
TYPE-CERTIFICATE DATA SHEET

UK.TC.A.00031

for

AQUILA AT01

Type Certificate Holder

AQUILA Aviation International GmbH

OT Schönhagen

Flugplatz

14959 Trebbin

Germany

Model(s):	AT01 AT01-100 AT01-200
Variant(s)	AT01-100A AT01-100B AT01-100C AT01-200C
Issue:	1
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Section 1 AT01

I. General

1. Type / Variant or Model

Type	AQUILA AT01
Model	AT01
Variant	

2. Airworthiness Category

Very Light Aircraft (VLA)

3. Type Certificate Holder

AQUILA Aviation International GmbH

4. Manufacturer

AQUILA Aviation International GmbH

5. Certification Application Date

27 February 1998

6. Type Certification Date

21 September 2001

II. Certification Basis

1. Reference Date for determining the applicable requirements

30 September 2015

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

4. Exemptions

None

5. Deviations

None

6. Equivalent Safety Findings

None

7. Requirements elected to comply

CS-23, Amdt. 2: for glass cockpit installation (Garmin G-500 / ASPEN PFD 1000) as Primary for Day- and Night VFR

§23.29, §23.303, §23.601, §23.603, §23.611, 23.771, §23.773, §23.777, §23.867, §23.1301, §23.1303, §23.1309, §23.1311,

§23.1321, §23.1322, §23.1323, §23.1325, §23.1327, §23.1331,
§23.1351, §23.1353, §23.1357, §23.1359, §23.1361, §23.1365,
§23.1367, §23.1381, §23.1431, §23.1501, §23.1519, §23.1541,
§23.1557, §23.1581, §23.1583, §23.1585

8. Environmental Standards

ICAO, Annex 16, Vol 1, Chapter X Original LBA, LSL Chapter X
dated 1-Jan-1991

III. Technical Characteristic and Operating Limitations

1. Type Design Definition

Drawing list,

S/N AT01-100: Doc.-no LD-AT01-0030-100P

S/N AT01-101 until 299: Doc.-no LD-AT01-0030-100

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

Model 1 Rotax 912 S3

Type Certificate EASA TCDS E.121

Limitations Refer to AFM

6. Propeller

Model 1 MT-Propeller MTV-21-A/175-05

Type Certificate LBA TCDS 32.130/86

Number of blades 2

Diameter 1750 mm ± 5mm

Sense of Rotation Clockwise in flight direction

7. Fluids

Fuel	Refer to AFM (FM-AT01-1010-100)
Oil	Refer to AFM (FM-AT01-1010-100)
Coolant	Refer to AFM (FM-AT01-1010-100)

8. Fluid Capacities

Fuel	Total	120 L (2 x 60 L)
	Useable	109.6 L (2 x 54.8 L)
Oil	Min	2.55 L
	Max	3.00 L
Coolant System Capacity	Min	2.40 L
	Max	2.50 L

9. Load Factors

+4g / -2g

10. Air Speeds

Manoeuvring Speed V_A	112 KIAS
Never Exceed Speed V_{NE}	165 KIAS
Maximum flap extended speed V_{FE}	90 KIAS
Maximum structural cruising speed V_{NO}	130 KIAS

11. Maximum Operating Altitude

14500 ft

12. Approved Operations Capability

Day-VFR
Night-VFR

13. Maximum Weights

MTOW: 750kg

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. Levelling Means

Wedge 800:77 (5,5°) on top of rear fuselage; 800 mm forward of horizontal stabilizer

17. Control Surface Deflections

Refer to Maintenance Manual

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

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. Operating Manual

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

V. Notes

1. TCDS section 1 is valid for S/N AT01-100 through AT01-299
2. Approved Noise Level in accordance with Type Certificate Data Sheet for Noise UK.TC.A.00031.
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. The operation under Night-VFR-conditions is allowed after accomplishment of the Service Bulletin SBAT01-010 "Extension of the Kind of Operation to VFR-Night-Operation" except aircraft where the Service Bulletin SB-AT01-011 "Modifications for Measuring and Photo Flight Operations" has been accomplished or with MC approval 10039259

