

型号认可证数据单

TYPE VALIDATION CERTIFICATE DATA SHEET

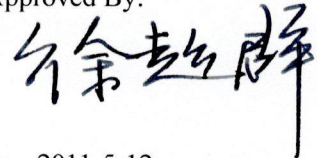
编号/No: VTC0254P

版次/Revision: 1

型号/Type:

MVT-6- ()

批准人/Approved By:



日期/Date: 2011-5-12

本数据单是型号认可证(编号: VTC0254P)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: VTC0254P), 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:

MT-Propeller Entwicklung GmbH
Flugplatzstraße 1
94348 Atting
Germany

有效页清单/List of effective pages :

页数/ Pages	1	2	3	4	5	6	7								
版次/Revision	1	1	1	1	1	1	1								

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: VTC0254P, 版次: 1 颁发日期: 2011年5月12日	EASA TCDS No.P.094, Issue:02, Date: 29 August 2008
历史 History	编号: VTC159P、版次: 0 颁发日期: 2005年2月3日	LBA-Germany 32.130/57, Issue: 5, Date: 11 August 2002

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: 欧洲航空安全局/EASA

4. 型号合格证持有人/Type Certificate Holder: MT-Propeller Entwicklung GmbH
Flugplatzstraße 1
94348 Atting
Germany
设计组织批准号/ Design Organisation Approval No.:EASA.21J.020

5. 制造厂/Manufacturer: MT-Propeller Entwicklung GmbH

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:

审定基础为1990年8月18日生效的14 CFR 35部, 35-1到35-6修正案/14 CFR Part 35, as amended by 35-1 through 35-6, effective 18 August 1990

注/Note: 在欧洲航空安全局建立之前, 首次申请是向德国民航局提出的。使用的适航标准是依照申请当时的德国法规建立。最初的适航标准是1980年10月14日生效的14 CFR 35部35-1到35-5修正案, 更新到1990年8月18日生效的14 CFR 35部35-6修正案是在2002年7月24日完成(德国民航局数据单号为32.130/57 第4版)。/First application was made to LBA-Germany before EASA was established. The applicable airworthiness standards were established in accordance with the rule in Germany at the time of application. Initial airworthiness standard was 14 CFR Part 35 Amendment 35-5, effective 14 October 1980. Update to 14 CFR Part 35 Amendment 35-6, effective 18 August 1990, was made on 24 July 2002 (LBA-Germany Type Certificate Data Sheet No. 32.130/57 issue 4).

B. 技术特性/Technical Characteristics

1. 型号设计定义/Type Design Definition

MTV-6螺旋桨是通过主要的装配图样和相关的部件目录来定义的: /The MTV-6 propeller model is defined by a main assembly drawing and associated parts list:

MTV-6-(*) “恒速” / MTV-6-(*) “Constant Speed”:

图号/Drawing No.: P-085-() 1985年9月17日/dated 17 September 1985 (*)

部件目录号/Parts List No.: S-009-() 1985年9月20日/dated 20 September 1985 (*)

MTV-6-(*)-C-F “恒速顺桨” / “Constant Speed and Feather”:

图号/Drawing No. : P-430-() 1996年11月6日/dated 06 November 1996 (*)

部件目录号/Parts List No. S-071-() 1996年11月8日/dated 08 November 1996 (*)

MTV-6-(*)-C-F -R(M) “恒速顺桨和反桨(Mühlbauer系统)” / “Constant Speed, Feather, and Reverse (System Mühlbauer)”:

图号/Drawing No.: P-715-() 2000年10月9日/dated 09 October 2000 (*)

部件目录号/Parts List No. : S-125-() 2000年10月9日/dated 09 October 2000 (*)

注/Note:

(*) 四种形式的桨毂安装盘可用/ Four versions of hub flange are available:

