

EASA
TYPE-CERTIFICATE
DATA SHEET

IS-28M2

Type Certificate Holder:

S.C. Constructii Aeronautice S.A
Str. Aeroportului Nr. 1
507075 Ghimbav, Brasov
Romania

EASA TCDS No. A.454

For variants: IS-28M2
IS-28-M2/80HP
IS-28M2/G
IS-28M2/GR

Issue 02, 8 November 2007

0.I. Table of Content

SECTION 0: General

- 0.I. Table of Content
- 0.II. List of Effective Pages
- 0.III. Change Record

SECTION A: IS-28M2

- A.I. General
- A.II. Certification Basis
- A.III. Technical Characteristics and Operational Limitations
- A.IV. Operating and Service Instructions
- A.V. Notes

SECTION B: IS-28-M2/80HP

- B.I. General
- B.II. Certification Basis
- B.III. Technical Characteristics and Operational Limitations
- B.IV. Operating and Service Instructions
- B.V. Notes

SECTION C: IS-28M2/G

- C.I. General
- C.II. Certification Basis
- C.III. Technical Characteristics and Operational Limitations
- C.IV. Operating and Service Instructions
- C.V. Notes

SECTION D: IS-28M2/GR

- D.I. General
- D.II. Certification Basis
- D.III. Technical Characteristics and Operational Limitations
- D.IV. Operating and Service Instructions
- D.V. Notes

0.II. List of effective Pages:

Page	0-1	A-1	A-2	A-3	B-1	B-2	B-3	C-1	C-2	C-3	D-1	D-2	D-3
Issue	02	01	02	01	01	02	01	01	02	01	01	02	01

0.III. Change Record

Issue	Date	Changes
01	28 March 2007	Initial release, Transfer from Romanian TCDS
02	8 November 2007	Reference to EASA Engine TCDS added

Section A: IS-28M2

A.I. General

Allgemeines

1. Data Sheet No.: EASA.A.454
Kennblatt-Nr.
2. a) Type: (Muster) IS-28M2
b) Variant: (Baureihe) IS-28M2
3. Airworthiness Category: Powered Sailplane, OSTIV – Utility “U”
Lufttüchtigkeitskategorie :
4. Type Certificate Holder: S.C. Constructii Aeronautice S.A
Halter der Musterzulassung
Str. Aeroportului Nr. 1
507075 Ghimbav, Brasov
Romania
5. Manufacturer: S.C. Constructii Aeronautice S.A
Hersteller
Str. Aeroportului Nr. 1
507075 Ghimbav, Brasov
Romania
6. Certification Application Date: October 24, 1976
Datum der Antragstellung
7. Romanian CAA Certification Date: November 12, 1977
8. The EASA Type Certificate replaces the Romanian CAA Type Certificate No. MP-02

A.II. Certification Basis

Zulassungsbasis

1. Certification Basis: D. Av. C. letter nr. 34134/November 10, 1976
Zulassungsbasis:
2. Airworthiness Requirements: OSTIV Airworthiness Requirements for Sailplanes, issue
Lufttüchtigkeitsforderungen: 1971
3. Requirements elected to comply: None
Gewählte Forderungen:
4. Special Conditions: None
Sonderforderungen:
5. Exemptions: The following paragraphs are excepted from the Certification
Ausnahmen: Basis:
 - Par. 1.5 Up to S/N 40, the maximum allowed weight for pilots is less than 180 kgf
 - Par. 2.71 Drag-increasing devices ensure an angle to the horizon of 25° at V_{NE}
 - Par. 3.251 Up to S/N 40, the maximum allowed load factor is +5,0 g
 - Par. 4.121 Up to S/N 30, the parts which are not manufactured of aviation approved materials are oversized, in order to provide a safety factor of at least 1,95

