



TYPE-CERTIFICATE DATA SHEET

NO. EASA.A.434

for
HB 21

Type Certificate Holder
HB-Flugtechnik

Dr. Adolf Schärfstraße 42
A-4053 Haid
Austria

For models: HB 21, HB 21/2400, HB 21/2400 B, HB 21 V1, HB 21 V2



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SECTION A: **HB 21**

A.I General

- | | |
|--|--|
| 1. Type/ Model/ Variant | |
| 1.1 Type: | HB 21 |
| 1.2 Model: | - |
| 1.3 Variant: | - |
| 2. Airworthiness Category | Utility |
| 3. Manufacturer | HB Brditschka GesmbH&CoKG
Flugzeugbau
A-4053 Haid
Austria |
| 4. EASA Type Certification Application Date | - |
| 5. State of Design Authority | BAZ/ACG |
| 6. State of Design Authority Type Certificate Date | March 1978 see Note 4 |
| 7. EASA Type Certification Date | - |

A.II EASA Certification Basis

- | | |
|---|--|
| 1. Reference Date for determining the applicable requirements | - |
| 2. Airworthiness Requirements | LFSM issued 1.November 1975 |
| 3. Special Conditions | None |
| 4. Exemptions | None |
| 5. (Reserved) Deviations | None |
| 6. Equivalent Safety Findings | None |
| 7. Environmental Protection | Zivilluftfahrzeug-Lärmzulässigkeitverordnung
429/1982 |



A.III Technical Characteristics and Operational Limitations

- | | | | | | | | | | | |
|---------------------------------|------------------------------|---|-------------------------------|-------------|---------------------------------|------------|--------|--------|-----------|----------------------|
| 1. | Type Design Definition | Drawing Set and following approved Design Changes (ÄM – System) | | | | | | | | |
| 2. | Description | Single engine, two-seated high wing airplane, wooden wing/steel tube fuselage construction, tandem seating configuration, fixed tri gear, air brakes on upper wing surface and pusher propeller | | | | | | | | |
| 3. | Equipment Minimum Equipment: | 1 airspeed indicator (range up to 250 km/h)
1 altimeter with mbar barometric dial
1 magnetic compass with deviation table
1 RPM indicator
1 running time meter
1 oil pressure gauge
1 oil temperature gauge
1 Voltmeter
1 fuel pressure indicator
1 fuel quantity gauge
1 stall warning indicator
1 at least 4-point harness for each seat
1 Masterswitch
1 Currentprotection (circuit protection)
1 Generator and 1 Battery
For Acrobatic in addition
1 G-Meter
2 Safety loops for Rudderpedals
For Cloudflights
1 Variometer
1 Turn and Bank indicator
1 COM | | | | | | | | |
| 4. | Dimensions | <table border="0"> <tr> <td>Span</td> <td>16,24 m</td> </tr> <tr> <td>Length</td> <td>8,48 m</td> </tr> <tr> <td>Height</td> <td>2,60 m</td> </tr> <tr> <td>Wing Area</td> <td>19,00 m²</td> </tr> </table> | Span | 16,24 m | Length | 8,48 m | Height | 2,60 m | Wing Area | 19,00 m ² |
| Span | 16,24 m | | | | | | | | | |
| Length | 8,48 m | | | | | | | | | |
| Height | 2,60 m | | | | | | | | | |
| Wing Area | 19,00 m ² | | | | | | | | | |
| 5. | Engine | | | | | | | | | |
| | 5.1 Model | VW-W-1600 G or G/2 | | | | | | | | |
| | 5.2 Type Certificate | BAZ TW 2/77 | | | | | | | | |
| | 5.3 Limitations | <table border="0"> <tr> <td>Max take-off rotational speed</td> <td>4000 r.p.m.</td> </tr> <tr> <td>Max continuous rotational speed</td> <td>3600 r.p.m</td> </tr> </table> | Max take-off rotational speed | 4000 r.p.m. | Max continuous rotational speed | 3600 r.p.m | | | | |
| Max take-off rotational speed | 4000 r.p.m. | | | | | | | | | |
| Max continuous rotational speed | 3600 r.p.m | | | | | | | | | |
| | 5.4 Maximum Continuous Power | For power-plants limits refer to Flight Manual | | | | | | | | |
| 6. | Propeller | | | | | | | | | |
| | 6.1 Model | 1 Hoffmann HO 14 *175 117 LD or
HO 14 *172 117 LD | | | | | | | | |
| | 6.2 Type Certificate | LBA 32.110/1 | | | | | | | | |



