

European Aviation Safety Agency

EASA TYPE-CERTIFICATE DATA SHEET

EASA.A.372

R 3000 series

Type Certificate Holder:

C.E.A.P.R.

1 route de Troyes 21121 DAROIS FRANCE

Manufacturer:

Avions ROBIN

1 route de Troyes 21121 DAROIS FRANCE

For variants:

R 3000/140 R 3000/120 R 3000/100 R 3000/120 D R 3000/160 R 3000/160 S

R 3000/180

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SECTION A: R 3000/140

A.I. General

1. a) Type: R3000/140b) Variant: Not applicable

2. Airworthiness Category: Normal and Utility Category

3. Type Certificate Holder: C.E.A.P.R.

1 route de Troyes 21121 DAROIS

FRANCE

4. Manufacturer: Avions ROBIN

1 route de Troyes 21121 DAROIS FRANCE.

5. (Reserved)

6. DGAC Type Certification Date: 13 October 1983

7. EASA Type Certification Date: Transferred by Commission Regulation (EC) No.

1702/2003

8. The EASA type Certificates replaces DGAC-France Type Certificate no 172

A.II. Certification Basis

1. Reference Date for determining

the applicable requirements: January 12, 1978

(Reserved)
 (Reserved)

4. Certification Basis: FAR part 23

5. Airworthiness Requirements: FAR part 23 as amended by amendment 23-1 through 1-

23 dated 12 January 1978

Requirements elected to comply: None
 EASA Special Conditions: None
 EASA Exemptions: None
 EASA Equivalent Safety Findings: None

10. EASA Environmental Standards: ICAO Annex 16, Vol.1. Chap 6.

A.III. Technical Characteristics and Operational Limitations

1. (Reserved)

2. Description: Single-engine, four-seat, low-wing airplane, all-metal

construction, fixed tricycle landing gear, T-tail.

3. Equipment: The basic required equipment as prescribed in the

5. Engines:

Lycoming O-320-D2A

The EASA type certification standard includes that of FAA TC E-274, 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 state prior to 28 September 2003 are also acceptable.

5.1 Engine Limits:

Maximum Continuous power: 2700 rpm (119 kW, 160 HP)

6. Propellers:

Manufacturer	Model	Ø	Number of blades	Minimum static RPM at sea level
Sensenich	74DM S5-2-64	1.83 m (*)	2	2150 rpm

Remarks: (*) No acceptable diameter reduction for repair.

The EASA type certification standard includes that of FAA TC P-886, 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 state prior to 28 September 2003 are also acceptable.

7. Fluids:

7.1 Fuel:

91/96 or 100/130 octane minimum aviation grade

gasoline.

Refer to latest revision of Service Instruction Lycoming

No. 1070.

7.2 Engine Oil:

Refer to latest revision of Service Instruction Lycoming

No. 1014.

Air temperature	Ashless dispersant (AD)	Mineral
All temperature	grades	grades
All temperature	SAE15W50 or SAE20W50	
Above 80°F (+25°C)	SAE60	SAE60
Above 60°F (+15°C)	SAE40 or SAE50	SAE50
30°F to 90°F (O°C à +30°C)	SAE40	SAE40
0°F to 70°F (-15°C à +20°C)	SAE30, SAE40 or SAE20W40	SAE30
0°F to 90°F (-15°C à +30°C)	SAE20W50 or SAE15W50	SAE20W50
Below 10°F (-10°C)	SAE30 or SAE20W30	SAE20

7.3 Coolant:

Not Applicable

8. Fluid capacities:

8.1 Fuel:

Two wing	tanks	Optional Two wing tanks		
(liters	3)	(liters)		
Total Capacity	Usable	Total Capacity	Usable	
160	158	200	198	

8.2 Oil:

V_{NE}	318 km/h (171 knots	IAS)
V_{NO}	252 km/h (136 knots	IAS)
V_A	216 km/h (116 knots	IAS)
V_{FE}	175 km/h (94 knots	IAS)
V_{C}	252 km/h (136 knots	IAS)
V_{D}	358 km/h (193 knots	IAS)

10. Maximum Operating Altitude: Refer to approved aircraft flight manual.

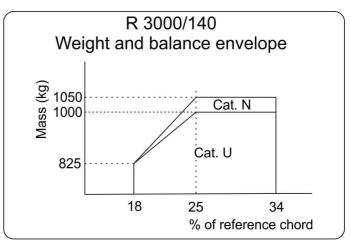
Refer to approved aircraft flight manual. 11. Operational Capability:

12. Maximum Masses: Normal Category

Take-off and Landing...... 1050 kg (2314 lb.)

Utility Category

13. Centre of Gravity Range:



Normal Category

Forward limit (18 % ref.): .. 0.290 m aft of datum at 825 kg Intermediate limit (25 % ref.):0.403 m aft of datum at 1050 kg Aft limit (34 % ref.): 0.548 m aft of datum at 1050 kg

Utility Category

Forward limit (18 % ref.): .. 0.290 m aft of datum at 825 kg Intermediate limit (25 % ref.):0.403 m aft of datum at 1000 kg Aft limit (34 % ref.): 0.548 m aft of datum at 1000 kg

14. Datum: Wing leading edge at rib n°6.

Cord length at reference section: 1.612 m (5.28ft).

