European Aviation Safety Agency

EASA

TYPE-CERTIFICATE DATA SHEET

G 120

Type Certificate Holder:

GROB Aircraft AG
Lettenbachstrasse 9
86874 Tussenhausen-Mattsies
Germany

Manufacturer:

GROB Aircraft AG
Lettenbachstrasse 9
86874 Tussenhausen-Mattsies
Germany

For Models: **G 120A**
G 120A-I

Issue 05; 08 July 2010

CONTENT

Change Record

Issue 1	14 February 2006. Initial issue G120 (see note 1)
Issue 2	23 March 2007. Editorial changes
Issue 3	25 April 2008. Incorporation of changed company name and optional equipment from S/N 85035 on i.a.w. change note OÄM1121-075 for model G 120A
Issue 4	8 January 2010. Change of company name to GROB Aircraft AG
Issue 5	8 July 2010. Change of Type Definition Reference for Model G 120A

SECTION A G 120A

A.I. General

Data Sheet No.: A.075 Issue: 01 Date: 14. February 2006

1.	a) Type:	G 120
	b) Model:	G 120A
	c) Sales Designation	
	S/N 85001 – 85007:	G 120A
	from S/N 85026 on:	G 120A-C
	If equipment i.a.w. OÄM1121-075 installed:	G 120A-F (see note 7)
2.	Airworthiness Category:	
	a)	Utility
	b)	Aerobatic
3.	Type Certificate Holder:	GROB Aircraft AG Lettenbachstrasse 9 86874 Tussenhausen-Mattsies Germany
4.	Manufacturer:	GROB Aircraft AG Lettenbachstrasse 9 86874 Tussenhausen-Mattsies Germany previously GROB Aerospace GmbH Lettenbachstrasse 9 86874 Tussenhausen-Mattsies Germany
5.	Certification Application Date:	08. June 2000
6.	LBA Certification:	22. November 2001 (LBA TCDS Number 1121)
7.	EASA Certification:	09. February 2006 (see note 1)

A.II. Certification Basis

1.	Certification Basis:	As defined in CRI A-01, Issue 3 or later Issue
2.	Airworthiness Requirements:	JAR-23, Amendment 1, 01-Feb-2001
3.	Requirements elected to comply:	None
4.	Special Conditions:	CRI C-02, Fire Protection of the Connection Engine Mount / Composite Airframe CRI F-01, Protection from the Effects of HIRF CRI F-03, Protection from the Effects of Lightning Strikes, Indirect Effects
5.	Equivalent Safety Findings:	CRI G-01, Fuel Quantity Indicator
6.	Environmental Standards:	ICAO Annex 16, Vol. I (see note 2)

A.III. Technical Characteristics and Operational Limitations

1. Type Design Definition:		Doc.-No.: DE-G120A-000100, Master Document Index, Revision 0 or later approved revision	
2. Description:		Single engine, two-seated cantilever monoplane, composite structure, retractable tricycle landing gear, normal empennage	
3. Equipment:		Equipment list in Airplane Flight Manual (AFM)	
4. Dimensions:			
	Span	10.19 m	(26.62 ft)
	Length	8.12 m	(26.62 ft)
	Height	2.66 m	(8.74 ft)
	Wing Area	13.29 m²	(142.95 sqft)
5. Engines:		Lycoming AEIO-540-D4D5 (FAA TCDS 1E4, see note 3) Max rotational speed 2700 RPM Refer to AFM, Section 2 for power-plants limits	
6. Propellers:		Hartzell HC-C3YR-4BF/FC7663R (FAA TCDS P25EA, see note 3) optional with change note OÄM1121-055: Hartzell HC-C3YR-1RF/F7663R (FAA TCDS P25EA, see note 3)	
	Diameter	1981 mm	(78 in.)
7. Fluids:	Fuel	AVGAS 100 LL	
	Oil	conforming to MIL-L-22851 or –6082C Refer to AFM Section 2 for more details	
8. Fuel capacity:	Total:	262 liters	69.2 U.S. gallons
	Usable:	252 liters	66.6 U.S. gallons
9. Oil capacity:	Total:	11.4 liters	12 quarts
10. Air Speed Limits:	V_{NE}	235 kts (435 km/h) never exceed speed	
	V_{NO}	172 kts (318 km/h) normal operating speed	
	V_A utility aircraft	145 kts (268 km/h) maneuvering speed	
	V_A acrobatic aircraft	165 kts (305 km/h) maneuvering speed	
	V_{FE1}	150 kts (278 km/h) flaps extended takeoff	
	V_{FE}	114 kts (211 km/h) flaps extended Landing, Full	
11. Maximum Operating Altitude:		18 000 ft (5486 m)	
12. Kinds of Operation:		VFR day and Night and IFR Flight into known or forecast icing conditions is prohibited	

