TYPE-CERTIFICATE DATA SHEET

No. P.020

For Propeller
AV-804 series propellers

Type Certificate Holder
Avia Propeller Ltd.
Beranových 65/666
199 00 Praha 9
Czech Republic

For Models:
AV-804-1

Intentionally left blank

TABLE OF CONTENTS

I. General

1. Type/ Models
AV-804 / AV-804-1

2. Type Certificate Holder
Avia Propeller Ltd.
Beranových 65/666
199 00 Praha 9
Czech Republic

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

3. Manufacturer
Avia Propeller Ltd.
Beranových 65/666
199 00 Praha 9
Czech Republic

4. Date of Application

AV-804-1
20 May 2015

5. EASA Type Certification Date

AV-804-1
08 February 2018

II. Certification Basis

1. Reference Date for determining the applicable airworthiness requirements
20 May 2015

2. EASA Certification Basis

2.1. Airworthiness Standards
CS-P Amendment 1 as published with ED Decision 2006/09/R dated 16 November 2006 except the CS-P 550 and CS-P 560 as allowed by CS-P 10(b), see note 1.

2.2. Special Conditions
None

2.3. Equivalent Safety Findings
None

2.4. Deviations
None

III. Technical Characteristics

1. Type Design Definition

Each design configuration is defined by a main assembly drawing and an appropriate parts list.

The AV-804-1-( )-C-F-R(W) propeller model covers the following design configurations.
Design Configuration “Constant Speed, Feather, Reverse (System Walter) ”
Drawing No. 117-0000 dated May 5, 2015 (*1)
Parts List No. R-117-0000 dated May 5, 2015 (*1)
(*1) effective is the declared issue or a later approved revision.

2. Description

The AV-804-1 propeller model is 4-blade variable pitch propeller with a hydraulically operated blade pitch change mechanism providing the operation “Constant speed”, “Feather”, and “Reverse”.
The hub is milled out of aluminium alloy.
The blades are forged and milled out of aluminium alloy.
Optionally the propeller may have installed a spinner and ice protection equipment.

3. Equipment

Spinner: according to Avia Propeller Service Bulletin No. 2M and all later approved versions.

Governor: according to Avia Propeller Service Bulletin No. 3N and all later approved versions.

Ice Protection: according to Avia Propeller Service Bulletin No. 4J and all later approved versions.

4. Dimensions

Propeller diameter: max. 2500 mm (98,4 in)

5. Weight

AV-804-1 Propeller Design Configuration
“Constant speed, Feather, Reverse”,
propeller spinner incl.: approx.. 80,0 kg (176,4 lb)

6. Hub/ Blade- Combinations

Hub	Blade - Type
AV-804-1	-441

7. Control System

Propeller governors as listed in Avia Propeller Service Bulletin No. 3N and all later approved versions.
All governors and propeller control systems must be approved as part of the aircraft installation regardless of manufacturer.

8. Adaptation to Engine

ARP 880 Flange.

9. Direction of Rotation

Right-hand tractor (viewed in flight direction)

IV. Operating Limitations

1. Approved Installations

Specific installation not yet defined. The general suitability of all AV-804 propeller models for a given aircraft/engine combination must be demonstrated within the scope of the type certification of the aircraft.

Refer to Avia Propeller Service Bulletin No.5G and all later approved versions.

2. Maximum Take Off Power and Speed

635 kW (850 HP)
1950 RPM

3. Maximum Continuous Power and Speed

635 kW (850 HP)
1950 RPM

4. Propeller Pitch Angle

Maximum pitch change range 105° - measured at 75% radius station

V. Operating and Service Instructions

Operation and Installation Manual	P/N EN-1320 Date of Latest Issue/Revision Issue 4, Rev. July 27, 2018 (*)
Overhaul Manual	P/N EN-1291 Date of Latest Issue/Revision Issue 4, Rev. June 25, 2018 (*)
Overhaul Manual for Metal Blades	P/N EN-1370 Date of Latest Issue/Revision Issue 5, Rev. March 12, 2018 (*)
Service Bulletins	as noted in the current List of Service Bulletins

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

VI. Notes

1. This Propeller has been certificated in accordance with CS-P subparts A, B and C. Compliance with the requirements of Subpart D, which is specific to each aircraft installation, has not yet been demonstrated.

2. The EASA approved Airworthiness Limitations Section (ALS) of the Instructions for Continued Airworthiness is published in the applicable "Propeller Operation and Installation Manual" document, chapter 1 "Airworthiness Limitations".

3. The suitability of a propeller for certain aircraft/engine combination must be demonstrated within the scope of the type certification of the aircraft.

4. Propeller designation system:

Hub /Blade
AV - 804 - 1 - E - ( ) - ( ) - ( ) - ( ) - ( ) / ( ) ( ) 250 – 441 ( )
1 2 3 4 5 6 7 8 9 10 11 1 2 3 4 5

Hub

1 Avia Propeller (manufacturer)

2 V - Variable Pitch Propeller

3 Blade Root Type

4 Number of Blade

5 No. of variant of the propeller model

6 code letter for flange type
- B = AS-127-D, SAE No.2 mod., ½ inch - 20 UNF bolts
- D = ARP 502
- E = ARP 880
- K = M14 Flange

7 code letter for counterweights
- blank = no or small counterweights for pitch change forces to decrease pitch
- C = counterweights for pitch change forces to increase pitch

8 code letter for feather provision
- blank = no feather position possible
- F = feather position installed

9 code letter for reverse provision
- blank = no reverse position possible
- R = reverse position installed

10 code letter for reverse system
(W) = System Walter

11 code letter for design changes
small letter for changes which do not affect interchangeability
capital letter for changes which restrict or exclude interchangeability

Blade

1 code letter for position of pitch change pin
blank = pitch change pin position for pitch change forces to decrease pitch
C = pitch change pin position for pitch change forces to increase pitch
CF = pitch change pin position for feather provision; pitch change forces to increase pitch
CR = pitch change pin position for reverse provision; pitch change forces to increase pitch
CFR = pitch change pin position for feather and reverse provision; pitch change forces to increase pitch

2 code letter for blade design and installation
blank = right-hand tractor
RD = right-hand pusher
L = left-hand tractor
LD = left-hand pusher

3 propeller diameter in cm

4 No. of blade type (contains design configuration and aerodynamic data) according to the certified hub/blade – combinations

5 code letter for design changes
small letter for changes which do not affect interchangeability of blade set
capital letter for changes which restrict or exclude interchangeability of blade set

SECTION: ADMINISTRATIVE

I. Acronyms and Abbreviations

n/a

II. Type Certificate Holder Record

Avia Propeller Ltd.

III. Change Record

Issue	Date	Changes	TC issue
Issue 01	08 February 2018	Initial Issue	Initial Issue, 08 February 2019

-END-