15. Load factor (n) at maximum weight: Normal Category:

Flaps Up +3.8- 1.52 Flaps Down + 2 - 0 **Utility Category**

Flaps Up +4.4- 1.76 Flaps Down + 2 - 0

16. Leveling Means: Horizontal reference upper fuselage spar

17. Minimum Flight Crew: 1 (pilot)

18. Maximum Passenger Seating Capacity:......Refer to approved aircraft flight manual.

19. Baggage / Cargo Compartment	Maximum bagg aft of datum.	age compartm	ent 40 kg (88	lb) at +1.93m
20. Wheels and Tires		rear: front: sure t gear	refer to t	380 x 150 355x135 following table following table gear
	Tire	Oleo strut	Tire	Oleo strut
21. Control surface movements:	2 bar	6 bar	2.3 bar	9 bar
	Elevator:			up 25° ± 2° down 10° ± 2°
	Ailerons:			up 12° ± 2° down 15° ± 2°
	Rudder:			25° ± 3°
	Elevator tab: Flaps up			
	Trim r	neutral position	: 0°	±3°
		ull down position		
		full up position:	+3/~	±3° (down)
	Flaps do	wn (30) neutral position	· +16°	±3°
		ull down position		
	Trim f	full up position:	+40°	±3° (down)
	Wing Flaps:			0° ±2° 30° ±3°

22. Reserved

A.IV. Operating and Service Instructions

Airplane Flight Manual......Refer to latest amendment of service letter n°6 Airplane Maintenance Manual Refer to latest amendment of service letter n°6

A.V. Note:

1. The certificated empty weight and the corresponding center of gravity location must include unusable fuel and undrainable oil of the engine.

SECTION B: R 3000/120

B.I. General

1. a) Type: R3000/120b) Variant: Not applicable

2. Airworthiness Category: Normal Category

3. Type Certificate Holder: C.E.A.P.R.

1 route de Troyes 21121 DAROIS

FRANCE

4. Manufacturer: Avions ROBIN

1 route de Troyes 21121 DAROIS FRANCE.

5. (Reserved)

6. DGAC Type Certification Date: 13 October 1983

7. EASA Type Certification Date: Transferred by Commission Regulation (EC) No.

1702/2003

8. The EASA type Certificates replaces DGAC-France Type Certificate no 172

B.II. Certification Basis

1. Reference Date for determining

the applicable requirements: January 12, 1978

2. (Reserved)

3. (Reserved)

4. Certification Basis: FAR part 23

5. Airworthiness Requirements: FAR part 23 as amended by amendment 23-1 through 1-

23 dated 12 January 1978

Requirements elected to comply: None
 EASA Special Conditions: None
 EASA Exemptions: None
 EASA Equivalent Safety Findings: None

10. EASA Environmental Standards: ICAO Annex 16, Vol.1. Chap 6.

B.III. Technical Characteristics and Operational Limitations

1. (Reserved)

2. Description: Single-engine, four-seat, low-wing airplane, all-metal

construction, fixed tricycle landing gear, T-tail.

3. Equipment: The basic required equipment as prescribed in the

5. Engines:

Lycoming O-235-N2A or Lycoming O-235-L2A

The EASA type certification standard includes that of FAA TC E-223, 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 state prior to 28 September 2003 are also acceptable.

5.1 Engine Limits:

Maximum Continuous power: 2800 rpm (88 kW, 116 HP)

6. Propellers:

Manufacturer	Model	Ø	Number of blades	Minimum static RPM at sea level
Sensenich	72CK S6-0- 52	1.83 m (*)	2	2400 rpm

Remarks: (*) No acceptable diameter reduction for repair.

The EASA type certification standard includes that of FAA TC P-904, 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 state prior to 28 September 2003 are also acceptable.

7. Fluids:

7.1 Fuel:

100 or 100LL octane minimum aviation grade gasoline Refer to latest revision of Service Instruction Lycoming No. 1070.

7.2 Engine Oil:

Refer to latest revision of Service Instruction Lycoming No. 1014.

110. 1017.		
Air temperature	Ashless dispersant (AD)	Mineral
All temperature	grades	grades
All temperature	SAE15W50 or SAE20W50	
Above 80°F (+25°C)	SAE60	SAE60
Above 60°F (+15°C)	SAE40 or SAE50	SAE50
30°F to 90°F (O°C à +30°C)	SAE40	SAE40
0°F to 70°F (-15°C à +20°C)	SAE30, SAE40 or SAE20W40	SAE30
0°F to 90°F (-15°C à +30°C)	SAE20W50 or SAE15W50	SAE20W50
Below 10°F (-10°C)	SAE30 or SAE20W30	SAE20

7.3 Coolant:

Not Applicable

8. Fluid capacities:

8.1 Fuel:

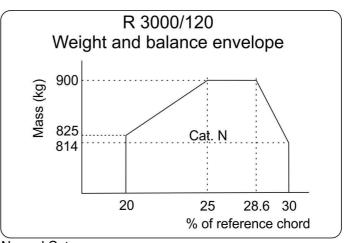
Two wing	tanks	Optional Two wing tanks		
(liters	s)	(liters)		
Total Capacity	Usable	Total Capacity	Usable	
120	118	160	158	

8.2 Oil:

Total capacity...... 6 U.S. quarts (5.7 liters) Usable....... 4 U.S. quarts (3.8 liters)

277 km/h (149 knots IAS)
220 km/h (118 knots IAS)
216 km/h (116 knots IAS)
175 km/h (94 knots IAS)
220 km/h (118 knots IAS)
308 km/h (166 knots IAS)

- 10. Maximum Operating Altitude: Refer to approved aircraft flight manual.
- 11. Operational Capability: Refer to approved aircraft flight manual.
- 13. Centre of Gravity Range:



Normal Category

Forward limit (20 % ref.): .. 0.322 m aft of datum at 825 kg Intermediate limit (25 % ref.):0.403 m aft of datum at 900 kg Intermediate limit (28.6 % ref.):0.461 m aft of datum at 900 kg Aft limit (30 % ref.): 0.484 m aft of datum at 814 kg

14. Datum: Wing leading edge at rib n°6.

Cord length at reference section: 1.612 m (5.28ft).

