



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

Type Certificate Data Sheet

№ FATA-AS350/EC130

Models:

- AS350B
- AS350B1
- AS350B2
- AS350BA
- AS350B3
- EC130B4
- EC130T2

**Issue 03
30 of March 2018**

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This Data Sheet which is the integral part of Type Certificate № CT107-350, Supplements to Type Certificate and Major changes approval. It prescribes the conditions and limitations under which the product for which the type certificate was issued meets the requirements of Certification Basis.

1. Helicopter model AS 350B

| | |
|--------------------------------|---|
| Type Certificate Holder | Airbus Helicopters Aéroport International Marseille Provence 13725 Marignane, Cedex, France |
| Manufacturer | Airbus Helicopters Aéroport International Marseille Provence 13725 Marignane, Cedex, France |
| Aircraft description | Single-rotor helicopter with tail rotor, equipped with single gas-turbine engine and skid landing gear |
| Category | Normal |
| Applicability | AS350B helicopter model is approved for VFR day and night operation, for passenger transportation, for cargo transportation inside cabin as well as on external sling |
| Type Certification Data | Type Certificate №CT107-350. Issued by IAC AR on 14 June 1996 |
| Type Design | <p>Defined in the following documents:</p> <ul style="list-style-type: none"> – Flight Manual – AS350B, AS350B1, AS350BA with IAC AR Supplements; – Service Manual – AS350; – Overhaul Manual – 350; – Repair Manual – AS350; – Illustrated parts catalogue- AS350; – AS350 Service Bulletins approved by EASA. <p>The helicopter must be equipped with the following equipment (approved list of mandatory equipment is included in EUROCOPTER FRANCE document №350A04.4320 based on the following list):</p> <ul style="list-style-type: none"> – Pressure altimeter (in meters); – Airspeed indicator (in km/h); – Magnetic course indicator; – Vertical speed indicator (in m/s); – Attitude Indicator (horizon) with glide indication; – Aircraft clock; – Radio altimeter; – Automatic Direction Finder (ADF); – UHF radio. |
| Certification Basis | C5350.27 |

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Noise requirements

IAC AR Noise Type Certificate
№ 72 dated June 14, 1996.

Engine

ARRIEL 1B
manufactured by Turbomeca
Engine Type Certificate
№CT92-Д dated on 22 June 1996.

Fuel

PT, TC-1 in accordance with GOST 10227-86
(foreign fuels types are listed in RFM)
Anti-ice additives: fluid "И" (GOST 8313), "И-М" (TU 6-10-1458), volume concentration 0.10-0.30%, anti-static Sigbol is approved for use in amounts up to 0.0005% by weight.

Approved oil types for engine and transmission gearbox

see in RFM

ARRIEL 1B Engine operational limits

| Takeoff mode (5 min) | |
|--------------------------------|----------------------|
| Power | 650 h.p. (478 kW) |
| Generator speed | 51800 rpm 100% |
| Gas temperature before turbine | 810 °C |

| Maximum continuous mode | |
|--------------------------------|----------------------|
| Power | 598 h.p. (440 kW) |
| Generator speed | 50764 rpm 98% |
| Gas temperature before turbine | 775 °C |

Rotor Limitations

Power on flight 385 rpm
Maximum in autorotation 424 rpm
Minimum in autorotation 320 rpm

Speed limitations

Vne – 147 kt (272 km/h) from 0 to 330 m, then decreasing by 20 km/h per 1000 m from 330 m. When OAT is between -30°C... -40 °C, 18.5 km/h have to be subtracted from the above decreasing law.

C.G. Reference

Longitudinal: - 3.4 mm forward of the MRH centerline
Lateral: Aircraft symmetry plane

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Minimum crew 1 pilot in R.H. seat

Maximum take-off weight 1950 kg

Fuel capacity 540 liters

Number of seats 5

6 - if the aircraft is fitted with the forward dual passenger seat, approved layout is contained in document №350A04.4111

Maximum baggage weight
 In R.H. side hold 100 kg
 In L.H. side hold 120 kg
 In rear hold 80 kg
 On cabin floor:
 Forward section 150 kg
 Rear section 310 kg

Maximum operational altitude 4875 m

The limitations of maximum operation flight altitude linked with the necessity to supply crew and passengers with oxygen are contained in federal aviation regulations of aircraft state operator.

OAT temperature range -40°C ...ISA+35°C (Max +50°C).

