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## 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  
BK 160  
BK 160-200  
BK 160TR



## Contents

<b>SECTION A: BS 115</b> .....	<b>3</b>
<b>A.I. General</b> .....	<b>3</b>
<b>A.II. EASA Certification Basis</b> .....	<b>3</b>
<b>A.III. Technical Characteristics and Operational Limitations</b> .....	<b>4</b>
<b>A.IV. Operating and Service Instructions</b> .....	<b>7</b>
<b>A.V. Notes</b> .....	<b>7</b>
<b>SECTION B: BK 160</b> .....	<b>8</b>
<b>B.I. General</b> .....	<b>8</b>
<b>B.II. EASA Certification Basis</b> .....	<b>8</b>
<b>B.III. Technical Characteristics and Operational Limitations</b> .....	<b>9</b>
<b>B.IV. Operating and Service Instructions</b> .....	<b>12</b>
<b>B.V. Notes</b> .....	<b>13</b>
<b>SECTION C: BK 160-200</b> .....	<b>14</b>
<b>C.I. General</b> .....	<b>14</b>
<b>C.II. EASA Certification Basis</b> .....	<b>14</b>
<b>C.III. Technical Characteristics and Operational Limitations</b> .....	<b>16</b>
<b>C.IV. Operating and Service Instructions</b> .....	<b>19</b>
<b>C.V. Notes</b> .....	<b>20</b>
<b>SECTION D: BK 160TR</b> .....	<b>21</b>
<b>D.I. General</b> .....	<b>21</b>
<b>D.II. EASA Certification Basis</b> .....	<b>21</b>
<b>D.III. Technical Characteristics and Operational Limitations</b> .....	<b>23</b>
<b>D.IV. Operating and Service Instructions</b> .....	<b>26</b>
<b>D.V. Notes</b> .....	<b>27</b>
<b>SECTION ADMINISTRATIVE</b> .....	<b>28</b>
<b>I. Acronyms &amp; Abbreviations</b> .....	<b>28</b>
<b>II. Type Certificate Holder Record</b> .....	<b>29</b>
<b>III. Change Record</b> .....	<b>30</b>



**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
5. State of Design Authority	N/A
6. State of Design Authority Type Certificate Date	N/A
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
7. Environmental Protection	see TCDSN EASA.A.607



**A.III. Technical Characteristics and Operational Limitations**

1. Type Design Definition Document No. "TDDCR-BS115-001" Type Design Data Configuration Report, latest applicable issue.
2. Description Single-engine low wing monoplane, tandem two-seater configuration. Equipped with retractable landing gear and variable pitch constant speed propeller. Airframe made by composite material carbon fibre reinforced epoxy (CFRP).
3. Equipment Equipment list as reported in BCV-00-38-00 "BS115 Airplane Flight Manual" Section 6
4. Dimensions
- |           |                      |             |
|-----------|----------------------|-------------|
| Span      | 9.000 m              | 29.53 ft    |
| Length    | 7.437 m              | 24.40 ft    |
| Height    | 2.455 m              | 8.05 ft     |
| Wing area | 10.31 m <sup>2</sup> | 111.00 sqft |
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
- |              | Flap UP | Flap DOWN |
|--------------|---------|-----------|
| Max positive | +5      | +2.0      |
| Max negative | -2.5    | 0         |
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 N/A

9. Fluid capacities

9.1 Fuel 2 tanks, 64 litres (17 USG) each. Total usable capacity: 113.5 litres (30 USG).

9.2 Oil

Total: 7.57 litres (8 quart)

Minimum: 3.78 litres (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 Manoeuvring 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

23% MAC 31% MAC at 750 Kg

16.5% MAC 31% 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: $28^{\circ} \pm 2^{\circ}$ Down: $23^{\circ} \pm 2^{\circ}$
Elevator	Up: $29^{\circ} \pm 1^{\circ}$ Down: $8^{\circ} \pm 1^{\circ}$
Rudder	Left: $25^{\circ} \pm 2^{\circ}$ Right: $25^{\circ} \pm 2^{\circ}$
Elevator trim	UP: $25^{\circ} \pm 1^{\circ}$ 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 Serial Numbers Eligible

s/n BCV.001 and subsequent



#### **A.IV. Operating and Service Instructions**

- |                                |  |
|--------------------------------|--|
| 1. Flight Manual               | BCV-00-38-00 "BS115 Aircraft Flight Manual", Issue 1 |
| 2. Maintenance Manual          | BCV-00-39-00 "Aircraft Maintenance Manual", Issue 0  |
| 3. Structural Repair Manual    | N/A  |
| 4. Weight and Balance Manual   | included in the AFM                                  |
| 5. Illustrated Parts Catalogue | N/A  |

