

European Aviation Safety Agency

EASA TYPE-CERTIFICATE DATA SHEET

EASA.IM.A.341 BE-103

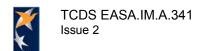
Type Certificate Holder:

Beriev Aircraft Company

1, Aviatorov square Taganrog, 347923 RUSSIA

For models: Be-103

Issue 02: 01-Mar-2013



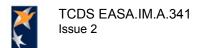
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Section A: Be-103

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

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

 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 Lighning

Strike, Indirect Effects

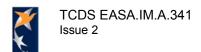
8. EASA Exemption: None

9. EASA Equivalent Safety Findings: None

10. EASA Environmental Standards: ICAO, Annex 16, Volume 1, Third Edition, Amdt. 6

CS-36, issued 03-Apr-2007, Amendment 1, see CRI

N-01



A.III. <u>Technical Characteristics and Operational Limitations</u>

Type Design Definition: Current issue of Doc. No. A103.4.0000.000D49

(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 sqft)

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

Б95/130 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: 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: Day-VFR

Flights into known or forecast icing conditions is

prohibited

Outside Air Temperature at

start-up and take-off: 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 / 4999lb)

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)

Maximum Passenger Seating Capacity: 4

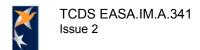
20. (Reserved)

21. Baggage / Cargo Compartments

<u>Location</u> <u>max. allowable Load</u>
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

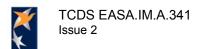
Airplane Maintenance Manual (AMM)

(incl. Airworthiness Limitations) Document No. A103.4.0000.000.AMM

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

<u>I.</u> <u>Aconyms</u>

None

II. Type Certificate Holder Record

No change done so far

III. Change Record

Issue	Date	Changes	
1	23-Dec-2008	Initial Issue of TCDS	
		All pages:	Layout changed to new version
		Title Section 1:	Type Designator corrected
2	01-Mar-2013	A.I:	Correction of TC Number
		A.II.4:	Revision and date of CRI A-01 added
		A.V.:	Reference to PTC-AIL added instead of AIL