6.3	Settings	Low pitch setting/ Static RPM:	3400+/- 200
7.	Fluids		
7.1	Fuel	AVGAS 100 LL or Automotive Gasoline, Leaded/unleaded min ROZ 98 (see Note 2)	
7.1	Oil	quality automotive oils Castrol GTX2 or all HD SAE 15W40 (see Flight Manual)	
8.	Fluid capacities		
8.1	Fuel	Standard Fuel Tank Total: 54 liters Usable: 53 liters	
8.2	Oil	Maximum: 2,5 liters Minimum: 1,5 liters	
9.	Air Speeds		
	Design Manoeuvring Speed v_A :	173 km/h	
	Maximum rough air speed V_{ra} :	173 km/h.	
	Never exceed speed v_{NE} :	200 km/h	
10.	Approved Operations Capability	VFR Day Cloud flying permitted	
11.	Maximum Masses	(see Note 6)	
	Take-off	750 kg	
	Maximum mass of non lifting parts	550 kg	
12.	Centre of Gravity Range		
	Forward limit	2,410 m behind Datum	
	Rear limit:	2,520 m behind Datum	
13.	Datum	2,00 m in front of wing leading edge at root rib 2	
14.	Levelling Means	top of fuselage aft of propeller horizontal	
15.	Minimum Flight Crew	1 (Pilot)	
16.	Maximum Passenger Seating Capacity	1	
17.	Baggage/ Cargo Compartments	Behind Seats 10 kg	
18.	Wheels and Tyres	Main/Tail Wheel Tyre Size For approved Types and rating see AMM	



A.IV Operating and Service Instructions

1. Flight Manual Airplane Flight Manual HB 21, Issue 24.March 1983,
BAZ approved (German Version)
2. Maintenance Manual Maintenance Manual, Issue 24. March 1983,
(German Version)

Engine Manual , Westermayer– VW-V-1600 G

Hoffmann, Operation and Maintenance Manual for
the HOCO propeller, latest Issue or

Service Informations and Service Bulletins

All Master Manuals are issued in German Language only



A.V Notes

- 1) Only industrial manufacturing is permitted.
- 2) Use of unleaded automotive fuel SUPER PLUS 98 ÖNorm C1100, min. ROZ 98, in accordance with TM/HB/23/23/93, latest issue, is permitted.
- 3) Modification from engine VW-W 1600-G to G/2 is approved with TM 016
- 4) Initial Certification carried out by the Austrian Aviation Authority – Bundesamt für Zivilluftfahrt renamed to Austro Control
- 5) The certification applies to SNo. 21.008 up to 21.029 inclusive.
- 6) The extension of the maximum take off weight from 710 to 750 kg and the maximum weight of the lifting parts from 500 to 550 kg is approved with TM 032/83 dated 13. July 1983, BAZ approved.
- 7) Cloud Flights and Acrobatic is approved in accordance with TM 017/80 dated 1. Sept.1980, BAZ approved.