#### **A.V. Notes**

N/A



**SECTION B: BK 160**

**B.I. General**

1. Type/ Model / Variant	
1.1 Type	BS 115
1.2 Model	BK 160 (refer to B.V. Note 1)
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
5. State of Design Authority	N/A
6. State of Design Authority Type Certificate Date	N/A
7. EASA Type Certification Date	03 April 2017

**B.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	SC-CVLA-div01-02 "CS-VLA Aeroplanes with MTOM of more than 750 Kg" SC-OVLA.div03-02 – Night VFR Operation with VLA
4. Exemptions	none
5. (Reserved) Deviations	none
6. Equivalent Safety Findings	ESF to SC-OVLA.div-03-02 SC 1143 and SC 1147 ESF to CS VLA.161 (b)(2)(ii) Amdt 1
7. Environmental Protection	see TCDSN EASA.A.607





**B.III. Technical Characteristics and Operational Limitations**

1. Type Design Definition	Document No. "TDDCR-BS115-004" Type Design Data Configuration Report, latest applicable issue.		
2. Description	Single-engine low wing monoplane, tandem two-seater configuration. Equipped with retractable landing gear and variable pitch constant speed propeller. Airframe made by composite material carbon fibre reinforced epoxy (CFRP).		
3. Equipment	Equipment list as reported in BCV-00-38-00 BS115 Airplane Flight Manual Section 6		
4. Dimensions			
	Span	9.000 m	29.53 ft
	Length	7.437 m	24.40 ft
	Height	2.455 m	8.05 ft
	Wing area	10.31 m <sup>2</sup>	111.00 sqft
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			
	Flap UP	Flap DOWN	
Max positive	+4.4	+2.0	
Max negative	-2.0	0	
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	N/A		



9. Fluid capacities

9.1 Fuel 2 tanks, 64 litres (17 USG) each. Total usable capacity: 113.5 litres (30 USG).

9.2 Oil

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

9.3 Coolant system capacity N/A

10. Air Speeds

Never Exceed Speed  $V_{NE}$ : 172 KCAS  
Max. structural cruising speed  $V_{NO}$ : 148 KCAS  
Operating Manoeuvring speed  $V_A$ : 122 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/Night VFR  
Flights in known icing conditions is prohibited

13. Maximum Masses

Max. Take-off: 850 kg (1874 lbs)

Max. Landing 850 kg (1874 lbs)

14. Centre of Gravity Range

23% MAC 31% MAC at 850 Kg  
19% MAC 31% MAC at 765 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: $14^{\circ} \pm 1^{\circ}$ Down: $13^{\circ} \pm 1^{\circ}$
Elevator	Up: $25^{\circ} \pm 1^{\circ}$ Down: $8^{\circ} \pm 1^{\circ}$
Rudder	Left: $25^{\circ} \pm 2^{\circ}$ Right: $25^{\circ} \pm 2^{\circ}$
Elevator trim	DWN: $30^{\circ} \pm 2^{\circ}$ UP: $4^{\circ} \pm 1^{\circ}$
Flap	Take-off: $15^{\circ} \pm 1^{\circ}$ Landing: $30^{\circ} \pm 2^{\circ}$

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. Serial Numbers Eligible

s/n BCV.21005 and subsequent  
(refer to B.V. Note 2)



#### **B.IV. Operating and Service Instructions**

- |                                |   |
|--------------------------------|---|
| 1. Flight Manual               | BCV-00-38-00 "BS115 Aircraft Flight Manual", Issue 2 rev.0 or later approved revision |
| 2. Maintenance Manual          | BCV-00-39-00 "Aircraft Maintenance Manual", Issue 1 rev.0 or later approved revision  |
| 3. Structural Repair Manual    | N/A   |
| 4. Weight and Balance Manual   | included in the AFM   |
| 5. Illustrated Parts Catalogue | N/A   |



**B.V. Notes**

- 1) BK 160 model consists of BS 115 model modified as per major changes MOD-BCV-17-020 “BS 115 weight increase to 850 kg” (EASA Approval 10071128), major change MOD-BCV-17-021 “Internal Muffler (EASA Approval 10071131) and MOD-BCV-17-026 “BS 115 Night-VFR” (EASA Approval 10071129).
- 2) Aircraft S/N BCV.21003 and S/N BCV.21004 were originally produced as BS 115 model with applied Major Changes see B.V. Note 1) resulting in conformity of these 2 aircraft with basic specifications of BK 160 model.



