

**DEPARTMENT OF TRANSPORTATION
FEDERAL AVIATION ADMINISTRATION**

R0001RD
Revision 5
Airbus Helicopters
EC120B
February 8, 2022

TYPE CERTIFICATE DATA SHEET No. R0001RD

This data sheet which is part of Type Certificate No. R0001RD prescribes conditions and limitations under which the product for which the Type Certificate was issued meets the airworthiness requirements of the Federal Aviation Regulations.

Type Certificate Holder: Airbus Helicopters
Aéroport International Marseille Provence
13725-Marignane Cedex
France

TC Holder Record: Eurocopter France changed name to Airbus Helicopters on January 1, 2014.

I. Model EC120B (Normal Category) Helicopter, Approved January 28, 1998

Engine. 1 Turbomeca Arrius 2F

Fuel. See Rotorcraft Flight Manual

<u>Installed Engine Limits.</u>	Gas Generator Speed Ng % (RPM)	Exhaust Gas Temperature T4 °C (°F)
Takeoff Rating (5 min.)	101 (54658)	870 (1598)
Maximum Continuous	99.5 (53847)	830 (1526)
Maximum Transient (5 sec.)	103.6 (56065)	900 (1652)

See Rotorcraft Flight Manual for other limitations including speed and temperature transients

Transmission Torque Limits.

Maximum Takeoff	100%
Maximum Continuous	97%
Maximum Transient	110%

100% = 300 Kw (402 SHP) at 406 RPM

Rotor Limits.

Min. Continuous (power on)	390 RPM	Low NR aural warning: 370 RPM
Max. Continuous (power on)	415 RPM	High NR aural warning: 420 RPM
Minimum (power off)	340 RPM	
Maximum (power off)	447 RPM	

Airspeed Limits (IAS).

Max. V_{NE} (power on) = 150 kts. at Hp= 0 ft.
Max. V_{NE} (power off) = 120 kts. at Hp= 0 ft.
See Rotorcraft Flight Manual for airspeed limit decrease with altitude.

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C.G. Range.*Longitudinal C.G. Limits*

max. forward range: at 1680 kg (3700 lb): 3870mm (152.2 in.)
 at 1400 kg (3086 lb): 3830mm (150.8 in.)
 at 1300 kg (2866 lb): 3830mm (150.8 in.)
 at 970 kg (2138 lb): 3890mm (153.1 in.)

max. rearward range: at 1680 kg (3700 lb): 4100mm (161.4 in.)
 at 1300 kg (2866 lb): 4150mm (163.4 in.)
 at 970 kg (2138 lb): 4170mm (164.2 in.)

Straight line variation between points given.

Lateral C.G. Limits

max. left CG: 80mm (3.15 in.)
 max. right CG: 80mm (3.15 in.)
 lateral CG varies with longitudinal CG position. Refer the Rotorcraft Flight Manual.

Empty Weight C.G. Range.

None

Max. Weight.

1680kg (3700 lb)

Min. Crew.

1 Pilot

Passengers.

4

Max. Baggage/Cargo Loads.

Baggage floor: 300kg/m² (61.4 lb/ft²)
 Cockpit floor: 300kg/m² (61.4 lb/ft²)

Fuel Capacity.

total: 416 liter (109.9 US gal.)
 usable: 411.5 liter (108.7 US gal.)

Oil Capacity.

Maximum engine oil capacity: 4.61 liter (1.22 US gal.)

Max. Operating Altitude.

6096m (20000ft) pressure altitude

Rotorblade and Control Movements.

For rigging information refer to the EC120 Maintenance Manual.

Datum.

Longitudinal: 4m (157.5 in.) forward of main rotor head center line
 Lateral: Symetrical plane of the rotorcraft

Leveling Means.

Mechanical floor

Serial Nos. Eligible.

1001 and subsequent. A French (DGAC) Certificate of Airworthiness endorsed as noted below under "Import Requirements" must be submitted for each individual rotorcraft for which application for FAA certification is made.

Serial Nos. Ineligible

The FAA has revoked the standard airworthiness certificate of serial number 1137 on an emergency basis, based on a determination of un-airworthiness sufficient to render the certificate ineffective. This serial number aircraft is not currently eligible for a Standard Certificate of Airworthiness. Inquiries regarding this aircraft should be directed to the FAA Rotorcraft Directorate Staff, Fort Worth, TX.

Certification Basis.

- FAR 21.29
- FAR 27, through Amendment 27-33
- FAR 36 Appendix J through Amendment 36-21
- Equivalent Level of Safety findings
 - FAR 27.1027(b)(2)
 - FAR 27.1549(b)

The French Direction Generale de l'Aviation Civile (DGAC) originally type certificated this rotorcraft under its type certificate TC 189. The FAA validated

this product under U.S. Type Certificate Number R0001RD. Effective September 28, 2003, the European Aviation Safety Agency (EASA) began oversight of this product on behalf of the DGAC.

Import Requirements.

The FAA can issue a U.S. airworthiness certificate based on a National Aviation Authority (NAA) Export Certificate of Airworthiness (Export C of A) signed by a representative of the French Generale de l'Aviation Civile (DGAC) on behalf of the European Community.

Refer to the applicable bilateral agreement to verify eligibility for import into the United States of both new and used aircraft based on the scope of the agreement, to identify any required statements by the exporting authority on the export certificate of airworthiness (or equivalent document), and for procedures for coordinating exceptions to conformity statements on these documents. Refer to FAA Order 8130.2, *Airworthiness Certification of Aircraft*, for requirements for issuance of an *airworthiness certificate* for imported aircraft.

The Export C of A should contain the following statement: "The aircraft covered by this certificate has been examined, tested, and found to comply with the type design approved under U.S. Type Certificate Number R0001RD and to be in a condition for safe operation."

Equipment.

The minimum required equipment as prescribed in the applicable airworthiness regulations (see Certification Basis) must be installed in the respective helicopter for certification.

DGAC-approved EC120B Rotorcraft Flight Manual, dated June 19, 1997, Revision 2, or later approved revision, as required.

Service Information.

Each of the documents listed below must state that it is approved by the European Aviation Safety Agency (EASA) or – for approvals made before September 28, 2003 – by the French Generale de l'Aviation Civile (DGAC). Any such documents are accepted by the FAA and are considered FAA approved.

- Service Bulletin,
- Structural repair manuals,
- Vendor manuals,
- Aircraft flight manuals, and
- Overhaul and maintenance manuals.

This applies only to the acceptance of the type design data.

NOTES

NOTE 1.

Any alteration to the type design of this aircraft may require instructions for Continued Airworthiness. These instructions must be submitted and accepted by the Fort Worth Aircraft Evaluation Group Office prior to approval for return to service.

NOTE 2

Effective January 1, 2014, Eurocopter France name was changed to Airbus Helicopters.