SECTION B: **HB 21/2400**

B.I General

1. Type/ Model/ Variant
 - 1.1 Type: HB 21
 - 1.2 Model: -
 - 1.3 Variant: HB 21/2400
2. Airworthiness Category Utility
3. Manufacturer HB Brditschka GesmbH&CoKG
Flugzeugbau
A-4053 Haid
Austria
4. EASA Type Certification Application Date -
5. State of Design Authority BAZ/ACG
6. State of Design Authority Type Certificate Date March 1983 see Note 3;
The EASA Type Certificate replaces the Austrian Type Certificate SF 2/78
7. EASA Type Certification Date -

B.II EASA Certification Basis

1. Reference Date for determining the applicable requirements -
2. Airworthiness Requirements LFSM issued 1.November 1975
3. Certification Basis LFSM issued 1.November 1975
4. Special Conditions None
5. Exemptions None
6. (Reserved) Deviations None
7. Equivalent Safety Findings None
8. Environmental Protection Zivilluftfahrzeug-Lärmzulässigkeitverordnung
429/1982



B.III Technical Characteristics and Operational Limitations

- | | | | |
|----|------------------------------|--|----------------------|
| 1. | Type Design Definition | Drawing Set and following approved Design Changes (ÄM – System) | |
| 2. | Description | Single engine, two-seated high wing airplane, wooden wing/steel tube fuselage construction, tandem seating configuration, fixed tri gear, air brakes on upper wing surface and pusher propeller | |
| 3. | Equipment Minimum Equipment: | 1 airspeed indicator (range up to 250 km/h)
1 altimeter with mbar barometric dial
1 magnetic compass with deviation table
1 RPM indicator
1 running time meter
1 oil pressure gauge
1 oil temperature gauge
1 Voltmeter
1 fuel pressure indicator
1 fuel quantity gauge
1 stall warning indicator
1 at least 4-point harness for each seat
1 Masterswitch
1 Current protection (circuit protection)
1 Generator and 1 Battery
For Acrobatic in addition
1 G-Meter
2 Safety loops for Rudderpedals
For Cloudflights
1 Variometer
1 Turn and Bank indicator
2 COM | |
| 4. | Dimensions | Span | 16,24 m |
| | | Length | 8,48 m |
| | | Height | 2,60 m |
| | | Wing Area | 19,00 m ² |
| 5. | Engine | | |
| | 5.1 Model | VW-HB-2400 G | |
| | 5.2 Type Certificate | BAZ 4/82 | |
| | 5.3 Limitations | Max take-off rotational speed | 4000 r.p.m. |
| | | Max continuous rotational speed | 3600 r.p.m |
| | 5.4 Maximum Continuous Power | For power-plants limits refer to Flight Manual | |
| 6. | Propeller | | |
| | 6.1 Model | 1 Hoffmann HO 14 *175 130 LD or
HO 14 *172 130 LD | |



6.2	Type Certificate	LBA 32.110/1	
6.3	Settings	Low pitch setting/ Static RPM:	3400+/- 200
7.	Fluids		
7.1	Fuel	AVGAS 100 LL or Automotive Gasoline, Leaded/unleaded min ROZ 98 (see Note 4)	
7.2	Oil	quality automotive oils (see Flight Manual)	
8.	Fluid capacities		
8.1	Fuel	Standard Fuel Tank	
		Total:	54 liters
		Usable:	53 liters
8.2	Oil	Maximum:	4,0 liters
		Minimum:	3,0 liters
9.	Air Speeds		
	Design Manoeuvring Speed v_A :	173 km/h	
	Maximum rough air speed V_{ra} :	173 km/h.	
	Never exceed speed v_{NE} :	200 km/h	
10.	Approved Operations Capability	VFR Day	
	Cloud flying permitted		
11.	Maximum Masses	(see Note 6)	
	Take-off	750 kg	
	Maximum mass of non lifting parts	550 kg	
12.	Centre of Gravity Range		
	Forward limit	2,410 m behind Datum	
	Rear limit:	2,520 m behind Datum	
13.	Datum	2,00 m in front of wing leading edge at root rib 2	
14.	Levelling Means	top of fuselage aft of propeller horizontal	
15.	Minimum Flight Crew	1 (Pilot)	
16.	Maximum Passenger Seating Capacity	1	
17.	Baggage/ Cargo Compartments	Behind Seats	10 kg
18.	Wheels and Tyres	Main/Tail Wheel Tyre Size	
		For approved Types and rating	see AMM



