



European Aviation Safety Agency

EASA

**TYPE-CERTIFICATE
DATA SHEET**

EASA.A.527

AQUILA AT01

Aquila Aviation by Excellence GmbH

Flugplatz
14959 Trebbin OT Schönhagen
Germany

For models: AT01

Issue 03: 20 April 2012

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SECTION A: MODEL 1

[insert additional sections as applicable]

A.I. General

- | | |
|---|-------------------------------------|
| 1. Data Sheet No.: | EASA.A.527 |
| 2. a) Type: | AT01 |
| b) Model: | |
| c) Variant: | |
| 3. Airworthiness Category: | CS-VLA |
| 4. Type Certificate Holder: | Aquila Aviation by Excellence GmbH |
| 5. Manufacturer: | Aquila Aviation by Excellence GmbH |
| 6. Certification Application Date: | 27-Feb-1998 |
| 7. (LBA) National Certifying Authority | 21-Sept-2001 (LBA TCDS Number 1106) |
| 8. (EASA) National Authority Type Certificate Date: | 19-Nov-2008 (EASA.A.527) |

A.II. EASA Certification Basis

- | | |
|--|--|
| 1. Reference Date for determining the applicable requirements: | 27-Feb-1998 |
| 2. Airworthiness Requirements: | JAR-VLA, incl. Amd. VLA/92/1, dated 1-Jan-1992 |
| 3...Special Conditions: | SC235.01 "Connection Engine Mount/ Composite Airframe"
SC235.02 "Winglet"
Special Condition to CS-VLA for Night-VFR-Operation according to CRI-A01 |
| 3. Exemptions: | none |
| 4. Deviations: | none |
| 5. Equivalent Safety Findings: | none |
| 6. Requirements elected to comply: | none |
| 7. Environmental Standards: | ICAO, Annex 16, Vol 1, Chapter X Original LBA, LSL Chapter X dated 1-Jan-1991 |

8. (Reserved) Additional National Requirements: none
9. (Reserved)

A.III. Technical Characteristics and Operational Limitations

2. Description: -Single-Engine, Low Wing Aircraft
-2 Seats side-by side
-Dual Controls
-Normal Tailplane Configuration
-Composite Design
-Fixed Tricycle Landing Gear with steerable nose wheel
3. Equipment: For Minimum Equipment list refer to AFM, Section 2
and for
NVFR-operation refer to AFM-Supplement AVE 23, AVE
28 and/or AVE29, Section 2, latest approved Revision
4. Dimensions: Span: 10,3m
Length: 7,35m
Height: 2,4m
Wing Area: 10,5m²
5. Engine:
- 5.1.1 Model: 1 Rotax 912 S3
- 5.1.2 Type Certificate: EASA TCDS E.121
- 5.1.3 Limitations: For power plant limits refer to AFM
6. Load factors: +4; -2
7. Propeller:
- 7.1 Model: 1 MT-Propeller MTV-21-A/175-05
- 7.2 Type Certificate: LBA TCDS 32.130/86
- 7.3 Number of blades: Two Blades
- 7.4 Diameter: 1750 mm ± 5mm
- 7.5 Sense of Rotation: Clockwise in Flight Direction

8. Fluids:

- 8.1 Fuel: Refer to AFM (FM-AT01-1010-100)
- 8.2 Oil: Refer to AFM (FM-AT01-1010-100)
- 8.3 Coolant: Refer to AFM (FM-AT01-1010-100)

9. Fluid capacities:

- 9.1 Fuel: Total: 120 liters (2 x 60 liters)
Useable: 109,6 liters (2 x 54,8 liters)

- 9.2 Oil: Min: 2,55 liters
Max: 3,00 liters

- 9.3 Coolant system capacity: Min: 2,40 liters
Max: 2,50 liters

- 10. Air Speeds: $V_A = 112$ KIAS
 $V_{FE} = 90$ KIAS
 $V_{NO} = 130$ KIAS
 $V_{NE} = 165$ KIAS

- 11. Maximum Operating Altitude: 14500 ft

- 12. Kinds of Operation: Day-VFR and Night-VFR
Flights into known or forecast icing conditions is prohibited.

- 13. Maximum Weights: MTOW=750 kg

- 14. Centre of Gravity Range: Forward limit: 427 mm (31% MAC)
Rear limit: 523 mm (40% MAC)

- 15. Datum: At wing root leading edge vertical to fuselage centre line.

- 16. Control surface deflections: refer to Maintenance Manual

17. Levelling Means: Wedge 800:77 (5,5°) on top of rear fuselage; 800 mm forward of horizontal stabilizer
18. Minimum Flight Crew: 1 pilot
19. Maximum Passenger Seating Capacity: 2 seats (1 pilot, 1 passenger)
20. Baggage/Cargo Compartments: Aft Baggage Compartment; max. allowable Load: 40kg
21. Wheels and Tyres: refer to Maintenance Manual
22. (Reserved):

A.IV. Operating and Service Instructions

1. Flight Manual: FM-AT01-1010-100
2. Technical Manual: see Repair Manual and Spare Parts Catalogue
3. Repair Manual: MM-AT01-1020-100
4. Manual for Operation: see Flight Manual
5. Spare Parts Catalogue: PC-AT01-1030-100
6. Table of Dimensions, Limits and Clearances: see Flight Manual
7. Instruments and aggregates: MZ-AT01-0150-001

A.V. Notes:

1. This TCDS is valid for S/N AT01-100 and following
2. Approved Noise Level in accordance with the EASA data sheet for noise TCDSN A.527
3. Production is only permitted under Production Organisation Approval.
4. Marketing name: AQUILA A210
5. All parts which are imposed to direct vertical sunlight have to be painted in white colour except of those areas provided for registration signs and warning paint.
6. This EASA TCDS replaces the LBA TCDS No 1106, issue 3 dated June 25, 2003 according to EASA information and policy paper to EC-Reg 1702/2003 Art. 2.
7. The operation under Night-VFR-conditions is allowed after accomplishment of the Service Bulletin SB-AT01-010 "Extension of the Kind of Operation to VFR-Night-Operation" except aircrafts where the Service Bulletin SB-AT01-011 "Modifications for Measuring and Photo Flight Operations" has been accomplished or with MC approval 10039259

ADMINISTRATIVE SECTION

I. Acronyms

II. Type Certificate Holder Record

Date	Type Certificate Holder
21 Sep 2001	AQUILA Aviation Technische Entwicklungen GmbH Flugplatz Schönhagen 14959 Schönhagen Germany
19 Nov 2008	AQUILA Aviation by Excellence AG Flugplatz Schönhagen 14959 Schönhagen Germany
23 Dec 2011	Aquila Aviation by Excellence GmbH Flugplatz 14959 Trebbin OT Schönhagen Germany

III. Change Record

Issue	Date	Changes	TC Issue No. & Date
Issue 01	19 Nov 2008	Initial Issue, Transfer of LBA TC 1106 from AQUILA Technische Entwicklungen GmbH to AQUILA Aviation by Excellence AG	Issue 01; 19 Nov 2008
Issue 02	25 Mar 2010	Revision of the TCDS after approval of Major Change AT01-00219 "Day-VFR/Night-VFR operation"	Issue 02; 25 Mar 2010
Issue 03	20 April 2012	Change of corporate from "AQUILA Aviation by Excellence AG" to "Aquila Aviation by Excellence GmbH" and MC approval 10039259	Issue 03; 20 Apr 2012