TCDS No.: EASA.A.633
Issue: 05

Type : ELIXIR

Date: 19/10/2023

TYPE-CERTIFICATE
DATA SHEET

NO. EASA.A.633

for
ELIXIR

Type Certificate Holder
ELIXIR AIRCRAFT

Rue du Jura
17000 La Rochelle
FRANCE

For models: Elixir
SECTION A: MODEL A DESIGNATION .......................................................... 4
  A.I. General ......................................................................................... 4
  A.II. EASA Certification Basis ............................................................. 4
  A.III. Technical Characteristics and Operational Limitations .......... 5

SECTION ADMINISTRATIVE .................................................................. 8
  I. Acronyms & Abbreviations ......................................................... 8
  II. Type Certificate Holder Record .................................................. 8
  III. Change Record .......................................................................... 8
SECTION A: MODEL A DESIGNATION

A.I. General

1. Type/ Model/ Variant
   1.1 Type: ELIXIR
   1.2 Model: Elixir

2. Airworthiness Category: CS-23, Normal category

3. Manufacturer
   ELIXIR AIRCRAFT
   Rue du Jura
   17000 La Rochelle
   FRANCE

4. EASA Type Certification Application Date 17 May 2016
7. EASA Type Certification Date 20 March 2020

A.II. EASA Certification Basis

1. Reference Date for determining the applicable requirements: May 2016
2. Airworthiness Requirements
   EASA CS-23, Certification Specifications for Normal, Utility, Aerobatic and Commuter Category Aeroplanes, Amdt. 5, dated 29 March 2017
   EASA CS-ACNS, Initial issue, dated 01 January 2014
3. Special Conditions
   SC-ELA.2015-01, i2 – Lithium Battery Installations
4. Exemptions
   None
5. (Reserved) Deviations
   None
6. Equivalent Safety Findings
   None
7. Environmental Protection
   See TCDSN EASA.A.633
A.III. Technical Characteristics and Operational Limitations

1. Type Design Definition  ELIXIR Master Document List  LXR-A1-REC-DOC-MAster Document List R02 or later approved revision

2. Description:
The airplane is a side-by-side two-seater. It has a partially elliptical cantilever low wing configuration with flaps and ailerons. The tail has a T configuration. The tricycle landing gear is fixed.

3. Equipment: The aeroplane is equipped with an airframe parachute.

4. Dimensions: Wing span........8.48 m
Height............... 1.80 m
Length ............6.06 m
Wing area...... 7.9 m²

5. Engine
   5.1. Model: ROTAX 912iSc3 Sport
   5.2 Type Certificate: The ROTAX 912iSc3 Sport is certified by EASA under TC EASA.E.121 TCDS No. E.121 issue 11 dated 11 Oct. 2019.
   5.3 Limitations Refer to the latest version of TCDS No. E. 121

6. Load factors:
   Flaps up n ........+4
   Flaps up n.......... -2
   Flaps down n ....+2
   Flaps down n..... -0

7. Propeller
   7.1 Model: MTV-34-1-A/156-203
   7.3 Number of blades: 3
   7.4 Diameter: 1.56m
   7.5 Sense of Rotation: clockwise, seen from pilot’s point of view

8. Fluids
   8.1 Fuel: refer to applicable AFM section 2-Limitations
   8.2 Oil: refer to applicable AFM section 2-Limitations
   8.3 Coolant: refer to applicable AFM section 2-Limitations

9. Fluid capacities
   9.1 Fuel: Total capacity: 104L
   Usable capacity: 100L
   9.2 Oil: Min. sump capacity: 3.05L
   Max. sump capacity: 3.5 L
   9.3 Coolant: Capacity: 2.5 L

10. Air Speeds (indicated)
    Vs0: 85 km/h (46 kts)
    Vs: 113 km/h (59 kts)
    Vfe: 164 km/h (88 kts)
    Va: 224 km/h (121 kts)
Vc: 244 km/h (131 kts)
Vne: 290 km/h (156 kts)

Note: IAS = CAS + 2 km/h on the whole flight envelope and flap settings

11. Flight Envelope: Max. operating altitude above MSL: 4877m / 16 000ft
12. Approved Operations Capability: Day-VFR and Night-VFR operations only (refer to AFM for aeroplanes with Night-VFR capability)
13. Maximum Masses: 630 kg
14. Centre of Gravity Range: From 800mm to 860mm referring to firewall

15. Datum: The datum line is the firewall.
16. Control surface deflections: Refer to AMM
17. Levelling Means: Refer to AMM
18. Minimum Flight Crew: One (1) pilot
19. Maximum Passenger Seating Capacity: One (1) passenger
20. Baggage/Cargo Compartments: At the back of the seats, weight limitation: refer to AFM
21. Wheels and Tyres: Main wheel size 5.00-5
Nose wheel size 11x4.00-5

22. (Reserved)

A.IV. Operating and Service Instructions


Notes

Structure is qualified up to 54°C (129.2°F). Operation of the aircraft with structure temperatures (composite) above 54°C (129.2°F) is not permitted.
SECTION ADMINISTRATIVE

I. Acronyms & Abbreviations
None

II. Type Certificate Holder Record
None

III. Change Record

<table>
<thead>
<tr>
<th>Issue</th>
<th>Date</th>
<th>Changes</th>
<th>TC Issue No. &amp; Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>01</td>
<td>20 March 2020</td>
<td>Initial Issue</td>
<td>Issue 01, 20 March 2020</td>
</tr>
<tr>
<td>02</td>
<td>22 February 2022</td>
<td>Update of manufacturer address, change of propeller model, increase of MTOM, update of air speeds, removal of note on post TC items, addition of structural temperature limitation, Editorial updates.</td>
<td>Issue 02, 25 May 2021</td>
</tr>
<tr>
<td>03</td>
<td>06 July 2022</td>
<td>Editorial clarification of Certification Basis</td>
<td>/</td>
</tr>
<tr>
<td>04</td>
<td>23 March 2023</td>
<td>Addition of night VFR capability, Editorial changes</td>
<td>/</td>
</tr>
<tr>
<td>05</td>
<td>19 October 2023</td>
<td>Editorial change of the §A.III.8 - Fluids Update of section §A.IV “Operating and Service Instructions”, page 6</td>
<td>/</td>
</tr>
</tbody>
</table>

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