B.IV Operating and Service Instructions

1. Flight Manual Airplane Flight Manual HB 21/2400, Issue 15.6. 1983
BAZ approved (German Version)
2. Maintenance Manual Maintenance Manual, Issue 24. March 1983,
(German Version)

Engine Manual , VW-HB-2400 G, Oktober 1981 or
later approved Issue

Hoffmann, Operation and Maintenance Manual for
the HOCO propeller, latest Issue or

Service Informations and Service Bulletins

All Master Manuals are issued in German Language only



B.V Notes

- 1) Only industrial manufacturing is permitted.
- 2) Use of unleaded automotive fuel SUPER PLUS 98 ÖNorm C1100, min. ROZ 98, in accordance with TM/HB/23/23/93, latest issue, is permitted.
- 3) Initial Certification carried out by the Austrian Aviation Authority – Bundesamt für Zivilluftfahrt renamed to Austro Control
- 4) The certification applies to SNo. 21.008 up to 21.029 inclusive. The conversion from m HB 21 to variant HB21/2400 is approved.
- 5) The extension of the maximum take off weight from 710 to 750 kg and the maximum weight of the lifting parts from 500 to 550 kg is approved with TM 023/83 dated 13. July 1983, BAZ approved
- 6) Cloud Flights and Acrobatic is approved in accordance with TM 017/80 dated 1. Sept.1980, BAZ approved.
- 7) Glider and Banner towing is approved with TM 021/81 dated 27.2.1982, the following additional equipment must be installed:
 - 1 cylinder head temperature gauge
 - 1 Tow indicator in the instrument panel
 - 1 coupling type Tost E75
 - 1 mirror





SECTION C: HB 21/2400 B

C.I General

1. Type/ Model/ Variant
 - 1.1 Type: HB 21
 - 1.2 Model: -
 - 1.3 Variant: HB 21/2400B
2. Airworthiness Category Utility
3. Manufacturer HB Brditschka GesmbH&CoKG
Flugzeugbau
A-4053 Haid
Austria
4. EASA Type Certification Application Date -
5. State of Design Authority BAZ/ACG
6. State of Design Authority Type Certificate Date March 1983 see Note 3;
The EASA Type Certificate replaces the Austrian Type Certificate SF 2/78
7. EASA Type Certification Date -

C.II EASA Certification Basis

1. Reference Date for determining the applicable requirements -
2. Airworthiness Requirements LFSM issued 1.November 1975
3. Certification Basis LFSM issued 1.November 1975
4. Special Conditions None
5. Exemptions None
6. (Reserved) Deviations None
7. Equivalent Safety Findings BAZ approval 6285-2/26-83 dated 25.Juli 1983
8. Environmental Protection Zivilluftfahrzeug-Lärmzulässigkeitverordnung
429/1982



C.III Technical Characteristics and Operational Limitations

- | | | | |
|----|------------------------------|--|----------------------|
| 1. | Type Design Definition | Drawing Set and following approved Design Changes (ÄM – System) | |
| 2. | Description | Single engine, two-seated high wing airplane, wooden wing/steel tube fuselage construction, tandem seating configuration, fixed tri gear, air brakes on upper wing surface and pusher propeller | |
| 3. | Equipment Minimum Equipment: | 1 airspeed indicator (range up to 250 km/h)
1 altimeter with mbar barometric dial
1 magnetic compass with deviation table
1 RPM indicator
1 running time meter
1 oil pressure gauge
1 oil temperature gauge
1 Voltmeter
1 fuel pressure indicator
1 fuel quantity gauge
1 stall warning indicator
1 at least 4-point harness for each seat
1 Masterswitch
1 Current protection (circuit protection)
1 Generator and 1 Battery
For Acrobatic in addition
1 G-Meter
2 Safety loops for Rudderpedals
For Cloudflights
1 Variometer
1 Turn and Bank indicator
1 COM | |
| 4. | Dimensions | Span | 16,24 m |
| | | Length | 8,48 m |
| | | Height | 2,60 m |
| | | Wing Area | 19,00 m ² |
| 5. | Engine | | |
| | 5.1 Model | VW-HB-2400 G | |
| | 5.2 Type Certificate | BAZ 4/82 | |
| | 5.3 Limitations | Max take-off rotational speed | 4000 r.p.m. |
| | | Max continuous rotational speed | 3600 r.p.m |
| | 5.4 Maximum Continuous Power | For power-plants limits refer to Flight Manual | |
| 6. | Propeller | | |
| | 6.1 Model | 1 Hoffmann HO 14 *175 130 LD or
HO 14 *172 130 LD | |



