

Prezes Urzędu Lotnictwa Cywilnego
President of the Civil Aviation Authority

ŚWIADECTWO UZNANIA ZATWIERDZENIA TYPU
Type Approval Recognition Certificate

NUMER: ULA.00 – 001/2023
Reference:

Niniejsze świadectwo uznania zatwierdzenia typu zaświadcza, że określony typ/model ultralekkiego statku powietrznego został uznany za akceptowalny w Rzeczypospolitej Polskiej zgodnie z obowiązującymi przepisami polskiego lotnictwa cywilnego i pozostaje w mocy przez czas nieokreślony, chyba że zatwierdzenie zostanie zrzeczone, zawieszono lub cofnięte oraz że został wpisany na listę typów zatwierdzonych prowadzoną przez Prezesa Urzędu Lotnictwa Cywilnego, o której mowa w przepisach wydanych na podstawie art. 33 ust. 2 i 4 ustawy – Prawo lotnicze (Dz.U. z 2022 r. poz. 1235, 1715, 1846 i 2185).

This Type Approval Recognition Certificate certifies that the ultralight aircraft type/model specified has been found acceptable in Republic of Poland in accordance with the applicable Polish Civil Aviation regulations and shall remain as such for an unlimited duration unless the approval is surrendered, suspended or revoked and has been entered on the list of approved flying device types managed by the President of the Civil Aviation Authority, referred to in the regulations issued on the basis of Art. 33 para 2 and 4 of the Aviation Law Act dated July 3rd, 2002 (JL. 2022, item 1235, 1715, 1846 and 2185).

Państwo projektu
State of Design

Czech Republic

Państwo produkcji
State of Manufacture

Czech Republic

Posiadacz zatwierdzenia typu
Type Approval Holder

Aeropilot s.r.o.
Jeníkovská 1815, 286 01 Čáslav, Czech Republic

Oznaczenie typu produktu
Product Type Designation

LEGEND 600

Numer zatwierdzenia typu
Type Approval Number

ULL 01/2021

Arkusze danych do zatwierdzenia typu
Type Certificate Data Sheet

ULL 01/2021

Przyjęte wymagania techniczne
Type Certification Basis

UL 2 – Part I, issue I 2019

Uwagi
Remarks

Approved by the Technical Committee of LAA Czech Republic
on 30.06.2021

EZD ref. LTT-4.5460.10.2022

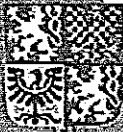
Z upoważnienia Prezesa Urzędu Lotnictwa Cywilnego
On behalf of President of the Civil Aviation Authority

Marcin Perkowski

Zastępca Dyrektora Departamentu Techniki Lotniczej
Deputy Director, Aviation Technical Department
(pismo zostało wydane w postaci elektronicznej
i opatrzone kwalifikowanym podpisem elektronicznym)
*(the letter was published in electronic form
and signed with a qualified electronic signature)*

Data pierwszego wydania: 02.01.2023
Date of original issue:

Data ostatniej zmiany: --
Date of last revision:



Letecká amatérská asociace ČR – Light Aircraft Association of the Czech Republic

Type Certificate

Issued by the Light Aircraft Association of the Czech Republic (hereinafter LAA CR), based on the delegation by the Ministry of Transport to perform the state administration in the matters of sports flying equipment in accordance with the Section 82, Subsection 1 of Act No. 49/1997 Coll. On civil aviation and amending and supplementing Act No. 455/1991 Coll. On Trade Licensing (The Trade Licensing Act), as amended by later regulations of the Ministry of Transport

Aircraft type designation:

Two-seat, single-engine, aerodynamically controlled, all-composite, strut high wing aircraft – Sport Flying Equipment.

Type designation: **LEGEND 600**

Maximum take off mass 600 kg including the ballistic recovery parachute.
Detailed technical specification is stated in the Data Sheet.

Type certificate holder:

Aeropilot s.r.o.
Jeníkovská 815
286 01 Čáslav
Czech Republic
ID: 271 08 431

Approved by the LAA CR Technical commission on:

30th June 2021

The Type certificate is registered at the LAA CR under the reference:

ULL 01 / 2021

Letecká amatérská asociace ČR
Ke Kabině 289
286 00 Čáslav 10
TEL: 242 433 88

LAA CR Chief Technical Inspector:

Petr Tax
Ing. Petr Tax



Type certificate number:	ULL – 01 / 2021
Type certificate holder:	Aeropilot s.r.o.
Type SLZ:	Legend 600
Date of issuance:	7/7/2021
Supplement a):	3/1/2022

Type certificate annex no. ULL - 01 / 2021

I. Generally

1. Type designation: **Legend 600**
2. Category: Light sport aircraft, microlight aerodynamically controlled aircraft
3. Type certificate holder: Aeropilot s.r.o.
Jeníkovská 1815
286 01 Čáslav, Czech Republic
ID: 271 08 431
5. Application date: 10th May of 2019
6. Approval date: 1st Jule of 2021