**SECTION C: BK 160-200**

**C.I. General**

1. Type/ Model / Variant	
1.1 Type	BS 115
1.2 Model	BK 160-200
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	25 August 2021
5. State of Design Authority	N/A
6. State of Design Authority Type Certificate Date	N/A
7. EASA Type Certification Date	30 May 2022

**C.II. EASA Certification Basis**

1. Reference Date for determining the applicable requirements	25 August 2021 (refer to C.V. Note 1)
2. Airworthiness Requirements	CS-VLA Amdt. 1, 5 May 2009 amended with CS 23.2605(b) Amdt. 5; CS 23.2440 Amdt. 6 CS-ACNS Issue 1, 17 December 2013
3. Special Conditions	SC-CVLA-div01-02 [CS-VLA Aeroplanes with MTOM of more than 750 Kg] SC-OVLA.div03-02 [Night VFR Operation with VLA] SC-ELA.2015-01 [Lithium Battery Installation]
4. Exemptions	none
5. (Reserved) Deviations	none
6. Equivalent Safety Findings	ESF to SC-OVLA.div-03-02 SC 1143 and SC 1147 ESF to CS VLA.161 (b)(2)(ii) Amdt 1
7. Environmental Protection	see TCDSN EASA.A.607
8. Interpretative Material and Means of Compliance	CS-VLA 177(a)(2) and CS VLA 177(a)(3) [Static lateral stability]  ASTM F3064/F3064M-18a



As per AMC & GM to CS-23 Issue 4, the following acceptable means of compliance are used for CS 23.2440 Amdt. 6: ASTM F3066/F3066M-18 para. 8.1 to 8.7 [Titanium Firewall]



**C.III. Technical Characteristics and Operational Limitations**

1. Type Design Definition	Document No. "TDDCR-BK160200-001" Type Design Data Configuration Report, latest applicable issue.		
2. Description	Single-engine low wing monoplane, tandem two-seater configuration. Equipped with retractable landing gear and variable pitch constant speed propeller. Airframe made by composite material carbon fibre reinforced epoxy (CFRP).		
3. Equipment	Equipment list as reported in BCV-00-38-06 Airplane Flight Manual Section 6		
4. Dimensions			
	Span	9.000 m	29.53 ft
	Length	7.437 m	24.40 ft
	Height	2.455 m	8.05 ft
	Wing area	10.31 m <sup>2</sup>	111.00 sqft
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-00-38-06 "Aircraft Flight Manual" Section 2		
6. Load factors			
	Flap UP	Flap DOWN	
Max positive	+4.4	+2.0	
Max negative	-2.0	0	
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	N/A		





9. Fluid capacities

9.1 Fuel 2 tanks, 64 litres (17 USG) each. Total usable capacity: 113.5 litres (30 USG).

9.2 Oil

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

9.3 Coolant system capacity N/A

10. Air Speeds

Never Exceed Speed  $V_{NE}$ : 172 KCAS  
Max. structural cruising speed  $V_{NO}$ : 148 KCAS  
Operating Manoeuvring speed  $V_A$ : 122 KCAS  
Max. speed with landing gear extended:  $V_{LE}$ : 110 KCAS  
Max. speed for landing gear operation  $V_{LO}$ : 110 KCAS  
Max. speed with flaps fully deployed  $V_{FE}$ : 100 KCAS

11. Maximum Operating Altitude

11500 ft – Density Altitude

12. Approved Operations Capability

Day/Night VFR  
Flights in known icing conditions is prohibited

13. Maximum Masses

Max. Take-off: 850 kg (1874 lbs)

Max. Landing 850 kg (1874 lbs)

14. Centre of Gravity Range

23% MAC 28.5% MAC at 850 Kg  
19% MAC 28.5% MAC at 765 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: $14^{\circ} \pm 1^{\circ}$ Down: $13^{\circ} \pm 1^{\circ}$
Elevator	Up: $25^{\circ} \pm 1^{\circ}$ Down: $8^{\circ} \pm 1^{\circ}$
Rudder	Left: $25^{\circ} \pm 2^{\circ}$ Right: $25^{\circ} \pm 2^{\circ}$
Elevator trim	DWN: $30^{\circ} \pm 2^{\circ}$ UP: $4^{\circ} \pm 1^{\circ}$
Flap	Take-off: $15^{\circ} \pm 1^{\circ}$ Landing: $30^{\circ} \pm 2^{\circ}$