6.2	Type Certificate	LBA 32.110/1	
6.3	Settings	Low pitch setting/ Static RPM:	3400+/- 200
7.	Fluids		
7.1	Fuel	AVGAS 100 LL or Automotive Gasoline, Leaded/unleaded min ROZ 98 (see Note 2)	
7.2	Oil	quality automotive oils (see Flight Manual)	
8.	Fluid capacities		
8.1	Fuel	Standard Fuel Tank	
		Total:	54 liters
		Usable:	53 liters
8.2	Oil	Maximum:	4,0 liters
		Minimum:	3,0 liters
9.	Air Speeds		
	Design Manoeuvring Speed v_A :		173 km/h
	Maximum rough air speed V_{ra} :		173 km/h.
	Never exceed speed v_{NE} :		200 km/h
10.	Approved Operations Capability	VFR Day	
	Cloud flying permitted		
11.	Maximum Masses		
	Take-off		775 kg
	Maximum mass of non lifting parts		550 kg
12.	Centre of Gravity Range		
	Forward limit		2,410 m behind Datum
	Rear limit:		2,520 m behind Datum
13.	Datum		2,00 m in front of wing leading edge at root rib 2
14.	Levelling Means		top of fuselage aft of propeller horizontal
15.	Minimum Flight Crew		1 (Pilot)
16.	Maximum Passenger Seating Capacity		1
17.	Baggage/ Cargo Compartments	Behind Seats	10 kg
18.	Wheels and Tyres	Main/Tail Wheel Tyre Size	
		For approved Types and rating	see AMM



C.IV Operating and Service Instructions

1. Flight Manual Airplane Flight Manual HB 21/2400B, Issue 24.3. 1983
BAZ approved (German Version)
2. Maintenance Manual Maintenance Manual, Issue 24. March 1983,
(German Version)

Engine Manual , VW-HB-2400 G, Oktober 1981 or
later approved Issue

Hoffmann, Operation and Maintenance Manual for
the HOCO propeller, latest Issue or Service
Informations and Service Bulletins

All Master Manuals are issued in German Language
only



C.V Notes

- 1) Only industrial manufacturing is permitted.
- 2) Use of unleaded automotive fuel SUPER PLUS 98 ÖNorm C1100, min. ROZ 98, in accordance with TM/HB/23/23/93, latest issue, is permitted.
- 3) Initial Certification carried out by the Austrian Aviation Authority – Bundesamt für Zivilluftfahrt renamed to Austro Control
- 4) The certification applies to SNo. 21.008 up to 21.029 inclusive.
- 5) Cloud Flights and Acrobatic is approved in accordance with TM 017/80 dated 1. Sept.1980, BAZ approved.
- 6) Glider and Banner towing is approved with TM 021/81 dated 27.2.1982, the following additional equipment must be installed:
 - 1 cylinder head temperature gauge
 - 1 Tow indicator in the instrument panel
 - 1 coupling type Tost E75
 - 1 mirror