II. Certification specification

1. Airworthiness requirements: UL2 – část I. vydání 1. 2019. Ultralehké letouny řízené aerodynamicky, upravené znění ze dne 27.3.2019.
2. Special conditions: N/A
3. Exceptions: N/A



III. Technical data, performance, operation limitation

1. Type definition: Aircraft type is defined by set of drawings and Type definition.

2. Description: Legend 540 is side by side two seater, single engine, high wing aircraft made of glass fibre and carbon fibre composite materials. The wing is rectangular platform in the middle part and it has sandwich skin, carbon – fibre glass. The wing spar is manufactured from carbon fibre. The wing is equipped with hinged split flaps. The fuselage is made of composite. The tail surfaces are classical similar construction as wing. The undercarriage is 3-wheel type with towing nose gear wheel, and the main undercarriage is fitted with hydraulics disc brakes. The main landing gear legs are made of composite spring. Fuel tanks are welded from sheet aluminum and placed in wings. Standard powerplant is Rotax 912 ULS (or UL) fitted with a composite propeller.

3. Equipment: For technical airworthiness approval of light sport aircraft issue, basic equipment according certification specification listed in chapter II must be installed.

4. Basic technical data:

1. Dimensions

Span	9,05 m
Length	7,05 m
High	2,62 m

Wing

Area	10,716 m ²
Root wing section chord	1,3 m
Tip wing section chord	0,88 m
Aspect ratio	7,643
Wing loading at MTOM 600kg	55,99 kg/m ²



Aileron

Aileron length	1,43 m
Area	0,3375 m ²
Aileron deflection (up/down)	23 ⁰ /13 ⁰

Wing trailing edge flap

Flap length	2,31 m
Area	0,845 m ²
Flap deflection - cruise	0 ⁰
Flap deflection – take-off	15 ⁰
Flap deflection – approach, landing	30°, 40 ⁰

Horizontal stabilizer

Span	2,8 m
Area	2,24 m ²
Elevator area	0,9 m ²
Elevator deflection (up/down)	21 ⁰ / 10 ⁰

Vertical fin

Area	1,04 m ²
Rudder area	0,4 m ²
Rudder deflection	+/- 22 ⁰

Undercarriage

Main undercarriage wheelbase	2,04m
Main and front undercarriage wheelbase	1,67 m
Main and front wheel dimensions	15x6-6, 12x4-4
Main undercarriage tire pressure	2,7 bar
Front undercarriage tire pressure	2,7 bar
Brakes	Hydraulic disc brakes
Main undercarriage suspension	Composite spring
Front undercarriage suspension	Steel spring

2. Mass

Max. take-off mass	600 kg
Max. take-off mass with emergency parachute system	600 kg
Max. useful load	219 kg
Min. crew mass	60 kg
Max. baggage mass	15 kg
Wing fuel tanks	2x50 l
Standard Empty mass including emergency parachute system	380 kg



Airspeed and performance

Motor ROTAX 912 ULS (73,5 kW / 100 HP), propeller WOODCOMP PROPULS

Performance in ISA conditions.	Take-off mass 600 kg Airspeed CAS
Stall speed flaps extended V_{SO}	71,6 km/h
Stall speed flaps retracted V_{S1}	86,9 km/h
Max. speed – flaps extended (30°) V_{FE}	135 km/h
Design airspeed V_A	173,7 km/h
Max. horizontal flight airspeed V_H	220 km/h
Never exceed speed V_{NE}	240 km/h
Take-off length 15 m obstacle, grass	225 m
Rate of climb	5,9 m/s at 120 km/h
Rough airspeed V_{RA}	192 km/h

Motor ROTAX 912 iS (73,5 kW / 100 HP), propeller WOODCOMP PROPULS

Performance in ISA conditions.	Take-off mass 600 kg Airspeed CAS
Stall speed flaps extended V_{SO}	71,6 km/h
Stall speed flaps retracted V_{S1}	86,9 km/h
Max. speed – flaps extended (30°) V_{FE}	135 km/h
Design airspeed V_A	173,7 km/h
Max. horizontal flight airspeed V_H	220 km/h
Never exceed speed V_{NE}	240 km/h
Take-off length 15 m obstacle, grass	225 m
Rate of climb	5,9 m/s at 120 km/h
Rough airspeed V_{RA}	192 km/h

3. CG position range

Limit front CG position: **24 % MAC**
 Limit aft CG position: **35 % MAC**

The Datum is located at the leading edge of the wing at the root rib. Mean aerodynamic chord length $MAC=1,2m$.

4. Flight load factors

Maximal positive / negative **+4,0 / -2,0.**

5. Power-plant

Rotax 912 ULS.

Maximal take-off power **84,5 kW/ 5800 min⁻¹ (max duration 5 min).**
 Maximal continuous power **68,5 kW/ 5500 min⁻¹.**



Rotax 912 iS.

Maximal take-off power	84,5 kW/ 5800 min ⁻¹ (max duration 5 min).
Maximal continuous power	73,5 kW/ 5500 min ⁻¹ .