- A = 螺栓环形直径80毫米, 7/16英寸螺栓/ Bolt circle diameter 80 mm, 7/16 inch bolts

- C = AS-127-D, SAE No. 2 mod., 7/16英寸螺栓/AS-127-D, SAE No. 2 mod., 7/16 inch bolts

- D = ARP-502, 1 型/ ARP-502, Type 1

- F = AS-127-D, SAE No. 2 mod., 3/8英寸螺栓/AS-127-D, SAE No. 1 mod., 3/8 inch bolts

- P = 除了没有销子和使用A型桨毂的定位孔外其他等同于D型桨毂/Identical to D-flange except without dowels and uses pilot bore of A flange

对于对准中心/for centering

- R =除了使用1/2英寸螺栓外等同于A型桨毂/Identical to A-flange except uses 1/2 inch bolts

(*) 或者以后批准的版本。版本号之后, 图号或者部件目录号包括对应的版本字母, 例如从P-085到 P-085-A /Or later approved revision. Following a revision, the Drawing No. or the Parts List No. includes the corresponding revision letter, e.g. from P-085 to P-085-A.

2. 描述/Description

本螺旋桨为三叶可变距螺旋桨, 带有液压驱动桨距变换装置提供“恒速”、“顺桨”、“反桨”操作模式。桨毂由铝合

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金铣成。桨叶是带有复合材料外壳的层压木质结构。叶尖由不锈钢腐蚀防护套保护。可选设备包括整流罩和防冰装置。/3-blade variable pitch propeller with a hydraulically operated blade pitch change mechanism providing the operation mode “Constant Speed”, “Feather” and “Reverse”. The hub is milled out of aluminum alloy. The blades have a laminated wood structure with a composite fiber cover. The leading edge of the blades is protected by a stainless steel erosion protection sheath. Optional equipment includes spinner and ice protection.

3. 设备/ Equipment

整流罩：参见MT螺旋桨第13号服务通告/Spinner: refer to MT-Propeller Service Bulletin No. 13

控制器：参见MT螺旋桨第14号服务通告/Governor: refer to MT-Propeller Service Bulletin No. 14

防冰装置：参见MT螺旋桨第15号服务通告/Ice Protection: refer to MT-Propeller Service Bulletin No. 15

4. 尺寸/ Dimensions

螺旋桨直径140厘米至203厘米。/Propeller diameter: 140 cm to 203 cm

5. 重量/ Weight

基于螺旋桨设计构型。/Depending on propeller-Design Configuration

“恒速”：大约14公斤。/“Constant Speed”: approx. 14 kg

“恒速、顺桨”：大约17.5公斤。/“Constant Speed, Feather”: approx. 17.5 kg

“恒速、顺桨、反桨”：大约18.5公斤。“Constant Speed, Feather, Reverse”: approx. 18.5 kg

6. 桨毂/桨叶组合/Hub/Blade-Combinations

桨毂/Hub	桨叶/Blades
MTV-6-()	-03, -04, -05, -06, -07, -08, -09, -12, -16, -23, -28, -31 -49, -51, -64, -69, -80, -81, -106, -112, -122, -123, -125, -129, -312

7. 控制系统/Control System

螺旋桨控制器列在第14号MT螺旋桨服务通告中/Propeller governors as listed in MT-Propeller Service Bulletin No. 14.

8. 发动机适用性/ Adaptation to Engine

桨毂安装盘以螺旋桨名中的一个字母定义(参见注VI.6)/Hub flanges as identified by a letter in the propeller designation (refer to note VI.6)

9. 旋转方向/Direction of Rotation

旋转方向(朝飞行方向看)以螺旋桨名称中的一个字母代码定义(参见注VI.6)/Direction of rotation (viewed in flight direction) as identified by a letter-code in the propeller designation (refer to note VI.6)