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2. Helicopter model AS 350B1

| | |
|--------------------------------|---|
| Type Certificate Holder | Airbus Helicopters Aéroport International Marseille Provence 13725 Marignane, Cedex, France |
| Manufacturer | Airbus Helicopters Aéroport International Marseille Provence 13725 Marignane, Cedex, France |
| Aircraft description | Single-rotor helicopter with tail rotor, equipped with single gas-turbine engine and skid landing gear |
| Category | Normal |
| Applicability | AS350 B1 helicopter model is approved for VFR day and night operation, for passenger transportation, for cargo transportation inside cabin as well as on external sling |
| Type Certification Data | Type Certificate №CT107-350. Issued by IAC AR on 14 June 1996 |
| Type Design | <p>Defined in the following documents:</p> <ul style="list-style-type: none"> – Flight Manual – AS350B, AS350B1, AS350BA with IAC AR Supplements; – Service Manual – AS350; – Overhaul Manual – 350; – Repair Manual – AS350; – Illustrated parts catalogue- AS350; – AS350 Service Bulletins approved by EASA. <p>The helicopter must be equipped with the following equipment (approved list of mandatory equipment is included in EUROCOPTER FRANCE document №350A04.4320 based on the following list):</p> <ul style="list-style-type: none"> – Pressure altimeter (in meters); – Airspeed indicator (in km/h); – Magnetic course indicator; – Vertical speed indicator (in m/s); – Attitude Indicator (horizon) with glide indication; – Aircraft clock; – Radio altimeter; – Automatic Direction Finder (ADF); – UHF radio. |
| Certification Basis | CE350.27 |
| Noise requirements | IAC AR Noise Type Certificate № 72 dated June 14, 1996. |

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Engine

ARRIEL 1D
 manufactured by Turbomeca
 Engine Type Certificate
 №CT92-Д dated on 22 June 1996.

Fuel

PT, TC-1 in accordance with GOST 10227-86
 (foreign fuels types are listed in RFM)
 Anti-ice additives: fluid "И" (GOST 8313), "И-М" (TU 6-10-1458), volume concentration 0.10-0.30%. Anti-static Sigbol is approved for use in amounts up to 0.0005% by weight.

Approved oil types for engine and transmission gearbox

see in RFM

ARRIEL 1D Engine operational limits

| Takeoff mode (5 min) | |
|--------------------------------|----------------------|
| Power | 693 h.p. (510 kW) |
| Generator speed | 52214 rpm 100.8% |
| Gas temperature before turbine | 845 °C |

| Maximum continuous mode | |
|--------------------------------|----------------------|
| Power | 612 h.p. (450 kW) |
| Generator speed | 50764 rpm 98% |
| Gas temperature before turbine | 795 °C |

Rotor Limitations

| | |
|-------------------------|---------|
| Power on flight | 390 rpm |
| Maximum in autorotation | 430 rpm |
| Minimum in autorotation | 320 rpm |

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Speed limitations

Power on:

Vne is limited by indicated air speed:

155 kt (287 km/h) from 0 m altitude.

With altitude increasing, it is decreased by 18 km/h per each 1000 m.

When OAT is lower than - 30°C Vne is additionally decreased by 19 km/h.

Power off:

Vne is limited by indicated air speed:

125 kt (231 km/h) from 0 m altitude.

With altitude increasing, it is decreased by 18 km/h per each 1000 m.

When OAT is lower than - 20°C Vne is additionally decreased by 19 km/h. When OAT is lower than - 30°C Vne is additionally decreased by 37 km/h (20 knots) except when Vne is lower than 120 km/h (65 knots).

C.G. Reference

Longitudinal: - 3.4 mm forward of the MRH centerline

Lateral: Aircraft symmetry plane

Minimum crew

1 pilot in R.H. seat

Maximum take-off weight

2200 kg

Fuel capacity

540 liters

Number of seats

5

6 - if the aircraft is fitted with the forward dual passenger seat, approved layout is contained in AEROSPATIALE document №350A04.4111

Maximum baggage weight

In R.H. side hold 100 kg

In L.H. side hold 120 kg

In rear hold 80 kg

On cabin floor:

Forward section 150 kg

Rear section 310 kg

Maximum operational altitude

6096 m

Maximum take-off and landing altitude

4267 m

The limitations of maximum operation flight altitude linked with the necessity to supply crew and passengers with oxygen are contained in federal aviation regulations of aircraft state operator.