- | | | |
|----|---|---|
| | Par. 4.331 | The ground vibration tests were not carried out |
| | Par. 4.332 | Aero-elastic phenomena were studied only by flight tests, without records |
| | Par. 5.12a | Beginning with S/N 41, the maximum allowed flight weight is 760 kgf |
| 6. | Equivalent Safety Findings:
Nachweise gleichwertiger Sicherheit: | None |
| 7. | Environmental Standard
Lärmschutzforderungen: | None |

A.III. Technical Characteristics and Operational Limitations

Technische Merkmale und Betriebsgrenzen

- | | | | |
|----|---|---|-----------------------|
| 1. | Type Design Definition:
Musterdefinition: | Document No. 28M2.00.0006, current issue | |
| 2. | Description:
Beschreibung: | Double-seat (side-by-side) powered sailplane, metallic construction, partially retractable landing gear with dampers, "T"-tail. | |
| 3. | Equipment:
Ausüstung: | Mandatory equipment according to Flight and Maintenance Manual, Chapter 2..7 | |
| 4. | Dimensions:
Abmessungen: | Wing Span | 17,000 m |
| | | Total Length | 7,800 m |
| | | Maximum Height | 2,150 m |
| | | Wing Area | 18,240 m ² |
| | | Mean aerodynamic chord | 1,108 m |
| 5. | Engines
Triebwerk | Model: | Limbach SL 1700 E1 |
| | | Type Certificate: | EASA.E.082 |
| | 5.1 Engine Limits
Triebwerksgrenzwerte | Maximum Take-off Power | 50 kW at 3600 RPM |
| | | Maximum continuous Power | 44 kW at 3200 RPM |
| 6. | Propellers
Propeller: | Hoffmann HO-V62-R/L 160BT or 160T | |
| 7. | Fluids and Fluid capacities:
Kraftstoffmengen: | Fuselage tank
Rumpftank | 40 liters |
| 8. | Launching Hooks:
Schleppkupplungen: | None | |
| 9. | Weak links:
Sollbruchstellen: | None | |

10.	Air Speeds: Geschwindigkeiten:	Never exceed speed V_{NE}	210 km/h IAS
		Maneuvering speed V_A	170 km/h IAS
		Maximum speed in rough air V_B	170 km/h IAS
		Maxim operating speed with wing flaps fully deflected V_{FO}	140 km/h IAS
		Maxim landing gear operating speed V_{LO}	210 km/h IAS
		Stalling speed in cruise configuration V_{S1}	75 km/h IAS
11.	Operational Capability Betriebsart	VFR-day allowed except icing condition Cloud flying prohibited Fly by night prohibited Inverted flying with engine operating prohibited	
12.	Maximum Masses: Höchstzulässige Massen:	Take-off	745 kg up to S/N 40 760 kg from S/N 41 on
13.	Centre of Gravity Range: Schwerpunktsbereich:	Datum: 2m in front of the leading edge of wing root rib Leveling means: Longitudinal axis: marked points on fuselage sides Lateral axis: marked points on left and right wing (see AFMM)	
		Forward Limit	21,4% of MAC
		Rearward Limit	35,0% of MAC
14.	Seating Capacity: Anzahl der Sitze:	2	
15.	Lifetime limitations: Lebensdauerbegrenzte Teile:	Refer to Aircraft Flight and Maintenance Manual (AFMM)	
16.	Deflection of control surfaces: Ruderausschläge	Refer to Aircraft Flight and Maintenance Manual (AFMM)	

A.IV. Operating and Service Instructions

Betriebs- und Instandhaltungsanweisungen

1. Aircraft Flight and Maintenance Manual issue 2 / Amd 31 or later amd. approved by the Agency (AFMM) for S/N 1÷40
2. Aircraft Flight and Maintenance Manual issue 2 / Amd 14 or later amd. approved by the Agency (AFMM) for S/N 41 and on

A.V. Notes

Bemerkungen

1. Current weight and balance data, loading information and a list of equipment included in empty weight must be provided for each aeroplane at the time of original certification.
2. All placards required in the approved AFMM must be installed in the appropriate location.

