TYPE-CERTIFICATE
DATA SHEET

No. P.174

For Propeller
KW-1(x) series propellers

Type Certificate Holder
Aleš KŘEMEN
Vodolská 4, Dolínek
250 70 Odolena Voda
Czech Republic

For Models:
KW-10
KW-15
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I. General

1. Type/ Models
KW-1(x) / KW-10, KW-15

2. Type Certificate Holder
Aleš KŘEMEN
Vodolská 4, Dolínek
250 70 Odolena Voda
Czech Republic

Design Organisation Approval No.: EASA.AP250

3. Manufacturer
Woodcomp Propellers s.r.o.
Vodolská 4, Dolínek
250 70 Odolena Voda
Czech Republic

4. Date of Application

<table>
<thead>
<tr>
<th></th>
<th>KW-10</th>
<th>KW-15</th>
</tr>
</thead>
<tbody>
<tr>
<td>Date</td>
<td>16 November 2010</td>
<td>16 November 2010</td>
</tr>
</tbody>
</table>

5. EASA Type Certification Date

<table>
<thead>
<tr>
<th></th>
<th>KW-10</th>
<th>KW-15</th>
</tr>
</thead>
<tbody>
<tr>
<td>Date</td>
<td>09 September 2011</td>
<td>09 September 2011</td>
</tr>
</tbody>
</table>

II. Certification Basis

1. Reference Date for determining the applicable airworthiness requirements
16 November 2010

2. EASA Certification Basis

2.1. Airworthiness Standards
CS-P Amendment 1 as published with ED Decision 2006/09/R dated 16 November 2006

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 KW-10 propeller model covers the following design configurations.
Design Configuration “Constant Speed”
Drawing No. 10-100-000 dated 03 August 2011 (*1)
Above mentioned drawing contains Parts List

The KW-15 propeller model covers the following design configurations.
Design Configuration “Constant Speed”
Drawing No. 15-100-000 dated 03 August 2011 (*1)
Above mentioned drawing contains Parts List

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

2. Description
KW-1(x) series propeller is 3-blade variable pitch with a hydraulically operated blade pitch change constant speed mechanism. The hub is milled out of aluminium alloy and the blades are made of wood with glass or carbon composite covering layer. The leading edge of the blade is protected by the metal stamping.

3. Equipment

Spinner: according to Aleš KŘEMEN Service Bulletin No. 2.
Governor: according to Aleš KŘEMEN Service Bulletin No. 3.

4. Dimensions

<table>
<thead>
<tr>
<th>Model</th>
<th>Diameter (max)</th>
</tr>
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<tbody>
<tr>
<td>KW-10</td>
<td>201 cm (79 in)</td>
</tr>
<tr>
<td>KW-15</td>
<td>201 cm (79 in)</td>
</tr>
</tbody>
</table>

5. Weight

<table>
<thead>
<tr>
<th>Model</th>
<th>Propeller Design Configuration</th>
<th>Propeller Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>KW-10</td>
<td>“Constant speed”</td>
<td>approx. 27 kg (59.5 lb)</td>
</tr>
<tr>
<td></td>
<td>propeller incl.:</td>
<td></td>
</tr>
<tr>
<td>KW-15</td>
<td>“Constant speed”</td>
<td>approx. 34 kg (75 lb)</td>
</tr>
<tr>
<td></td>
<td>propeller incl.:</td>
<td></td>
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6. Hub/Blade Combinations

<table>
<thead>
<tr>
<th>Hub</th>
<th>Blade - Type</th>
</tr>
</thead>
<tbody>
<tr>
<td>KW-10</td>
<td>-001, -002, -003</td>
</tr>
<tr>
<td>KW-15</td>
<td>-011, -012, -013</td>
</tr>
</tbody>
</table>
7. Control System
Propeller governors as listed in Aleš KŘEMEN Service Bulletin No. 3. All governors and propeller control systems must be approved as part of the aircraft installation regardless of manufacturer.