15. Load factor (n) at maximum weight: Normal Category:

Flaps Up + 3.8 - 1.52 Flaps Down + 2 - 0

16. Leveling Means: Horizontal reference upper fuselage spar

17. Minimum Flight Crew: 1 (pilot)

18. Maximum Passenger Seating Capacity:.....Refer to approved aircraft flight manual.

19. Baggage / Cargo Compartment Maximum baggage compartment 40 kg (88 lb) at +1.93m

aft of datum.

20. Wheels and Tires	Main gear track
	Front gear Main gear
	Tire Oleo strut Tire Oleo strut
	2 bar 6 bar 2.3 bar 9 bar
21. Control surface movements:	
	Elevator:up 25°± 2° down 10°± 2°
	Ailerons:up 12°± 2° down 15°± 2°
	Rudder:25° ± 3°
	Elevator tab:
	Flaps up Trim neutral position: 0°
	Wing Flaps:0° ±2°

22. Reserved

B.IV. Operating and Service Instructions

Airplane Flight Manual......Refer to latest amendment of service letter n°6 Airplane Maintenance Manual Refer to latest amendment of service letter n°6

30° ±3°

B.V. Note:

- 2. The certificated empty weight and the corresponding center of gravity location must include unusable fuel and undrainable oil of the engine.
- 3. This model is identical to the R3000/140 except the Lycoming O235 N2A or L2A engine.

SECTION C: R 3000/100

C.I. General

1. a) Type: R 3000/100 b) Variant: Not applicable

2. Airworthiness Category: Normal Category

3. Type Certificate Holder: C.E.A.P.R.

1 route de Troyes 21121 DAROIS

FRANCE

4. Manufacturer: Avions ROBIN

1 route de Troyes 21121 DAROIS FRANCE.

5. (Reserved)

DGAC Type Certification Date: 13 October 1983

7. EASA Type Certification Date: Transferred by Commission Regulation (EC) No.

1702/2003

8. The EASA type Certificates replaces DGAC-France Type Certificate no 172

C.II. Certification Basis

1. Reference Date for determining

the applicable requirements: January 12, 1978

(Reserved)
 (Reserved)

4. Certification Basis: FAR part 23

5. Airworthiness Requirements: FAR part 23 as amended by amendment 23-1 through 1-

23 dated 12 January 1978

Requirements elected to comply: None
 EASA Special Conditions: None
 EASA Exemptions: None
 EASA Equivalent Safety Findings: None

10. EASA Environmental Standards: ICAO Annex 16, Vol.1. Chap 6.

C.III. Technical Characteristics and Operational Limitations

1. (Reserved)

2. Description: Single-engine, four-seat, low-wing airplane, all-metal

construction, fixed tricycle landing gear, T-tail.

3. Equipment: The basic required equipment as prescribed in the

5. Engines:

Lycoming O-235-N2A or Lycoming O-235-L2A

The EASA type certification standard includes that of FAA TC E-223, 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 state prior to 28 September 2003 are also acceptable.

5.1 Engine Limits:

Maximum Continuous Power:. 2800 rpm (88 kW, 116 HP)

6. Propellers:

Manufacturer	Model	Ø	Number of blades	Minimum static RPM at sea level
Sensenich	72CK S6-0- 52	1.83 m (*)	2	2400 rpm

Remarks: (*) No acceptable diameter reduction for repair.

The EASA type certification standard includes that of FAA TC P-904, 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 state prior to 28 September 2003 are also acceptable.

7. Fluids:

7.1 Fuel:

100 or 100LL octane minimum aviation grade gasoline Refer to latest revision of Service Instruction Lycoming No. 1070.

7.2 Engine Oil:

Refer to latest revision of Service Instruction Lycoming No. 1014.

Air temperature	Ashless dispersant (AD)	Mineral
All temperature	grades	grades
All temperature	SAE15W50 or SAE20W50	
Above 80°F (+25°C)	SAE60	SAE60
Above 60°F (+15°C)	SAE40 or SAE50	SAE50
30°F to 90°F (O°C à +30°C)	SAE40	SAE40
0°F to 70°F (-15°C à +20°C)	SAE30, SAE40 or SAE20W40	SAE30
0°F to 90°F (-15°C à +30°C)	SAE20W50 or SAE15W50	SAE20W50
Below 10°F (-10°C)	SAE30 or SAE20W30	SAE20

7.3 Coolant:

Not Applicable

8. Fluid capacities:

8.1 Fuel:

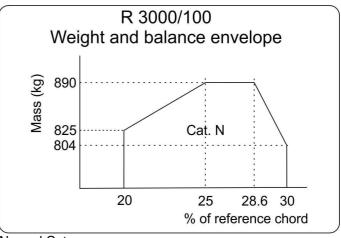
Two wing tanks		Optional Two wing tanks	
(liters	s)	(liter	s)
Total Capacity	Usable	Total Capacity	Usable
120	118	160	158

8.2 Oil:

Total capacity...... 6 U.S. quarts (5.7 liters) Usable....... 4 U.S. quarts (3.8 liters)

277 km/h (149 knots IAS)
220 km/h (118 knots IAS)
216 km/h (116 knots IAS)
175 km/h (94 knots IAS)
220 km/h (118 knots IAS)
308 km/h (166 knots IAS)

- 10. Maximum Operating Altitude: Refer to approved aircraft flight manual.
- 11. Operational Capability: Refer to approved aircraft flight manual.
- 13. Centre of Gravity Range:



Normal Category

Forward limit (20 % ref.): .. 0.322 m aft of datum at 825 kg Intermediate limit (25 % ref.):0.403 m aft of datum at 890 kg Intermediate limit (28.6 % ref.):0.461 m aft of datum at 890 kg Aft limit (30 % ref.): 0.484 m aft of datum at 804 kg

14. Datum: Wing leading edge at rib n°6.

Cord length at reference section: 1.612 m (5.28ft).

