



AGÊNCIA NACIONAL DE AVIAÇÃO CIVIL - BRASIL

TYPE CERTIFICATE DATA SHEET Nº ER-1999T04

Type Certificate Holder:

EUROCOPTER FRANCE

Aéroport International Marseille-Provence
13725-Marignane Cedex

FRANCE

ER-1999T04-01
Sheet 01

EUROCOPTER

EC120B

November 2006

This data sheet, which is part of Type Certificate No. 1999T04, prescribes conditions and limitations under which the product, for which the Type Certificate was issued, meets the airworthiness requirements of the Brazilian Aeronautical Regulations.

I - Model EC120B (Normal Category) Helicopter, approved 16 June 1999.

ENGINE 1 Turbomeca Arrius 2F.

FUEL See Rotorcraft Flight Manual for fuel and additive specification.

ENGINE LIMITS	Gas Generator Speed Ng % (rpm)	Exhaust Gas Temperature T4 °C (°F)
Takeoff (5 min.)	101.0 (54 658)	870 (1 598)
Max. Continuous	99.5 (53 847)	830 (1 526)
Max. Transient (5sec)	103.6 (56 065)	900 (1 652)

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

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

TRANSMISSION TORQUE LIMITS	Maximum Takeoff:	100%
	Maximum Continuous:	97%
	Maximum Transient:	110%

100% = 300 kW (402 SHP) at 406 rpm

Panos

AIRSPEED LIMITS (IAS)	<p>Max. V_{NE} (power on) = 150 kt at $H_p = 0$ ft Max. V_{NE} (power off) = 120 kt at $H_p = 0$ ft</p> <p>See Rotorcraft Flight Manual for airspeed limit decrease with altitude.</p>
C. G. RANGE	<p>Longitudinal C.G. Limits:</p> <p>max. forward range: at 1 680 kg (3700 lb): 387 cm (152.2 in) at 1 400 kg (3086 lb): 383 cm (150.8 in) at 1 300 kg (2866 lb): 383 cm (150.8 in) at 970 kg (2138 lb): 389 cm (153.1 in)</p> <p>max. rearward range: at 1 680 kg (3700 lb): 410 cm (161.4 in) at 1 300 kg (2866 lb): 415 cm (163.4 in) at 970 kg (2138 lb): 417 cm (164.2 in)</p> <p>Straight line variation between points given.</p> <p>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.</p>
EMPTY WEIGHT C.G. RANGE	None.
MAXIMUM WEIGHT	1 715 kg (3 780 lb)
ALTITUDE LIMITS	Max. Operating Altitude: 6096m (20000ft) pressure altitude.
MAXIMUM PASSENGERS	4 (four) pax.
MINIMUM CREW	1 (one) pilot.
MAXIMUM BAGGAGE	Baggage floor: 300kg/m ² (61.4 lb/ft ²) Cockpit floor: 300kg/m ² (61.4 lb/ft ²)
FUEL CAPACITY	Total: 416.0 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.) See Rotorcraft Flight Manual for oil specification.
DATUM	Longitudinal: 4m (157.5 in.) forward of main rotor head center line. Lateral: Symmetrical plane of the rotorcraft.
LEVELING MEANS	Mechanical floor.
S/N'S ELIGIBLE	A Certificate of Airworthiness for Export endorsed as noted under "Import Requirements" must be submitted for each individual rotorcraft for which application for a Brazilian Certificate of Airworthiness is made.

IMPORT ELIGIBILITY

A Brazilian Certificate of Airworthiness may be issued on the basis of a DGAC Export Certificate of Airworthiness (or a third country Export Certificate of Airworthiness, in case of used rotorcraft imported from such country), including the following statement:

"The rotorcraft covered by this certificate have been examined and found to be in conformity with the Brazilian approved type design as defined by the Brazilian Type Certificate No 1999T04 and in condition of safe operation".

The Brazilian Authority Report H.10-1800-00, dated 16 June 1999, for rotorcraft model Eurocopter EC120B, contains the Brazilian requirements for the acceptance of this rotorcraft.

CERTIFICATION BASIS

- RBHA 21.29;
- RBHA 27 which endorses the FAR 27, through Amendment 27-33; and
- RBHA 36 which endorses the FAR 36, Appendix J, through Amendment 36-21.
- Equivalent Level of Safety findings:
 - RBHA/FAR 27.1027(b)(2); and
 - RBHA/FAR 27.1549(b).

REQUIRED EQUIPMENT

The basic required equipment, as described in the applicable airworthiness regulations (see Certification Basis) must be installed in the rotorcraft for certification. In addition, the following items of equipment are required:
DGAC-approved EC120B Rotorcraft Flight Manual, dated 19 June 1997, Revision 3, or later approved revision, as required.

NOTES:

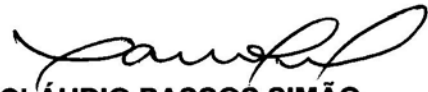
NOTE 1 Weight and balance: Current weight and balance report including list of equipment included in certificated empty weight, and loading instructions when necessary, must be provided for each rotorcraft at its delivery. The certificated empty weight and corresponding center of gravity location must include unusable fuel and undrainable oil.

NOTE 2 Markings and placards: The following placard must be displayed in front of and in clear view of the pilot: "THIS HELICOPTER MUST BE OPERATED IN COMPLIANCE WITH OPERATING LIMITATIONS SPECIFIED IN THE APPROVED HELICOPTER FLIGHT MANUAL."
All placards required in the approval flight manual must be installed in the appropriate locations.
In addition, all markings and placards for passenger information under normal or emergency conditions must be in Portuguese (or English and Portuguese). External markings for emergency operation of doors, normal ground operation of cargo doors and servicing operations must be in Portuguese (or bilingual). Marking and placards indicating maximum loads in cargo and baggage compartments must be also presented in Portuguese (or bilingual). A list of these placards for the rotorcraft and the respective translations acceptable by the ANAC is provided in the report H.10-1800-00, Annex II.

NOTE 3 Continuing Airworthiness: Service Information. Service bulletins, repair manuals, vendor manuals, rotorcraft flight manuals and maintenance manuals, which contain a statement that the document is DGAC approved, are accepted by the ANAC and are considered ANAC approved. These approvals pertain to the type design only. Any alteration to the type design of this rotorcraft may require instructions for Continued Airworthiness. These instructions must be submitted and accepted by the ANAC prior to approval for return to service.

NOTE 4 The differences between the Brazilian airplanes in relation to the basic DGAC type design are summarized below:

1. The DGAC approved Brazilian Airplane Flight Manuals are:
 - EC120B – AFM Revision 4, dated May 1999.
2. Markings and placards in Portuguese language or bilingual (See Note 2).



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