Issue: 03 Date: 01 July 2019



TYPE-CERTIFICATE DATA SHEET

NO. EASA.A.626

for

S2

Type Certificate Holder

Sonaca Aircraft S.A.

Rue du Capitaine Aviateur Jacquet 48 5020 Namur Belgium

For models: S200

S201

S2

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SECTION A: S200

A.I. General

1. Type/ Model/ Variant

 1.1 Type
 S2

 1.2 Model
 S200

 1.3 Variant
 --

2. Airworthiness Category CS-VLA Normal category

3. Manufacturer Sonaca Aircraft S.A.

Rue du Capitaine Aviateur Jacquet 48

5020 Namur

Belgium

4. EASA Type Certification Application Date 05 August 2015

5. State of Design Authority EASA

6. EASA Type Certification Date 12 June 2018

A.II. <u>EASA Certification Basis</u>

1. Reference Date for determining

the applicable requirements 05/08/2015

2. Airworthiness Requirements EASA CS-VLA amdt.1

3. Special Conditions SC-OVLA.div-03 Issue 2 Night VFR Operation with VLA

SC-VLA.3 Intentional Spinning with VLA

4. Exemptions None5. (Reserved) Deviations None

6. Equivalent Safety Findings ELOS-EVLA.0991 Electrical Fuel Pumps

7. Environmental Protection ICAO Annex 16, Volume 1. For details, see TCDSN

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A.III. Technical Characteristics and Operational Limitations

1. Type Design Definition CRI_A-05-Type_Design_Definition

2. Description Single-engine, fixed pitch propeller, two seats, low wing all

aluminium aeroplane equipped with fixed tricycle landing gear.

3. Equipment Minimum equipment list according to flight manual (SONAIR-S2-

D-MAN-001)

4. Dimensions

 $\begin{array}{lll} \text{Span} & 9,24 \text{ m} \\ \text{Length} & 6,74 \text{ m} \\ \text{Height} & 2,56 \text{ m} \\ \text{Wing Area} & 11,85 \text{ m}^2 \end{array}$

5. Engine

5.1. Model BRP-Rotax GmbH & Co KG 914 F2 -015.2 Type Certificate EASA Type Certificate No. EASA.E.122

5.3 Limitations Refer to EASA TCDS No.: E.122

6. Load factors Flaps retracted Flaps down

Positive +4,4g +2,2g Negative -1,76g 0g

7. Propeller

7.1 Model DUC Hélices FLASH-R H-FSH_3-D-R_I_RX_C

7.2 Type Certificate EASA Type Certificate No. EASA.P.038

7.3 Number of blades 3

7.4 Diameter 1750 mm

7.5 Sense of Rotation Clockwise (pilot's view)

8. Fluids

8.1 Fuel - MOGAS: Min RON 95

EN 228 Super / Super Plus

ASTM D4814

- AVGAS :

LEADED : 100 LL ASTM D910 UNLEADED : UL91 ASTM D7547

See Rotax SI-914-019 for more information.

8.2 Oil See Rotax SI-914-019 8.3 Coolant See Rotax SI-914-019



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9. Fluid capacities

9.1 Fuel 2 Tanks : 73 L each

Total: 146 L

Usable: 140 L

9.2 Oil Total: 3,0 L

Minimum: 2,5 L

9.3 Coolant system Total: 1,5 L

10. Air Speeds (CAS)

Never exceed speed 135 Kts

Maximum structural cruising speed 120 Kts

Manoeuvering speed 105 Kts

Maximum Flaps 10° speed 105 Kts

Maximum Flaps 20° speed 95 Kts

Maximum Flaps 30° speed 85 Kts

Flaps 30° stall speed 45 Kts

11. Flight Envelope

Maximum Operating Altitude 13.000 ft

12. Approved Operations Capability

Day- and Night-VFR is allowed

Flight into expected or actual icing conditions is prohibited

13. Maximum Masses

Max Take-Off: 750 kg Max Landing: 750 kg

14. Centre of Gravity Range

	Metric	Imperial	% of MAC
Forward limit at 650 kg and	0.876 m*	2.873 ft*	20%
below	0.070		
Forward limit at 750 kg	0.915 m*	3 ft*	23%
Rear limit at 650 kg and below	1.021m*	3.349ft*	31%
Rear limit at 750 kg	1.034 m*	3.392 ft*	32%