OAT temperature range

-40°C ...ISA+35°C (Max +50°C)

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3. Helicopter model AS350BA

| | |
|---------------------------------|---|
| Type Certificate Holder: | Airbus Helicopters Aéroport International Marseille Provence 13725 Marignane, Cedex, France |
| Manufacturer: | Airbus Helicopters Aéroport International Marseille Provence 13725 Marignane, Cedex, France |
| Aircraft description | Single-rotor helicopter with tail rotor, equipped with single gas-turbine engine and skid landing gear |
| Category | Normal |
| Applicability | AS350BA helicopter model is approved for VFR day and night operation, for passenger transportation, for cargo transportation inside cabin as well as on external sling |
| Type Certification Data | Type Certificate №CT107-350. Issued by IAC AR on 14 June 1996 |
| Type Design | <p>Defined in the following documents:</p> <ul style="list-style-type: none"> – Flight Manual – AS350B, AS350B1, AS350BA with IAC AR Supplements; – Service Manual – AS350; – Overhaul Manual – 350; – Repair Manual – AS350; – Illustrated parts catalogue- AS350; – AS350 Service Bulletins approved by EASA. <p>The helicopter must be equipped with the following equipment (approved list of mandatory equipment is included in EUROCOPTER FRANCE document №350A04.4320 based on the following list):</p> <ul style="list-style-type: none"> – Pressure altimeter (in meters); – Airspeed indicator (in km/h); – Magnetic course indicator; – Vertical speed indicator (in m/s); – Attitude Indicator (horizon) with glide indication; – Aircraft clock; – Radio altimeter; – Automatic Direction Finder (ADF); – UHF radio. |
| Certification basis | CE350.27 |
| Noise requirements | IAC AR Noise Type Certificate № 72 dated June 14, 1996. |

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Engine ARRIEL 1B
manufactured by Turbomeca
Engine Type Certificate
№ CT92-Д dated on 22 June 1996.

Fuel PT, TC-1 in accordance with GOST 10227-86
(foreign fuels types are listed in RFM)
Anti-ice additives: fluid "И" (GOST 8313), "И-М" (TU 6-10-1458), volume concentration 0.10-0.30%. Anti-static Sigbol is approved for use in amounts up to 0.0005% by weight.

Approved oil types for engine and transmission gearbox see in RFM

Engine operational limits:

| Take-off (5 min) | |
|--------------------------------|------------------------|
| Power | 650 h.p. (478.0 kW) |
| Generator speed | 51800 rpm 100% |
| Gas temperature before turbine | 810 °C |

| Maximum continuous mode | |
|--------------------------------|----------------------|
| Power | 598 h.p. (440 kW) |
| Generator speed | 50764 rpm 98% |
| Gas temperature before turbine | 775 °C |

Rotor Limitations:

Power on flight 390 rpm
Maximum in autorotation 430 rpm
Minimum in autorotation 320 rpm

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Speed limitations

Power on:

Vne is limited by indicated air speed:

155 kt (287 km/h) from 0 m altitude.

With altitude increasing, it is decreased by 18 km/h per each 1000 m.

When OAT is lower than - 30°C Vne is additionally decreased by 19 km/h.

Power off:

Vne is limited by indicated air speed:

125 kt (231 km/h) from 0 m altitude.

With altitude increasing, it is decreased by 18 km/h per each 1000 m.

When OAT is lower than - 20°C Vne is additionally decreased by 19 km/h (10 knots). When OAT is lower than - 30°C Vne is additionally decreased by 37 km/h (20 knots) except when Vne is lower than 120 km/h (65 knots).

C.G. Reference

Longitudinal: - 3.4 mm forward of the MRH centerline

Lateral: Aircraft symmetry plane

Minimum crew

1 pilot in R.H. seat

Maximum take-off weight

2100 kg

Fuel capacity

540 liters

Number of seats

5

6 - if the aircraft is fitted with the forward dual passenger seat, approved layout is contained in AEROSPATIALE document №350A04.4111

Maximum baggage weight

In R.H. side hold 100 kg

In L.H. side hold 120 kg

In rear hold 80 kg

On cabin floor:

Forward section 150 kg

Rear section 310 kg

Maximum operational altitude

4875 m

The limitations of maximum operation flight altitude linked with the necessity to supply crew and passengers with oxygen are contained in federal aviation regulations of aircraft state operator.

OAT temperature range

-40 °C...ISA +35 °C (Max +50 °C)

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Additional operational conditions limitations and information of AS350B, B1, BA helicopter models for operators in Russian Federation:

1. Flights in icing conditions are prohibited.
2. Markings for emergency equipment must be in Russian language.
3. The Type Certificate covers helicopters flying according only to VFR.
4. Helicopter should be equipped with emergency VHF radio.
5. Helicopter should be equipped with emergency flight data recorder (FDR).
6. There should be marking naming CIS fuel types near the filler neck.
7. Passenger transportation on the copilot seat is prohibited unless the copilot's controls are fully removed.
8. Regular commercial transportation on helicopters, not equipped with a flight data recorder, is prohibited.
9. Flights in thunderstorm activity when weather radar is not installed or inoperative are prohibited.
10. Flights with passengers over water beyond safe autorotation distance from land without emergency floatation gear are prohibited.