Section 2 AT01-100

I. General

1. Type / Variant or Model

Type	AQUILA AT01
Model	AT01-100
Variant	AT01-100A, AT01-100B, AT01-100C

2. Airworthiness Category

Very Light Aircraft (VLA)

3. Type Certificate Holder

AQUILA Aviation International GmbH

4. Manufacturer

AQUILA Aviation International GmbH

5. Certification Application Date

26 October 2012

6. Type Certification Date

31 May 2013

II. Certification Basis

1. Reference Date for determining the applicable requirements

n/a

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

4. Exemptions

None

5. Deviations

None

6. Equivalent Safety Findings

None

7. Requirements elected to comply

Variant AT01-100A
CS-VLA acc. MoC: MC-AT01-00600-100
CS-23, Amdt. 2: for glass cockpit installation (ASPEN PFD 1000) as Primary for Day- and Night VFR

§23.29, §23.303, §23.601, §23.603, §23.611, 23.771, §23.773, §23.777, §23.867, §23.1301, §23.1303, §23.1309, §23.1311, §23.1321, §23.1322, §23.1323, §23.1325, §23.1327, §23.1331, §23.1351, §23.1353, §23.1357, §23.1359, §23.1361, §23.1365, §23.1367, §23.1381, §23.1431, §23.1501, §23.1519, §23.1541, §23.1557, §23.1581, §23.1583, §23.1585

Or

CS-VLA acc. MoC: TCP-AT01-01046

CS-23, Amdt. 2: for glass cockpit installation (Garmin G3X (uncertified components)) as Primary for Day-VFR and with additional standby instrumentation for Day- and Night-VFR

§23.29, §23.303, §23.601, §23.603, 23.611, §23.771, §23.773, §23.777, §23.867, §23.1301, §23.1303, §23.1309, §23.1311, §23.1321, §23.1322, §23.1323, §23.1325, §23.1327, §23.1331, §23.1337, §23.1351, §23.1353, §23.1357, §23.1359, §23.1361, §23.1365, §23.1367, §23.1381, §23.1431, §23.1501, §23.1519, §23.1541, §23.1543, §23.1549, §23.1553, §23.1557, §23.1581, §23.1583, §23.1585

Variant AT01-100B

CS-VLA acc. MoC: MC-AT01-00600-100

CS-23, Amdt. 2: for glass cockpit installation (Garmin G500 /G500TXi) as Primary for Day- and Night VFR §23.29, §23.303, §23.601, §23.603, §23.611, 23.771, §23.773, §23.777, §23.867, §23.1301, §23.1303, §23.1309, §23.1311, §23.1321, §23.1322, §23.1323, §23.1325, §23.1327, §23.1331, §23.1351, §23.1353, §23.1357, §23.1359, §23.1361, §23.1365, §23.1367, §23.1381, §23.1431, §23.1501, §23.1519, §23.1541, §23.1543, §23.1549, §23.1553, §23.1557, §23.1581, §23.1583, §23.1585

CS-23, Amdt. 4: for Autopilot installation (restricted Garmin GFC500) §23.143, §23.395, §23.1329, §23.1335

Variant AT01-100C

CS-VLA acc. MoC: MC-AT01-00635-100

CS-23, Amdt. 2: for glass cockpit installation (Garmin G500 /G500TXi plus MVP-50P) as Primary for Day- and Night VFR

§23.29, §23.303, §23.601, §23.603, 23.611, §23.771, §23.773, §23.777, §23.867, §23.1301, §23.1303, §23.1309, §23.1311, §23.1321, §23.1322, §23.1323, §23.1325, §23.1327, §23.1331, §23.1337, §23.1351, §23.1353, §23.1357, §23.1359, §23.1361, §23.1365, §23.1367, §23.1381, §23.1431, §23.1501, §23.1519, §23.1541, §23.1543, §23.1549, §23.1553, §23.1557, §23.1581, §23.1583, §23.1585

CS-23, Amdt. 4: for Autopilot installation (restricted Garmin GFC500) §23.143, §23.395, §23.1329, §23.1335

8. Environmental Standards

ICAO, Annex 16, Vol 1, Chapter X Original LBA, LSL Chapter X dated 1-Jan-1991

III. Technical Characteristic and Operating Limitations

1. Type Design Definition

Drawing list,

S/N AT01-100A (B, C)-300 and ff:

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 AS-01 (variant AT01-100A), AS-05 (variant AT01-100B) and AS-06 (variant AT01-100C), Section 2, latest approved Revision

4. Dimensions

Span: 10.3m
Length: 7.4m
Height: 2.4m
Wing Area: 10.5m²

5. Engine

Model 1 Rotax 912 S3
Type Certificate EASA TCDS E.121
Limitations Refer to AFM

6. Propeller

Model 1 MT-Propeller MTV-21-A/170-05
Type Certificate LBA TCDS 32.130/86
Number of blades 2
Diameter 1750 mm ± 5mm
Sense of Rotation Clockwise in flight direction

7. Fluids

Fuel Refer to AFM (FM-AT01-1010-101 / -102 /-103)
Oil Refer to AFM (FM-AT01-1010-101 / -102 /-103)
Coolant Refer to AFM (FM-AT01-1010-101 / -102 /-103)

8. Fluid Capacities

Fuel	Total	120 L (2 x 60 L)
	Useable	109.6 L (2 x 54.8 L)
Oil	Min	2.55 L
	Max	3.00 L

Coolant System Capacity	Min	2.40 L
	Max	2.50 L

9. Load Factors

+4g / -2g

10. Air Speeds

Manoeuvring Speed V_A	112 KIAS
Never Exceed Speed V_{NE}	165 KIAS
Maximum flap extended speed V_{FE}	90 KIAS
Maximum structural cruising speed V_{NO}	130 KIAS

11. Maximum Operating Altitude

14500 ft

12. Approved Operations Capability

Day-VFR
Night-VFR

13. Maximum Weights

MTOW: 750kg

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. Levelling Means

Wedge 800:77 (5,5°) on top of rear fuselage; 800 mm forward of horizontal stabilizer

17. Control Surface Deflections

Refer to Maintenance Manual MM-AT01-1020-110

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
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21. Wheels and Tyres

Refer to Maintenance Manual MM-AT01-1020-110

IV. Operating and Service Instructions

1. Flight Manual

Aircraft Flight Manual:
FM-AT01-1010-101 (variant AT01-100A)
FM-AT01-1010-102 (variant AT01-100B)
FM-AT01-1010-103 (variant AT01-100C)

2. Technical Manual

Aircraft Maintenance Manual:
MM-AT01-1020-110

3. Service Bulletins

LSB-AT01-001

4. Service Information

LSI-AT01-001

V. Notes

1. TCDS section 2 is valid for S/N AT01-100A (B, -C)-300 and up.
2. Approved Noise Level in accordance with Type-Certificate Data Sheet for Noise TCDSN UK.TC.A.00031.
3. Production is only permitted under Production Organisation Approval.
4. 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.

Section 3 AT01-200

I. General

1. Type / Variant or Model

Type	AQUILA AT01
Model	AT01-200
Variant	AT01-200C

2. Airworthiness Category

Very Light Aircraft (VLA)

3. Type Certificate Holder

AQUILA Aviation International GmbH

4. Manufacturer

AQUILA Aviation International GmbH

5. Certification Application Date

10 March 2014

6. Type Certification Date

26 March 2020

II. Certification Basis

1. Reference Date for determining the applicable requirements

n/a

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

Special Condition to CS-VLA for Increase of permissible maximum take-off weight to 800kg according to CRI-A07

4. Exemptions

None

5. Deviations

None

6. Equivalent Safety Findings

ELOS to CS-VLA for Electrical Fuel Pumps according to CRI-E01

7. Requirements elected to comply

Variant AT01-200C

CS-VLA acc. MoC: TCP-AT01-00728

CS-23, Amdt. 2: for glass cockpit installation (Garmin G500 /G500TXi plus MVP-50P) as Primary for Day- and Night VFR

§23.29, §23.303, §23.601, §23.603, 23.611, §23.771, §23.773, §23.777, §23.867, §23.1301, §23.1303, §23.1309, §23.1311, §23.1321, §23.1322, §23.1323, §23.1325, §23.1327, §23.1331, §23.1337, §23.1351, §23.1353, §23.1357, §23.1359, §23.1361, §23.1365, §23.1367, §23.1381, §23.1431, §23.1501, §23.1519, §23.1541, §23.1543, §23.1549, §23.1553, §23.1557, §23.1581, §23.1583, §23.1585