15. Load factor (n) at maximum weight: Normal Category:

Flaps Up + 3.8 - 1.52 Flaps Down + 2 - 0

16. Leveling Means: Horizontal reference upper fuselage spar

17. Minimum Flight Crew: 1 (pilot)

18. Maximum Passenger Seating Capacity:.....Refer to approved aircraft flight manual.

19. Baggage / Cargo Compartment Maximum baggage compartment 40 kg (88 lb) at +1.93m

aft of datum.

20. Wheels and Tires	Main gear track Wheel tire size Tire pressure	rear: front:		380 x 150 355x135
	Oleo strut pres			
		t gear		gear
	Tire	Oleo strut	Tire	Oleo strut
	2 bar	6 bar	2.3 bar	9 bar
21. Control surface movements:				
	Elevator:			up 25°± 2° down 10°± 2°
	Ailerons:			up 12°± 2° down 15°± 2°
	Rudder:			25° ± 3°
	Elevator tab: Flaps up	ı		
	Trim	neutral position	n: 0°	±3°
		full down positi		
		full up position:	+37°	±3° (down)
	Flaps do	, ,	4.00	. ••
		neutral position		±3°
		full down positi full up position:		±3° (up) ±3° (down)
00. B I	Wing Flaps:			0° ±2° 30° ±3°

22. Reserved

C.IV. Operating and Service Instructions

Airplane Flight Manual......Refer to latest amendment of service letter n°6 Airplane Maintenance Manual Refer to latest amendment of service letter n°6

C.V. Note:

- 1. The certificated empty weight and the corresponding center of gravity location must include unusable fuel and undrainable oil of the engine.
- 2. This model is identical to R3000/120 except cabin layout, wheel spat and maximum weight.

SECTION D: R 3000/120 D

D.I. General

1. a) Type: R 3000/120 D

b) Variant: Not applicable

2. Airworthiness Category: Normal Category

3. Type Certificate Holder: C.E.A.P.R.

1 route de Troyes 21121 DAROIS

FRANCE

4. Manufacturer: Avions ROBIN

1 route de Troyes 21121 DAROIS FRANCE.

5. (Reserved)

6. DGAC Type Certification Date: 13 October 1983

7. EASA Type Certification Date: Transferred by Commission Regulation (EC) No.

1702/2003

8. The EASA type Certificates replaces DGAC-France Type Certificate no 172

D.II. Certification Basis

1. Reference Date for determining

the applicable requirements: January 12, 1978

2. (Reserved)

3. (Reserved)

4. Certification Basis: FAR part 23

5. Airworthiness Requirements: FAR part 23 as amended by amendment 23-1 through 1-

23 dated 12 January 1978

6. Requirements elected to comply: None

7. EASA Special Conditions: None

8. EASA Exemptions: None

9. EASA Equivalent Safety Findings: None

10. EASA Environmental Standards: ICAO Annex 16, Vol.1. Chap 6.

D.III. Technical Characteristics and Operational Limitations

1. (Reserved)

2. Description: Single-engine, four-seat, low-wing airplane, all-metal

construction, fixed tricycle landing gear, T-tail.

3. Equipment: The basic required equipment as prescribed in the

5. Engines:

Lycoming O-235-N2A or Lycoming O-235-L2A

The EASA type certification standard includes that of FAA TC E-223, 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 state prior to 28 September 2003 are also acceptable.

5.1 Engine Limits:

Maximum Continuous power: 2600 rpm (83 kW, 112 HP)

6. Propellers:

Manufacturer	Model	Ø	Number of blades	Minimum static RPM at sea level
Sensenich	72CK S6-0-52	1.83 m (*)	2	2400 rpm

Remarks: (*) No acceptable diameter reduction for repair.

The EASA type certification standard includes that of FAA TC P-904, 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 state prior to 28 September 2003 are also acceptable.

7. Fluids:

7.1 Fuel:

100 or 100LL octane minimum aviation grade gasoline Refer to latest revision of Service Instruction Lycoming No. 1070.

7.2 Engine Oil:

Refer to latest revision of Service Instruction Lycoming No. 1014.

Air temperature	Ashless dispersant (AD)	Mineral
All temperature	grades	grades
All temperature	SAE15W50 or SAE20W50	
Above 80°F (+25°C)	SAE60	SAE60
Above 60°F (+15°C)	SAE40 or SAE50	SAE50
30°F to 90°F (O°C à +30°C)	SAE40	SAE40
0°F to 70°F (-15°C à +20°C)	SAE30, SAE40 or SAE20W40	SAE30
0°F to 90°F (-15°C à +30°C)	SAE20W50 or SAE15W50	SAE20W50
Below 10°F (-10°C)	SAE30 or SAE20W30	SAE20

7.3 Coolant:

Not Applicable

8. Fluid capacities:

8.1 Fuel:

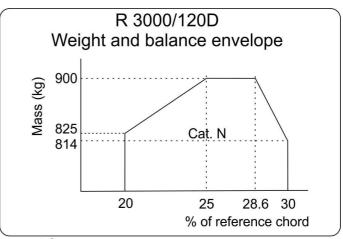
Two wing tanks		Optional Two wing tanks	
(liters	3)	(liter	rs)
Total Capacity	Usable	Total Capacity	Usable
120	118	160	158