C. 运行限制/ Operational Limits

1. 最大起飞推力和速度/Maximum Take Off Power and Speed

	直径/Diameter			
	140~160 厘米/cm	140~175 厘米/ cm	140~190 厘米/ cm	140~203 厘米/ cm
最大起飞推力/Max. Take Off Power	134 千瓦/ kW	120千瓦/kW	101千瓦/ kW	127千瓦/kW
最大起飞速度/Max. Take Off Speed	2700 转每分/ rpm	2800 转每分/ rpm	2500 转每分/ rpm	2300 转每分/ rpm

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2. 最大连续推力和速度/ Maximum Continuous Power and Speed

	直径/Diameter			
	140~160 厘米/cm	140~175 厘米/ cm	140~190 厘米/ cm	140~203 厘米/ cm
最大连续推力/Max. Continuous Power	134 千瓦/ kW	120千瓦/kW	101千瓦/ kW	127千瓦/kW
最大连续速度/Max. Continuous Speed	2700 转每分/ rpm	2800 转每分/ rpm	2500 转每分/ rpm	2300 转每分/ rpm

3. 螺旋桨桨距角/Propeller Pitch Angle

在75%半径处测量, 从-20度到+86度/ From -20° up to +86° measured at 75% radius station

D. 操作和服务指南/Operating and Service Instructions

液压控制可变距螺旋桨操作和安装手册/Operation and Installation Manual for hydraulically controlled variable pitch propeller	编号E-124, 2011年11月29日颁发。/No. E-124 Issue 29 Nov. 2001 (*)
可反桨的液压控制可变距螺旋桨操作和安装手册-反桨系统 (M) /Operation and Installation Manual for reversible hydraulically controlled variable pitch propeller - reverse-Systems (M)	编号E-504, 2000年4月12日颁发。/ No. E-504 Issue 12 Apr 2000 (*)
液压控制可变距螺旋桨大修手册和部件清单/Overhaul Manual and Parts List for hydraulically controlled variable pitch propeller	编号E-220, 2000年11月29日颁发。/No. E-220 Issue 29 Nov. 2001 (*)
液压控制可变距螺旋桨大修手册和部件清单/Overhaul Manual and Parts List for hydraulically controlled variable pitch propeller	编号E-519, 2000年10月10日颁发。/No. E-519 Issue 10 Oct. 2000 (*)
服务通告/Service Bulletins	如现行服务通告列表中所示。/as noted in the current List of Service Bulletins

(*) 或以后批准的版本/or later approved revision

E. 注释/ Notes

1. 必须证明螺旋桨对于给定飞机/发动机组合的适用性在飞机型号合格证范围内。/The suitability of the propeller for a given aircraft/engine-combination must be demonstrated within the scope of the type certification of the aircraft.
2. 本螺旋桨的某些型号可以加装启动桨距锁以防止在某一给定螺旋桨速度下发生顺桨。/Some models of this propeller can incorporate a start pitch lock which may prevent propeller feathering below a given propeller speed.
3. 制造商推荐的大修间隔在第1号MT螺旋桨服务通告中列出。/ The overhaul intervals recommended by the manufacturer are listed in MT-Propeller Service Bulletin No. 1.
4. 螺旋桨定速控制单元满足DO160D的要求和飞机的其他要求, 件号为TAE-ECU P/N 02-4610-55001 R1及以后批准的件号。经论证的级别列在第E-124号操作和安装手册中。根据DO 178B C级水平设计和批准相关软件。/Propeller constant speed control unit TAE-ECU P/N 02-4610-55001 R1, or later approved part number, complies with the requirement of DO 160D and the additional requirements of the airframe. The demonstrated levels are listed in the Operation and Installation Manual No. E-124. The software is designed and approved according to DO 178B Level C.
5. EASA型号合格证和型号合格证数据单编号P.094代替原德国民航局颁发的型号合格证和型号合格证数据单编号32.130/57。/EASA Type Certificate and Type Certificate Data Sheet No.P.094 replace LBA Germany Type Certificate and Type Certificate Data Sheet No. 32.130/57