CS-23, Amdt. 4: for Autopilot installation (restricted Garmin GFC500) §23.143, §23.395, §23.1329, §23.1335

8. Environmental Standards

ICAO, Annex 16, Vol 1, Chapter X Original LBA, LSL Chapter X dated 1-Jan-1991

III. Technical Characteristic and Operating Limitations

1. Type Design Definition

Drawing list,
S/N AT01-200C-367 and ff:
Doc.-no LD-AT01-0030-100:

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 AST-06 (variant AT01-200C), Section 2, latest approved Revision

4. Dimensions

Span: 10.3m
Length: 7.4m
Height: 2.4m
Wing Area: 10.5m²

5. Engine

Model	1 Rotax 914 F3
Type Certificate	EASA TCDS E.122
Limitations	Refer to AFM

6. Propeller

Model	1 MT-Propeller MTV-21-A/175-05
Type Certificate	LBA TCDS 32.130/86
Number of blades	2
Diameter	1750 mm \pm 5mm
Sense of Rotation	Clockwise in flight direction

7. Fluids

Fuel	Refer to AFM (FM-AT01-1010-106)
Oil	Refer to AFM (FM-AT01-1010-106)
Coolant	Refer to AFM (FM-AT01-1010-106)

8. Fluid Capacities

Fuel	Total	120 L (2 x 60 L)
	Useable	109.6 L (2 x 54.8 L)
Oil	Min	2.55 L
	Max	3.00 L
Coolant System Capacity	Min	2.40 L
	Max	2.50 L

9. Load Factors

+4g / -2g

10. Air Speeds

Manoeuvring Speed V_A	112 KIAS
Never Exceed Speed V_{NE}	165 KIAS
Maximum flap extended speed V_{FE}	90 KIAS
Maximum structural cruising speed V_{NO}	130 KIAS

11. Maximum Operating Altitude

16400 ft

12. Approved Operations Capability

Day-VFR
Night-VFR

13. Maximum Weights

MTOW:	750kg
MTOW	800 kg (see Note 3V.5)

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. Levelling Means

Wedge 800:77 (5,5°) on top of rear fuselage; 800 mm forward of horizontal stabilizer

17. Control Surface Deflections

Refer to Maintenance Manual MM-AT01-1020-110

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 MM-AT01-1020-110

IV. Operating and Service Instructions

1. Flight Manual

Aircraft Flight Manual:
FM-AT01-1010-106 (variant AT01-200C)

2. Technical Manual

Aircraft Maintenance Manual:
MM-AT01-1020-110

3. Service Bulletins

LSB-AT01-001

4. Service Information

LI-AT01-001

V. Notes

1. TCDS section 3 is valid for S S/N AT01-200C-367 and up.
2. Approved Noise Level in accordance with the Type-Certificate Data Sheet for Noise TCDSN UK.TC.A.00031.
3. Production is only permitted under Production Organisation Approval.
4. 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.
5. Operation up to 800 kg MTOW is only permitted after embodiment of Aquila Service Bulletin SBAT01-035..

Section 4 Administration

I. Acronyms and Abbreviations

Acronym / Abbreviation	Definition
CS	Certification Specification
CAA	Civil Aviation Authority
EASA	European Union Aviation Safety Agency
g	Load Factor
kg	Kilogram
L	Litre
LBA	Luftfahrt-Bundesamt
mm	Millimetre
MTOW	Maximum Take Off Weight
NVFR	Night Visual Flight Rules
TC	Type Certificate
TCDS	Type Certificate Data Sheet
TCH	Type Certificate Holder
VFR	Visual Flight Rules

II. Type Certificate Holder Record

TCH Record	Period
AQUILA Aviation International GmbH OT Schönhagen Flugplatz 14959 Trebbin Germany	Present. No changes.

III. Amendment Record

TCDS Issue No.	TCDS Issue Date	Changes	TC Issue and Date
1	11 Apr 2022	This certificate supersedes EASA.A.527. All technical data taken from EASA.A.527 Issue 10.	Issue 1 11 April 2022

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