6. Propeller

Three-blade, 1740 WOODCOMP PROPULS.

7. Fuel

EUROSUPER RON 95 unleaded according DIN 51607,Ö- NORM 1100 AVGAS 100 LL.
BA 95 Natural recommended in Czech republic.

8. Oil

Oil specification API SF(SG) or higher, designated for 4-stroke motorcycles
(with gear lubrication additives).

9. Rescue parachute system

GRS 6/600 SD Speedy 115m² installed according Galaxy company standards.

IV. Operation and maintenance documents:

- Flight and maintenance manual together with appendix of optional equipment.
- Operation manual ROTAX 912.
- Propeller technical description and operation manual.
- Operation manual GALAXY GRS 6/600.

V. Annex:

Without annex.

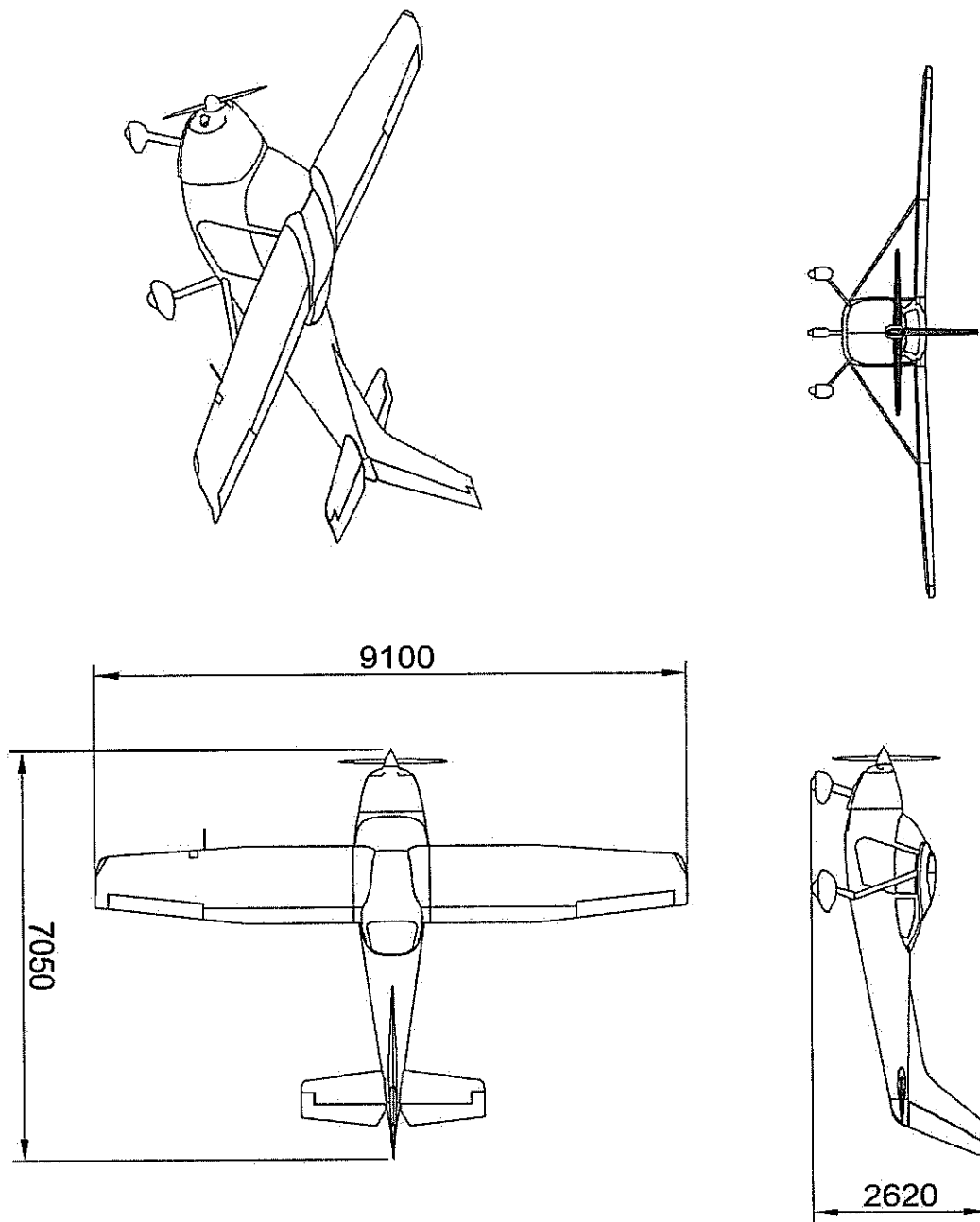
Notes:

1. Each aircraft must be equipped with actual weight and balance protocol with equipment list to issue airworthiness technical approval
2. Aircraft must be equipped with placards listed in flight manual

VI. Appendix:

3D LEGEND 600 aircraft drawing according type definition ULL 01/2021.

3D Legend 600 aircraft drawing according ULL 01/2021.



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