## 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. Serial Numbers Eligible

s/n BCV.21009 and subsequent



#### C.IV. Operating and Service Instructions

- |                                |   |
|--------------------------------|---|
| 1. Flight Manual               | BCV-00-38-06 "BK 160-200 Aircraft Flight Manual", rev.0 or later approved revision      |
| 2. Maintenance Manual          | BCV-00-39-02 "BK 160-200 Aircraft Maintenance Manual", rev.0 or later approved revision |
| 3. Structural Repair Manual    | N/A   |
| 4. Weight and Balance Manual   | included in the AFM   |
| 5. Illustrated Parts Catalogue | BCV-00-39-03 "BK 160-200 Illustrated Parts Catalogue", rev. 0                           |



**C.V. Notes**

- 1) The model BK 160-200 was classified according to 21.A.101 as a non-significant change to TC of the BK 160, for which the original reference date was 15 September 2014.



**SECTION D: BK 160TR**

**D.I. General**

1. Type/ Model / Variant	
1.1 Type	BS 115
1.2 Model	BK 160TR
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	7 April 2020
5. State of Design Authority	N/A
6. State of Design Authority Type Certificate Date	N/A
7. EASA Type Certification Date	14 June 2022

**D.II. EASA Certification Basis**

1. Reference Date for determining the applicable requirements	7 April 2020
2. Airworthiness Requirements	CS-VLA Amdt. 1, 5 May 2009 amended with CS 23.2605(b)(c) Amdt. 5; CS 23.2440 Amdt. 6: CS-ACNS Issue 2, 30 April 2019
3. Special Conditions	SC-CVLA-div01-02 [CS-VLA Aeroplanes with MTOM of more than 750 Kg] SC-OVLA.div03-02 [Night VFR Operation with VLA] SC-ELA.2015-01 [Lithium Battery Installation]
4. Exemptions	none
5. (Reserved) Deviations	none
6. Equivalent Safety Findings	ESF to SC-OVLA.div-03-02 SC 1143 and SC 1147 ESF to CS VLA.161 (b)(2)(ii) Amdt 1 [Longitudinal trim] ESF to CS VLA 1145(a) [Engine ignition switches] ESF to CS-VLA 1147 [Mixture control] ESF CS-VLA 777 (a) ;(b);(e)(1)(2); (f) [Cockpit controls – flaps]
7. Environmental Protection	see TCDSN EASA.A.607



8. Interpretative Material and Means of Compliance

CS-VLA 177(a)(2) and CS VLA 177(a)(3)  
[Static lateral stability]

As per AMC & GM to CS-23 Issue 3, the following acceptable means of compliance are used for CS 23.2605(b) Amdt. 5: CS VLA.1305 complemented with ASTM F3064/F3064M-18a par 6.2.1.6.  
[Fuel low-level annunciation]

As per AMC & GM to CS-23 Issue 3, the following acceptable means of compliance are used for CS 23.2605(c) Amdt. 5: ASTM F3061/F3061M-17.  
[Landing Gear Warning Silencer]

As per AMC & GM to CS-23 Issue 4, the following acceptable means of compliance are used for CS 23.2440 Amdt. 6: ASTM F3066/F3066M-18 para. 8.1 to 8.7  
[Titanium Firewall]



### **D.III. Technical Characteristics and Operational Limitations**

1. Type Design Definition Document No. "TDDCR-BK160-TR-001" Type Design Data Configuration Report, latest applicable issue.
2. Description Single-engine low wing monoplane, tandem two-seater configuration. Equipped with retractable landing gear and variable pitch constant speed propeller. Airframe made by composite material carbon fibre reinforced epoxy (CFRP).
3. Equipment Equipment list as reported in BCV-00-38-05 Airplane Flight Manual Section 6

4. Dimensions

Span	9.000 m	29.53 ft
Length	7.437 m	24.40 ft
Height	2.455 m	8.05 ft
Wing area	10.31 m <sup>2</sup>	111.00 sqft

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-00-38-05 "Aircraft Flight Manual" Section 2

6. Load factors

	Flap UP	Flap DOWN
Max positive	+4.4	+2.0
Max negative	-2.0	0

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 N/A



9. Fluid capacities

9.1 Fuel 2 tanks, 64 litres (17 USG) each. Total usable capacity: 113.5 litres (30 USG).

9.2 Oil

Total: 7.57 litres (8 quart)

Minimum: 3.78 litres (4 quart)