SECTION D: **HB 21 V1**

D.I General

1. Type/ Model/ Variant
 - 1.1 Type: HB 21
 - 1.2 Model: -
 - 1.3 Variant: HB 21 VI
2. Airworthiness Category Utility
3. Manufacturer HB Brditschka GesmbH&CoKG
Flugzeugbau
A-4053 Haid
Austria
4. EASA Type Certification Application Date -
5. State of Design Authority BAZ/ACG
6. State of Design Authority Type Certificate Date 16 August 1978 see Note 2;
The EASA Type Certificate replaces the Austrian Type Certificate SF 4/78
7. EASA Type Certification Date -

D.II EASA Certification Basis

1. Reference Date for determining the applicable requirements -
2. Airworthiness Requirements LFSM issued 1.November 1975
3. Certification Basis LFSM issued 1.November 1975
4. Special Conditions None
5. Exemptions None
6. (Reserved) Deviations None
7. Equivalent Safety Findings None
8. Environmental Protection Zivilluftfahrzeug-Lärmzulässigkeitverordnung
486/1972



D.III Technical Characteristics and Operational Limitations

- | | | | |
|----|------------------------------|---|----------------------|
| 1. | Type Design Definition | Drawing Set and following approved Design Changes (ÄM – System) | |
| 2. | Description | Single engine, two-seated high wing airplane, wooden wing/steel tube fuselage construction, tandem seating configuration, fixed tri gear, air brakes on upper wing surface and pusher propeller | |
| 3. | Equipment Minimum Equipment: | 1 airspeed indicator (range up to 250 km/h)
1 altimeter with mbar barometric dial
1 magnetic compass with deviation table
1 RPM indicator
1 running time meter
1 oil pressure gauge
1 oil temperature gauge
1 Voltmeter
1 fuel pressure indicator
1 fuel quantity gauge
1 stall warning indicator
1 at least 4-point harness for each seat
1 Masterswitch
1 Current protection (circuit protection)
1 Generator and 1 Battery | |
| 4. | Dimensions | Span | 16,24 m |
| | | Length | 8,48 m |
| | | Height | 2,60 m |
| | | Wing Area | 19,00 m ² |
| 5. | Engine | | |
| | 5.1 Model | VW-HB-1600 G | |
| | 5.2 Type Certificate | BAZ 2/77 | |
| | 5.3 Limitations | Max take-off rotational speed | 4000 r.p.m. |
| | | Max continuous rotational speed | 3600 r.p.m |
| | 5.4 Maximum Continuous Power | For power-plants limits refer to Flight Manual | |
| 6. | Propeller | | |
| | 6.1 Model | 1 Hoffmann HO 14 *175 117 | |
| | 6.2 Type Certificate | LBA 32.110/1 | |
| | 6.3 Settings | Low pitch setting/ Static RPM: | 3400+/- 200 |
| 7. | Fluids | | |
| | 7.1 Fuel | AVGAS 100 LL or
Automotive Gasoline,
Leaded/unleaded min ROZ 98
(see Note 1) | |
| | 7.2 Oil | quality automotive oils Castrol GTX2 or | |



all HD SAE 15W40 (see Flight Manual)

8. Fluid capacities

8.1 Fuel

Standard Fuel Tank

Total: 54 liters

Usable: 53 liters

8.2 Oil

Maximum: 2,5 liters

Minimum: 1,5 liters

9. Air Speeds

Design Manoeuvring Speed v_A : 160 km/h

Maximum rough air speed V_{ra} : 160 km/h.

Never exceed speed v_{NE} : 175 km/h

10. Approved Operations Capability

VFR Day

11. Maximum Masses

(see Note 6)

Take-off 661 kg

Maximum mass of non lifting parts 467 kg

12. Centre of Gravity Range

Forward limit 2,410 m behind Datum

Rear limit: 2,520 m behind Datum

13. Datum

2,00 m in front of wing leading edge at root rib 2

14. Levelling Means

top of fuselage aft of propeller horizontal

15. Minimum Flight Crew

1 (Pilot)