13. Maximum Weight:	M_{TOW} utility aircraft	1490 kg (3285 lbs) maximum takeoff weight
	M_{TOW} acrobatic aircrafty:	1440 kg (3175 lbs) maximum takeoff weight
	M_{LW} utility aircraft	1440 kg (3175 lbs) maximum landing weight
	M_{LW} acrobatic aircrafty:	1440 kg (3175 lbs) maximum landing weight

14. Centre of Gravity:

C.G. range	See AFM (weight and balance, Section 6)
Reference Datum	QE 0 in. (0 mm), 91.9 in. (2335 mm) in front of wing leading edge at ME 43.3 in. (1150 mm)
Leveling Means	Canopy sill

15. Minimum Crew:	1 Pilot
16. Number of Seats:	2
17. Maximum Bagage	50 kg (110 lbs)
18. Minimum Equipment	refer to equipment list in AFM
19. Service Life Limited Parts	refer to Maintenance Manual, Chapter 04-00
20. Control Surface Movements	refer to Maintenance Manual, Chapter 06-00

A.IV. Operating and Service Instructions

Operating Instructions

Airplane Flight Manual (AFM) including approved revisions and supplements

S/N 85001 – 85007:	Airplane Flight Manual GROB G 120A, Doc.-No. 120.PO.002-E, Issue 1, valid for Serial Numbers 85001 to 85007
from S/N 85026 on:	Airplane Flight Manual GROB G 120A, Doc.-No. 120A-C.PO.002-E, Issue 1, valid for Serial Numbers 85026 and higher
if equipped i.a.w. OÄM1121-075:	Airplane Flight Manual GROB G 120A, Doc.-No. 120A-F.PO.002-E, Issue 1

Placards in accordance with the Airplane Flight Manual

Service Instructions

Airplane Maintenance Manual including Airworthiness Limitations

S/N 85001 – 85007:	Aircraft Maintenance Manual GROB G 120A, Doc.-No. 120.MM.002-E, Issue 1, valid for Serial Numbers 85001 to 85007
from S/N 85026 on:	Aircraft Maintenance Manual GROB G 120A, Doc.-No. 120A-C.MM.002-E, Issue 1, valid for Serial Numbers 85026 and higher
if equipped i.a.w. OÄM1121-075:	Maintenance Manual GROB G 120A, Doc.-No. 120A-F.MM.002-E, Issue 1

Service Informations and Service Bulletins

A.V. Notes

1. This EASA TCDS replaces the LBA TCDS No. 1121, Issue 3 for G 120A, dated March 31, 2003 according EASA information and policy paper to EC-Reg. 1702/2003 Art. 2
2. CRI A-03, Lärmschutzforderungen (LSL), issued 01. Jan. 1991, amended on 03. Dec. 1996 and 01. May 2000. For further information concerning noise please refer to the TCDS-N A.075
3. The EASA Type Certification Standard includes that of FAA TCDS based on individual EU member State acceptance or certification of this standard prior to 28. September 2003. Other standards confirming to TC/ TCDS standards certificated by individual EU member States prior to 28. September 2003 are also acceptable.
4. This certification applies to type G 120, Model G 120A Airplanes Serial Number 85001 to 85007 and from 85026 on.
5. The painting scheme of the aircraft must be in accordance with GROB Process Specification GPS 1078-1.
6. For Certification for Operation the noise protection requirements effective on the day of application for certification for operation are applicable.
7. The optional equipment in accordance with change note OÄM1121-075 associated with the sales designation G 120A-F is applicable to model G 120A airplanes from Serial Number 85035 on.

SECTION B G 120A-I

B.I. General

Data Sheet No.: A.075 Issue: 01 Date: 14. February 2006

1.	a) Type:	G 120
	b) Model:	G 120A-I
	c) Sales Designation	G 120A-I
2.	Airworthiness Category:	
	a)	Utility
	b)	Aerobatic
3.	Type Certificate Holder:	GROB Aircraft AG Lettenbachstrasse 9 86874 Tussenhausen-Mattsies Germany
4.	Manufacturer:	GROB Aircraft AG Lettenbachstrasse 9 86874 Tussenhausen-Mattsies Germany previously GROB Aerospace GmbH Lettenbachstrasse 9 86874 Tussenhausen-Mattsies Germany
5.	Certification Application Date:	11. June 2002
6.	LBA Certification:	27. September 2002 (LBA TCDS Number 1121)
7.	EASA Certification:	14. February 2006 (see note 1)

