



## ***European Aviation Safety Agency***

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**EASA**

**TYPE-CERTIFICATE  
DATA SHEET**

No. EASA.R.508

**for  
COLIBRI**

**Type Certificate Holder  
AIRBUS HELICOPTERS**

Aéroport International Marseille – Provence  
13725 Marignane cedex  
France

For Models:  
EC120B

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## **SECTION 1: MODEL EC120B :**

### **I. General**

#### 1. Type/ Model/ Variant

1.1 Type	EC 120
1.2 Model	EC 120 B
1.3 Variant	N/A

#### 2. Airworthiness Category                      Normal Rotorcraft, Category B

#### 3. Manufacturer

before	January 1, 1992	AEROSPATIALE
before	January 7, 2014	EUROCOPTER
since	January 7, 2014	AIRBUS HELICOPTERS
Aéroport International Marseille-Provence 13725 MARIGNANE cedex		

#### 4. EASA Type Certification Application Date

Note: State of Design Authority certification application date for grandfathered products

EC 120 B    6 May 1994

#### 5. State of Design Authority

DGAC-France

#### 6. State of Design Authority Type Certificate Date

EC 120 B 19 Juin 1997  
(DGAC-F National TC N° 189)

#### 7. EASA Type Certification Date

N/A (to DGAC France)

## **II. Certification Basis**

1. Reference Date for determining the applicable requirements: 06, May 1994
2. Airworthiness Requirements JAR 27 First Issue dated September 06,1993 defined in CRI A1
3. Special Conditions HIRF
4. Exemptions None.
5. (Reserved) Deviations None.
6. Equivalent Safety Findings
  - Main gear box oil filter bypass
  - Powerplant instrument marking
7. Environmental Protection Requirements  
Refer to EASA TCDS Noise EASA.R.508.

## **III. Technical Characteristics and Operational Limitations**

1. Type Design Definition  
Basic EC 120 B definition:  
Report DMD C 000A0761 E01 Issue B
2. Description  
Normal Mono-engine
3. Equipment  
As per compliance with JAR 27 requirements and included in the original Type Design Standard
4. Dimensions

4.1 Fuselage	Length	9,60m	
	Height	3;40m	
	Width	1,50m	
4.2 Main Rotor	3 blades	Diameter	10m
4.3 Tail Rotor	8 blades	Diameter	0,75m
5. Engine
  - 5.1 Model  
1 Turboméca ARRIUS 2F

## 5.2 Type Certificate

see DGAC-F engine DS n° M22

## 5.3 Limitations

### 5.3.1 Installed Engine Limits

Ratings	Gas generator Speed (NG) <sup>(1)</sup>	Exhaust gas Temperature (T4) <sup>(2)</sup>
Max transient (5 s)	103.6%	900°C
Max take-off (5 min)	101%	870°C
Max Continuous	99.5%	830°C

Notes :       (1) 100%: 54 117 rpm  
              (2) Max Continuous during starting: 800°C

### 5.3.2 Transmission Torque Limits

Max transient:	110%
Max Take off:	103%
Max Continuous:	97%

Note : 100% : 300 Kw at 406 rpm

## 6. Fluids (Fuel/ Oil/ Additives)

### 6.1 Fuel

as approved in the Flight Manual

### 6.2 Oil

as approved in the Flight Manual

### 6.3 Additives

as approved in the Flight Manual

## 7. Fluid capacities

### 7.1 Fuel

410,5 l (108.3US gals)  
usable 406 l (107.3US gals)

### 7.2 Oil

engines	3 l min – 4,9 l max
MGB	4 l
TGB	0,2 l

## 8. Air Speeds Limits

Vne Power on 150 kt at sea level less 3 kt/1000ft  
Vne Power off 120 kt at sea level less 3 kt/1000 ft  
Refer to RFM for approved airspeed with doors open or removed

## 9. Rotor Speed Limits

Power on: Normal range	390 to 415 rpm
Power off: Maximum	447 rpm (aural warning : 420 rpm)
Minimum	340 rpm (aural warning : 370 rpm)