16. Maximum Passenger Seating Capacity

1

17. Baggage/ Cargo Compartments

Behind Seats 10 kg

18. Wheels and Tyres

Main/Tail Wheel Tyre Size

For approved Types and rating see AMM



D.IV Operating and Service Instructions

1. Flight Manual Airplane Flight Manual HB 21/2400, Issue 16.8. 1978
BAZ approved (German Version)
2. Maintenance Manual Maintenance Manual, Issue 16.8. 1978
(German Version)

Engine Manual , VW-W 1600 G
Hoffmann, Operation and Maintenance Manual for
the HOCO propeller, latest Issue or Service
Informations and Service Bulletins

All Master Manuals are issued in German Language
only



D.V Notes

- 1) Use of unleaded automotive fuel SUPER PLUS 98 ÖNorm C1100, min. ROZ 98, is permitted.
- 2) Initial Certification carried out by the Austrian Aviation Authority – Bundesamt für Zivilluftfahrt renamed to Austro Control
- 3) The certification applies to SNo. 21.001



SECTION E: **HB 21 V2**

E.I General

1. Type/ Model/ Variant
 - 1.1 Type: HB 21
 - 1.2 Model: -
 - 1.3 Variant: HB 21 V2
2. Airworthiness Category Utility
3. Manufacturer HB Brditschka GesmbH&CoKG
Flugzeugbau
A-4053 Haid
Austria
4. EASA Type Certification Application Date -
5. State of Design Authority BAZ/ACG
6. State of Design Authority Type Certificate Date 10 April 1978 see Note 2;
The EASA Type Certificate replaces the Austrian Type Certificate SF 3/78
7. EASA Type Certification Date -

E.II EASA Certification Basis

1. Reference Date for determining the applicable requirements -
2. Airworthiness Requirements LFSM issued 1.November 1975
3. Certification Basis LFSM issued 1.November 1975
4. Special Conditions None
5. Exemptions None
6. (Reserved) Deviations None
7. Equivalent Safety Findings None
8. Environmental Protection Zivilluftfahrzeug-Lärmzulässigkeitverordnung
486/1972



E.III Technical Characteristics and Operational Limitations

- | | | | | | | | | | | |
|---------------------------------|------------------------------|---|-------------------------------|-------------|---------------------------------|------------|--------|--------|-----------|----------------------|
| 1. | Type Design Definition | Drawing Set and following approved Design Changes (ÄM – System) | | | | | | | | |
| 2. | Description | Single engine, two-seated high wing airplane, wooden wing/steel tube fuselage construction, tandem seating configuration, fixed tri gear, air brakes on upper wing surface and pusher propeller | | | | | | | | |
| 3. | Equipment Minimum Equipment: | 1 airspeed indicator (range up to 250 km/h)
1 altimeter with mbar barometric dial
1 magnetic compass with deviation table
1 RPM indicator
1 running time meter
1 oil pressure gauge
1 oil temperature gauge
1 Voltmeter
1 fuel pressure indicator
1 fuel quantity gauge
1 stall warning indicator
1 at least 4-point harness for each seat
1 Masterswitch
1 Current protection (circuit protection)
1 Generator and 1 Battery | | | | | | | | |
| 4. | Dimensions | <table border="0"> <tr> <td>Span</td> <td>16,24 m</td> </tr> <tr> <td>Length</td> <td>8,48 m</td> </tr> <tr> <td>Height</td> <td>2,60 m</td> </tr> <tr> <td>Wing Area</td> <td>19,00 m²</td> </tr> </table> | Span | 16,24 m | Length | 8,48 m | Height | 2,60 m | Wing Area | 19,00 m ² |
| Span | 16,24 m | | | | | | | | | |
| Length | 8,48 m | | | | | | | | | |
| Height | 2,60 m | | | | | | | | | |
| Wing Area | 19,00 m ² | | | | | | | | | |
| 5. | Engine | | | | | | | | | |
| | 5.1 Model | VW-W 1600 G | | | | | | | | |
| | 5.2 Type Certificate | BAZ 2/77 | | | | | | | | |
| | 5.3 Limitations | <table border="0"> <tr> <td>Max take-off rotational speed</td> <td>4000 r.p.m.</td> </tr> <tr> <td>Max continuous rotational speed</td> <td>3600 r.p.m</td> </tr> </table> | Max take-off rotational speed | 4000 r.p.m. | Max continuous rotational speed | 3600 r.p.m | | | | |
| Max take-off rotational speed | 4000 r.p.m. | | | | | | | | | |
| Max continuous rotational speed | 3600 r.p.m | | | | | | | | | |
| | 5.4 Maximum Continuous Power | For power-plants limits refer to Flight Manual | | | | | | | | |
| 6. | Propeller | | | | | | | | | |
| | 6.1 Model | 1 Hoffmann HO 14 *175 117 | | | | | | | | |
| | 6.2 Type Certificate | LBA 32.110/1 | | | | | | | | |
| | 6.3 Settings | Low pitch setting/ Static RPM: 3400+/- 200 | | | | | | | | |
| 7. | Fluids | | | | | | | | | |
| | 7.1 Fuel | AVGAS 100 LL or
Automotive Gasoline,
Leaded/unleaded min ROZ 98
(see Note 1) | | | | | | | | |
| | 7.2 Oil | quality automotive oils Castrol GTX2 or
all HD SAE 15W4 (see Flight Manual) | | | | | | | | |