Section B: IS-28-M2/80HP

B.I. General

Allgemeines

1. Data Sheet No.: EASA.A.454
Kennblatt-Nr.
2. a) Type: (Muster) IS-28M2
b) Variant: (Baureihe) IS-28-M2/80HP
3. Airworthiness Category: Powered Sailplane, OSTIV – Utility “U”
Lufttüchtigkeitskategorie :
4. Type Certificate Holder: S.C. Constructii Aeronautice S.A
Halter der Musterzulassung Str. Aeroportului Nr. 1
507075 Ghimbav, Brasov
Romania
5. Manufacturer: S.C. Constructii Aeronautice S.A
Hersteller Str. Aeroportului Nr. 1
507075 Ghimbav, Brasov
Romania
6. Certification Application Date: July 3, 1981
Datum der Antragstellung
7. Romanian CAA Certification Date: September 30, 1981
8. The EASA Type Certificate replaces the Romanian CAA Type Certificate No. MP-04

B.II. Certification Basis

Zulassungsbasis

1. Certification Basis: D.Av. C. letter nr. 11223/July 25, 1981
Zulassungsbasis:
2. Airworthiness Requirements: Airworthiness Requirements NTAZ Part 2 “Sailplanes and
Lufttüchtigkeitsforderungen: powered sailplanes”, Issue 1978 / OSTIV Issue 1976
3. Requirements elected to comply: None
Gewählte Forderungen:
4. Special Conditions: None
Sonderforderungen:
5. Exemptions: Paragraph 5.1.2.3.(a) – “Maximum weight” from NTAZ 2,
Ausnahmen: 1978 / OSTIV, 1976 has been replaced with JAR-22.1(a)(2)
6. Equivalent Safety Findings: Nachweise gleichwertiger Sicherheit:

CESZ-044 In regard of NTAZ Part 2, 1978 /OSTIV, 1976 par. 2.7.1 – Air
brakes capability
CESZ-045 In regard of NTAZ Part 2, 1978 /OSTIV, 1976 par. 4.3.3 –
Aeroelastic phenomena
CESZ-048 In regard of NTAZ Part 2, 1978 /OSTIV, 1976 par. 5.3.2 –
Propeller clearance
7. Environmental Standard Noise: Acoustical certification standard STAS 10922/1-77
Lärmschutzforderungen: (similar with ICAO Annex 16 Third Edition, 1993, Part 2, Vol.
1, Chapter 6)

B.III. Technical Characteristics and Operational Limitations

Technische Merkmale und Betriebsgrenzen

- | | | | |
|-----|---|--|-----------------------|
| 1. | Type Design Definition:
Musterdefinition: | Document No. 28M2.00.0006, current issue | |
| 2. | Description:
Beschreibung: | Double-seat (side-by-side) powered sailplane, metallic construction, partially retractable landing gear with dampers, "T"-tail. | |
| 3. | Equipment:
Ausrüstung: | Mandatory equipment according to Aircraft Flight and Maintenance Manual, Chapter 2.7 | |
| 4. | Dimensions:
Abmessungen: | Wing Span | 17,000 m |
| | | Total Length | 7,800 m |
| | | Maximum Height | 2,150 m |
| | | Wing Area | 18,240 m ² |
| | | Mean aerodynamic chord | 1,108 m |
| 5. | Engines
Triebwerk | Model: | Limbach L 2000 EO1 |
| | | Type Certificate: | EASA.E.083 |
| | 5.1 Engine Limits
Triebwerksgrenzwerte | Maximum Take-off Power | 59 kW at 3400 RPM |
| | | Maximum continuous Power | 58 kW at 2900 RPM |
| 6. | Propellers
Propeller: | Hoffmann HO-V62-R/L 160BT or 160T | |
| 7. | Fluids and Fluid capacities:
Kraftstoffmengen: | Fuselage tank
Rumpftank | 55 liters |
| 8. | Launching Hooks:
Schleppkupplungen: | None | |
| 9. | Weak links:
Sollbruchstellen: | None | |
| 10. | Air Speeds:
Geschwindigkeiten: | Never exceed speed V_{NE} | 220 km/h IAS |
| | | Maneuvering speed V_A | 190 km/h IAS |
| | | Maximum speed in rough air V_B | 190 km/h IAS |
| | | Maxim operating speed with wing flaps fully deflected V_{FO} | 140 km/h IAS |
| | | Maxim landing gear operating speed V_{LO} | 220 km/h IAS |
| | | Stalling speed in cruise configuration V_{S1} | 75 km/h IAS |
| 11. | Operational Capability
Betriebsart | VFR-day allowed except icing condition
Cloud flying prohibited
Fly by night prohibited
Inverted flying with engine operating prohibited | |
| 12. | Maximum Masses:
Höchstzulässige Massen: | Take-off: | 760kg |

