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
   c) Series: CTLS-ELA, CTLSi-ELA
3. Airworthiness Category: Restricted
4. 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: for series CTLSi-ELA: SC-LSA.2012-01, SC-LSA.7140-02
   for equipment “Dynon SkyView”: SC-ELA.2015-01
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 „Limitiations“
   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:
   Series CTLS-ELA
   Option 1:
   Rotax 912 S2
   EASA Engine TCDS No. E.121
   Option 2:
   Rotax 912 ULS2
   Certified as part of the aircraft

   Series CTLSi-ELA
   Option 1:
   Rotax 912 iSc2 Sport
   EASA Engine TCDS No. E.121
   Option 2:
   Rotax 912 iS2 Sport
   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.

   For engines Rotax 912 iSc2 Sport or Rotax 912 iS2 Sport:
   Max take-off power 73.5 kW at max take-off rotational speed 5800 engine RPM
   Max continuous power 72 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:
   For series CTLS-ELA
   Usable: 126 liters
   Total: 130 liters

   For series CTLSi-ELA
   Usable: 130 liters
   Total: 136 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 Compartments: 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 for series CTLS-ELA: AF 0430 0009 Rev. 00;
   EASA approved 16. April 2012;
   or later approved revision
   Basic POH for series CTLSi-ELA: AF 0430 0028 Rev. 00;
   EASA approved 07 October 2019;
   or later approved revision
   Supplement S1 COSM: AZ 0430 0012 Rev 00;
   or later approved revision
   Supplement S6 Dynon D100/D120: AF 0430 0020 Rev 00;
   EASA approved 16. April 2012;
   or later approved revision
   Supplement S7 Dynon SkyView: AZ 0430 0010 Rev 00;
   EASA approved 21. June 2019
   or later approved revision
   Supplement S9 AEPS BRS 1350 HS: AF 0430 0018 Rev 00;
   EASA approved 16. April 2012;
   or later approved revision
   Supplement S10 AEPS Magnum 601: AF 0430 0041 Rev 00;
   or later approved revision

2. Technical Manual:
   Basic AMM: AF 0480 0004 Rev 00;
   or later approved revision
Supplement S1 AEPS BRS 1350 HS: AF 0480 0010 Rev 00; or later approved revision

Supplement S3 CTLSi-ELA: AF 0480 0018 Rev 00
EASA approved 07 October 2019; or later approved revision

Supplement S10 Dyon SkyView: AF 0480 0020 Rev 00;
EASA approved 21. June 2019; or later approved revision

Supplement S7 AEPS Magnum 601: AF 0480 0021 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 Union 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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<th>TC Holder</th>
<th>Period</th>
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<tr>
<td>Flight Design GmbH  Sielminger Strasse 51</td>
<td>From 17.4.2012 until 06.11.2018</td>
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<tr>
<td>70771 L-Echterdingen GERMANY</td>
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<td>FLIGHT DESIGN general aviation GmbH  Am Flugplatz 3</td>
<td>From 07.11.2018</td>
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<td>99820 Hörselberg-Hainich</td>
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III. Change Record

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<th>Date</th>
<th>Changes</th>
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<td>Issue 01</td>
<td>17-Apr-2012</td>
<td>Initial Issue</td>
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<td>Issue 02</td>
<td>07-Nov-2018</td>
<td>Change of TC Holder</td>
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<td>Issue 03</td>
<td>20-Aug-2019</td>
<td>Correction of Manufacturer after POA approval</td>
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<td>Issue 04</td>
<td>07-October-2019</td>
<td>Addition of series CTLSi-ELA</td>
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