



European Aviation Safety Agency

EASA

**TYPE-CERTIFICATE
DATA SHEET**

EASA.A.565

G 120TP

GROB Aircraft AG

Lettenbachstrasse 9
86874 Tussenhausen-Mattsies
Germany

For models: G 120TP-A

Issue 01: 06 May 2013

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SECTION A: MODEL G 120TP-A

A.I. General

1. Data Sheet No.: EASA.A.565
2. a) Type: G 120TP
b) Model: G 120TP-A
c) Variant: --
3. Airworthiness Category: Utility
Aerobatic
4. Type Certificate Holder: GROB AIRCRAFT AG
LETTENBACHSTRASSE 9
86874 TUSSENAUSEN-MATTSIES
GERMANY
5. Manufacturer: GROB AIRCRAFT AG
LETTENBACHSTRASSE 9
86874 TUSSENAUSEN-MATTSIES
GERMANY
6. Certification Application Date: 17. December 2009
7. (Reserved)
8. (Reserved)

A.II. EASA Certification Basis

1. Reference Date for determining the applicable requirements: 17. June 2010
2. Airworthiness Requirements: CS-23, Amendment 1, issued 12 February 2009

3. Special Conditions: CRI F-52 Protection from Effects of HIRF
CRI F-54 Protection from Effects of Lightning strikes, Indirect Effects
4. Exemptions: None
5. Deviations: None
6. Equivalent Safety Findings: CS 23.777(g): CRI D-101 Location of Landing Gear Control Lever
7. Requirements elected to comply: None
8. Environmental Standards: Chapter 10 of ICAO Annex 16, Volume I, Fifth Edition, Amendment 9
CS-36, Amendment 2
CS-34, Original issue
9. (Reserved)
10. (Reserved)

A.III. Technical Characteristics and Operational Limitations

1. Type Design Definition: Doc.-No: DE-120TPA-000100 Master Document Index, Revision 0 or later approved revision

2. Description: Two seat side by side trainer aircraft. Single engine turbo-propeller, low wing monoplane in composite construction, retractable landing gear, normal tail plane

3. Equipment: Refer to Equipment list in AFM, Section 6

4. Dimensions:

Span	10.31 m	(33.83 ft)
Length	8.42 m	(27.64 ft)
Height	2.64 m	(8.68 ft)
Wing Area	13.52 m ²	(145.53 ft ²)

5. Engine:
 - 5.1.1 Model: Rolls Royce 250-B17F
 - 5.1.2 Type Certificate: FAA E10CE
 - 5.1.3 Limitations:

MCP	380 SHP
MTOP	450 SHP (5 min.)
Rated Prop Shaft Speed	2030 RPM

6. Load factors:

<u>Utility Category</u>	
-1.76 / +4.4	(flaps up)
0 / +3.8	(flaps down)
 <u>Aerobatic Category</u>	
-4.0 / +6.0	(flaps up)
0 / +3.8	(flaps down)

7. Propeller:
 - 7.1 Model: MT-Propeller MTV-5-1-D-C-F-R(A)/CFR210-56
 - 7.2 Type Certificate: LBA 32.130/103
 - 7.3 Number of blades: 5
 - 7.4 Diameter: 2.10 m (82.68 in.)
 - 7.5 Sense of Rotation: Clockwise

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: Not applicable

9. Fluid capacities:

- 9.1 Fuel: Total 351.0 litres (92.7 U.S. gallons)
 Usable 341.4 litres (90.2 U.S. gallons)
 9.2 Oil: Min 5.0 litres (5.3 U.S. quarts)
 Max 11.0 litres (11.6 U.S. quarts)
 9.3 Coolant system capacity: Not applicable

10. Air Speeds:

Utility Category

- V_{MO} 235 KCAS (238 KIAS)
 (SL to 13000 ft)
 M_{MO} 0.45 (13000 ft to 25000 ft)
 V_O 142 KCAS (143 KIAS)
 V_{FE-TO} 150 KCAS (151 KIAS)
 V_{FE} 113 KCAS (114 KIAS)
 V_{LE} 180 KCAS (182 KIAS)
 V_{LOE} 180 KCAS (182 KIAS)
 V_{LOR} 135 KCAS (137 KIAS)

