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 CZ s.r.o.
   Letiště Šumperk, 78803, Nový Malín 524, Czech Republic.


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

AEPS Airframe Emergency Parachute System
AMM Aircraft Maintenance Manual
CRI Certification Review Item
CS-LSA Certification Specification for Light Sport Aeroplanes
EASA European Aviation Safety Agency
IAS Indicated Airspeed
kt Knots
MAC Mean Aerodynamic Chord
POH Pilot's Operating Handbook
RPM Rotations per Minute
TCDS Type Certificate Data Sheet

II. Type Certificate Holder Record

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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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