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4. Helicopter model AS350B2

| | |
|---------------------------------|--|
| Type Certificate Holder: | Airbus Helicopters Aéroport International Marseille Provence 13725 Marignane, Cedex, France |
| Manufacturer: | Airbus Helicopters Aéroport International Marseille Provence 13725 Marignane, Cedex, France |
| Aircraft description | Single-rotor helicopter with tail rotor, equipped with single gas-turbine engine and skid landing gear |
| Category | Normal |
| Applicability | AS350B2 helicopter model is approved for VFR day and night operation, for passenger transportation, for cargo transportation inside cabin as well as on external sling |
| Type Certificate Data | Type Certificate №CT107-350 dated June, 14 1996 issued by IAC AR |
| Type design | Defined in the document «AS350 FATA type design definition 350ABN0311», issue C |
| Certification Basis | CB350.27 |
| Noise requirements | Helicopter is compliant with: <ul style="list-style-type: none"> • 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 | 89.8 | 93.5 |
| Flyover | 87.6 | 92.5 |
| Approach | 91.4 | 94.5 |

Noise Type Certificate is applicable to all the AS350B2 rotorcraft products which do not have differences from Type Design, affecting the acoustic characteristics.

| | |
|---------------|---|
| Engine | ARRIEL 1D1 manufactured by Turbomeca Engine Type Certificate № CT92-Д dated on 22 June 1996. |
|---------------|---|

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Fuel

TC-1, PT (GOST 10227-86)
(foreign fuels types are listed in RFM)

Approved oil types for engine and transmission gearbox

| | |
|-------------|---------|
| For engine | See RFM |
| For gearbox | See RFM |

Arriel 1D1 engine operational limits:

| Take-off (5 min) | | |
|--------------------------------|------------------------|----------------------|
| Power | 650 h.p. (478.0 kW) | |
| Generator speed | Without P2 air bleed | With P2 air bleed |
| | 52 577 rpm 101,5% | 52 266 rpm 100,9% |
| Gas temperature before turbine | 845 °C | |

| Maximum continuous mode | |
|--------------------------------|----------------------|
| Power | 610 h.p. (449 kW) |
| Generator speed | 50764 rpm 98% |
| Gas temperature before turbine | 795 °C |

100%=51800 rpm

Rotor Limitations:

Power on flight 390 (+4/-5) rpm
Maximum in autorotation 430 rpm
Minimum in autorotation 320 rpm

**Maximum power transmitted
By the main gear box:** 650 hp (478 kW)

Speed limitations Vne is limited by indicated air speed:
155 kt (287 km/h)
Vne at autorotation speed:
125 kt (231 km/h)

Maximum take-off weight 2250 kg
2500 kg (with external load)

Maximum cargo weight inside fuselage 760 kg

External load maximum weight 1160 kg

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C.G. Reference See RFM

Fuel capacity Maximum used quantity 540 liters
Unused quantity 1,25 liters

Minimum crew 1 pilot

Number of seats 5
6 - if the aircraft is fitted with the forward dual passenger seat.

Maximum operation altitude 6096 m

The limitations of maximum operation flight altitude linked with the necessity to supply crew and passengers with oxygen are contained in federal aviation regulations of aircraft state operator.

OAT temperature range -40°C ...MCA +35°C (Max +50°C)

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5. Helicopter model AS350B3

| | |
|---------------------------------|---|
| Type Certificate Holder: | Airbus Helicopters Aéroport International Marseille Provence 13725 Marignane, Cedex, France |
| Manufacturer: | Airbus Helicopters Aéroport International Marseille Provence 13725 Marignane, Cedex, France |
| Aircraft description | Single-rotor helicopter with tail rotor, equipped with single gas-turbine engine and skid landing gear |
| Category | Normal |
| Applicability | AS350 B3 helicopter model is approved for VFR day and night operation, for passenger transportation, for cargo transportation inside cabin as well as on external sling |
| Type Certificate Data | Type Certificate №CT107-350 dated June, 14 1996 issued by IAC AR |
| Type design | Defined in the document «AS350 FATA type design definition 350ABN0311», issue C |
| Certification basis | Certification Basis CE350 B3.27 Certification Basis includes requirements to Airworthiness AP-27, requirements to Environment AP-36 and Special Technical Conditions |
| Noise requirements | Helicopter is compliant with: <ul style="list-style-type: none"> • Requirements of Aviation Regulations, Part 36 “Aircraft Noise Certification” Chapters A, H, O; • Requirements of ICAO Annex 16 “Environmental Protection”, Volume 1, Chapter 8 |

| Take-off weight | Established Noise Levels (EPNdb) | External Noise Levels, according to AP-36 | External Noise Levels, according to ICAO Annex 16, Volume 1 (EPNdb) |
|-----------------|----------------------------------|---|---|
| 2250 kg | 84,4 | 86,5 | 86,5 |
| 2370 kg | 84,2 | 86,8 | 86,8 |