Aerobatic Category

- V_{MO} 235 KCAS (238 KIAS)
 (SL to 13000 ft)
 M_{MO} 0.45 (13000 ft to 20000 ft)
 V_O 162 KCAS (164 KIAS)
 V_{FE-TO} 150 KCAS (151 KIAS)
 V_{FE} 113 KCAS (114 KIAS)
 V_{LE} 180 KCAS (182 KIAS)
 V_{LOE} 180 KCAS (182 KIAS)
 V_{LOR} 135 KCAS (137 KIAS)

11. Maximum Operating Altitude:

- Utility Category 25000 ft
 Aerobatic Category 20000 ft

12. Allweather Operations Capability: VFR day and night, IFR
Flight into known icing conditions is prohibited
13. Maximum Weights: Utility Category
Take-off 1515 kg (3340 lb)
Landing 1440 kg (3175 lb)
- Aerobatic Category
Take-off 1440 kg (3175 lb)
Landing 1440 kg (3175 lb)
14. Centre of Gravity Range: Utility Category
Most forward C.G. 2.676 m (25% MAC) aft of datum
Most aft C.G. 2.732 m (29% MAC) aft of datum
to 2.766 m (31.5% MAC) aft of datum for 1170 kg to 1370 kg
2.766 m (31.5% MAC) aft of datum for 1370 kg to 1515 kg
- Aerobatic Category
Most forward C.G. 2.676 m (25% MAC) aft of datum
Most aft C.G. 2.732 m (29% MAC) aft of datum
15. Datum: 2.335 m in front of wing leading edge at 1.150 m outside the symmetry axis
16. Control surface deflections: Refer to AMM, Section 6
17. Levelling Means: Canopy frame bottom edge
18. Minimum Flight Crew: 1 Pilot
19. Maximum Passenger Seating Capacity: 2 Seats

- | | | |
|------------------------------------|----------------------|----------------------|
| 20. Baggage/Cargo
Compartments: | Location | 3.800 m aft of datum |
| | max. Baggage. weight | |
| | Utility | 50 kg (110 lb) |
| | Aerobatic | no baggage allowed |
| 21. Wheels and Tyres: | Nose Wheel Tyre Size | 5.00-5 |
| | Main Wheel Tyre Size | 15x6.0-6 |
| 22. (Reserved): | | |

A.IV. Operating and Service Instructions

1. Flight Manual: Airplane Flight Manual GROB G 120TP-A,
Doc.-No. 1T-120TPA-1,
Issue 1, Revision 0 or later approved revision

2. Maintenance Manual: Airplane Maintenance Manual GROB G 20TP-A,
Doc.-No. 1T-120TPA-2,
Issue 1, Revision 0 or later approved revision

3. Structural Repair Manual: Included in Airplane Maintenance Manual

4. Illustrated Parts Catalogue: Illustrated Parts Catalogue GROB G120TP-A,
Doc.-No. 1T-120TPA-4

A.V. Notes:

1. This TCDS, Section A applies to S/N 11002 and following model G 120TP-A aeroplanes.
2. Painting of the aircrafts must comply with the GROB Process Specification GPS 1078-1 or later approved data provided by GROB superseding GPS 1078-1.

ADMINISTRATIVE SECTION

I. Acronyms

AFM	Airplane Flight Manual
AMM	Airplane Maintenance Manual
C.G.	Centre of Gravity
CRI	Certification Review Item
HIRF	High Intensity Radiated Field
IFR	Instrument Flight Rules
IPC	Illustrated Parts Catalogue
MCP	Maximum Continuous Power
MTOP	Maximum Takeoff Power
TCDS	Type Certificate Data Sheet
VFR	Visual Flight Rules
V _{FE-TO}	Maximum Flaps Extended Speed, Takeoff Configuration
V _{FE}	Maximum Flaps Extended Speed, Landing Configuration
V _{LE}	Maximum Landing Gear Extended Speed
V _{LOE}	Maximum Landing Gear Extension Speed
V _{LOR}	Maximum Landing Gear Retraction Speed
V _{MO}	Maximum Operating Speed
M _{MO}	Maximum Operating Mach Number
V _O	Maximum Manoeuvring Speed

II. Type Certificate Holder Record

TC Holder	Period
GROB Aircraft AG Lettenbachstrasse 9 86874 Tussenhausen-Mattsies Germany	Effective

III. Change Record

Issue	Date	Changes	TC Issue No. & Date
Issue 01	06 May 2013	Initial Issue	01 06 May 2013