TCDS No.: P.025 V 500 series propellers
Issue: 02 Date: 15 December 2022

EASA

TYPE-CERTIFICATE DATA SHEET

No. P.025

for

V 500 series propellers

Type Certificate Holder

Avia Propeller Ltd.

Beranových 65/666 199 00 Praha 9 - Letňany Czech Republic

For Models: V 500 V 500A



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I. General

1. Type / Model

V 500 / V 500A

2. Manufacturer

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

3. Date of Application

V 500	V 500A
15.01.1964	30.03.1973

4. EASA Type Certification Date

V 500	V 500A
20.03.1964	30.04.1973

Type certification of the V 500 series propeller model has been covered previously by Czech Republic Type certificate No.64 001, and partly by No.73-03.

II. Certification Basis

1. State of Design Authority Certification Basis

Czech Republic

2. Reference Date for determining the applicable airworthiness requirements

15 January 1964 (for later updated amendments 30 March 1973 was used)

3. EASA Certification Basis

3.1. Airworthiness Standards

British Civil Airworthiness Requirements (BCAR), Section C, Issue 5, dated 1st July, 1962

Later compliance with FAR Part 35-2 dated March 04, 1967 had been shown.

Note:

Application was made to CAA - Czech Republic (former Czechoslovakia) before EASA was established. The applicable airworthiness standards were established in accordance with the rule in Czech Republic (former Czechoslovakia) at the time of application.



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3.2. Special Conditions

None

3.3. Equivalent Safety Findings

None

3.4. Deviations

None

III. Technical Characteristics

1. Type Design Definition

The V 500 propeller model covers the following design configuration. Design configuration is defined by a main assembly drawing and an appropriate parts list.

V 500 and V500A

Design Configuration "Constant Speed"

Drawing No. 060-0000 dated June 9, 2009 (*1)

Parts List No. R-060-0000 dated June 8, 2009 (*1)

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

2. Description

2-blade variable pitch propeller with a hydraulically operated blade pitch change mechanism providing the operation mode "Constant Speed". The hub is milled out of steel and blades are milled out of aluminum alloy.

Optionally the propeller may have installed a spinner.

3. Equipment

Spinner: according to Avia Propeller Service Bulletin No. 2

Governor: according to Avia Propeller Service Bulletin No. 3

4. Dimensions

Propeller diameter: max. 200 cm

5. Weight

Propeller-Design Configuration "Constant Speed": approx. 26 kg

6. Hub / Blade-Combinations

Hub	Blade-Type
V 500()	-1690, -1905, -2000



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7. Control System

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

8. Adaptation to Engine

Flange, bolt spacing diameter 120 mm.

9. Direction of Rotation

Left-hand tractor (viewed in flight direction).

IV. **Operating Limitations**

1. Maximum Take Off Power and Speed

184 kW at 2750 min⁻¹ - for propeller V500 162 kW at 2750 min⁻¹ - for propeller V500A

2. Maximum Continuous Power and Speed

184 kW at 2750 min⁻¹ - for propeller V500 162 kW at 2750 min⁻¹ - for propeller V500A

3. Propeller Pitch Angle

From +13° to +35° measured at reference station

V. Operating and Service Instructions

Operation and Installation Manual	P/N E-1648 Date of Latest Issue/Revision Issue 1, June 18, 2009 (*)
Overhaul Manual	P/N E-1649 Date of Latest Issue/Revision Issue 1, June 18, 2009 (*)
Overhaul Manual for Metal Blades	P/N EN-1370 Date of Latest Issue/Revision Issue 2, March 17, 2009 (*)
Service Bulletins	as noted in the current List of Service Bulletins

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

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VI. Notes

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.

2. The overhaul intervals recommended by the manufacturer are listed in Avia Propeller Service Bulletin No. 1.

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

3. EASA Type Certificate and Type Certificate Data Sheet No.P.025 replace CAA - Czech Republic Type Certificate and Type Certificate Data Sheet No.64 001 and No.73-03.

SECTION: ADMINISTRATIVE

I. Acronyms and Abbreviations

n/a

II. Type Certificate Holder Record

n/a

III. Change Record

TCDS Issue	Date	Changes	TC issue
Issue 01	30 June 2009	Initial Issue	Initial Issue, 30 June 2009
Issue 02	15 December 2022	Addition of a sentence to Note 2 in Chapter VI. Notes: The EASA approved Airworthiness Limitations Section of the Instructions for Continued Airworthiness is published in the applicable "Propeller Operation and Installation Manual" document, chapter Airworthiness Limitations. (Major Change approval 10080692)	

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