B.II. Certification Basis

1.	Certification Basis:	As defined in CRI A-01, latest Issue
2.	Airworthiness Requirements:	JAR-23, Amendment 1, 01-Feb-2001
3.	Requirements elected to comply:	None
4.	Special Conditions:	same as A.II.4. (G120A)
5.	Equivalent Safety Findings:	CRI D-02, Landing Gear Switch
6.	Environmental Standards:	ICAO Annex 16, Vol. I (see note 2)

B.III. Technical Characteristics and Operational Limitations

1. Type Design Definition:		Set of Drawings according to Master Drawing Index: Doc.-No. ZG-G120A-I-000000 Doc.-No. ZG-G120A-I-900000 (BUV Electric/Avionic)	
2. Description:		Single engine, two-seated cantilever monoplane, composite structure, retractable tricycle landing gear, normal empennage	
3. Equipment:		Equipment list in Airplane Flight Manual (AFM)	
4. Dimensions:			
	Span	10.19 m	(26.62 ft)
	Length	8.12 m	(26.62 ft)
	Height	2.66 m	(8.74 ft)
	Wing Area	13.29 m²	(142.95 sqft)
5. Engines:		Lycoming AEIO-540-D4D5 D4D5 (FAA TCDS 1E4, see note 3) Max rotational speed 2700 RPM Refer to AFM, Section 2 for power-plants limits	
6. Propellers:		Hartzell HC-C3YR-1RF/F7663R (FAA TCDS P25EA, see note 3)	
	Diameter	1981 mm	(78 in.)
7. Fluids:	Fuel	AVGAS 100 LL	
	Oil	conforming to MIL-L-22851 or –6082C Refer to AFM Section 2 for more details	
8. Fuel capacity:	Total:	262 liters	69.2 U.S. gallons
	Usable:	252 liters	66.6 U.S. gallons
9. Oil capacity:	Total:	11.4 liters	12 quarts
10. Air Speed Limits:	V_{NE}	235 kts (435 km/h) never exceed speed	
	V_{NO}	172 kts (318 km/h) normal operating speed	
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11. Maximum Operating Altitude:		18 000 ft (5486 m)	
12. Kinds of Operation:		VFR day and Night Flight into known or forecast icing conditions is prohibited	
13. Maximum Weight:	M_{TOW} utility aircraft	1490 kg (3285 lbs) maximum takeoff weight (EASA.A.C.08557)	
	M_{TOW} acrobatic aircrafty:	1440 kg (3175 lbs) maximum takeoff weight	
	M_{LW} utility aircraft	1440 kg (3175 lbs) maximum landing weight	
	M_{LW} acrobatic aircrafty:	1440 kg (3175 lbs) maximum landing weight	

14. Centre of Gravity:	
C.G. range	See AFM (weight and balance, Section 6)
Reference Datum	QE 0 in. (0 mm), 91.9 in. (2335 mm) in front of wing leading edge at ME 43.3 in. (1150 mm)
Leveling Means	Canopy sill
15. Minimum Crew:	1 Pilot
16. Number of Seats:	2
17. Maximum Bagage	50 kg (110 lbs)
18. Minimum Equipment	refer to equipment list in AFM
19. Service Life Limited Parts	refer to Maintenance Manual, Chapter 04-00
20. Control Surface Movements	refer to Maintenance Manual, Chapter 06-00

B.IV. Operating and Service Instructions

Operating Instructions
Airplane Flight Manual (AFM) including approved revisions and supplements
Airplane Flight Manual GROB G 120A-I, Doc.-No. 120A-I.PO.002-E, Issue 1,

Placards in accordance with the Airplane Flight Manual

Service Instructions
Airplane Maintenance Manual including Airworthiness Limitations
Aircraft Maintenance Manual GROB G 120A-I, Issue 1,

Service Informations and Service Bulletins

B.V. Notes

1. This EASA TCDS replaces the LBA TCDS No. 1121, Issue 1 for G 120A-I, Dated September 27, 2002. according EASA information and policy paper to EC-Reg. 1702/2003 Art. 2
2. CRI A-03, Lärmschutzforderungen (LSL), issued 01. Jan. 1991, amended on 03. Dec. 1996 and 01. May 2000. For further information concerning noise please refer to the TCDS-N A.075
3. The EASA Type Certification Standard includes that of FAA TCDS based on individual EU member State acceptance or certification of this standard prior to 28. September 2003. Other standards confirming to TC/ TCDS standards certificated by individual EU member States prior to 28. September 2003 are also acceptable.
4. This certification applies to type G 120, Model G 120A-I Airplanes Serial Number 85008 to 85025.
5. The painting scheme of the aircraft must be in accordance with GROB Process Specification GPS 1078-1.
6. For Certification for Operation the noise protection requirements effective on the day of application for certification for operation are applicable.
7. Maneuvering speed (B.III.10.) and Max Takeoff Weight (B.III.13.) are increased according change note OÄM1121-089.