6. 螺旋桨命名系统/Propeller designation system:

Hub / Blade

MT V - 6 - () () () () () / () () 187 - 129 ()
1 2 3 4 5 6 7 8 9 / 1 2 3 4 5

桨毂/Hub

1 MT螺旋桨公司/MT-Propeller Entwicklung GmbH

2 可变桨距螺旋桨/Variable pitch propeller

3 螺旋桨类型定义/Identification of propeller type

4 桨毂安装盘类型字母代码

- A = 螺栓环形直径80毫米, 7/16英寸螺栓/ Bolt circle diameter 80 mm, 7/16 inch bolts
- C = AS-127-D, SAE No. 2 mod., 7/16英寸螺栓/AS-127-D, SAE No. 2 mod., 7/16 inch bolts
- D = ARP-502, 1 型/ ARP-502, Type 1
- F = AS-127-D, SAE No. 2 mod., 3/8英寸螺栓/AS-127-D, SAE No. 1 mod., 3/8 inch bolts
- P = 除了没有销子和使用A型桨毂的定位孔外其他等同于D型桨毂/Identical to D-flange except without dowels and uses pilot bore of A flange

对于对准中心/for centering

- R = 除了使用1/2英寸螺栓外等同于A型桨毂/Identical to A-flange except uses 1/2 inch bolts

5 配重字母代码/Letter code for counterweights:

- 空白表示无配重或者产生减小桨距的桨距变化力的小型配重/blank = no or small counterweights for pitch change forces to decrease pitch

- C表示产生增大桨距的桨距变化力的配重/C = counterweights for pitch change forces to increase pitch

6 顺桨装置字母代码/Letter code for feather provision:

- 空白代表没有可能的顺桨位置/blank = no feather position possible
- F代表允许的顺桨位置/F = feather position allowed

7 反桨装置字母代码/Letter code for reverse provision:

- 空白代表没有可能的反桨位置/blank = no reverse position possible
- R代表允许的反桨位置/R = reverse position allowed

8 反桨系统字母代码/Letter code for reversing system: - M = System Mühlbauer

9 桨毂设计变化的字母代码: /Letter code for hub design changes:

- 小写字母, 不影响互换性的更改/small letter for changes which do not affect interchangeability
- 大写字母, 影响互换性的更改/capital letter for changes which affect interchangeability

桨叶/Blade

1 桨距变化销钉的位置字母代码/Letter code for position of pitch change pin:

- 空白表示产生可减小桨距的桨距变化力的销钉位置/blank = pin position for pitch change forces to decrease pitch
- C表示表示产生可增大桨距的桨距变化力的销钉位置/C = pin position for pitch change forces to increase pitch
- CF表示允许顺桨, 增大桨距的桨距变化力的销钉位置/CF = pin position to allow feather; pitch change forces to increase pitch
- CR表示允许反桨, 增大桨距的桨距变化力的销钉位置/CR = pin position to allow reverse; pitch change forces to increase pitch
- CRF表示顺桨和反桨, 增大桨距的桨距变化力的销钉位置/CFR = pin position to feather and reverse; pitch change forces to increase pitch

2 旋转方向/Direction of rotation:

- 空白表示右转拉进式螺旋桨/blank = right-hand tractor
- RD表示右转推进式螺旋桨/RD = right-hand pusher
- L表示左转拉进式螺旋桨/L = left-hand tractor
- LD表示左转推进式螺旋桨/LD = left-hand pusher

3 螺旋桨直径以厘米为单位/Propeller diameter in cm

4 表示桨叶设计定义/Identification of blade design

5 桨叶设计更改字母代码/Letter code for blade design changes:

- 小写字母表示不影响桨叶互换性的更改/ small letter for changes which do not affect interchangeability of blade set
- 大写字母表示影响桨叶互换性的更改/capital letter for changes which affect interchangeability of blade set

结束

END