8. Adaptation to Engine
Adaptation to engine as listed in Aleš KŘEMEN Service Bulletin No. 4.

9. Direction of Rotation
Direction of rotation (viewed in flight direction) as identified by a letter-code in the propeller designation. (see chapter VI.4.). The left-hand version of an approved propeller model is approved at the same rating and diameter as listed for the right-hand model.

IV. Operating Limitations
1. Approved Installations
Propeller/engine/aircraft combinations that have been demonstrated to comply with the requirements of CS-P Subpart D are listed in Aleš KŘEMEN Service Bulletin No. 5. The suitability of a propeller for a given aircraft/engine combination must be demonstrated within the scope of the type certification of the aircraft.

2. Maximum Take Off Power and Speed
   KW-10: 243 kW
       2700 RPM
   KW-15: 265 kW
       2700 RPM

3. Maximum Continuous Power and Speed
   KW-10: 243 kW
       2700 RPM
   KW-15: 265 kW
       2700 RPM

4. Propeller Pitch Angle
Maximum pitch change range 32° - measured at 75% radius station

V. Operating and Service Instructions

<table>
<thead>
<tr>
<th>Manual/Service Bulletins</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>User’s Manual</td>
<td>UM-02, Rev. 3, dated 24 April 2019 [*]</td>
</tr>
<tr>
<td>Overhaul Manual</td>
<td>TN-11, Rev. 0, dated 03 August 2011 [*]</td>
</tr>
<tr>
<td>Service Bulletins</td>
<td>as noted in the current List of Service Bulletins</td>
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</tbody>
</table>
VI. Notes

1. The EASA approved Airworthiness Limitations Section (ALS) of the Instructions for Continued Airworthiness is published in the applicable “User Manual” document, chapter 14, “Airworthiness Limitations”.

2. Propeller designation system:

   HUB / BLADE
   KW – xx – () – ( ) – ( ) – ( ) – ( ) / ( ) – ( ) – ( )

   1  2  3  4  5  6  7  8  /  9  10  11

   **Hub**
   1  KW  Aleš KŘEMEN, Vodolská 4, Dolínek, 250 70 Odolena Voda, Czech Republic

2  No. of propeller model

3  Code letter for propeller category:
   A - Automatic Propeller
   F - Fixed Pitch Propeller
   G - Ground Adjustable Propeller
   V - Variable Pitch Propeller

4  Code letter for blade pitch change system:
   H – Hydraulic
   E – Electric
   M – Mechanical

5  Number of blades installed

6  Code letter for feathering system:  
   F – Feather position installed
   0 – No feather position possible

7  Code letter for reverse provision:  
   R – Reverse position installed
   0 – No reverse position possible

8  Code letter for flange type  
   listed in Aleš KŘEMEN Service Bulletin No. 4

   **Blade**

9  Code letter for blade design and installation:
   R: - Right-hand tractor
   RP: - Right-hand pusher
   L: - Left-hand tractor
   LP: - Left-hand pusher

10  Propeller diameter in cm

11  No. of blade type (contains design configuration and aerodynamic data) according to the certified hub/blade-combinations.
SECTION: ADMINISTRATIVE

I. Acronyms and Abbreviations
n/a

II. Type Certificate Holder Record
n/a

III. Change Record

<table>
<thead>
<tr>
<th>Issue</th>
<th>Date</th>
<th>Changes</th>
<th>TC issue</th>
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<tbody>
<tr>
<td>Issue 01</td>
<td>09 September 2011</td>
<td>Initial Issue</td>
<td>Initial Issue, 09 September 2011</td>
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<tr>
<td>Issue 02</td>
<td>16 September 2019</td>
<td>Amendment to Certification Basis, article II. – Airworthiness Standards: Compliance with CS-P, Subpart D, CS-P 560, Flight Functional Tests shown as defined in document: &quot;Certification Program of KW-1(x) propeller&quot;, Doc.No.: CP KW-1(x) (EASA Major Change Approval 10070656)</td>
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