Noise Type Certificate is applicable to all the AS350B3 rotorcraft products which do not have differences from Type Design, affecting the acoustic characteristics.

| | |
|---------------|--|
| Engine | ARRIEL 2B1 manufactured by Turbomeca Engine Type Certificate Supplement № CT195-AMД/Д01 dated on 28 July 2006 or |
|---------------|--|

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ARRIEL 2D
manufactured by Turbomeca
Engine Type Certificate Supplement
№ CT195-AMД/Д02 dated on 28 October 2011

Fuel

TC-1, PT (GOST 10227-86)
(for foreign fuels types are listed in RFM)

Approved oil types for engine and transmission gearbox

| | |
|-------------|---------|
| For engine | See RFM |
| For gearbox | See RFM |

Arriel 2B1 engine operational limits:

| Take-off (5 min) | |
|--------------------------------|----------------------|
| Power | 727 h.p. (535 kW) |
| Generator speed | 52683 rpm 101.1% |
| Gas temperature before turbine | 915 °C |

| Maximum continuous mode | |
|--------------------------------|----------------------|
| Power | 675 h.p. (497 kW) |
| Generator speed | 50598 rpm 97.1% |
| Gas temperature before turbine | 849 °C |

100%=52110 rpm

Arriel 2D engine operational limits:

| Take-off (5 min) | |
|--------------------------------|----------------------|
| Power | 727 h.p. (535 kW) |
| Generator speed | 52578 rpm 100.9% |
| Gas temperature before turbine | 949 °C |

| Maximum continuous mode | |
|--------------------------------|----------------------|
| Power | 675 h.p. (497 kW) |
| Generator speed | 51067 rpm 98.0% |
| Gas temperature before turbine | 905 °C |

100%=52110 rpm

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Rotor Limitations:

Power on flight from 375 to 405 rpm
Maximum in autorotation 430 rpm
Minimum in autorotation 320 rpm

Maximum power transmitted by the main gear box: 727 hp (535 kW)

Speed limitations Vne is limited by indicated air speed:
155 kt (287 km/h)
Vne at autorotation speed:
125 kt (231 km/h).

Maximum take-off weight 2250 kg
2370 kg for helicopters with MOD OP-3369 modification
2800 kg (with external load)

Maximum cargo weight inside fuselage 760 kg

External load maximum weight 1400 kg

C.G. Reference See RFM

Fuel capacity Maximum used quantity 540 liters
Unused quantity 1,25 liters

Minimum crew 1 pilot

Number of seats 5
6 - if the aircraft is fitted with the forward dual passenger seat

Maximum operation altitude 6096 m

The limitations of maximum operation flight altitude linked with the necessity to supply crew and passengers with oxygen are contained in federal aviation regulations of aircraft state operator.

OAT temperature range -40 °C ...MCA +35 °C (max +50 °C)

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6. Helicopter model EC 130B4

| | | | | | |
|---|--|------------|---------|-------------|---------|
| Type Certificate Holder: | Airbus Helicopters Aéroport International Marseille Provence 13725 Marignane, Cedex, France | | | | |
| Manufacturer: | Airbus Helicopters Aéroport International Marseille-Provence 13725 Marignane, Cedex, France | | | | |
| Aircraft description | Single-rotor helicopter with tail rotor, equipped with single gas-turbine engine and skid landing gear | | | | |
| Category | Normal | | | | |
| Applicability | EC 350 B4 helicopter model is approved for VFR day and night operation, for passenger transportation, for cargo transportation inside cabin as well as on external sling | | | | |
| Type Certificate Data | Type Certificate №CT107-350 dated June, 14 1996 issued by IAC AR | | | | |
| Type design | Defined in the document «AS350 FATA type design definition 350ABN0215», issue G» | | | | |
| Certification basis | Certification Basis CE130.27 includes requirements to Airworthiness AP-27, requirements to Environment AP-36 | | | | |
| Noise requirements | Noise Type Certificate № 72 dated 12 October 2006 | | | | |
| Engine | ARRIEL 2B1 manufactured by Turbomeca Engine Type Certificate Supplement № CT195-AMД/Д01 dated on 28 July 2006 | | | | |
| Fuel | TC-1, PT (GOST 10227-86) (foreign fuels types are listed in RFM) | | | | |
| Approved oil types for engine and transmission gearbox | <table border="1"> <tr> <td>For engine</td> <td>See RFM</td> </tr> <tr> <td>For gearbox</td> <td>See RFM</td> </tr> </table> | For engine | See RFM | For gearbox | See RFM |
| For engine | See RFM | | | | |
| For gearbox | See RFM | | | | |