13. Centre of Gravity Range: Datum: 2m in front of the leading edge of wing root rib
Schwerpunktsbereich: Leveling means:
Longitudinal axis: marked points on fuselage sides
Lateral axis: marked points on left and right wing (see AFMM)
Forward Limit 21,4% of MAC
Rearward Limit 35,0% of MAC
14. Seating Capacity: 2
Anzahl der Sitze:
15. Lifetime limitations: Refer to Aircraft Flight and Maintenance Manual (AFMM)
Lebensdauerbegrenzte Teile:
16. Deflection of control surfaces: Refer to Aircraft Flight and Maintenance Manual (AFMM)
Ruderausschläge

B.IV. Operating and Service Instructions

Betriebs- und Instandhaltungsanweisungen

1. Aircraft Flight and Maintenance Manual issue 1 / Amd 12 or later amd. approved by the Agency (AFMM)

B.V. Notes

Bemerkungen

1. The Type Certificate No. MP-04 was initially issued on 30.09.1981, for Intreprinderea de Construcții Aeronautice Braşov, which has changed its name in S.C. IAR S.A. Braşov since January 1991. Since December 2004, this Type Certificate has been transferred to its present Holder, S.C. Construcții Aeronautice S.A. Braşov.

Section C: IS-28M2/G

C.I. General

Allgemeines

1. Data Sheet No.: EASA.A.454
Kennblatt-Nr.
2. a) Type: (Muster) IS-28M2
b) Variant: (Baureihe) IS-28M2/G
3. Airworthiness Category: Powered Sailplane, OSTIV – Utility “U”
Lufttüchtigkeitskategorie :
4. Type Certificate Holder: S.C. Constructii Aeronautice S.A
Halter der Musterzulassung Str. Aeroportului Nr. 1
507075 Ghimbav, Brasov
Romania
5. Manufacturer: S.C. Constructii Aeronautice S.A
Hersteller Str. Aeroportului Nr. 1
507075 Ghimbav, Brasov
Romania
6. Certification Application Date: February 13, 1995
Datum der Antragstellung
7. Romanian CAA Certification Date: June 25, 1995
8. The EASA Type Certificate replaces the Romanian CAA Type Certificate No. MP-04

C.II. Certification Basis

Zulassungsbasis

1. Certification Basis: AACR letter nr. 7445/June 5, 1995
Zulassungsbasis:
2. Airworthiness Requirements: Airworthiness Requirements NTAZ Part 2 “Sailplanes and
Lufttüchtigkeitsforderungen: powered sailplanes”, Issue 1978 / OSTIV Issue 1976
3. Requirements elected to comply: JAR-22 “Sailplanes and Powered Sailplanes”, issue 1980,
Gewählte Forderungen: Amdt. 3, for: Subpart A – General, Subpart B – Flight,
Subpart C – Structure and the following paragraphs: 22.595,
22.629, 22.671, 22.697(c), 22.777(c)(6), 22.785(d) and (e),
22.787, 22. 807, 22.905, 22.925(a), 22.1041, 22.1047,
22.1149, 22.1307, 22.1505, 22.1529, 22.1581, 22.1583,
22.1585.
4. Special Conditions: None
Sonderforderungen:
5. Exemptions: from NTAZ 2 /OSTIV 1976: par. 5.1.2.3.(a) – “Maximum weight
Ausnahmen: of powered sailplanes” has been replaced with JAR-22.1(a)(2)

no exemption from JAR-22
6. Equivalent Safety Findings: For NTAZ 2/OSTIV 1976
Nachweise gleichwertiger Sicherheit:

- CESZ-044 In regard of NTAZ Part 2, 1978 /OSTIV, 1976 par. 2.7.1 – Air brakes capability
- CESZ-045 In regard of NTAZ Part 2, 1978 /OSTIV, 1976 par. 4.3.3 – Aeroelastic phenomena
 For JAR-22
- CESZ-044 In regard of JAR 22.73 – Descent, high speed
- CESZ-045 In regard of JAR 22.629 - Flutter
- CESZ-046 In regard of JAR 22.161 (c)(2)(i) - Trim
- CESZ-047 In regard of JAR 22.411 (a) – Control system stiffness and stretch
7. Environmental Standard Noise: LBA – noise requirement (LSL), chapter VI
 Lärmschutzforderungen: /01.01.1991

C.III. Technical Characteristics and Operational Limitations

Technische Merkmale und Betriebsgrenzen

- | | | |
|--|---|-----------------------|
| 1. Type Design Definition:
Musterdefinition: | Document No. 28M2.00.0006, current issue | |
| 2. Description:
Beschreibung: | Double-seat (side-by-side) powered sailplane, metallic construction, partially retractable landing gear with dampers, "T"-tail. | |
| 3. Equipment:
Ausrüstung: | Mandatory equipment according to Aircraft Flight Manual, Chapter 2.11 | |
| 4. Dimensions:
Abmessungen: | Wing Span | 17,000 m |
| | Total Length | 7,500 m |
| | Maximum Height | 2,150 m |
| | Wing Area | 18,240 m ² |
| | Mean aerodynamic chord | 1,108 m |
| 5. Engines
Triebwerk | Model: | Limbach L 2000 EO1 |
| | Type Certificate: | EASA.E.083 |
| 5.1 Engine Limits
Triebwerksgrenzwerte | Maximum Take-off Power | 59 kW at 3400 RPM |
| | Maximum continuous Power | 58 kW at 2900 RPM |
| 6. Propellers
Propeller: | Hoffmann HO-V62-R/L 160T-10 | |
| 7. Fluids and Fluid capacities:
Kraftstoffmengen: | Fuselage tank | 55 liters |
| | Rumpftank | |
| 8. Launching Hooks:
Schleppkupplungen: | None | |
| 9. Weak links:
Sollbruchstellen: | None | |

10. Air Speeds: Geschwindigkeiten:	Never exceed speed V_{NE}	220 km/h IAS
	Maneuvering speed V_A	190 km/h IAS
	Maximum speed in rough air V_B	190 km/h IAS
	Maxim operating speed with wing flaps fully deflected V_{FO}	140 km/h IAS
	Maxim landing gear operating speed V_{LO}	220 km/h IAS
	Stalling speed in cruise configuration V_{S1}	75 km/h IAS
11. Operational Capability Betriebsart	VFR-day allowed except icing condition Cloud flying prohibited Fly by night prohibited Inverted flying with engine operating prohibited	
12. Maximum Masses: Höchstzulässige Massen:	Take-off:	780kg
13. Centre of Gravity Range: Schwerpunktsbereich:	Datum: 2m in front of the leading edge of wing root rib Leveling means: Longitudinal axis: marked points on fuselage sides Lateral axis: marked points on left and right wing (see AFM) Forward Limit 21,4% of MAC Rearward Limit 35,0% of MAC	
14. Seating Capacity: Anzahl der Sitze:	2	
15. Lifetime limitations: Lebensdauerbegrenzte Teile:	Refer to Aircraft Flight Manual (AFM)	
16. Deflection of control surfaces: Ruderausschläge	Refer to Aircraft Flight Manual (AFM)	

