TYPE-CERTIFICATE
DATA SHEET

NO. EASA.A.607

for
BS 115

Type Certificate Holder
BLACKSHAPE S.P.A.

Strada Statale 16 KM 841+900
70043 Monopoli (BA)
ITALY

For models: BS 115
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SECTION A: BS 115

A.I. General

1. Type/ Model/ Variant
   1.1 Type BS 115
   1.2 Model BS 115
   1.3 Variant

2. Airworthiness Category Normal

3. Manufacturer Blackshape SPA
   SS 16 KM 841+900 Z.I.
   70043 Monopoli (BA) Italy

4. EASA Type Certification Application Date 14 March 2013
   Note: State of Design Authority certification application date for grandfathered products

5. State of Design Authority

6. State of Design Authority Type Certificate Date

7. EASA Type Certification Date 03 April 2017

A.II. EASA Certification Basis

1. Reference Date for determining the applicable requirements 15 September 2014

2. Airworthiness Requirements CS-VLA amdt.1, 5 May 2009

3. Special Conditions none

4. Exemptions none

5. (Reserved) Deviations none

6. Equivalent Safety Findings none

A.III. Technical Characteristics and Operational Limitations

1. Type Design Definition
   Document no. “TDDCR-BS115-001” Type Design Data Configuration Report, Issue 0 or later approved revision.

2. Description

3. Equipment
   Equipment list as reported in BCV-00-38-00 BS115 Airplane Flight Manual Section 6

4. Dimensions
<table>
<thead>
<tr>
<th>Dimension</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Span</td>
<td>9.000 m</td>
</tr>
<tr>
<td>Length</td>
<td>7.437 m</td>
</tr>
<tr>
<td>Height</td>
<td>2.455 m</td>
</tr>
<tr>
<td>Wing area</td>
<td>10.31 m²</td>
</tr>
</tbody>
</table>

5. Engine
   5.1. Model
   Lycoming IO-320-D1B
   5.2 Type Certificate
   TCDS no. US 1E12
   5.3 Limitations
   Max Take-off Power: 160 shp
   Max Continuous Power: 160 shp
   Other limitations are listed in BCV-00-38-00 “BS115 Airplane Flight Manual” Section 2

6. Load factors
<table>
<thead>
<tr>
<th>Flap up</th>
<th>At $V_A$</th>
<th>At $V_{NE}$</th>
<th>Flaps in T/O or LDN position</th>
</tr>
</thead>
<tbody>
<tr>
<td>Max. positive</td>
<td>+5</td>
<td>+5</td>
<td>+2.0</td>
</tr>
<tr>
<td>Max. negative</td>
<td>-2.5</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

7. Propeller
   7.1 Model
   Hartzell Raptor series
   Hub: 3C1-L675A1
   Governor: S-1-78
   Blades: 76C03-7
   7.2 Type Certificate
   TCDS No. IM.P.137
   7.3 Number of blades
   3
   7.4 Diameter
   1.75 m (69 in)
   7.5 Sense of Rotation
   Clockwise (pilot’s view)

8. Fluids
   8.1 Fuel
   Refer to AFM, Section 2 for engine fuels
   8.2 Oil
   Refer to AFM, Section 2 for engine oil
8.3 Coolant

9. Fluid capacities

9.1 Fuel

2 tanks, 67.5 liters (18 USG) each. Total usable capacity: 120 liters (32 USG).

9.2 Oil

Total: 7.57 liters (8 quart)
Minimum: 3.78 liters (4 quart)

9.3 Coolant system capacity

N/A

10. Air Speeds

Never Exceed Speed $V_{NE}$: 172 KCAS
Max. structural cruising speed $V_{NO}$: 150 KCAS
Operating Maneuvering speed $V_A$: 123 KCAS
Max. speed with landing gear extended: $V_{LE}$: 90 KCAS
Max. speed for landing gear operation $V_{LO}$: 90 KCAS
Max. speed with flaps fully deployed $V_{FE}$: 90 KCAS

11. Maximum Operating Altitude

11500 ft – Density Altitude

12. Approved Operations Capability

Day VFR
Flights in known icing conditions is prohibited

13. Maximum Masses

Max. Take-off: 750 kg (1653 lbs)
Max. Landing: 750 kg (1653 lbs)

14. Centre of Gravity Range

16.5% MAC – 31.0% MAC at 750 kg
23% MAC - 31.0% MAC at 712 kg
Mean Aerodynamic Chord: 1360.26 mm

15. Datum

800 mm aft of composite bulkhead.
165 mm up from airplane fuselage centreline.

