



TYPE-CERTIFICATE DATA SHEET

No. EASA.A.642

for
Bristell B23

Type Certificate Holder
BRM Aero s.r.o.

Letecká 255
686 04 Kunovice
Czech Republic

For models: Bristell B23



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The airplane is a side-by-side single engine two-seater. It has a tapered cantilever low wing configuration with flaps and ailerons. The empennage is conventional. The tricycle landing gear is fixed. The airframe is a light weight structure comprising aluminium sheets riveted with blind rivets. Airplane is equipped by lithium battery installations. Aircraft Emergency Parachute System (AEPS) is integral part of aircraft design (see A.V.1.)	6
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1. Flight Manual ADxC-73-001-AFM; issue A; dated 27 August 2020 or later approved issue 8	
2. Maintenance Manual ADxC-73-001-AMM; edition 1.0; dated 18 September 2020 or later approved issue 8	
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SECTION A: BRISTELL B23

A.I. General

1. Type/ Model	
1.1 Type	Bristell B23
1.2 Model	Bristell B23
2. Airworthiness Category	CS-23, Normal category
3. Manufacturer	BRM Aero s.r.o. Letecká 255 686 04 Kunovice Czech Republic
4. EASA Type Certification Application Date	30 May 2017
5. State of Design Authority	N/A
6. State of Design Authority Type Certificate Date	N/A
7. EASA Type Certification Date	07 October 2020

A.II. EASA Certification Basis

1. Reference Date for determining the applicable requirements	May 2017
2. Airworthiness Requirements	CS-23 [Certification Specifications for Normal-Category Aeroplanes] Amdt. 5, dated 29 March 2017 CS-ACNS, Issue 2, dated 26 April 2019
3. Special Conditions	None
4. Exemptions	None
5. (Reserved) Deviations	None
6. Equivalent Safety Findings	None
7. Environmental Protection	see TCDSN EASA.A.642



A.III. Technical Characteristics and Operational Limitations

1. Type Design Definition Bristell B23 Master Document List ADxC-73-001-MDL, issue A or later approved revision

2. Description

The airplane is a side-by-side single engine two-seater. It has a tapered cantilever low wing configuration with flaps and ailerons. The empennage is conventional. The tricycle landing gear is fixed. The airframe is a light weight structure comprising aluminium sheets riveted with blind rivets. Airplane is equipped by lithium battery installations. Aircraft Emergency Parachute System (AEPS) is integral part of aircraft design (see A.V.1.).

3. Equipment: The aeroplane is equipped with an airframe parachute.

4. Dimensions: Wing span (incl. wing tip lights): 9.27 m
Height 2.36 m
Length 6.58 m
Wing area 11.75 m²

5. Engine

5.1. Model ROTAX 912 S3
5.2 Type Certificate EASA.E.121
5.3 Limitations Refer to TCDS: EASA.E.121

6. Load factors

Flaps up n=+4
Flaps up n=-2
Flaps down n=+2
Flaps down n=-0

7. Propeller

7.1 Model MTV-34-1-A/175-200
7.2 Type Certificate EASA.P.049
7.3 Number of blades three
7.4 Diameter 175 cm
7.5 Sense of Rotation clockwise, seen from pilot's point of view

8. Fluids

8.1 Fuel See AFM section 2.13
See Rotax Service Instruction SI-912-016
8.2 Oil See Rotax Operators Manual OM-912 Series
See Rotax Service Instruction SI-912-016
8.3 Coolant See Rotax Operators Manual OM-912 Series
See Rotax Service Instruction SI-912-016



9. Fluid capacities

9.1 Fuel	Total capacity: 2x60L Usable capacity: 2x59L
9.2 Oil	Max. approx. capacity: 3.6 L
9.3 Coolant system capacity	Capacity: 2.5 L

10. Air Speeds: EAS≈CAS (IAS)

VSO: 43 kts (44 kts)
VS: 50 kts (51 kts)
VFE: 81 kts (82 kts)
VA: 98 kts (99 kts)
VC: 135 kts (136 kts)
VNE: 156 kts (157 kts)

11. Flight Envelope

Max. operating altitude above MSL: 14.000 ft

12. Approved Operations Capability

VFR Day / VFR Night (see A.V.1)

13. Maximum Masses

Max. Take-off mass is 750 kg

14. Centre of Gravity Range

from 25 %MAC to 34.5 %MAC, from 1.717 m to 1.811 m referring to datum

15. Datum

forward plane of the engine flange to the propeller

16. Control surface deflections

-Elevator 19° up, 15° down
-Aileron 24° up, 16° down
-Rudder 30° left and right
-Flap, discrete 0°/10°/25° down

17. Levelling Means

see AFM Section 6.2 Definitions

18. Minimum Flight Crew

1 pilot

19. Maximum Passenger Seating Capacity

1 passenger

20. Baggage/ Cargo Compartments

1 compartment in each wing,
1 compartment behind the occupants

21. Wheels and Tyres

Type and dimension of the main wheels:

- wheel rim - BERINGER - 5"
- tubeless tyre - MICHELIN AVIATOR - 5,00-5"

Type and dimension of the nose wheel:

- wheel rim - BERINGER - 5"
- tubeless tyre - MICHELIN AVIATOR - 5,00-5"

22. (Reserved)



A.IV. Operating and Service Instructions

- | | |
|--------------------------------|--|
| 1. Flight Manual | ADxC-73-001-AFM; issue A; dated 27 August 2020
or later approved issue |
| 2. Maintenance Manual | ADxC-73-001-AMM; edition 1.0; dated 18 September 2020
or later approved issue |
| 3. Structural Repair Manual | not available |
| 4. Weight and Balance Manual | ADxC-73-001-AFM; issue A; dated 27 August 2020
or later approved issue |
| 5. Illustrated Parts Catalogue | not issued |

A.V. Notes

1. In order to show the compliance with the CS-23, Amdt. 5, certification basis, the AMC to CS-23 was used by the TC holder complemented by following Means of Compliance for specific design features:
 - a) SC-ELA.2015-01 [Lithium battery installations] Issue 1;
 - b) SC-OVLA.div-03 [Night VFR operation with VLA] Issue 2;
 - c) ASTM F2316-12 [Aircraft Emergency Parachute System].



SECTION ADMINISTRATIVE

I. Acronyms & Abbreviations

n/a

II. Type Certificate Holder Record

TC Holder	Period
BRM Aero s.r.o. Letecká 255 686 04 Kunovice CZECH REPUBLIC Contracted DOA Holder based on 21.A.2:	Since 07 October 2020
Aircraft Design Certification GmbH Reichensteinstr. 48 69151 Neckargemünd Germany EASA.21J.411	Since 07 October 2020

III. Change Record

Issue	Date	Changes	TC Issue No. & Date
Issue 01	07 October 2020	Initial issue of TCDS	Initial / 07 October 2020

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