15. Datum

Centreline of firewall front face bottom edge

16. Control surface deflections

Ailerons:	24° ±2° up and 24° ±2° down
Elevator:	28° ±2° up and 22° ±2° down
Trim tab:	13° ±5° up and 23° ±5° down
Rudder:	25° ±2° left and right
	0° ±1° Retracted
Flance	10° ±1° Take Off
Flaps:	20° ±1.5° Approach
	30° ±2° Landing

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17. Levelling Means Transverse : Main spar beam (under seats)

Longitudinal: Center fuselage side sills (canopy rails)

18. Minimum Flight Crew One (1) pilot

19. Maximum Passenger

Seating Capacity One (1) passenger

20. Baggage/ Cargo Compartments

Maximum total baggage weight: 35 kg Maximum baggage weight in Area 1: 35 kg Maximum baggage weight in Area 2: 25 kg

21. Wheels and Tyres

Nose gear Wheel tyre size: 5.00-5/10/120

Main gear Wheel tyre size: 380X150/15X6.00-5/6/120

A.IV. Operating and Service Instructions

Flight Manual SONAIR-S2-D-MAN-001 Rev. A or later approved revision
 Maintenance Manual SONAIR-S2-D-MAN-002 Rev. A or later approved revision

3. Structural Repair Manual N/A

4. Weight and Balance Manual SONAIR-S2-D-MAN-001 Rev. A or later approved revision

5. Illustrated Parts Catalogue N/A

A.V. Notes

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SECTION B: S201

B.I. General

1. Type/ Model/ Variant

 1.1 Type
 S2

 1.2 Model
 S201

 1.3 Variant
 --

2. Airworthiness Category CS-VLA Normal category

3. Manufacturer Sonaca Aircraft S.A.

Rue du Capitaine Aviateur Jacquet 48

5020 Namur

4. EASA Type Certification Application DateBelgium18 October 2018

5. State of Design Authority EASA

6. EASA Type Certification Date 01 July 2019

B.II. EASA Certification Basis

1. Reference Date for determining

the applicable requirements 18/10/2018

2. Airworthiness Requirements EASA CS-VLA amdt.1

3. Special Conditions SC-OVLA.div-03 Issue 2 Night VFR Operation with VLA

SC-VLA.3 Intentional Spinning with VLA

4. Exemptions None5. (Reserved) Deviations None

6. Equivalent Safety Findings ELOS-EVLA.0991 Electrical Fuel Pumps

7. Environmental Protection ICAO Annex 16, Volume 1. For details, see TCDSN

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B.III. Technical Characteristics and Operational Limitations

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3. Equipment
Minimum equipment list according to flight manual (SONAIR-S2-

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4. Dimensions

 $\begin{array}{lll} \text{Span} & 9,24 \text{ m} \\ \text{Length} & 6,74 \text{ m} \\ \text{Height} & 2,56 \text{ m} \\ \text{Wing Area} & 11,85 \text{ m}^2 \end{array}$

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7.3 Number of blades 3

7.4 Diameter 1750 mm

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B.IV. Operating and Service Instructions

Flight Manual SONAIR-S2-D-MAN-006 Rev. A or later approved revision
 Maintenance Manual SONAIR-S2-D-MAN-002 Rev. E or later approved revision

3. Structural Repair Manual N/A

4. Weight and Balance Manual SONAIR-S2-D-MAN-006 Rev. A or later approved revision

5. Illustrated Parts Catalogue N/A

B.V. Notes

Derivative based on S200 Model, equipped with digital flight and navigation instruments.

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ADMINISTRATIVE SECTION

I. Acronyms & Abbreviations

AFM Airplane Flight Manual

Amdt. Amendment

AMM Airplane Maintenance Manual

CAS Calibrated Airspeed CG Centre of Gravity

CS-VLA Certification specification for Very Light Aeroplanes

DWN down

EASA European Aviation Safety Agency

IAS Indicated Airspeed

ICAO International Civil Aviation Organization

kg kilograms Kts knots

MAC Mean Aerodynamic Chord

N.A. Not applicable SC Special Condition

TCDSN Type Certificate Datasheet Noise

VFR Visual Flight Rules

II. Type Certificate Holder Record

Sonaca Aircraft S.A.

Rue du Capitaine Aviateur Jacquet 48

5020 Namur

Belgium

III. Change Record

Issue	Date	Changes
Issue 01	12 June 2018	Initial Issue
Issue 02	18 July 2018	Introduction of SCs and ELOS reference instead of CRI numbers.
		Correction of typo on elevator and trim deflections
Issue 03	01 July 2019	Added S201 Model
		Rounded useable fuel quantity
		Added Propeller Model