European Aviation Safety Agency

EASA

TYPE-CERTIFICATE
DATA SHEET

Number : P.025
Issue : 01
Date : 30 June 2009
Type : Avia Propeller Ltd.
V 500 series propellers

Variants
V 500
V 500A

List of effective Pages:

Page	1	2	3	4	5	6											
Issue	1	1	1	1	1	1											

Intentionally left blank

I. General

1. Type/Variants

V 500/V 500A

2. Type Certificate Holder

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

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

3. Manufacturer

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

4. Date of Application

V 500	V 500A
15.01.1964	30.03.1973

5. Reference Date for determination of the applicable requirements

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

6. 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. 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.

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

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. Operational Limits

1. Propeller Speed:

max. 2750 min^{-1}

2. Max.Take-Off Power:

184 kW for propeller V500
162 kW for propeller V500A

3. Max.Continous Power:

184 kW for propeller V500
162 kW for propeller V500A

4. 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 Overhaul Manual for Metal Blades	P/N E-1649 Date of Latest Issue/Revision Issue 1, June 18, 2009 (*) 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

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.

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.