16. Control surface deflections

Aileron (Left / Right)
Up: 28° ±2°
Down: 23° ±2°

Elevator
Up: 29° ±1°
Down: 8° ±1°

Rudder
Left: 25° ±2°
Right: 25° ±2°

Elevator trim
Up: 25° ±1°
Down: $15^\circ \pm 1^\circ$

Flap

Take-off: $15^\circ \pm 1^\circ$

Landing: $30^\circ \pm 1^\circ$

17. Levelling Means
Baggage compartment surface

18. Minimum Flight Crew
1 pilot seated in the front seat

19. Maximum Passenger Seating Capacity
1

20. Baggage/ Cargo Compartments
33 kg capacity, 2.5 m aft of datum

21. Wheels and Tyres
Nose Landing Gear: 5.00-5”
Main Landing Gear: 4.00-5”

For approved tyres and ratings, see AMM

22. (Reserved)
A.IV. Operating and Service Instructions

1. Flight Manual  
   BCV-00-38-00 “BS115 Aircraft Flight Manual”, latest approved issue

   BCV-00-39-00 “Aircraft Maintenance Manual”, latest approved issue (see note 2)

   N/A

   included in the AFM

5. Illustrated Parts Catalogue  
   BCV-00-30-01 “Illustrated Parts Catalogue”
Notes

1) Eligible Serial Numbers: BCV.21001 and subsequent
2) Mandatory maintenance instructions have been provided at the date of TC. Remaining sections of the AMM will be provided before first entry into service, in accordance with CAI A-01.
SECTION ADMINISTRATIVE

I. Acronyms & Abbreviations

<table>
<thead>
<tr>
<th>Acronym</th>
<th>Description</th>
</tr>
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<tbody>
<tr>
<td>AFM</td>
<td>Aircraft Flight Manual</td>
</tr>
<tr>
<td>AMM</td>
<td>Aircraft Maintenance Manual</td>
</tr>
<tr>
<td>CRI</td>
<td>Certification Review Item</td>
</tr>
<tr>
<td>CS</td>
<td>Certification Specification</td>
</tr>
<tr>
<td>VLA</td>
<td>Very Light Aircraft</td>
</tr>
<tr>
<td>EASA</td>
<td>European Aviation Safety Agency</td>
</tr>
<tr>
<td>ICAO</td>
<td>International Civil Aviation Organization</td>
</tr>
<tr>
<td>IPC</td>
<td>Illustrated Part Catalogue</td>
</tr>
<tr>
<td>KCAS</td>
<td>Knots Calibrated Air Speed</td>
</tr>
<tr>
<td>KOEL</td>
<td>Kind of Operations Equipment List</td>
</tr>
<tr>
<td>MAC</td>
<td>Mean Aerodynamic Chord</td>
</tr>
<tr>
<td>MLW</td>
<td>Maximum Landing Weight</td>
</tr>
<tr>
<td>MTOW</td>
<td>Maximum Take-Off Weight</td>
</tr>
<tr>
<td>MZFW</td>
<td>Maximum Zero Fuel Weight</td>
</tr>
<tr>
<td>TC</td>
<td>Type Certificate</td>
</tr>
<tr>
<td>TCDS</td>
<td>Type Certificate Data Sheet</td>
</tr>
<tr>
<td>VFR</td>
<td>Visual Flight Rules</td>
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II. Acronyms

<table>
<thead>
<tr>
<th>Acronym</th>
<th>Description</th>
</tr>
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<tbody>
<tr>
<td>Ft</td>
<td>feet</td>
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III. Type Certificate Holder Record

<table>
<thead>
<tr>
<th>TC Holder</th>
<th>Period</th>
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<tbody>
<tr>
<td>Blackshape S.p.A.</td>
<td>Effective</td>
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<tr>
<td>SS 16 KM 841+900 Z.I.</td>
<td></td>
</tr>
<tr>
<td>70043 Monopoli (BA)</td>
<td></td>
</tr>
<tr>
<td>Italy</td>
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</table>

IV. Change Record

<table>
<thead>
<tr>
<th>Issue</th>
<th>Date</th>
<th>Changes</th>
<th>TC Issue No. &amp; Date</th>
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</thead>
<tbody>
<tr>
<td>Issue 01</td>
<td>03 April 2017</td>
<td>Initial Issue</td>
<td>Initial Issue, 03 April 2017</td>
</tr>
<tr>
<td>Issue 02</td>
<td>17 Dec 2018</td>
<td>Change to maximum operating altitude, definition of eligible serial numbers and elevator deflections.</td>
<td>Initial issue, 03 April 2017</td>
</tr>
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</table>

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