## 10. Maximum Operating Altitude and Temperature

10.1 Altitude	Take-off and landing	2000ft / 20.000ft pressure altitude [1]
	En route	20.000ft pressure altitude

[1] Max take-off and landing Hp= 20.000 ft permitted when change A00075 and SB 32.001 have been embodied to the aircraft (use Flight Manual issue 2+ITR 3C or subsequent issue)

10.2 Temperature	- 30°C to + ISA +35°C limited to 50°C
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## 11. Operating Limitations

day VFR  
night VFR [2]  
Flights under icing conditions, freezing rain and aerobatic manoeuvres are prohibited

[2] Night VFR operation permitted when SB 34.001 has been embodied to the aircraft (use Flight Manual issue 2 + ITR 3E or FM subsequent issues)

## 12. Maximum Weight

Take-off and landing: 1715 kg (3777 lb)

## 13. Centre of Gravity Range

Refer to approved Flight Manual

## 14. Datum

Longitudinal	4m (13ft2in) forward of main rotor head
Lateral	aircraft symmetry plane

## 15. Levelling Means

Mechanical floor

16. Minimum Flight Crew

1 pilot

17. Maximum Passenger Seating Capacity

4

18. Passenger Emergency Exit

One door on each side of the fuselage

19. Maximum Baggage/ Cargo Loads

The baggage floor is provided with the structural strength required for a load of 300kg/m<sup>2</sup> evenly distributed in cargo configuration / the cockpit floor is provided with the structural strength required for a load of 300kg/m<sup>2</sup> evenly distributed in cargo configuration.

20. Rotor Blade control movement

For rigging information, refer to Maintenance Manual

21. Auxiliary Power Unit (APU)

None

22. Life- limited parts

Refer to approved ALS chapter of the MSM

**IV. Operating and Service Instructions**

1. Flight Manual

Flight Manual (original issue approved by DGAC-F 19 June 1997) at issue 2 (approved by DGAC-F 19 March 1998) or subsequent issues

2. Maintenance Manual

- EC 120B Aircraft Maintenance Manual - chapter 04 (original issue approved by DGAC-F, 19 June 1997) at issue 1 (approved by DGAC-F, 30 March 1998)
- EC 120B Master Servicing Manual - chapter 04, original issue approved by DGAC-F, 12 March 1999 or subsequent issues

3. Structural Repair Manual

None

4. Weight and Balance Manual

EC 120 B Flight Manual section 6



5. Illustrated Parts Catalogue

EC 120 B Illustrated Parts Catalog

6. Service Letters and Service Bulletins

As published by AEROSPATIALE or EUROCOPTER or  
AIRBUS HELICOPTERS and approved by DGAC or  
EASA

7. Required Equipment

As per compliance with JAR 27 requirements and  
included in the original Type Design Standard

The Flight Manual must be on board.

8. Master Minimum Equipment List

None.

## **V. Notes**

1. Eligible serial numbers: 1001 and subsequent except S/N 1004
2. There is a Master Minimum Equipment List approved by DGAC-F (original issue dated 02.06 or subsequent issues)
3. There is no approved Repair Manual

## **SECTION 2: ADMINISTRATIVE**

### **I. Acronyms and Abbreviations**

ALS	Airworthiness Limitations Section
DOA	Design Organisation Approval
EASA	European Aviation Safety Agency
FAA	Federal Aviation Administration
HIRF	High Intensity Radiated Field
ICAO	International Civil Aviation Organisation
IPC	Illustrated Parts Catalogue
JAA	Joint Aviation Authorities
JAR	Joint Airworthiness Requirements
kg	Kilogram
lb.	Pounds
MMEL	Master Minimum Equipment List
MSM	Maintenance Servicing Manual
RFM	Rotorcraft Flight Manual

### **II. Type Certificate Holder Record**

AIRBUS HELICOPTERS  
Aéroport International Marseille-Provence  
13725 MARGNANE cedex - France

### **III. Change Record**

<b>Issue</b>	<b>Date</b>	<b>Changes</b>	<b>TC issue</b>
Issue 01	15/06/2010	Initial issue on EASA TCDS format Previous was JAA TCDS N°JAA/27/97/002 issue 6 dated of October 2002	Initial Issue, 15/06/2010
Issue 02	07/01/2014	TC holder EUROCOPTER changed into AIRBUS HELICOPTER	

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