Arriel 2B1 engine operational limits:

| Take-off (5 min) | |
|------------------|----------------------|
| Power | 757 h.p. (557 kW) |
| Generator speed | 52683 rpm |

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| | |
|--------------------------------|--------|
| | 101.1% |
| Gas temperature before turbine | 915 °C |

| Maximum continuous mode | |
|--------------------------------|----------------------|
| Power | 738 h.p. (543 kW) |
| Generator speed | 48306 rpm 97.1% |
| Gas temperature before turbine | 849 °C |

Rotor Limitations:

| | |
|-------------------------|---------------------|
| Power on flight | from 375 to 405 rpm |
| Maximum in autorotation | 430 rpm |
| Minimum in autorotation | 320 rpm |

Speed limitations

Vne is limited by indicated air speed:
155 kt (287 km/h)
Vne at autorotation speed:
125 kt (231 km/h)

Maximum take-off weight

2427 kg
2800 kg (with external load)

Maximum cargo weight inside fuselage

365
(load transportation inside cabin is prohibited)

External load maximum weight

1160 kg

Fuel capacity

| | |
|------------------------|-------------|
| Maximum used quantity | 540 liters |
| Unusable fuel quantity | 1,25 liters |

Number of seats

7 seats or 8 seats (for OP-3673 modification)
including pilot seat

Maximum operation altitude

7010 m

The limitations of maximum operation flight altitude linked with the necessity to supply crew and passengers with oxygen are contained in federal aviation regulations of aircraft state operator.

OAT temperature range

-40 °C ...MCA +35 °C (Max+50 °C)

| | | |
|-------------------------------|--------------|-------------|
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7. Helicopter model EC 130T2

| | |
|---------------------------------|---|
| Type Certificate Holder: | Airbus Helicopters Aéroport International Marseille Provence 13725 Marignane, Cedex, France |
| Manufacturer: | Airbus Helicopters Aéroport International Marseille-Provence 13725 Marignane, Cedex, France |
| Aircraft description | Single-rotor helicopter with tail rotor, equipped with single gas-turbine engine and skid landing gear |
| Category | Normal |
| Applicability | EC130T2 helicopter model is approved for VFR day and night operation, for overland and overwater operation for passenger transportation |
| Type Certificate Data | Type Certificate №CT107-350 dated June, 14 1996 issued by IAC AR |
| Type design | Defined in the document «AS350 FATA type design definition 350ABN0215», issue G» |
| Certification basis | Certification basis CE130.27 includes airworthiness requirements of AP-27 and noise requirements of AP-36 and AP-34 Environmental protection. Engine emissions. Regulations and tests |
| Noise requirements | Helicopter is compliant with: <ul style="list-style-type: none"> • Requirements of Aviation Regulations, Part 36 “Aircraft Noise Certification” Chapters A, H, O; • Requirements of ICAO Chapter 8, Annex 16 “Environmental Protection”, Volume 1, Chapter 11 |

| Maximum Take-off weight | Established Noise Levels (SEL) | Limit Noise Levels (SEL) |
|-------------------------|--------------------------------|--------------------------|
| 2500 kg | 81.1 | 87.0 |

| | |
|---------------|---|
| Engine | ARRIEL 2D manufactured by Turbomeca Engine Type Certificate Supplement № CT195-AMД/Д02 dated on 28 November 2011. |
| Fuel | TC-1, PT (GOST 10227-86) (foreign fuels types are listed in RFM) |

Approved oil types for engine and transmission gearbox

| | |
|-------------|---------|
| For engine | See RFM |
| For gearbox | See RFM |

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Arriel 2D engine operational limits:

| Ratings | Power (kW) | Generator speed (NG) (%) | Gas temperature before turbine (°C) |
|----------------------------------|------------|--------------------------|-------------------------------------|
| Maximum Take-off weight (5 min) | 597,5 | 101,7 | 949 |
| Maximum Take-off weight (30 min) | 597,5 | 101,7 | 949 |
| Maximum continuous | 485,7 | 99,7 | 905 |

Rotor Limitations:

Power on от 375 до 405 rpm

Power off от 320 до 430 rpm

Speed limitations

Vne is limited by indicated air speed:

- Power on 155 kt (287 km/h)
- Vne at autorotation speed: 125 kt (231,5 km/h).

Maximum take-off weight 2500 kg

Fuel capacity Maximum used quantity 540 liters

Number of seats 7 seats or 8 seats including pilot seat.

Maximum operation altitude 7010 m

The limitations of maximum operation flight altitude linked with the necessity to supply crew and passengers with oxygen are contained in federal aviation regulations of aircraft state operator.

