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# 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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| <b>SECTION A: BRISTELL B23</b> .....                                                                                                                                                                                                                                                                                                                                                                                                                                         | <b>5</b> |
| <b>A.I. General</b> .....                                                                                                                                                                                                                                                                                                                                                                                                                                                    | <b>5</b> |
| 1. Type/ Model .....                                                                                                                                                                                                                                                                                                                                                                                                                                                         | 5        |
| 2. Airworthiness Category CS-23, Normal category .....                                                                                                                                                                                                                                                                                                                                                                                                                       | 5        |
| 3. Manufacturer BRM Aero s.r.o. Letecká 255.....                                                                                                                                                                                                                                                                                                                                                                                                                             | 5        |
| 686 04 Kunovice.....                                                                                                                                                                                                                                                                                                                                                                                                                                                         | 5        |
| Czech Republic.....                                                                                                                                                                                                                                                                                                                                                                                                                                                          | 5        |
| 4. EASA Type Certification Application Date 30 May 2017.....                                                                                                                                                                                                                                                                                                                                                                                                                 | 5        |
| 5. State of Design Authority N/A .....                                                                                                                                                                                                                                                                                                                                                                                                                                       | 5        |
| 6. State of Design Authority Type Certificate Date N/A .....                                                                                                                                                                                                                                                                                                                                                                                                                 | 5        |
| 7. EASA Type Certification Date 07 October 2020.....                                                                                                                                                                                                                                                                                                                                                                                                                         | 5        |
| <b>A.II. EASA Certification Basis</b> .....                                                                                                                                                                                                                                                                                                                                                                                                                                  | <b>5</b> |
| 1. Reference Date for determining the applicable requirements May 2017 .....                                                                                                                                                                                                                                                                                                                                                                                                 | 5        |
| 2. Airworthiness Requirements CS-23 [Certification Specifications for Normal- Category<br>Aeroplanes] Amdt. 5, dated 29 March 2017 .....                                                                                                                                                                                                                                                                                                                                     | 5        |
| CS-ACNS, Issue 2, dated 26 April 2019 .....                                                                                                                                                                                                                                                                                                                                                                                                                                  | 5        |
| 3. Special Conditions None.....                                                                                                                                                                                                                                                                                                                                                                                                                                              | 5        |
| 4. Exemptions None.....                                                                                                                                                                                                                                                                                                                                                                                                                                                      | 5        |
| 5. (Reserved) Deviations None .....                                                                                                                                                                                                                                                                                                                                                                                                                                          | 5        |
| 6. Equivalent Safety Findings None .....                                                                                                                                                                                                                                                                                                                                                                                                                                     | 5        |
| 7. Environmental Protection see TCDSN EASA.A.642.....                                                                                                                                                                                                                                                                                                                                                                                                                        | 5        |
| <b>A.III. Technical Characteristics and Operational Limitations</b> .....                                                                                                                                                                                                                                                                                                                                                                                                    | <b>6</b> |
| 1. Type Design Definition Bristell B23 Master Document List ADxC-73-001-MDL, issue A or<br>later approved revision 6                                                                                                                                                                                                                                                                                                                                                         |          |
| 2. Description.....                                                                                                                                                                                                                                                                                                                                                                                                                                                          | 6        |
| The airplane is a side-by-side single engine two-seater. It has a tapered cantilever low wing<br>configuration with flaps and ailerons. The empennage is conventional. The tricycle landing gear<br>is fixed. The airframe is a light weight structure comprising aluminium sheets riveted with blind<br>rivets. Airplane is equipped by lithium battery installations. Aircraft Emergency Parachute<br>System (AEPS) is integral part of aircraft design (see A.V.1.) ..... | 6        |
| 3. Equipment: The aeroplane is equipped with an airframe parachute. ....                                                                                                                                                                                                                                                                                                                                                                                                     | 6        |
| 5. Engine .....                                                                                                                                                                                                                                                                                                                                                                                                                                                              | 6        |
| 6. Load factors .....                                                                                                                                                                                                                                                                                                                                                                                                                                                        | 6        |
| 7. Propeller .....                                                                                                                                                                                                                                                                                                                                                                                                                                                           | 6        |
| 8. Fluids.....                                                                                                                                                                                                                                                                                                                                                                                                                                                               | 6        |
| 9. Fluid capacities.....                                                                                                                                                                                                                                                                                                                                                                                                                                                     | 7        |
| 10. Air Speeds: EAS≈CAS (IAS) .....                                                                                                                                                                                                                                                                                                                                                                                                                                          | 7        |
| 11. Flight Envelope Max. operating altitude above MSL: 14.000 ft .....                                                                                                                                                                                                                                                                                                                                                                                                       | 7        |
| 12. Approved Operations Capability VFR Day / VFR Night (see A.V.1).....                                                                                                                                                                                                                                                                                                                                                                                                      | 7        |
| 13. Maximum Masses Max. Take-off mass is 750 kg.....                                                                                                                                                                                                                                                                                                                                                                                                                         | 7        |
| 14. Centre of Gravity Range from 25 %MAC to 34.5 %MAC, from 1.717 m to 1.811 m referring<br>to datum 7                                                                                                                                                                                                                                                                                                                                                                       |          |
| 15. Datum forward plane of the engine flange to the propeller.....                                                                                                                                                                                                                                                                                                                                                                                                           | 7        |
| 16. Control surface deflections.....                                                                                                                                                                                                                                                                                                                                                                                                                                         | 7        |
| -Elevator 19° up, 15° down.....                                                                                                                                                                                                                                                                                                                                                                                                                                              | 7        |
| -Aileron 24° up, 16° down.....                                                                                                                                                                                                                                                                                                                                                                                                                                               | 7        |
| -Rudder 30° left and right .....                                                                                                                                                                                                                                                                                                                                                                                                                                             | 7        |
| -Flap, discrete 0°/10°/25° down .....                                                                                                                                                                                                                                                                                                                                                                                                                                        | 7        |
| 17. Levelling Means see AFM Section 6.2 Definitions .....                                                                                                                                                                                                                                                                                                                                                                                                                    | 7        |
| 18. Minimum Flight Crew 1 pilot .....                                                                                                                                                                                                                                                                                                                                                                                                                                        | 7        |