8.2 Oil:

Total capacity...... 6 U.S. quarts (5.7 liters) Usable....... 4 U.S. quarts (3.8 liters)

277 km/h (149 knots IAS)
220 km/h (118 knots IAS)
216 km/h (116 knots IAS)
175 km/h (94 knots IAS)
220 km/h (118 knots IAS)
308 km/h (166 knots IAS)

- 10. Maximum Operating Altitude: Refer to approved aircraft flight manual.
- 11. Operational Capability: Refer to approved aircraft flight manual.
- 13. Centre of Gravity Range:



Normal Category

Forward limit (20 % ref.): .. 0.322 m aft of datum at 825 kg Intermediate limit (25 % ref.):0.403 m aft of datum at 900 kg Intermediate limit (28.6 % ref.):0.461 m aft of datum at 900 kg Aft limit (30 % ref.): 0.484 m aft of datum at 814 kg

14. Datum: Wing leading edge at rib n°6.

Cord length at reference section: 1.612 m (5.28ft).

15. Load factor (n) at maximum weight: Normal Category:

Flaps Up + 3.8 - 1.52 Flaps Down + 2 - 0

16. Leveling Means: Horizontal reference upper fuselage spar

17. Minimum Flight Crew: 1 (pilot)

18. Maximum Passenger Seating Capacity: Refer to approved aircraft flight manual.

19. Baggage / Cargo Compartment Maximum baggage compartment 40 kg (88 lb) at +1.93m

aft of datum.

20. Wheels and Tires	Main gear track
	Tire pressurerefer to following table
	Oleo strut pressure refer to following table
	Front gear Main gear
	Tire Oleo strut Tire Oleo strut
	2 bar 6 bar 2.3 bar 9 bar
21. Control surface movements:	
	Elevator:up 25°± 2° down 10°± 2°
	Ailerons:up 12°± 2° down 15°± 2°
	Rudder:25° ± 3°
	Elevator tab: Flaps up
	Trim neutral position: 0° ±3°
	Trim full down position: -12° ±3° (up)
	Trim full up position: $+37^{\circ}$ $\pm 3^{\circ}$ (down)
	Flaps down (30°)
	Trim neutral position: +16° ±3°
	Trim full down position: -9° ±3° (up)
	Trim full up position: +40°±3° (down)
	Wing Flaps:0° ±2°
	30° ±3°
00 5	

22. Reserved

D.IV. Operating and Service Instructions

Airplane Flight Manual......Refer to latest amendment of service letter n°6 Airplane Maintenance Manual Refer to latest amendment of service letter n°6

D.V. Note:

- 1. The certificated empty weight and the corresponding center of gravity location must include unusable fuel and undrainable oil of the engine.
- 2. This model is identical to the R3000/120 except the maximum continuous power limited to 2600 rpm. The origin of this limit is not the applicable airworthiness regulation.

SECTION E: R 3000/160

E.I. General

1. a) Type: R 3000/160b) Variant: Not applicable

2. Airworthiness Category: Normal and Utility Category

3. Type Certificate Holder: C.E.A.P.R.

1 route de Troyes 21121 DAROIS

FRANCE

4. Manufacturer: Avions ROBIN

1 route de Troyes 21121 DAROIS FRANCE.

5. (Reserved)

6. DGAC Type Certification Date: 13 October 1983

7. EASA Type Certification Date: Transferred by Commission Regulation (EC) No.

1702/2003

8. The EASA type Certificates replaces DGAC-France Type Certificate no 172

E.II. Certification Basis

1. Reference Date for determining

the applicable requirements: January 12, 1978

(Reserved)
 (Reserved)

4. Certification Basis: FAR part 23

5. Airworthiness Requirements: FAR part 23 as amended by amendment 23-1 through 1-

23 dated 12 January 1978

Requirements elected to comply: None
 EASA Special Conditions: None
 EASA Exemptions: None
 EASA Equivalent Safety Findings: None

10. EASA Environmental Standards: ICAO Annex 16, Vol.1. Chap 6.

E.III. Technical Characteristics and Operational Limitations

1. (Reserved)

2. Description: Single-engine, four-seat, low-wing airplane, all-metal

construction, fixed tricycle landing gear, T-tail.

3. Equipment: The basic required equipment as prescribed in the

5. Engines: Lycoming O-360-A3A

The EASA type certification standard includes that of FAA TC E-286, 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 state prior to 28 September 2003 are also acceptable.

5.1 Engine Limits: Maximum Continuous Power:2600 rpm (119 kW, 160 HP)

6. Propellers:

Manufacturer	Model	Ø	Number of blades	Minimum static RPM at sea level
Sensenich	76EM8 S5-0-64	1.93 m (*)	2	2200 rpm

Remarks: (*) No acceptable diameter reduction for repair.

The EASA type certification standard includes that of FAA TC P4EA, 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 state prior to 28 September 2003 are also acceptable.

7. Fluids:

7.1 Fuel: 100 or 100LL octane minimum aviation grade gasoline

Refer to latest revision of Service Instruction Lycoming

No. 1070.

7.2 Engine Oil: Refer to latest revision of Service Instruction Lycoming

No. 1014.