OAT temperature range -20 °C...MCA +35 °C (Max +50 °C)

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Additional operational conditions limitations and information of AS 350B2, AS 350B3, EC130B4, EC130T2 helicopter models for operators in Russian Federation:

1. Flights in icing conditions are prohibited.
2. Flights in thunderstorm activity when weather radar is not installed or inoperative are prohibited.
3. Flights with passengers over water beyond safe autorotation distance from land without emergency floatation gear are prohibited.
4. Passenger transportation on the copilot seat is prohibited unless the copilot's cyclic pitch and pedals are fully removed.
5. Non-hangar storage helicopter operation is allowed only with use of protective covers and gags.
6. Regular commercial transportation on helicopters, not equipped with a flight data recorder, is prohibited.
7. Other limitations are contained in helicopter operational documentations.

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|-------------------------------|--------------|-------------|
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Supplements to Type Certificate

| Supplements to Type Certificate | Type design change description | Applicability |
|---------------------------------|---|---------------|
| №СТ107-350/Д01 | Increased maximum internal gross weight to 2370 kg (MOD OP-3369, including dual hydraulic system installation and high landing gear installation) | AS 350B3 |
| №СТ107-350/Д02 | AFCS operation on helicopter with maximum internal gross weight up 2370 kg | AS 350B3 |
| №СТ107-350/Д03 | Arriel 2D engine installation | AS 350B3 |
| №СТ107-350/Д04 | Introduction of the EC130T2 helicopter model | EC130T2 |

Major change approvals

| Major change approvals | Type design change description | Applicability |
|------------------------|---|---|
| №СТ107-350/ОГИ-05 | NR Indicator change | EC130T2 AS 350B3e AS350B2 VEMD |
| | New main gear fixed ring | AS350B2 AS350B3 EC130B4 EC130T2 |
| | Industrialized Fuel Tanks Beams | EC130T2 |
| | Change the system control unit SMS by a MultiBloc Logical | AS350B2 VEMD |
| | New flight servo control NOVINTEC | AS350B3 EC130B4 EC130T2 |
| | Wire protection of the strobe light optional | AS350B2 AS350B3 |
| | Tail rotor Removal of the additional chin weight | AS350B3 |
| | Installation of new equipment GTN650H (VOR/VHF/GPS) | AS350B3 |
| №СТ107-350/ОГИ-06 | OP-4656 issue 2 - New Garmin CNS - GTN650H (VOR/ILS/VHF/GPS) | AS 350B3 (Arriel 2D) AS350B2 (VEMD) |
| | | AS 350B3 (Arriel 2D) AS350B2 (VEMD) |
| №СТ107-350/ОГИ-07 | OP-4484 issue 1 - New Garmin Radio Line - GTN750H (VOR/ILS/VHF/GPS) | EC130T2 |

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| Major change approvals | Type design change description | Applicability |
|-------------------------------|--|---|
| №СТ107-350/ОГИ-08 | Long tube of tail rotor drive shaft line by air furnace | AS350B2 AS350B3 EC130B4 EC130T2 |
| №СТ107-350/ОГИ-09 | TRH Blade machined into bulk | AS 350B4 EC130T2 |
| №СТ107-350/ОГИ-10 | Upper scissor branch by air furnace | AS350B2 AS350B3 EC130B4 EC130T2 |
| №СТ107-350/ОГИ-11 | Alternative input pinion of MGB | EC130T2 |
| №СТ107-350/ОГИ-12 | New thermoformed eyeshade | EC130T2 |
| №СТ107-350/ОГИ-13 | "Reinforcement of the locking mechanism of EC130 canopy's doors" | EC130T2 |
| №СТ107-350/ОГИ-14 | "Reinforcement of the locking mechanism of EC130 canopy's doors" | EC130B4 |
| №СТ107-350/ОГИ-15 | VEMD New Generation" | AS 350B3 (Arriel 2D) |
| №СТ107-350/ОГИ-16 | Connecting shaft (Engine/ MGB link) - Serialization of the part" | EC130T2 |
| №СТ107-350/ОГИ-17 | Splined flange (Engine/ MGB link) - Serialization of the part" | EC130T2 |
| №СТ107-350/ОГИ-18 | "Bi-directional crossbeam - Serialization of the part" | EC130T2 |
| №СТ107-350/ОГИ-19 | "Cargo Sling - Fixed parts" | EC130T2 |
| №СТ107-350/ОГИ-20 | Revisions to ALS Section "Airworthiness limitation section" | AS350B2 AS350B3 EC130B4 EC130T2 |
| №ФАВТ-AS350/EC130-ОГИ-21 | VEMD Software Modification | AS 350B3 (Arriel 2D) |
| №ФАВТ-AS350/EC130-ОГИ-22 | Modification of the types of Chin weights of tail rotors | AS 350B3 |
| №ФАВТ-AS350/EC130-ОГИ-23 | VEMD NG Software Modification | AS 350B3 (Arriel 2D) |
| №ФАВТ-AS350/EC130-ОГИ-024 | Half Laminated Bearings classification modification | AS350 B AS350 B1 AS350 B2 AS350 B3 AS350 BA |