|                                                                                                       |          |
|-------------------------------------------------------------------------------------------------------|----------|
| 19. Maximum Passenger Seating Capacity 1 passenger.....                                               | 7        |
| 20. Baggage/ Cargo Compartments 1 compartment in each wing, .....                                     | 7        |
| 1 compartment behind the occupants.....                                                               | 7        |
| 21. Wheels and Tyres.....                                                                             | 7        |
| 22. (Reserved).....                                                                                   | 7        |
| 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 |          |
| 3. Structural Repair Manual not available.....                                                        | 8        |
| 4. Weight and Balance Manual ADxC-73-001-AFM; issue A; dated 27 August 2020 or later approved issue 8 |          |
| 5. Illustrated Parts Catalogue not issued.....                                                        | 8        |
| <b>A.V. Notes .....</b>                                                                               | <b>8</b> |
| <b>SECTION ADMINISTRATIVE .....</b>                                                                   | <b>9</b> |
| <b>I. Acronyms &amp; Abbreviations .....</b>                                                          | <b>9</b> |
| <b>II. Type Certificate Holder Record .....</b>                                                       | <b>9</b> |
| <b>III. Change Record .....</b>                                                                       | <b>9</b> |



## **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.<br>Letecká 255<br>686 04 Kunovice<br>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<br>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                                                                                                                      |





## 9. Fluid capacities

|                             |                                                 |
|-----------------------------|-------------------------------------------------|
| 9.1 Fuel                    | Total capacity: 2x60L<br>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<br>or later approved issue        |
| 2. Maintenance Manual          | ADxC-73-001-AMM; edition 1.0; dated 18 September 2020<br>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<br>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                |
|--------------------------------------------------------------------------------------------------------------------------|-----------------------|
| <b>BRM Aero s.r.o.</b><br>Letecká 255<br>686 04 Kunovice<br>CZECH REPUBLIC<br><br>Contracted DOA Holder based on 21.A.2: | Since 07 October 2020 |
| <b>Aircraft Design Certification GmbH</b><br>Reichensteinstr. 48<br>69151 Neckargemünd<br>Germany<br>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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