Air temperature	Ashless dispersant (AD)	Mineral
All temperature	grades	grades
All temperature	SAE15W50 or SAE20W50	
Above 80°F (+25°C)	SAE60	SAE60
Above 60°F (+15°C)	SAE40 or SAE50	SAE50
30°F to 90°F (O°C à +30°C)	SAE40	SAE40
0°F to 70°F (-15°C à +20°C)	SAE30, SAE40 or SAE20W40	SAE30
0°F to 90°F (-15°C à +30°C)	SAE20W50 or SAE15W50	SAE20W50
Below 10°F (-10°C)	SAE30 or SAE20W30	SAE20

7.3 Coolant: Not Applicable

8. Fluid capacities:

8.1 Fuel: Two structural wing tanks

Usable...... 6 U.S. quarts (5.7 liters)

318 km/h (171 knots IAS)
252 km/h (136 knots IAS)
216 km/h (116 knots IAS)
175 km/h (94 knots IAS)
252 km/h (136 knots IAS)
358 km/h (193 knots IAS)

- 10. Maximum Operating Altitude:
- Refer to approved aircraft flight manual.
- 11. Operational Capability:
- Refer to approved aircraft flight manual.
- 12. Maximum Masses:

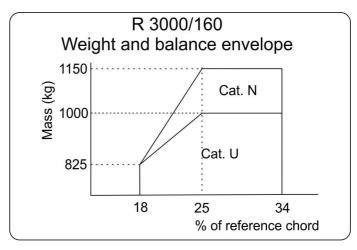
Normal Category

Take-off and landing 1150 kg (2535 lb.)

Utility Category

Take-off and landing 1000 kg (2205 lb)

13. Centre of Gravity Range:



Normal Category

Forward limit (18 % ref.): .. 0.290 m aft of datum at 825 kg Intermediate limit (25 % ref.):0.403 m aft of datum at 1150 kg Aft limit (34 % ref.): 0.548 m aft of datum at 1150 kg

Utility Category

Forward limit (18 % ref.): .. 0.290 m aft of datum at 825 kg Intermediate limit (25 % ref.):0.403 m aft of datum at 1000 kg Aft limit (34 % ref.): 0.548 m aft of datum at 1000 kg

14. Datum: Wing leading edge at rib n°6.

Cord length at reference section: 1.612 m (5.28ft).

15. Load factor (n) at maximum weight: Normal Category:

Flaps Up + 3.8

- 1.52

Flaps Down + 2

- 0

Utility Category

Flaps Up + 4.4

- 1.76

Flaps Down + 2

- 0

16. Leveling Means:

Horizontal reference upper fuselage spar

17. Minimum Flight Crew:	1 (pilot)					
18. Maximum Passenger Seating Capacity: Refer to approved aircraft flight manual.						
19. Baggage / Cargo Compartment	Maximum bagg aft of datum.	jage compartm	ent 40 kg (88	lb) at +1.93m		
20. Wheels and Tires	Main gear track Wheel tire size Tire pressure Oleo strut press	rear: front:	refer to f	380 x 150355x135 following table		
	Front	t gear	Main	gear		
	Tire	Oleo strut	Tire	Oleo strut		
	2 bar	6 bar	2.3 bar	9 bar		
21. Control surface movements:	Elevator: Ailerons:			down 10°± 2° up 12°± 2° down 15°± 2°		
	Rudder:					

22. Reserved

E.IV. Operating and Service Instructions

Airplane Flight Manual......Refer to latest amendment of service letter n°6 Airplane Maintenance Manual Refer to latest amendment of service letter n°6

Wing Flaps:.....0° ±2°

30° ±3°

E.V. Note:

- 1. The certificated empty weight and the corresponding center of gravity location must include unusable fuel and undrainable oil of the engine.
- 2. This model is identical to the R3000/140 except the Lycoming O360-A3A engine.

SECTION F: R 3000/160 S

F.I. General

1. a) Type: R 3000/160 Sb) Variant: Not applicable

2. Airworthiness Category: Normal and Utility Category

3. Type Certificate Holder: C.E.A.P.R.

1 route de Troyes 21121 DAROIS

FRANCE

4. Manufacturer: Avions ROBIN

1 route de Troyes 21121 DAROIS FRANCE.

5. (Reserved)

6. DGAC Type Certification Date: 13 October 1983

7. EASA Type Certification Date: Transferred by Commission Regulation (EC) No.

1702/2003

8. The EASA type Certificates replaces DGAC-France Type Certificate no 172

F.II. Certification Basis

1. Reference Date for determining

the applicable requirements: January 12, 1978

(Reserved)
 (Reserved)

4. Certification Basis: FAR part 23

5. Airworthiness Requirements: FAR part 23 as amended by amendment 23-1 through 1-

23 dated 12 January 1978

Requirements elected to comply: None
 EASA Special Conditions: None
 EASA Exemptions: None
 EASA Equivalent Safety Findings: None

10. EASA Environmental Standards: ICAO Annex 16, Vol.1. Chap 6.

F.III. Technical Characteristics and Operational Limitations

1. (Reserved)

2. Description: Single-engine, four-seat, low-wing airplane, all-metal

construction, fixed tricycle landing gear, T-tail.

3. Equipment: The basic required equipment as prescribed in the

5. Engines: Lycoming O-360-A3A

The EASA type certification standard includes that of FAA TC E-286, 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 state prior to 28 September 2003 are also acceptable.

6. Propellers:

Manufacturer	Model	Ø	Number of blades	Minimum static RPM at sea level
Sensenich	76EM8 S5-0-64	1.93 m (*)	2	2200 rpm

Remarks: (*) No acceptable diameter reduction for repair.

The EASA type certification standard includes that of FAA TC P4EA, 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 state prior to 28 September 2003 are also acceptable.

7. Fluids:

7.1 Fuel: 100 or 100LL octane minimum aviation grade gasoline

Refer to latest revision of Service Instruction Lycoming

No. 1070.