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| Major change approvals | Type design change description | Applicability |
|-------------------------------|---|---|
| №FATA-02052R-MC-025 | Removable parts of the Cargo Sling Installation | EC130 T2 |
| №FATA-02052R-MC-026 | Incorporation of the Arriel 2B and Arriel 2B1 Free Wheel into ALS section of the aircraft MSM | AS350 B3 (Arriel 2B1) EC130 B4 |
| №FATA-02052R-MC-027 | Installation of the Garmin G500H Electronic Flight Instrument System | AS350 B3 (Arriel 2D) |
| №FATA-02052R-MC-028 | Installation of the Garmin G500H Electronic Flight Instrument System | EC130 T2 |
| №FATA-02052R-MC-029 | Removal of external load carrying class marking | EC130 T2 AS350 B2 AS350 B2 VEMD AS350 B3 (Arriel 2B1) AS350 B3 (Arriel 2D) |
| №FATA-02052R-MC-030 | Cargo compartment/ Tail-boom junction frame | AS350 B AS350 B1 AS350 B2 AS350 B3 AS350 BA |
| №FATA-02052R-MC-031 | Installation of a fuel system improving crashworthiness | AS350 B3 (Arriel 2B1) |
| №FATA-02052R-MC-032 | Standardization of MGB main housing blanks | AS350 B AS350 B1 AS350 B2 AS350 B3 AS350 BA EC130 B4 EC130 T2 |

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|-------------------------------|-------|------------|
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Supplemental Type Certificates (STC)

| № | STC Name | STC Holder | Type Design description documents | Aviation authorities issued STC | Applicability |
|---|--|-----------------------|--|---------------------------------|---|
| 1 | STC SH 93-4 «Bearpaw Installation» | Dart Aerospace Ltd. | - MDL-D350-578, Rev.A; - Maintenance ICA-D350-578, Rev.1; - Installation Drawing D350-578, Rev. F | TCCA | AS350B AS350B1 AS350B2 AS350B3 AS350BA EC130B4 |
| 2 | STC SH 94-14 «Heli-utility Basket Installation» | Dart Aerospace Ltd. | - MDL-D350-607, Rev.A; - Maintenance ICA-D350-607, Rev. 3; - Installation D350-607, Rev. H; - FMS-D355-607, Rev.D. For EC 130B4: -MDL-D130-701 Rev. A; -Maintenance ICA-D130-701, Rev.1; - Installation IIN-D130-701, Rev. C; - FMS-D130-701, Rev. C | TCCA | AS350B AS350B1 AS350B2 AS350B3 AS350BA EC130B4 |
| 3 | STC SR02797CH «Installation of Camera Vision 1000» | Appareo Systems, LLC. | -Master Document List 606586-000011, Rev. 1.03; -Vision 1000 Instruction for Continued; Airworthiness 606586-000016, Rev. 1.07; -Vision 1000 Installation Instruction, 606586-000012, Rev. 1.04 | FAA | AS350B1, AS350B2, AS350B3, AS350BA |
| 4 | STC SH05-4 «Installation of an Auxiliary Side Locker Fuel Tank» | Dart Aerospace Ltd. | -FMS D350-794 Fight manual supplement; -IIN-D350-794 Installation instructions; -ICA-D350-794 Instructions for continued airworthiness | TCCA | AS350B AS350B1 AS350B2 AS350B3 AS350BA EC130B4 |

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| № | STC Name | STC Holder | Type Design description documents | Aviation authorities issued STC | Applicability |
|----------|---|---------------------------------|---|--|---|
| 5 | STC №10034706 Installation of EMS kit | Air Ambulance Technology Gesmbh | For AS350 and modifications: P/N 350-25-24-100, FMS SUP.AAT3, Appendix 1,2, IM-AS350-AAT01. For EC130B4: FMS AAT57 rev.1, P/N EC130-25-20-41.000-5 | EASA | AS350B, AS350B1, AS350B2, AS350B3, AS350BA, EC130B4 |
| 6 | STC № FATA-STC03031 Crash Resistant Fuel System | Airbus Helicopters | See STC | EASA | AS350 B3 (Arriel 2D) |
| 7 | STC № FATA-STC03032 Fuel tank reinforced metal sheet cradles | Airbus Helicopters | See STC | EASA | AS350 B3 (Arriel 2D) |

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Original TCDS is signed by Deputy Director General

Mr. O. Storchevoy