EASA
TYPE-CERTIFICATE
DATA SHEET

EASA.IM.A.341
BE-103

Type Certificate Holder:
Beriev Aircraft Company
1, Aviatorov square
Taganrog, 347923
RUSSIA

For models: Be-103

Issue 02: 01-Mar-2013
SECTION A: Be-103

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Section A: Be-103

A.I. General

1. a) Type: Be-103  
b) Model: Be-103  
c) Variant: ---

2. Airworthiness Category: Normal Category

3. Type Certificate Holder: Beriev Aircraft Company  
1, Aviatorov square  
Taganrog, 347923  
Russia

4. Manufacturer: KnAAPO  
1, Sovetskaya street  
Komsomolsk-on-Amur, 681018  
Russia

5. Application Date at country of origine: 14-Sep-2001

6. EASA Certification Application Date: 26-Sep-2005

7. EASA Type Certification Date: 23-Dec-2008

A.II. Certification Basis

1. Reference Date for determining the applicable requirements: 14-Sep-2001

2. (Reserved)

3. (Reserved)

4. Certification Basis: As defined in CRI A-01, Release 2, Revision 1, dated 19-Dec-2008, or later Revision

5. Airworthiness Requirements: JAR-23, Amendment 1, issued 01 February 2001  
JAR-1, Change 5, issued 15 July 1996

6. Requirements elected to comply: None

7. EASA Special Conditions: CRI F-52, Protection from Effects of HIRF  
CRI F-54, Protection from the Effects of Lightning Strike, Indirect Effects

8. EASA Exemption: None

9. EASA Equivalent Safety Findings: None

CS-36, issued 03-Apr-2007, Amendment 1, see CRI N-01
A.III. Technical Characteristics and Operational Limitations

1. Type Design Definition: Current issue of Doc. No. A103.4.0000.000.D49 (as defined in CRI A-05)

2. Description: Twin engine, five-seated cantilever low wing amphibious airplane, metal construction, retractable tricycle landing gear, X-tail

3. Equipment: Equipment list, AFM, Doc. No. A103.4.0000.000.AFM, Section 6

4. Dimensions:
   - Span: 12.72 m (41.73 ft)
   - Length: 10.875 m (35.68 ft)
   - Height: 3.757 m (12.31 ft)
   - Wing Area: 25.1 m² (270.2 sq ft)

5. Engines: 2 Teledyne Continental Engines IO-360 ES4 FAA TC No. E1CE, deemed to be EASA approved

   5.1 Engine Limits:
   - Max take-off rotational speed: 2800 r.p.m.
   - Max continuous rotational speed: 2800 r.p.m.

   For power-plants limits refer to AFM, Doc. No. A103.4.0000.000.AFM, Section 2

6. (Reserved)

7. Propellers: 2 MT-Propeller MTV-12-D-C-F-R(M)/CFR183-17 EASA Prop. Type Certificate Data Sheet P.013

   7.1 Settings
   - Low pitch setting: 8.5 °
   - Feather position: 83 °
   - Revers position: -20 °

8. Fluids:
   8.1 Fuel: AVGAS 100 LL AVGAS 100 B95/130 GOST 1012-72 (Russian Aviation Grade Fuel)

   8.2 Oil: engine 15W-50, 20W-50, SAE 30 or 10W-30, SAE 50 or see AFM, Doc. No. A103.4.0000.000.AFM, Section 1

   8.3 Coolant: None

   8.4 Ice Protection Fluids: None

9. Fluid capacities:
   9.1 Fuel: Wing Fuel Tank
   - Total: 193.8 kg (271 liters / 71 US Gallons)
   - Usable: 193.1 kg (270 liters / 71 US Gallons)

   Pylon Fuel Tank
   - Total: 49.3 kg (69 liters / 18 US Gallons)
   - Usable: 47.9 kg (67 liters / 18 US Gallons)

   9.2 Oil: each engine 9.12 liters 8 qts
10. Air Speeds:
   Design Manoeuvring Speed $v_A$: up to 2270 kg (5004 lb) 116 KIAS
   Flap Extended Speed $v_{FE}$: Approach None, Landing None
   Maximum Landing Gear Operation Speed $v_{LO}$: 99 KIAS
   Maximum Landing Gear Extended Speed $v_{LE}$: 99 KIAS
   Minimum Control Speed $v_{MC}$: 62 KIAS
   Maximum Operating Limit Speed $v_{MO}$: 130 KIAS

11. Operating Altitudes
   Maximum Operating Altitude: 3000 m (9900 ft)
   Maximum Airfield Elevation for take-off: 900 m (3000 ft)

12. Conditions
   All weather Capability:
   Outside Air Temperature at start-up and take-off:
   Day-VFR Flights into known or forecast icing conditions is prohibited
   Land Operations: from -30 °C (-22 °F) to 40 °C (105 °F)
   Water Operations: from 5 °C (41 °F) to 40 °C (105 °F)

13. Maximum Masses:
   Take-off (Land & Water) 2270 / 2267 kg (5004 / 4999 lb)
   Zero Fuel 2220 kg (4888 lb)
   Landing (Land & Water) 2270 / 2267 kg (5004 / 4999 lb)
   Taxi (Land) 2280 kg (5022 lb)

14. Centre of Gravity Range:
   Forward limit 17 % MAC
   Rear limit 22 % MAC

15. Datum:
   20.94 in in front of point 11 LH (11 RH)

16. (Reserved)

17. Levelling Means:
   Point 11 LH (11 RH) and point 25 LH (25 RH)
   see AMM, Section 08.10.00

18. Minimum Flight Crew:
   1 (Pilot)

19. Maximum Passenger Seating Capacity:
   4

20. (Reserved)

21. Baggage / Cargo Compartments
   Location max. allowable Load
   Aft Baggage Compartment 50 kg (110 lb)

22. Wheels and Tyres
   Nose Wheel Tyre Size 400x150mm
   Main Wheel Tyre Size 476x178mm
A.IV. Operating and Service Instructions

Airplane Flight Manual (AFM) Document No. A103.4.0000.000.AFM
Master Minimum Equipment List (MMEL) Document No. A103.4.0000.000.MMEL
Airplane Maintenance Manual (AMM) Document No. A103.4.0000.000.AMM
(incl. Airworthiness Limitations)
Service Informations and Service Bulletins

A.V. Notes

1. This certification applies to serial numbers 3901 and subsequent for production at KnAAPO.

2. Approved Noise Levels in accordance to the EASA data sheet for noise TCDSN A.341.

3. Unless closure of all open Pre C of A Items listed in the Post TC Action Item List (PTC-AIL), Doc. No. Be-103_PTC-AIL_01, Rev. 0, no Be-103 aircraft is eligible to enter a register of a country member of the EU or EASA. Upon closure of those open items this note will be deleted.
ADMINISTRATIVE SECTION

I. Acronyms

None

II. Type Certificate Holder Record

No change done so far

III. Change Record

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<td>23-Dec-2008</td>
<td>Initial Issue of TCDS</td>
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<tr>
<td>2</td>
<td>01-Mar-2013</td>
<td>All pages: Layout changed to new version</td>
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<tr>
<td></td>
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<td>Title Section 1: Type Designator corrected</td>
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<td>A.I.: Correction of TC Number</td>
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<td>A.II.4: Revision and date of CRI A-01 added</td>
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