7.2 Engine Oil: Refer to latest revision of Service Instruction Lycoming

No. 1014.

Ashless dispersant (AD)	Mineral
grades	grades
SAE15W50 or SAE20W50	
SAE60	SAE60
SAE40 or SAE50	SAE50
SAE40	SAE40
SAE30, SAE40 or SAE20W40	SAE30
SAE20W50 or SAE15W50	SAE20W50
SAE30 or SAE20W30	SAE20
	grades SAE15W50 or SAE20W50 SAE60 SAE40 or SAE50 SAE40 SAE30, SAE40 or SAE20W40 SAE20W50 or SAE15W50

7.3 Coolant: Not Applicable

8. Fluid capacities:

8.1 Fuel: Two structural wing tanks

8.2 Oil: Total capacity...... 8 U.S. quarts (7.6 liters)

Usable...... 6 U.S. quarts (5.7 liters)

318 km/h (171 knots IAS)
252 km/h (136 knots IAS)
216 km/h (116 knots IAS)
175 km/h (94 knots IAS)
252 km/h (136 knots IAS)
358 km/h (193 knots IAS)

- 10. Maximum Operating Altitude:
- Refer to approved aircraft flight manual.
- 11. Operational Capability:
- Refer to approved aircraft flight manual.
- 12. Maximum Masses:

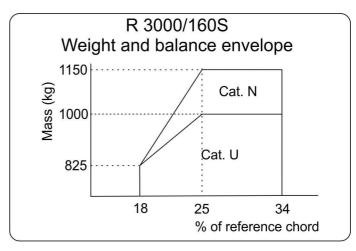
Normal Category

Take-off and landing 1150 kg (2535 lb.)

Utility Category

Take-off and landing 1000 kg (2205 lb)

13. Centre of Gravity Range:



Normal Category

Forward limit (18 % ref.): .. 0.290 m aft of datum at 825 kg Intermediate limit (25 % ref.):0.403 m aft of datum at 1150 kg Aft limit (34 % ref.): 0.548 m aft of datum at 1150 kg

Utility Category

Forward limit (18 % ref.): .. 0.290 m aft of datum at 825 kg Intermediate limit (25 % ref.):0.403 m aft of datum at 1000 kg Aft limit (34 % ref.): 0.548 m aft of datum at 1000 kg

14. Datum: Wing leading edge at rib n°6.

Cord length at reference section: 1.612 m (5.28ft).

15. Load factor (n) at maximum weight: Normal Category:

Flaps Up + 3.8 - 1.52 Flaps Down + 2 - 0

Utility Category

Flaps Up + 4.4 - 1.76 Flaps Down + 2 - 0

16. Leveling Means: Horizontal reference upper fuselage spar

17. Minimum Flight Crew: 1 (pilot)

18. Maximum Passenger Seating Cap	acity: Refer to ap	proved aircraft	flight manual.		
19. Baggage / Cargo Compartment	Maximum bagg aft of datum.	gage compartm	nent 40 kg (88	lb) at +1.93m	
20. Wheels and Tires	Main gear track Wheel tire size	rear:	2	380 x 150	
	Tire pressure				
	Oleo strut press	sure			
		t gear		gear	
	Tire	Oleo strut	Tire	Oleo strut	
	2 bar	6 bar	2.3 bar	9 bar	
21. Control surface movements:					
	Elevator: up 25°± 2° down 10°± 2°				
	Ailerons:up 12°± 2° down 15°± 2°				
	Rudder:			25° ± 3°	
	Elevator tab: Flaps up				
	Trim neutral position: 0° ±3°				
	Trim full down position: -12° ±3° (up)				
	Trim full up position: +37° ±3° (down)				
	Flaps down (30°)				
	Trim neutral position: +16° ±3°				
	Trim full down position: -9° $\pm 3^{\circ}$ (up)				

22. Reserved

F.IV. Operating and Service Instructions

Airplane Flight Manual......Refer to latest amendment of service letter n°6 Airplane Maintenance Manual Refer to latest amendment of service letter n°6

Trim full up position:

Wing Flaps:.....0° ±2°

+40°±3° (down)

30° ±3°

F.V. Note:

- 1. The certificated empty weight and the corresponding center of gravity location must include unusable fuel and undrainable oil of the engine.
- 2. This model is identical to the R3000/160 except the maximum continuous power limited to 2530 rpm. The origin of this limit is not the applicable airworthiness regulation.

SECTION G: R 3000/180

G.I. General

1. a) Type: R 3000/180b) Variant: Not applicable

2. Airworthiness Category: Normal and Utility Category

3. Type Certificate Holder: C.E.A.P.R.

1 route de Troyes 21121 DAROIS

FRANCE

4. Manufacturer: Avions ROBIN

1 route de Troyes 21121 DAROIS FRANCE.

5. (Reserved)

6. DGAC Type Certification Date: 13 October 1983

7. EASA Type Certification Date: Transferred by Commission Regulation (EC) No.

1702/2003

8. The EASA type Certificates replaces DGAC-France Type Certificate no 172

G.II. Certification Basis

1. Reference Date for determining

the applicable requirements: January 12, 1978

(Reserved)
 (Reserved)

4. Certification Basis: FAR part 23

5. Airworthiness Requirements: FAR part 23 as amended by amendment 23-1 through 1-

23 dated 12 January 1978

Requirements elected to comply: None
 EASA Special Conditions: None
 EASA Exemptions: None
 EASA Equivalent Safety Findings: None

10. EASA Environmental Standards: ICAO Annex 16, Vol.1. Chap 6.

G.III. Technical Characteristics and Operational Limitations

1. (Reserved)

2. Description: Single-engine, four-seat, low-wing airplane, all-metal

construction, fixed tricycle landing gear, T-tail.

