



TYPE CERTIFICATE DATA SHEET No. 2017T05

Type Certificate Holder:

AIRBUS HELICOPTERS

Aéroport International Marseille-Provence
13725-Marignane cedex
FRANCE

ER-2017T05-00
Sheet 01

AIRBUS HELICOPTERS
EC175 B

06 October 2017

This data sheet, which is part of Type Certificate No. 2017T05, prescribes conditions and limitations under which the product, for which the Type Certificate was issued, meets the airworthiness requirements of the Brazilian Civil Aviation Regulations.

I - EC175 B MODEL (Transport Category A and B Rotorcraft), approved 06 October 2017.

ENGINE Two (2) Pratt & Whitney Canada model PT6C-67E engines (EM-2006T07)

FUEL Jet A-1, JP-5, JP-8
For alternative authorized fuel and authorized additives, refer to approved Brazilian RFM.

ENGINE LIMITS

All Engines Operative (AEO) limits

	N1 [% (rpm)]	TOT [°C]	TQ [%]
Max Transient PWR (20 sec)	105.4 (39 500)	820	only allowed up to Vy 2 x 110
Max TOP (5 min)	104.6 (39 200)	815	only allowed up to Vy 2 x 100
MCP (unlimited)	102.7 (38 500)	775	2 x 93.2
Extended PWR (30 min continuous, 50 min cumulated / flight)	104.6 (39 200)	815	2 x 100

One Engine Inoperative (OEI) limits

	N1 [% (rpm)]	TOT [°C]	TQ [%]
Overshoot			165.7
OEI HI (30 sec)	111 (41600)	915	153.4
OEI LO (2 min)	108 (40500)	865	136.4
OEI CT (unlimited)	105.4 (39500)	820	119.3

For other engine limits, refer to approved Brazilian RFM.

OIL For approved engine, MGB, IGB and TGB oils/lubricants, refer to the Brazilian RFM.

HYDRAULIC FLUIDS

MIL-H-83282C or MIL-PRF-83282D (NATO code H-537) only.

AIRSPEED LIMITS

$V_{NE\ PWR\ ON}$ From -1500 ft Hp to 3 000 ft Hp: 175 KIAS
For reduction of V_{NE} with altitude, refer to approved RFM.

$V_{NE\ PWR\ OFF}$ 40 KIAS

Refer to approved Brazilian RFM for other speed limitations.

ROTOR SPEED LIMITS

Power on	Maximum:	298.5 (107)
[rpm (%)]	Reference:	279.0 (100)
	Minimum continuous:	265.2 (95)
	Minimum transient AEO and OEI:	231.7 (83)
Power off	Maximum transient (20s):	326.7 (117)
[rpm (%)]	Maximum continuous:	307.1 (110)
	Minimum continuous:	244.3 (87.5)
	Minimum transient:	231.7 (83)

CG RANGE

Refer to approved Brazilian RFM [Section 2.2] and applicable Supplements.

DATUM

Longitudinal: The datum plane (STA 0) is located at 7000mm forward of main rotor centerline.
Lateral: Fuselage symmetry plane.

LEVELING MEANS

Levelling reference marking on upper deck on LH side near to frame 4 MGB.

MAXIMUM MASS

In flight:	7500 Kg	(16535 lbs)
On ground:	7550 Kg	(16645 lbs)

MINIMUM CREW

VFR:	1 pilot (right seat)
IFR:	2 pilots

MAXIMUM PASSENGERS SEATING CAPACITY

VFR:	Up to 17
IFR:	Up to 16

See approved Brazilian RFM for approved seating configuration.

MAX BAGGAGE/CARGO LOADING

Cargo floor max load:	300 Kg
Cargo floor max unit load:	160 Kg

FUEL CAPACITY

Standard fuel tank capacity: 2616 liters

Unusable fuel: 17.7 liters

OIL CAPACITY

Engine (each): 8.0 liters

MGB: 21.0 liters

IGB: 1.0 liters

TGB: 1.5 liters

Hydraulic Main supply I: 5.0 liters

Hydraulic Main supply II: 9.0 liters

MAXIMUM OPERATING ALTITUDE

From -1 500 ft Hp to +15 000 ft Hø

TAKEOFF AND LANDING MAXIMUM ALTITUDE

Category A: from -1 500 ft Hp up to +13 000 ft Hø

Category B: from -1 500 ft Hp up to +13 000 ft Hø

TEMPERATURE OPERATING LIMITS

From -40°C to ISA+40°C limited to OAT +50°C

For variation of temperature limitations with altitude, refer to approved Brazilian RFM and applicable Supplements.

