TYPE-CERTIFICATE DATA SHEET

No. P.049

for Propeller
MTV-34 series

Type Certificate Holder
MT-Propeller Entwicklung GmbH

Flugplatzstraße 1
94348 Atting
Germany

For Models:
MTV-34-1

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I. General

1. Type / Models

MTV-34 / MTV-34-1

2. Type Certificate Holder

MT-Propeller Entwicklung GmbH
Flugplatzstraße 1
94348 Atting
Germany

Design Organisation Approval No.: EASA.21J.020

3. Manufacturer

MT-Propeller Entwicklung GmbH

4. Date of Application

MTV-34-1: 30 October 2012

5. EASA Type Certification Date

MTV-34-1: 24 May 2013

II. Certification Basis

1. Reference Date for determining the applicable airworthiness requirements:

30 October 2012

2. EASA Certification Basis

2.1. Airworthiness Standards

MTV-34-1	Wooden Blades: -200, -201, -202, -203, -204, -205	CS-22 Amendment 2 Subpart J, dated 5 March 2009, except CS22.1939 CS-P 390(b) and CS-P 390(c), dated 16 November 2006

2.2. Special Conditions (SC): None

2.3. Equivalent Safety Findings (ESF): None

2.4. Deviations: None

III. Technical Characteristics

1. Type Design Definition

The MTV-34 series propeller models are defined by a main assembly drawing and an associated parts list:

MTV-34-1-(*1) “Ground Adjustable or Constant Speed”:
Drawing No. P-1270-C dated 19 April 2012 (*2)
Parts List No. S-194-C dated 18 January 2013 (*2)

Note:

(*1) Two versions of hub flanges are available:
- A = 6x 7/16”-20UNF on a 80mm bolt circle diameter
- R = Identical to flange A above except for the bolts which are ½ inch size

(*2) Or later approved revision. Following a revision, the Drawing No. or the Parts List No. includes the corresponding revision letter, e.g. from P-1270-C in P-1270-D.

2. Description

3-blade ground-adjustable or variable pitch propeller with a hydraulically operated blade pitch change mechanism providing the operation mode “Constant Speed”. The hub is milled out of aluminium alloy. The blades have a laminated wood structure with a composite fibre cover. The leading edge of the blade is protected by a stainless steel erosion protection sheath.
Optional equipment includes spinner.

3. Equipment

Spinner: according to MT-Propeller Service Bulletin No. 13
Governor: according to MT-Propeller Service Bulletin No. 14

4. Dimensions

Propeller diameter: 150 cm to 178 cm

5. Weight

Maximum: approx. 9.5 kg

6. Hub / Blade Combinations

Hub	Blades
MTV-34-1	-200, -201, -202,-203, -204, -205

7. Control System

Propeller governors as listed in MT-Propeller Service Bulletin No. 14.

8. Adaptation to Engine

Hub flanges as identified by a letter-code in the propeller designation (see VI.5.)

9. Direction of Rotation

Direction of rotation (viewed in flight direction) as identified by a letter-code in the propeller designation (see VI.5.)

IV. Operating Limitations

1. Approved Installations

This propeller is certified for installation on Powered sailplanes, Very Light Aeroplanes and aircraft which can accept a propeller certified according to CS-22 Subpart J. Acceptable propeller/engine/aircraft combinations and the corresponding limitations are listed in MT-Propeller Service Bulletin No. 16 (see also note VI.3).

2. Maximum Take Off Power and Speed

Max. Take Off Power (kW)	Max. Take Off Speed (propeller rpm)	Diameter (cm)
86	2560	150 to 178 cm
117	2279	150 to 178 cm

3. Maximum Continuous Power and Speed

Max. Continuous Power (kW)	Max. Continuous Off Speed (propeller rpm)	Diameter (cm)
86	2560	150 to 178 cm
117	2279	150 to 178 cm

4. Propeller Pitch Angle

From +3° up to +55° measured at 75% radius station

V. Operating and Service Instructions

Operation, Installation and Maintenance Manual for Ground Adjustable and Hydraulically Controlled Variable Pitch Propeller (Constant Speed Propeller) MTV-33-() MTV-34-()	No. E-2285 (*)
Overhaul Manual and Parts List for Ground Adjustable and Hydraulically Controlled Variable Pitch Propeller (Constant Speed Propeller) MTV-33-() MTV-34-()	No. E-2286 (*)
Standard Practice Manual	No. E-808 (*)
Service Bulletins, Service Letters, Service Instructions	As published by MT-Propeller

(*) latest revision of

VI. Notes

1. The EASA approved Airworthiness Limitations Section of the Instructions for Continued Airworthiness is published in the applicable "Operation, Installation and Maintenance Manual" document, chapter 10.0 "Airworthiness Limitations Section". This ALS section is empty because no life limit is necessary for these models.

2. The overhaul Intervals recommended by the manufacturer are published in MT-Propeller Service Bulletin No. 1.

3. This propeller is certified for installation on Powered sailplanes, Very Light Aeroplanes and aircraft which can accept a propeller certified according to CS-22 Subpart J. The suitability of a propeller for a given aircraft/engine combination must be demonstrated within the scope of the type certification of the aircraft.

4. Propeller designation system:

			Hub				/	Blade				
MT	V	-	34	-	1	- ( )	/	( )	175	- 200	-	( )
1	2		3		4	5	/	1	2	3		4

Hub

1 MT-Propeller Entwicklung GmbH

2 Variable pitch propeller

3 Identification of propeller type

4 Identification of propeller model

5 Letter code for flange type (A or R as described in III. 1. Above)

Blade

1 Letter code for direction of rotation and installation
-blank = right-hand tractor
-RD = right-hand pusher
-L = left-hand tractor
-LD = left-hand pusher

2 Diameter in cm

3 Identification of blade design

4 Letter code for blade design changes
-small letter for changes which do not affect interchangeability of blade set
-capital letter for changes which affect interchangeability of blade set

SECTION: ADMINISTRATIVE

I. Acronyms and Abbreviations

CFR Code of Federal Regulations
LBA Luftfahrt Bundesamt

II. Type Certificate Holder Record

As per I.2

III. Change Record

TCDS Issue	Date	Changes	TC Issue Date
Issue 01	24 May 2013	Initial issue following Type Certification of the MTV-34 series propeller	24 May 2013
Issue 02	13 December 2018	-Include approval of an additional power rating, reference EASA approval No. 10067991 -Update to the latest EASA TCDS format	
Issue 03	30 March 2022	-Include approval of an additional power rating and additional type of flange, reference EASA approval No. 10078930	

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