3. Equipment: The basic required equipment as prescribed in the

5. Engines:

Lycoming O-360-A3A

The EASA type certification standard includes that of FAA TC E-286, 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 state prior to 28 September 2003 are also acceptable.

5.1 Engine Limits:

6. Propellers:

Manufacturer	Model	Ø	Number of blades	Minimum static RPM at sea level
Sensenich	76EM8 S5-0-64	1.93 m (*)	2	2200 rpm

Remarks: (*) No acceptable diameter reduction for repair.

The EASA type certification standard includes that of FAA TC P4EA, 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 state prior to 28 September 2003 are also acceptable.

7. Fluids:

7.1 Fuel:

100 or 100LL octane minimum aviation grade gasoline Refer to latest revision of Service Instruction Lycoming No. 1070.

7.2 Engine Oil:

Refer to latest revision of Service Instruction Lycoming No. 1014.

Air temperature	Ashless dispersant (AD)	Mineral
All temperature	grades	grades
All temperature	SAE15W50 or SAE20W50	
Above 80°F (+25°C)	SAE60	SAE60
Above 60°F (+15°C)	SAE40 or SAE50	SAE50
30°F to 90°F (O°C à +30°C)	SAE40	SAE40
0°F to 70°F (-15°C à +20°C)	SAE30, SAE40 or SAE20W40	SAE30
0°F to 90°F (-15°C à +30°C)	SAE20W50 or SAE15W50	SAE20W50
Below 10°F (-10°C)	SAE30 or SAE20W30	SAE20

7.3 Coolant: Not Applicable

8. Fluid capacities:

8.1 Fuel: Two structural wing tanks

8.2 Oil: Total capacity...... 8 U.S. quarts (7.6 liters)

Usable...... 6 U.S. quarts (5.7 liters)

318 km/h (171 knots IAS)
252 km/h (136 knots IAS)
216 km/h (116 knots IAS)
175 km/h (94 knots IAS)
252 km/h (136 knots IAS)
358 km/h (193 knots IAS)

- 10. Maximum Operating Altitude:
- Refer to approved aircraft flight manual.
- 11. Operational Capability:
- Refer to approved aircraft flight manual.
- 12. Maximum Masses:

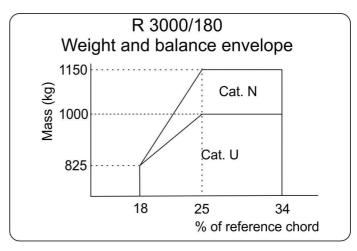
Normal Category

Take-off and landing 1150 kg (2535 lb.)

Utility Category

Take-off and landing 1000 kg (2205 lb.)

13. Centre of Gravity Range:



Normal Category

Forward limit (18 % ref.): .. 0.290 m aft of datum at 825 kg Intermediate limit (25 % ref.):0.403 m aft of datum at 1150 kg Aft limit (34 % ref.): 0.548 m aft of datum at 1150 kg

Utility Category

Forward limit (18 % ref.): .. 0.290 m aft of datum at 825 kg Intermediate limit (25 % ref.):0.403 m aft of datum at 1000 kg Aft limit (34 % ref.): 0.548 m aft of datum at 1000 kg

14. Datum: Wing leading edge at rib n°6.

Cord length at reference section: 1.612 m (5.28ft).

15. Load factor (n) at maximum weight: Normal Category:

Flaps Up + 3.8 - 1.52 Flaps Down + 2 - 0

Utility Category

Flaps Up + 4.4 - 1.76 Flaps Down + 2 - 0

16. Leveling Means: Horizontal reference upper fuselage spar

17. Minimum Flight Crew: 1 (pilot)

Trim full down position: -9° $\pm 3^{\circ}$ (up) Trim full up position: $+40^{\circ}$ $\pm 3^{\circ}$ (down)

30° ±3°

Wing Flaps:.....0° ±2°

18. Maximum Passenger Seating Cap	acity: Refer to ap	proved aircraft	flight manual.	
19. Baggage / Cargo Compartment	Maximum bagg aft of datum.	gage compartm	ent 40 kg (88	lb) at +1.93m
20. Wheels and Tires	Main gear track Wheel tire size Tire pressure Oleo strut press	rear: front:	refer to f	380 x 150 355x135 following table
		t gear		gear
	Tire	Oleo strut		Oleo strut
	2 bar	6 bar	2.3 bar	9 bar
21. Control surface movements:	Elevator:up 25°± 2° down 10°± 2°			
	Ailerons:up $12^{\circ}\pm2^{\circ}$ down $15^{\circ}\pm2^{\circ}$			
	Rudder:25° ± 3°			
	Elevator tab: Flaps up Trim neutral position: Trim full down position: Trim full up position: Flaps down (30°)			
	Trim i	neutral position	n: +16°	±3°

22. Reserved

G.IV. Operating and Service Instructions

Airplane Flight Manual......Refer to latest amendment of service letter n°6 Airplane Maintenance Manual Refer to latest amendment of service letter n°6

G.V. Note:

- 1. The certificated empty weight and the corresponding center of gravity location must include unusable fuel and undrainable oil of the engine.
- 2. This model is identical to the R3000/160 except the maximum continuous power limited to 2700 rpm.

ADMINISTRATIVE SECTION

- I. Acronyms
- II. Type Certificate Holder Record

Société Avions Pierre Robin Société Avions Robin ROBIN Aviation APEX Aircraft

III. Change Record

Issue 1	10 May 2013	Initial issue on transfer of this Type Certificate to CEAPR	