9.3 Coolant system capacity N/A

10. Air Speeds

Never Exceed Speed  $V_{NE}$ : 172 KCAS

Max. structural cruising speed  $V_{NO}$ : 148 KCAS

Operating Manoeuvring speed  $V_A$ : 122 KCAS

Max. speed with landing gear extended:  $V_{LE}$ : 110 KCAS

Max. speed for landing gear operation  $V_{LO}$ : 110 KCAS

Max. speed with flaps fully deployed  $V_{FE}$ : 100 KCAS

11. Maximum Operating Altitude 11500 ft – Density Altitude

12. Approved Operations Capability Day/Night VFR  
Flights in known icing conditions is prohibited

13. Maximum Masses

Max. Take-off: 850 kg (1874 lbs)

Max. Landing 850 kg (1874 lbs)

14. Centre of Gravity Range 23% MAC 28.5% MAC at 850 Kg

19% MAC 28.5% MAC at 800 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: $14^{\circ} \pm 1^{\circ}$ Down: $13^{\circ} \pm 1^{\circ}$
Elevator	Up: $25^{\circ} \pm 1^{\circ}$ Down: $8^{\circ} \pm 1^{\circ}$
Rudder	Left: $25^{\circ} \pm 2^{\circ}$ Right: $25^{\circ} \pm 2^{\circ}$
Elevator trim	DWN: $30^{\circ} \pm 2^{\circ}$ UP: $4^{\circ} \pm 1^{\circ}$
Flap	Take-off: $15^{\circ} \pm 1^{\circ}$ Landing: $30^{\circ} \pm 2^{\circ}$

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. Serial Numbers Eligible

s/n BCV.21007 and subsequent



#### **D.IV. Operating and Service Instructions**

- |                                |   |
|--------------------------------|---|
| 1. Flight Manual               | BCV-00-38-05 “BK 160TR Aircraft Flight Manual”,<br>rev. 0 or later approved revision      |
| 2. Maintenance Manual          | BCV-00-39-01 “BK 160TR Aircraft Maintenance Manual”,<br>rev.0 or later approved revision  |
| 3. Structural Repair Manual    | N/A   |
| 4. Weight and Balance Manual   | included in the AFM   |
| 5. Illustrated Parts Catalogue | BCV-00-39-04 “BK 160TR Illustrated Parts Catalogue”,<br>rev. 0 or later approved revision |



**D.V. Notes**

None



## **SECTION ADMINISTRATIVE**

### **I. Acronyms & Abbreviations**

#### **Acronyms**

AFM – Aircraft Flight Manual  
AMM – Aircraft Maintenance Manual  
CRI – Certification Review Item  
CS – Certification Specification  
VLA – Very Light Aircraft  
EASA – European Aviation Safety Agency  
ESF – Equivalent Safety Finding  
ICAO – International Civil Aviation Organization  
IPC – Illustrated Part Catalogue  
KCAS – Knots Calibrated Air Speed  
KOEL – Kind of Operations Equipment List  
MAC – Mean Aerodynamic Chord  
MLW – Maximum Landing Weight  
MTOW – Maximum Take-Off Weight  
MZFW – Maximum Zero Fuel Weight  
TC – Type Certificate  
TCDS – Type Certificate Data Sheet  
VFR – Visual Flight Rules  
N-VFR – Night - Visual Flight Rules  
Ft - feet



## II. Type Certificate Holder Record

TC Holder	Period
Blackshape S.p.A. SS 16 KM 841+900 Z.I. 70043 Monopoli (BA) Italy	Effective



### III. Change Record

Issue	Date	Changes	TC Issue No. & Date
Issue 01	03 April 2017	Initial Issue	Initial Issue, 03 April 2017
Issue 02	17 Dec 2018	Change to maximum operating altitude, definition of eligible serial numbers and elevator deflections.	Initial Issue, 03 April 2017
Issue 03	02 Oct. 2019	Added Variant <i>BK160 Gabriël</i> incorporating major changes: MOD-BCV-17-020, MOD-BCV-17-021 and MOD-BCV-17-026	Initial Issue, 03 April 2017
Issue 04	12 May 2020	Variant BK 160 transformed to a new separate model BK 160 – document general restructuring	Issue 01, 12 May 2020
Issue 05	18 March 2022	Administrative corrections in sections A.IV. and B.IV. performed based on the DOA audit.	Issue 01, 12 May 2020
Issue 06	07 June 2022	Added Model BK 160-200 incorporating major changes: MOD-BCV-19-004, MOD-BCV-21-008 and MOD-BCV-20-010	Issue 02, 07 June 2022
Issue 07	22 June 2022	Added Model BK 160TR	Issue 03, 14 June 2022
Issue 08	13 December 2023	MOD-BCV-22-013 (BK 160-200; BK 160TR)	Issue 03, 14 June 2022

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