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

CONTENT

SECTION A: CTLS-ELA

A.I. General

1.	Data Sheet No.:	EASA.A.537
2.	a) Type: b) Model:	CT CTLS-ELA
2.	Airworthiness Category:	Normal (see Note 1)
3.	Manufacturer:	FLIGHT DESIGN general aviation CZ s.r.o. Příčná 3374/12 787 01 Šumperk Czech Republic
4.	Certification Application Date:	20. January 2009

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 engine option 2a and 2b: 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 Doc.-List AF 0100 0004 Rev. 01 or higher for initial certification Master Doc.-List AF 0100 0048 Rev. 05 or higher for Major Change 10070259 Master Doc.-List AF 0100 0046 Rev. 02 or higher for Major Change 10071170
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:

Option 1a: Rotax 912 S2
EASA Engine TCDS No. E.121

Option 1b: Rotax 912 ULS2
Certified as part of the aircraft

Option 2a: Rotax 912 iSc2 Sport
EASA Engine TCDS No. E.121

Option 2b: Rotax 912 iS2 Sport
Certified as part of the aircraft

5.1 Engine Limits:

for engine options 1a and 1b

Max take-off power 73.5 kW at max take-off rotational speed 5800 engine RPM

Max continuous power 69.0 kW at max continuous rotational speed 5500 engine RPM

Propeller reduction 1:2.43

For engine limits refer to POH.

for engine options 2a and 2b

Max take-off power 73.5 kW at max take-off rotational speed 5800 engine RPM

Max continuous power 72.0 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:

Engine option 1a and 1b	Usable:	126 liters
	Total:	130 liters
Engine option 2a and 2b	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 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 for engine options 1a and 1b:	AF 0430 0009 Rev. 00; EASA approved 16. April 2012; or later approved revision
Basic POH for engine options 2a and 2b:	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 D100/D120:	AF 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 for engine options 2a and 2b:	AF 0480 0010 Rev 00; EASA approved 07. October 2019 or later approved revision
Supplement S7 AEPS Magnum 601:	AF 0480 0021 Rev 00; or later approved revision
Supplement S10 Dynon SkyView:	AF 0480 0020 Rev 00; EASA approved 21. June 2019 or later approved revision

3. Manual for Operation: Refer to POH, POH Supplements, AMM, AMM Supplements

A.V. Notes:

1) Serial numbers produced before 13 November 2020 are eligible for Restricted Certificate of Airworthiness in accordance with TCDS EASA.A.537 issue 04 and previous. Serial numbers produced after 13 November 2020 are eligible for normal Certificate of Airworthiness in accordance with this TCDS EASA.A.537 issue 05 and later revisions approved by EASA.
2) Aircraft with engine options 1a and 1b are sold under marketing name CTLS-ELA. Aircraft with engine options 2a and 2b are sold under marketing names CTLSi-ELA. The type design placard on the aircraft always shows CTLS-ELA.

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

TC Holder	**Period**
Flight Design GmbH Sielminger Strasse 51 70771 Leinfelden-Echterdingen GERMANY	from 17-Apr-2012 until 06-Nov-2018
FLIGHT DESIGN general aviation GmbH Am Flugplatz 3 99820 Hörselberg-Hainich Germany	from 07-Nov-2018

III. Change Record

Issue	**Date**	**Changes**
Issue 01	17-Apr-2012	Initial Issue
Issue 02	07-Nov-2018	Change of TC Holder
Issue 03	20-Aug-2019	Correction of Manufacturer after POA approval
Issue 04	07-Oct-2019	Addition of engine option 2a and 2b
Issue 05	13-Nov-2020	Change of airworthiness category from Restricted to Normal in Section A.I.2. Addition of Notes A.V.1 and A.V.2
Issue 06	12-Nov-2024	Correction of the address of manufacturer – page 3