.0032.

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