SERIAL NUMBERS ELIGIBLE

5002 and subsequent.

CERTIFICATION BASIS

The certification basis for the aircraft model is RBAC 21, amdt. 2, Section 21.29, Brazilian Aeronautical Certification Regulations, including:

Airworthiness requirements:

– RBAC 29, including amendments 29-1 through 29-53.

Emissions requirements:

– RBAC 34, Subpart B, including amendments 34-1 through 34-4.

Noise requirements:

– RBAC 36, including amendments 36-1 through 36-3.

The following EASA conditions has been adopted by ANAC:

Special Conditions:

– Extended Take-Off Power Duration (CRI E-01);

– HIRF Protection (CRI F-01).

– SAR Modes certification (CRI B-02)

Equivalent Safety Findings:

– Fatigue evaluation of structure (CRI C-02);

– Fire in Cargo and Baggage Compartments (CRI D-04);

– Main aisle width (CRI D-05);

– Passenger emergency exits other than side of fuselage (CRI D-06);

– Ditching emergency exits (CRI D-07);

- (Cont.)**
- Passenger emergency exit access (CRI D-10);
 - Emergency Exit Marking (CRI D-12);
 - Fire detector electrical circuit testability in flight (CRI E-07);
 - Cigalhe system: part time display of vehicle parameters (CRI F-03);
 - Independent power source for stand-by attitude indicator (CRI F-04);
 - Airspeed and powerplant indicators green arc (CRI G-01);
 - Powerplant instruments marking during Engine training mode (CRI G-03).
 - Hoist Installation (CRI D-14)

REQUIRED EQUIPMENT

The basic required equipment as prescribed in the applicable airworthiness regulations (see Certification Basis) must be installed in the aircraft for certification. In addition, the following items of equipment are required:

1. Brazilian Approved Rotorcraft Flight Manual
 2. Aircraft registered in Brazil shall incorporate Helionix Step 2 design changes 99A03550-00-M-ECP or 99A04155-00-M-ECP, or later approved Helionix configurations.
- Refer to approved Brazilian Flight Manual and MMEL.

DATA PERTINENT TO ALL MODELS

IMPORT ELIGIBILITY

"A Brazilian Certificate of Airworthiness must be issued based on the Exporting Authority and Primary Authority Export Certificate of Airworthiness (in case they are not the same), and they must include the following statement: "The aircraft covered by this Certificate has been inspected and found to be in conformity with the Brazilian approved type design as defined by the ANAC Type Certificate Nr 2017T05 and is in condition for safe operation"

NOTES:

NOTE 1

Weight and balance: A current weight and balance report, including a list of equipment included in the certificated empty weight, and loading instructions must be provided for each aircraft at the time of original certification.

NOTE 2

Markings and placards: Rotorcraft operation must be in accordance with the Brazilian Approved Rotorcraft Flight Manual. All placards required by the Brazilian Approved Rotorcraft Flight Manual, the applicable operating rules, and the Certification Basis must be installed in the aircraft.

NOTE 3

Continuing airworthiness: See approved ALS of the Maintenance Manual.

NOTE 4

CVFDR equipped in Brazilian aircraft must have an independent power source.

NOTE 5

Cabin interior and seating configurations must be approved, if differing from the Type Design Definition.

NOTE 6

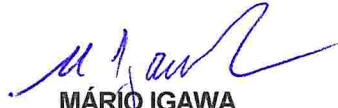
Operating Limitations: VFR day and night, IFR, non-icing conditions.

NOTE 7

The certified "optional" installations are each approved independently of the basic helicopter and an approved RFM Supplement is associated to each optional installation if necessary.

NOTE 8

Designation "H175" is the trade name for helicopters of Type Certificate "EC175 B".



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