C.IV. Operating and Service Instructions

Betriebs- und Instandhaltungsanweisungen

1. Aircraft Flight Manual issue 3 / Amd 3 or later amd. approved by the Agency (AFM)
2. Aircraft Maintenance Manual issue 1 / Amd 2 or later amd. approved by the Agency (AMM)

C.V. Notes

Bemerkungen

1. The Type Certificate No. MP-04 was initially issued on 30.09.1981, for Intreprinderea de Construcții Aeronautice Braşov, which has changed its name in S.C. IAR S.A. Braşov since January 1991. Since December 2004, this Type Certificate has been transferred to its present Holder, S.C. Construcții Aeronautice S.A. Braşov

Section D: IS-28M2/GR

D.I. General

Allgemeines

1. Data Sheet No.: EASA.A.454
Kennblatt-Nr.
2. a) Type: (Muster) IS-28M2
b) Variant: (Baureihe) IS-28M2/GR
3. Airworthiness Category: Powered Sailplane, OSTIV – Utility “U”
Lufttüchtigkeitskategorie :
4. Type Certificate Holder: S.C. Constructii Aeronautice S.A
Halter der Musterzulassung
Str. Aeroportului Nr. 1
507075 Ghimbav, Brasov
Romania
5. Manufacturer: S.C. Constructii Aeronautice S.A
Hersteller
Str. Aeroportului Nr. 1
507075 Ghimbav, Brasov
Romania
6. Certification Application Date: June 5, 1996
Datum der Antragstellung
7. Romanian CAA Certification Date: November 07, 1997
8. The EASA Type Certificate replaces the Romanian CAA Type Certificate No. MP-04

D.II. Certification Basis

Zulassungsbasis

1. Certification Basis: A.A.C.R. letter nr. 8479/ June 6, 1996
Zulassungsbasis:
2. Airworthiness Requirements: Airworthiness Requirements NTAZ Part 2 “Sailplanes and
Lufttüchtigkeitsforderungen: powered sailplanes”, Issue 1978 / OSTIV Issue 1976
3. Requirements elected to comply: JAR-22 “Sailplanes and Powered Sailplanes”, issue 1980,
Gewählte Forderungen: Amdt. 3, for: Subpart A – General, Subpart B – Flight,
Subpart C – Structure, Subpart H - Engine and the following
paragraphs : 22.601, 22.603, 22.607, 22.609, 22.611, 22.613,
22.619, 22.627, 22.629, 22.671, 22.697(c), 22.777(c)(6), 22.779,
22.785(d) and (e), 22.787, 22.807, 22.831, 22.901, 22.902,
22.903, 22.905, 22.925(a), 22.955, 22.993, 22.1011, 22.1013,
22.1015, 22.1017, 22.1041, 22.1047, 22.1091, 22.1093, 22.1103,
22.1105, 22.1121, 22.1125, 22.1141, 22.1145, 22.1149, 22.1163,
22.1165, 22.1193, 22.1301, 22.1305, 22.1307, 22.1321, 22.1337,
22.1365, 22.1501, 22.1505, 22.1521, 22.1529, 22.1545, 22.1549,
22.1553, 22.1557, 22.1581, 22.1583, 22.1585.

JAR 22.857 from JAR-22, Change 4, 1987;

JAR-P “Propellers” Change 7
4. Special Conditions: according to FPC-A4 – Exhaust system heat exchangers
Sonderforderungen:

5. Exemptions:
 Ausnahmen: from NTAZ 2 /OSTIV 1976: par. 5.1.2.3.(a) – “Maximum weight of powered sailplanes” has been replaced with JAR-22.1(a)(2)
 no exemption from JAR-22
6. Equivalent Safety Findings:
 Nachweise gleichwertiger Sicherheit: For NTAZ 2/OSTIV 1976
- CESZ-044 In regard of NTAZ Part 2, 1978 /OSTIV, 1976 par. 2.7.1 – Air brakes capability
- CESZ-045 In regard of NTAZ Part 2, 1978 /OSTIV, 1976 par. 4.3.3 – Aeroelastic phenomena
 For JAR-22
- CESZ-044 In regard of JAR 22.73 – Descent, high speed
- CESZ-045 In regard of JAR 22.629 - Flutter
- CESZ-046 In regard of JAR 22.161 (c)(2)(i) - Trim
- CESZ-047 In regard of JAR 22.411 (a) – Control system stiffness and stretch
7. Environmental Standard
 Lärmschutzforderungen: Noise: LBA – noise requirement (LSL), chapter VI /01.01.1991

