



**MINISTRY OF TRANSPORT OF THE RUSSIAN FEDERATION
FEDERAL AIR TRANSPORT AGENCY**

Type Certificate Data Sheet

№ FATA-EC225

EC225 Helicopter

Models:

– EC225 LP

**Issue 01
November, 23 2018**

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Model EC225 LP

Type Certificate Holder

Airbus Helicopters

Aeroport International Marseille Provence
13725 Marignane, Cedex, France

Manufacturer

Airbus Helicopters

Aeroport International Marseille Provence
13725 Marignane, Cedex, France

Aircraft description

Single-rotor helicopter with tail rotor, equipped with two gas-turbine engines and retracting wheel landing gear

Category

Transport , A and B

Applicability

EC225 LP helicopter model is approved for VFR and IFR day and night operation, above land and water surface, for passenger transportation, for cargo transportation inside cabin as well as on external sling

Type Certification Data

Type Certificate № CT359-225
Issued by IAC AR on 26 November 2015

Type Design

Defined in the document № 332ABN303 – EC225 LP TDD for Russia, Revision B

Certification Basis

Certification Basis C5225.29 approved 20.11.2015
Certification Basis C5225.29 includes requirements to:

- Airworthiness AP-29, Issue 1, 1995;
- Noise requirements AP-36, Issue 1;
- Requirements to Environment AP-34;
- Special technical regulations.

The list of Certification Basis requirements for which equivalent compliance is established:
29.173; 29.175; 29.561(b)(3); 29.571;
29.807(c)(1)(d)(2); 29.813(a); 29.815; 29.923(a)(2);
29.955(b); 29.1303(j); 29.1545(b)(4); 29.1549(b).

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Noise requirements

Helicopter is compliant with:

- Requirements of Aviation Regulations, Part 36 "Aircraft Noise Certification" Chapters A, H, O;
- Requirements of ICAO Annex 16 "Environmental Protection", Volume 1, Chapter 8.

Measured check-points	Established Noise Levels (EPNdb)	External Noise Levels, according to AP-36, ICAO Annex 16, Volume 1 (EPNdb)
Take-off	95.6	100.4
Flyover	93.5	99.4
Approach	98.9	101.4

Fuel

TC-1 in accordance with GOST 10227-86 (foreign fuels types are listed in RFM)

Oil

for engine	see in RFM
for transmission gearbox	MIL.L.6086.D MINERAL OIL 8 cSt

Maximum power transmitted by the main gear box:

3548 hp (2610 kW)

Engine operational limits:

With all operating engines:

Mode of operation	Takeoff mode (5 min)	Maximum continuous power (IAS<40 kt) (IAS>60 kt)
Moment, N×m (TQ, %)	100	85.4 82.7
Gas temperature turbine (TOT, °C)	801	754
Generator speed (ΔN1,%)	0	-2.92

With one non-operating engine:

Mode of operation	OEI high (30 second)	OEI low (2 minutes)	OEI continuous (unlimited)
Moment, N×m (TQ, %)	78.4	71.9	63.4
Gas temperature turbine (TOT, °C)	-	847	814
Generator speed (ΔN1, %)	3.54	1.56	0.80

The other engine limitations in accordance with the Type Certificate Data Sheet № CT308-AMД and reference documentation mentioned in it, which define the approved Type design.

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Rotor Limitations

Power on:

- maximum	275 rpm
- minimum	246 rpm
- minimum transition	220 rpm

Power off:

- maximum transition	310 rpm
- maximum	290 rpm
- minimum	246 rpm (IAS>100 kt (185 km/h)) 220 rpm (IAS<100 kt (185 km/h))

Maximum take-off weight 11 000 kg

Air speed limitations

Vne Power on:	
Up to 1524 m of barometric altitude	175 kt (324 km/h)
Over 1524 m of barometric altitude	175 kt – 3 kt/1000 ft (324 km/h – 5.5 km/h/304 m)
Vne Power off:	Is according to the value of Vne when Power on and is limited up to 150 kt (278 km/h)

C.G. Reference see in RFM

Maximum baggage weight 350 kg

Maximum external load operation 3800 kg or 4750 kg (depending on the type external load)

Maximum load on cargo compartment floor 800 kg/m²

Minimum crew 2 pilots

Maximum numbers of seats 19

Fuel quantity Basic configuration maximum capacity: 2588 liters;
With an additional 6th fuel tank maximum capacity: 2908 liters;
Unusable quantity: 14.50 liters

Maximum operational altitude 6096 m

The maximum operating altitude limitations related with the necessity to supply flight crew and passengers with oxygen are contained in Federal Aviation regulations of Russian Federation.

OAT temperature range -30°C ...ISA +40°C (Max +50°C).

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Major change approvals

Approval of Major change	Major change name	Applicability
№ FATA-020117R-MC-001	07-53047 – MGB Oil cooling circuit – Adding of a ferromagnetic Particles Detection System, usually named Full Flow Magnetic Plug	EC225 LP
№ FATA-020117R-MC-002	07-53051 – MGB Oil cooling circuit – TECALEMIT Pipes variant on FFMP system	EC225 LP
№ FATA-020117R-MC-003	07-53052 – MGB Oil cooling circuit – New Magnet Plug 2 nd generation (usually named “plug 2”) on FFMP system	EC225 LP

Additional operational conditions, limitations and information:

1. Flights in icing conditions are allowed on helicopters with installed equipment, which listed in the document № 332ABN303 – EC225 LP TDD for Russia, Revision B Chapter 6.A «Mandatory additional equipment».
2. Regular commercial transportation on helicopters, not equipped with a flight data recorder, is prohibited.
3. Cargo, baggage and hand-luggage transportation inside of a passenger cabin is prohibited.
4. Other limitations are contained in helicopter operational documentations.

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Original TCDS is signed by Deputy Director General

Mr. A. Novgorodov