

CIVIL AVIATION AUTHORITY OF THE CZECH REPUBLIC

03-01
Revision 1
EVEKTOR, spol. s r.o.
EV-97 VLA
15.07.2005

TYPE CERTIFICATE DATA SHEET No. 03-01

This data sheet which is a part of Type Certificate No. 03-01 prescribes conditions and limitations under which the product for which the type certificate was issued meets the airworthiness requirements of the Czech Republic.

Model	Application Date	Certification Date
EV-97 VLA	06.04.1999	13.01.2003

Page No.	1	2	3	4	5
Rev. No.	1	1	1	1	1

Model EV-97 VLA

I. General

1. Data Sheet No.: 03-01
2. Model: EV-97 VLA
3. Airworthiness category: Normal
4. Type Certificate Holder: EVEKTOR, spol. s r.o.
Kunovice-letiste
686 04 Kunovice, Czech Republic
5. Manufacturer: EVEKTOR-AEROTECHNIK a.s.
Letecka 1384
686 04 Kunovice, Czech Republic
6. Application Date: 06.04.1999
7. Certificate Date: 13.01.2003

II. Certification Basis

1. Certification Basis: „Joint Aviation Requirements–Very Light Aeroplanes“
issue 26. April 1990, incl. Amdt. VLA/91/1 and
VLA/92/1.
2. Special Conditions: None
3. Exemptions: None
4. Equivalent Safety Findings: None
5. Environmental Standards: ICAO Annex 16, Volume I, Chapter 10
FAR Part 36, Amdt. 36-22, Appendix G

III. Technical Characteristics and Operational Limitations

1. Type Design Definition: Airplane EV-97 VLA G0 00-00 01
2. Description: The EV-97 VLA is a two-seater, all metal, cantilever low-wing monoplane with two side-by-side seats, fixed tricycle landing gear, tractor propeller.
3. Equipment: The minimum equipment is listed in approved EV-97 VLA Flight Manual, No. EVLA 001.00-AS.
4. Dimensions:

Span:	8.100 m
Length:	5.980 m
Height:	2.335 m
Wing Area:	9.790 m ²
5. Engine:
 - 5.1.1. Model: Rotax 912 S
 - 5.1.2. Type Certificate: TW9 - ACG
issued by AUSTRO CONTROL (Austria)
 - 5.1.3. Limitations:

Maximum Take off Power	73.5 kW/5800 RPM (max. 5 min.)
Maximum Continuous Power	69 kW/5500 RPM
6. Propeller:
 - 6.1.1. Model: V 230E
 - 6.1.2. Type Certificate: 96-04
 - 6.1.3. Number of blades: 2
 - 6.1.4. Diameter: 1625 mm
 - 6.1.5. Sense of Rotation: clockwise
7. Fuel: EUROSUPER RON unleaded according to EN 228 or DIN 51607 or AVGAS 100 LL.
8. Oil: Automotive oil, classification SF, SG, according to API.
9. Air Speeds:

Never Exceed Speed	V _{NE}	270 km/h
Maximum Structural Cruising Speed	V _{N0}	205 km/h
Maximum Flap Extended Speed:		
flaps 15°	V _{FE15}	145 km/h
flaps 40°	V _{FE40}	135 km/h
Maneuvering Speed	V _A	200 km/h

10. Load factors: +3.8
-1.5
11. Maximum Operating Altitude: 12000 ft
12. Weights: Maximum Take off Weight 575 kg
Empty Weight (standard configuration) 340 kg \pm 3%
13. Center of Gravity Range: 13,8 - 32 % MAC
14. Datum: The reference datum is the leading edge of the wing
15. Mean Aerodynamic Cord (MAC): Length: 1.230 m.
MAC beginning is located 0,020 m aft of the reference datum.
16. Leveling Means: Longitudinal axis: leveling point No. 1L and 2L
Lateral axis: leveling point No. 3L and 3L
17. Minimum Flight Crew: 1
18. Number of seats: 2
19. Baggage/Cargo Compartments: Max. 15 kg aft of the seat backrest bulkhead.
20. Control surface deflections:
- | | | |
|----------|----------------|----------------------------|
| Elevator | Up | $25^{\circ} \pm 1^{\circ}$ |
| | Down | $20^{\circ} \pm 1^{\circ}$ |
| Rudder | Left and Right | $30^{\circ} \pm 2^{\circ}$ |
| Aileron | Up | $20^{\circ} \pm 1^{\circ}$ |
| | Down | $15^{\circ} \pm 1^{\circ}$ |
| Trim tab | Up | $5^{\circ} \pm 2^{\circ}$ |
| | Down | $35^{\circ} \pm 5^{\circ}$ |
| Flap | Take off | $15^{\circ} \pm 2^{\circ}$ |
| | Landing | $40^{\circ} \pm 3^{\circ}$ |
21. Wheels and Tyres: Main wheel: G5 06-27 01 and G5 06-27 02
Tyres and tubes: Goodyear 15x6.00-6 6PR (P/N 156E61-3)
Nose wheel: G5 00-31 01
Tyre and tube: Goodyear 15x6.00-6 6PR (P/N 156E61-3)
22. Other Limitations: The aeroplane is approved for Day VFR flight.

IV. Operating and Service Instructions

- | | |
|---|------------------|
| 1. EV-97 VLA Flight Manual: | EVLA 001.00-AS |
| 2. EV-97 VLA Maintenance Manual: | EVLA 004.01-AS |
| 3. EV-97 VLA Illustrated Parts Catalogue: | EVLA 005.01-AS |
| 4. Maintenance Manual for ROTAX Engine Type 912 Series: | 899 372 |
| 5. Propeller Operation Manual V230E: | LV-DZ-05/2001-01 |

V. Notes

- 1. EASA TC No. EASA.A.029 has been issued for Type EV-97 VLA aircraft on February 4, 2005**