D.III. Technical Characteristics and Operational Limitations

Technische Merkmale und Betriebsgrenzen

1. Type Design Definition:
 Musterdefinition: Document No. 28M2.00.0006, current issue
2. Description:
 Beschreibung: Double-seat (side-by-side) powered sailplane, metallic construction, partially retractable landing gear with dampers, “T”-tail.
3. Equipment:
 Ausrüstung: Mandatory equipment according to Aircraft Flight Manual, Chapter 2.11
4. Dimensions:
 Abmessungen:
- | | |
|------------------------|-----------------------|
| Wing Span | 17,000 m |
| Total Length | 7,700 m |
| Maximum Height | 2,150 m |
| Wing Area | 18,240 m ² |
| Mean aerodynamic chord | 1,108 m |
5. Engines
 Triebwerk
- | | |
|-------------------|----------------|
| Model: | Rotax 912F3/A3 |
| Type Certificate: | EASA.E.121 |
- 5.1 Engine Limits
 Triebwerksgrenzwerte
- | | |
|--------------------------|---------------------|
| Maximum Take-off Power | 59,6 kW at 5800 RPM |
| Maximum continuous Power | 58 kW at 5500 RPM |
6. Propellers
 Propeller: Hoffmann HO-V-352F-S1/S 170FQ
7. Fluids and Fluid capacities:
 Kraftstoffmengen: Fuselage tank 55 liters
 Rumpftank
8. Launching Hooks:
 Schleppkupplungen: None

9. Weak links: Sollbruchstellen:	None
10. Air Speeds: Geschwindigkeiten:	Never exceed speed V_{NE} 220 km/h IAS Maneuvering speed V_A 190 km/h IAS Maximum speed in rough air V_B 190 km/h IAS Maxim operating speed with wing flaps fully deflected V_{FO} 140 km/h IAS Maxim landing gear operating speed V_{LO} 220 km/h IAS Stalling speed in cruise configuration V_{S1} 75 km/h IAS
11. Operational Capability Betriebsart	VFR-day allowed except icing condition Cloud flying prohibited Fly by night prohibited Inverted flying with engine operating prohibited
12. Maximum Masses: Höchstzulässige Massen:	Take-off: 780kg
13. Centre of Gravity Range: Schwerpunktsbereich:	Datum: 2m in front of the leading edge of wing root rib Leveling means: Longitudinal axis: marked points on fuselage sides Lateral axis: marked points on left and right wing (see AFM) Forward Limit 21,4% of MAC Rearward Limit 35,0% of MAC
14. Seating Capacity: Anzahl der Sitze:	2
15. Lifetime limitations: Lebensdauerbegrenzte Teile:	Refer to Aircraft Flight Manual (AFM)
16. Deflection of control surfaces: Ruderausschläge	Refer to Aircraft Flight Manual (AFM)

D.IV. Operating and Service Instructions

Betriebs- und Instandhaltungsanweisungen

1. Aircraft Flight Manual issue Aug. 1997 / Amd 5 or later amd. approved by the Agency (AFM)
2. Aircraft Maintenance Manual issue Aug. 1997 / Amd 5 or later amd. approved by the Agency (AMM)

D.V. Notes

Bemerkungen

1. The Type Certificate No. MP-04 was initially issued on 30.09.1981, for Intreprinderea de Construcții Aeronautice Brașov, which has changed its name in S.C. IAR S.A. Brașov since January 1991. Since December 2004, this Type Certificate has been transferred to its present Holder, S.C. Construcții Aeronautice S.A. Brașov