



TYPE-CERTIFICATE DATA SHEET

No. P.175

for

V 218 series fixed pitch propellers

Type Certificate Holder

Aleš KŘEMEN

Alšova 118

250 70 Odolena Voda – Dolínek

Czech Republic

For Models:

V 218

V 218 A

V 218 B



Intentionally left blank



TABLE OF CONTENTS

I. General.....	4
1. Type/ Model	4
2. Manufacturer	4
3. Date of Application	4
4. EASA Type Certification Date	4
II. Certification Basis.....	4
1. Airworthiness Standards	4
III. Technical Characteristics	4
1. Type Design Definition	4
2. Description	5
3. Equipment.....	5
4. Dimensions	5
5. Weight	5
6. Hub/ Blade- Combinations	5
7. Control System.....	5
8. Adaptation to Engine	5
9. Direction of Rotation.....	5
IV. Operating Limitations	5
1. Propeller Speed.....	5
2. Maximum Continuous Power:.....	5
3. Propeller Pitch Angle.....	6
V. Operating and Service Instructions	6
VI. Notes	6
SECTION: ADMINISTRATIVE.....	7
I. Acronyms and Abbreviations	7
II. Type Certificate Holder Record	7
III. Change Record	7



I. General

1. Type/ Model

V 218 / V 218A / V218B

2. Manufacturer

Aleš KŘEMEN
Alšova 118
250 70 Odolena Voda – Dolínek
Czech Republic

3. Date of Application

V 218: 10 November 1981
V 218A: 06 August 1984
V 218B: 10 April 1989

4. EASA Type Certification Date

V 218: 16 December 1981
V 218A: 24 August 1984
V 218B: 15 May 1989

Type certification of the V 218 series fixed pitch propeller models has been covered previously by Czech Republic Type certificate No.81-03, Rev.No.3.

The Type Certificate has been transferred from “VZLU, a.s. Czech Republic” to Ales Kremen company on 20 March 2009.

II. Certification Basis

1. Airworthiness Standards

L 8/O, L 8/C (Part C5-4, Schedule 1, Point 2-1)

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 218 series fixed pitch propeller models are defined by a main assembly drawing and parts list:

Drawing No. V218B-000, Rev.0, dated 25 February 2009 [*]
Above mentioned drawing contains the parts list.



[*] Or or later approved revision. Following a revision, the Drawing No. includes the corresponding number of revision, e.g. from V218B-000,Rev.0 to V218B-000,Rev.1.

2. Description

The V218 series propeller is a two blades, fixed pitch propeller constructed of wood composite structure. Leading edges of the propeller are protected against damage. The propeller surface is sprayed with a resistant polyurethane paint to increase lifetime.

The propellers are designed in different versions for piston engines. It is attached to the engine via the propeller hub flange by means of screws.

3. Equipment

None

4. Dimensions

Propeller Diameter: 150 cm

5. Weight

Propeller weight: approx.. 3.4 kg

6. Hub/ Blade- Combinations

N/A (single piece propeller)

7. Control System

N/A (fixed pitch propeller)

8. Adaptation to Engine

Hub flanges as identified by a letter in the propeller designation (refer to note VI.3).

9. Direction of Rotation

Direction of rotation (viewed in flight direction) as identified by a letter-code in the propeller designation (refer to note VI.3)

IV. Operating Limitations

1. Propeller Speed

Max. 2760 min⁻¹

2. Maximum Continuous Power:

55 kW



3. Propeller Pitch Angle

20.5°

V. Operating and Service Instructions

User's manual	UM-218, Rev.0, dated 25 February 2009 [*]
Service Bulletins	as noted in the current List of Service Bulletins

[*] or later approved revision

VI. Notes

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

EASA Type Certificate and Type Certificate Data Sheet No.P.175 replace CAA - Czech Republic Type Certificate and Type Certificate Data Sheet No.81-03, Rev.No.3.

Propeller designation system:

V 218() - () - () - () / ()
1 2 3 4 5 6 7

1 – Propeller type

2 – Propeller model

3 – Propeller diameter in [cm]

4 – Letter code for the propeller sense of rotation / functioning

RT = right hand turning / tractor

LT = left hand turning / tractor

RP = right hand turning / pusher

LP = left hand turning / pusher

5 – Blade pitch in [°] defined to the shape tangent at 0,75 blade radius

6 – Type of propeller hub flange connecting dimensions – defined in type design

7 – Maximum permitted propeller speed in [min⁻¹].
~~~~~



**SECTION: ADMINISTRATIVE**

**I. Acronyms and Abbreviations**

N/A

**II. Type Certificate Holder Record**

N/A

**III. Change Record**

| <b>Issue</b> | <b>Date</b>      | <b>Changes</b>                                                                            | <b>TC issue</b>                 |
|--------------|------------------|-------------------------------------------------------------------------------------------|---------------------------------|
| Issue 01     | 20 March 2009    | Initial Issue                                                                             | Initial Issue,<br>20 March 2016 |
| Issue 02     | 22 February 2016 | Increasing of max. continuous power up to 55 kW<br>and max. propeller speed up to 2760-1. | Initial issue                   |
|              |                  |                                                                                           |                                 |
|              |                  |                                                                                           |                                 |
|              |                  |                                                                                           |                                 |

-END-