TYPE-CERTIFICATE

DATA SHEET

NO. EASA.A.537

for

CT

Type Certificate Holder
FLIGHT DESIGN general aviation GmbH
Am Flugplatz 3
D-99820 Hörselberg-Hainich
Germany

For model: CTLS-ELA
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SECTION A: CTLS-ELA

A.I. General

1. Data Sheet No.: EASA.A.537
2. a) Type: CT
   b) Model: CTLS-ELA

2. Airworthiness Category: Restricted
3. Manufacturer: FLIGHT DESIGN general aviation GmbH
   Am Flugplatz 3
   99820 Hörselberg-Hainich, Germany


A.II. EASA Certification Basis

1. Reference Date for determining the applicable requirements: 01. August 2011
2. Airworthiness Requirements: Certification Specification for Light Sport Aeroplanes (CS-LSA), Initial Issue
3. Special Conditions: None
4. Exemptions: None
5. Deviations: None
6. Equivalent Safety Findings: None
7. Requirements elected to comply: None
8. Environmental Standards: CS-36 Amendment 1;
   Chapter 10 of ICAO Annex 16, Volume I (4th Edition,
   Amendment 8) with the noise limits defined in paragraph 10.4 b)

A.III. Technical Characteristics and Operational Limitations

1. Type Design Definition: Master Document List AF 0100 0004 Rev. 00
2. Description: Single engine, two-seated cantilever high wing airplane, composite construction, fixed tricycle landing gear, cruciform tail
3. Equipment: Minimum Equipment see POH, Section 2 „Limitations“
   Approved Equipment Variants see POH and POH Supplements,
   Section 6 „Mass and Balance, Equipment List“
4. Dimensions:
   Span 8.594 m
   Length 6.604 m
   Height 2.342 m
   Wing Area 9.98 m²
5. Engine:
   Option 1: Rotax 912 S2
               EASA Engine TCDS No. E.121

   Option 2: Rotax 912 ULS2
               Certified as part of the aircraft

5.1 Engine Limits:
   for engines Rotax 912 S2 or Rotax 912 ULS2
   Max take-off power 73.5 kW at max take-off rotational speed 5800 engine RPM
   Max continuous power 69 kW at max continuous rotational speed 5500 engine RPM
   Propeller reduction 1:2.43
   For engine limits refer to POH.

6. Propeller:
   Manufacturer: Neuform Composites GmbH & Co. KG
   Type: CR3-65-(IP)-47-101.6
   Number of Blades: 3
   Diameter: 1.65 m - 4 mm / +6 mm
   Pitch: 21.5° +/- 1° @ 75% blade radius; measured at the contact line to the airfoil lower side
   Compliance: certified as part of the aircraft

7. Fuel Quantity:
   Usable: 126 liters
   Total: 130 liters

8. reserved

9. reserved

10. Air Speeds:
    Design Maneuvering Speed $V_A$: 105 kt (195 km/h) IAS
    Flap Extended Speed $V_{FE}$:
        Flaps 1: 105 kt (195 km/h) IAS
        Flaps 2: 80 kt (148 km/h) IAS
        Flaps 3: 62 kt (115 km/h) IAS
    Design Cruising Speed $V_C$: 120 kt (222 km/h) IAS
    Never exceed speed $V_{NE}$: 145 kt (269 km/h) IAS

11. Operations Capability:
    Day-VFR

12. Maximum Weights:
    Maximum Permitted Empty Mass: 405 kg
    Maximum Permitted Takeoff Mass: 600 kg

13. Centre of Gravity Range:
    Forward limit: 330 mm behind datum (28.2% MAC)
    Rear limit: 420 mm behind datum (37.6% MAC)

    Datum: Leading edge of the wing
    Levelling Means: Upper side of tunnel inside cabin horizontal

14. Control surface deflections:
    Refer to AMM

15. Minimum Flight Crew: 1 (Pilot)

16. Maximum Passenger Seating Capacity: 1
17. Baggage/Cargo Compartments:

Baggage Compartment: 25 kg per side (50 kg total); only permissible when secured with baggage harness
Hat Rack: 2.5 kg per side (5 kg total); only permissible when secured with baggage net
Floor Cabinet: 2.5 kg per side (5 kg total); only permissible with hatch closed

18. Lifetime limitations: Refer to AMM

A.IV. Operating and Service Instructions

1. Flight Manual:

Basic POH: AF 0430 0009 Rev. 00; EASA approved 16. April 2012; or later approved revision
Supplement S1 COSM: AZ 0430 0012 Rev 00; or later approved revision
Supplement S6 Dyon D100/D120: AF 0430 0020 Rev 00; EASA approved 16. April 2012; or later approved revision
Supplement S9 AEPS BRS 1350 HS: AF 0430 0018 Rev 00; EASA approved 16. April 2012; or later approved revision

2. Technical Manual:

Basic AMM: AF 0480 0004 Rev 00; or later approved revision

3. Manual for Operation:

Refer to POH, POH Supplements, AMM, AMM Supplements

A.V. Notes:

None
ADMINISTRATIVE SECTION

I. Acronyms

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<thead>
<tr>
<th>Acronym</th>
<th>Definition</th>
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<tbody>
<tr>
<td>AEPS</td>
<td>Airframe Emergency Parachute System</td>
</tr>
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<td>AMM</td>
<td>Aircraft Maintenance Manual</td>
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<tr>
<td>CRI</td>
<td>Certification Review Item</td>
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<td>CS-LSA</td>
<td>Certification Specification for Light Sport Aeroplanes</td>
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<td>EASA</td>
<td>European Aviation Safety Agency</td>
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<tr>
<td>IAS</td>
<td>Indicated Airspeed</td>
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<td>kt</td>
<td>Knots</td>
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<td>MAC</td>
<td>Mean Aerodynamic Chord</td>
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<td>POH</td>
<td>Pilot's Operating Handbook</td>
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<td>RPM</td>
<td>Rotations per Minute</td>
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II. Type Certificate Holder Record

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<th>Period</th>
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<td>Am Flugplatz 3</td>
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<td>99820 Hörselberg-Hainich</td>
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III. Change Record

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