

Civil Aviation Authority United Kingdom



TYPE-CERTIFICATE DATA SHEET

UK.TC.A.00138

for

GROB G 120TP

Type Certificate Holder

GROB Aircraft SE

Lettenbachstrasse 9

86874 Tussenhausen-Mattsies

Germany

Model(s): G 120TP-A
Issue: 1
Date of issue: 19 May 2025

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Section 1 G 120TP-A**I. General****1. Type / Variant / Model**

- a) Type: GROB G 120TP
- b) Variant or Model: G 120TP-A

2. Type Certificate Holder

GROB Aircraft SE
Lettenbachstrasse 9
86874 Tussenhausen-Mattsies
Germany

3. Airworthiness Category

Utility
Aerobatic

4. Manufacturer:

GROB AIRCRAFT SE
LETTENBACHSTRASSE 9
86874 TUSSENAUSEN-MATTSIES
GERMANY

5. EASA Certification Application Date:

17 December 2009

7. EASA Type Certification Date

06 May 2013

II. Certification Basis

1. **Reference Date for determining the applicable requirements:** 17. June 2010
2. **Airworthiness Requirements:**
CS-23, Amendment 1, issued 12 February 2009
If equipped i.a.w. OCN 565-83 with MCN 565-684:
CS-ACNS, Issue 1
If equipped i.a.w. OAM 565-17:
CS-ACNS, Issue 3
3. **Special Conditions:**
SC-F23.1309-02 Protection from Effects of HIRF
SC-F23.1309-03 Protection from Effects of Lightning strikes, Indirect Effects
If equipped i.a.w. OAM 565-17:
SC-B23.div-01 Human Factors – Integrated Avionics Systems
4. **Exemptions:**
None
5. **Deviations:**
If equipped i.a.w. OCN 565-83 with MCN 565-684:
Deviation CS-ACNS#1
6. **Equivalent Safety Findings:**
CS 23.777(g) Location of Landing Gear Control Lever
If equipped i.a.w. OAM 565-17:
CS 23.1321(d)(4): Location of Heading Indicator PFD
7. **Requirements elected to comply:**
None
8. **Environmental Standards:**
ICAO Annex 16, Volume I (See TCDSN UK.TC.A.00138 for details)

III. Technical Characteristic and Operating 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:

a. Model:

Rolls Royce 250-B17F

b. Type Certificate:

FAA E10CE

6. Limitations:

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

7. Load factors:Utility Category

-1.76 / +4.4 (flaps up)

0 / +3.8 (flaps down)

Aerobatic Category

-4.0 / +6.0 (flaps up)

0 / +3.8 (flaps down)

8. Propeller:**a. Model:**

MT-Propeller MTV-5-1-D-C-F-R(A)/CFR210-56

b. Type Certificate:

LBA 32.130/103

c. Number of blades:

5

d. Diameter:

2.10 m (82.68 in.)

e. Sense of Rotation:

Clockwise

9. Fluids:**a. Fuel:**

Refer to AFM, Section 2 for engine fuels

b. Oil:

Refer to AFM, Section 2 for engine oil

c. Coolant:

Not applicable

10. Fluid capacities:**a. Fuel:**

Total 351.0 litres (92.7 U.S. gallons)

Usable 341.4 litres (90.2 U.S. gallons)

b. Oil:

Min 5.0 litres (5.3 U.S. quarts)

Max 11.0 litres (11.6 U.S. quarts)

c. Coolant system capacity:

Not applicable

11. 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)

12. Maximum Operating Altitude:

Utility Category	25000 ft
Aerobatic Category	20000 ft

13. Allweather Operations Capability:

VFR day and night, IFR
 Flight into known icing conditions is prohibited
 If equipped i.a.w. OCN 565-107:
 Flight into known or forecast icing conditions is approved

14. Maximum Weights:Utility Category

Take-off 1515 kg (3340 lb)

Landing 1440 kg (3175 lb)

From S/N 11037 or if equipped i.a.w. OSB 565-018

Landing 1515 kg (3340 lb)

If equipped i.a.w. OCN 565-74 or OSB 565-094:

Take-off 1625 kg (3582 lb)

Landing 1545 kg (3406 lb)

Aerobatic Category

Take-off 1440 kg (3175 lb)

Landing 1440 kg (3175 lb)

If equipped i.a.w. OCN 565-74 or OSB 565-094:

Take-off 1515 kg (3340 lb)

Landing 1515 kg (3340 lb)

15. Centre of Gravity Range:Utility and 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 to
2.766 m (31.5% MAC) aft of datum
for 1170 kg to 1370 kg2.766 m (31.5% MAC) aft of datum
for 1370 kg to 1515 kg

If equipped i.a.w. OCN 565-74 or OSB 565-094:

Most forward C.G. 2.676 m (25% MAC) aft of datum for
1170 kg to 1550 kg2.676 m (25% MAC) aft of datum to
2.683 m (25.5% MAC) aft of datum
for 1550 kg to 1625 kgMost 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 kg2.766 m (31.5% MAC) aft of datum
for 1370 kg to 1515 kg2.766 m (31.5% MAC) aft of datum
to 2.759 m (31.0% MAC) aft of
datum for 1515 kg to 1625 kg

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

- 16. Datum:**
 2.335 m in front of wing leading edge at 1.150 m outside the
 symmetry axis
- 17. Control surface deflections:**
 Refer to AMM, Section 6
- 18. Levelling Means:**
 Canopy frame bottom edge
- 19. Minimum Flight Crew:**
 1 Pilot
- 20. Maximum Passenger Seating Capacity:**
 1 Seat
- 21. Baggage/Cargo Compartments:**
- | | |
|----------------------------|----------------------|
| Location | 3.800 m aft of datum |
| <u>Max. Baggage weight</u> | |
| Utility | 50 kg (110 lb) |
| Aerobatic | no baggage allowed |
- 22. Wheels and Tyres:**
- | | |
|----------------------|----------|
| Nose Wheel Tyre Size | 5.00-5 |
| Main Wheel Tyre Size | 15x6.0-6 |
- 23. (Reserved):**

IV. Operating and Service Instructions

1. Flight Manual:

Airplane Flight Manual GROB G 120TP-A,
 Doc.-No. 1T-120TPA-1,
 Issue 1, latest approved revision

If equipped i.a.w. OAM 565-17:

Airplane Flight Manual GROB G 120TP-A,
 Doc.-No. 1T-120TPAD-1,
 Issue 1, latest approved revision

2. Maintenance Manual:

Airplane Maintenance Manual GROB G 20TP-A,
Doc.-No. 1T-120TPA-2,
Issue 2, latest 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 (not part of ICA)

V. Notes

1. This TCDS, Section 1 applies to S/N 11002 and following model G 120TP-A aeroplanes.
2. Paint schemes have to be approved by the TC holder or National Airworthiness Authority.

Section 2 Administration**I. Acronyms and Abbreviations**

Acronym / Abbreviation	Definition
AFM	Airplane Flight Manual
AMM	Aircraft Maintenance Manual
CAA	Civil Aviation Authority
CS	Certification Specification
EASA	European Union Aviation Safety Agency
ICAO	International Civil Aviation Organization
KCAS	Knots Calibrated Air Speed
KIAS	Knots Indicated Air Speed
SC	Special Condition
TC	Type Certificate
TCDS	Type Certificate Data Sheet
TCDSN	Type Certificate Data Sheet Noise
TCH	Type Certificate Holder

II. Type Certificate Holder Record

TCH Record	Period
Grob Aircraft SE Lettenbachstrasse 9 86874 Tussenhausen-Mattsies Germany	Present. No changes.

III. Amendment Record

TCDs Issue No.	TCDs Issue Date	Changes	TC Issue and Date
1	19 May 2025	Initial UK TC issue post EU-exit. Technical information as per EASA.A.565 Issue 04. Major change "Extension of aerobatic cg range" implemented with change note MCN 565-859 (UK Acceptance). Major Change "Ice Protection System" implemented with optional change note OCN 565-107 (Streamlined Validation).	Issue 1 19 May 2025

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