8. Fluid capacities

8.1 Fuel

Standard Fuel Tank

Total: 54 liters

Usable: 53 liters

8.2 Oil

Maximum: 2,5 liters

Minimum: 1,5 liters

9. Launching Hooks

10. Air Speeds

Design Manoeuvring Speed v_A : 166 km/h

Maximum rough air speed V_{ra}): 166 km/h.

Never exceed speed v_{NE} : 200 km/h

11. Approved Operations Capability

VFR Day

12. Maximum Masses

Take-off 661 kg

Maximum mass of non lifting parts 467 kg

13. Centre of Gravity Range

Forward limit 2,410 m behind Datum

Rear limit: 2,520 m behind Datum

14. Datum

2,00 m in front of wing leading edge at root rib 2

15. Levelling Means

top of fuselage aft of propeller horizontal

16. Minimum Flight Crew

1 (Pilot)

17. Maximum Passenger Seating Capacity

1

18. Baggage/ Cargo Compartments

Behind Seats 10 kg

19. Wheels and Tyres

Main/Tail Wheel Tyre Size

For approved Types and rating see AMM



E.IV Operating and Service Instructions

1. Flight Manual Airplane Flight Manual HB 21/2400, Issue 10.April 1978, BAZ approved (German Version)
 2. Maintenance Manual Maintenance Manual, Issue 10.April 1978 (German Version)
- Engine Manual , VW-W 1600 G,
- Hoffmann, Operation and Maintenance Manual for the HOCO propeller, latest Issue or

Service Informations and Service Bulletins

All Master Manuals are issued in German Language only



Notes

- 1) Use of unleaded automotive fuel SUPER PLUS 98 ÖNorm C1100, min. ROZ 98, is permitted.
- 2) Initial Certification carried out by the Austrian Aviation Authority – Bundesamt für Zivilluftfahrt renamed to Austro Control
- 3) The certification applies to SNo. 21.002 up to 21.007 including



SECTION F: ADMINISTRATIVE SECTION

F.I Acronyms & Abbreviations

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F.II Type Certificate Holder Record

HB-Flugtechnik GmbH
Dr. Adolf Schärfstraße 42
A-4053 Haid, Austria
www.hb-flugtechnik.at

F.III Change Record

Issue	Date	Changes	TC Issue No. & Date
Issue 01	25 January 2010	Initial Issue; Transfer from ACG TCDS SF 2/78 issue 5, SF 4/78 issue 1 and SF 3/78 issue 1 to the EASA Type Design	Initial Issue, 25 January 2010
Issue 02	08 January 2024	New EASA template; Correction of Maximum Passenger Seating Capacity for each variant;	Initial Issue, 25 January 2010

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