

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

**Type Certificate Data Sheet
№ FATA-EC135**

**Issue 03
14 of December 2017**

Models:
- EC135T2+
- EC135P2+
- EC135T3
- EC135P3

<i>Page</i>	01	02	03	04	05	06	07
<i>Issue</i>	03	03	03	03	03	03	03
<i>Date</i>	14.12.2017	14.12.2017	14.12.2017	14.12.2017	14.12.2017	14.12.2017	14.12.2017

<i>Page</i>	08	09	10	11	12	13	14
<i>Issue</i>	03	03	03	03	03	03	03
<i>Date</i>	14.12.2017	14.12.2017	14.12.2017	14.12.2017	14.12.2017	14.12.2017	14.12.2017

<i>Page</i>	15	16	17	18	19	20	21
<i>Issue</i>	03	03	03	03	03	03	03
<i>Date</i>	14.12.2017	14.12.2017	14.12.2017	14.12.2017	14.12.2017	14.12.2017	14.12.2017

<i>Page</i>	22	23	24	25	26	27	28
<i>Issue</i>	03	03	03	03	03	03	03
<i>Date</i>	14.12.2017	14.12.2017	14.12.2017	14.12.2017	14.12.2017	14.12.2017	14.12.2017

<i>Page</i>	29	30	31	32
<i>Issue</i>	03	03	03	03
<i>Date</i>	14.12.2017	14.12.2017	14.12.2017	14.12.2017

Title	Issue	Date
FATA TCDS № FATA-EC135	03	14.12.2017

This Data Sheet which is the integral part of Type Certificate № ФАВТ-EC135 prescribes conditions and limitations under which the product for which Type Certificate was issued meets the requirements of Certification Basis.

1. EC135 T2+

Type Certificate Holder	Airbus Helicopters Deutschland GmbH Donauwörth, Germany
Manufacturer	Airbus Helicopters Deutschland GmbH Donauwörth, Germany
Aircraft Description	Single-rotor helicopter with twin turbo-shaft engines and skid type landing gear
Category	Normal, A and B
Applicability	EC135T2+ helicopter is approved for VFR and IFR flights, for over land and over water flights, internal and external load transportation, for people transportation.
Type Certificate Data	Type Certificate No CT263-EC135 dated June 15, 2007 Issued by IAC AR
Type Design	Description of type design contained in document «TDD L0000M01RUS EC135 – FATA Type Design Definition», issue 3
Certification Basis	Certification Basis C5135.27 approved by IAC AR on 08 th of June 2007 Certification Basis includes: <ul style="list-style-type: none"> • Airworthiness requirements AP-27 "Aviation Regulations: Normal category rotorcraft"; • Special Technical Conditions; • Environmental protection requirements AP-36 "Aircraft noise certification" • List of Certification basis paragraphs versus which Equivalent safety findings were established: 27. 865 (c), 27.1549 (b), Attachment B, paragraph B4(c), C.2.1587
Noise Requirements	Type Noise Certificate No CШ168-EC135 issued 15 th of June 2007.
Engine	2 engines ARRIUS 2B2 manufactured by Turbomeca Engine Type certificate № CT258-AMД dated 28 th of July 2006.
Approved Fuel Grades	TC-1, T1, T2. (for foreign fuel grades refer to Flight manual)

Title	Issue	Date
FATA TCDS № FATA-EC135	03	14.12.2017

Engine Limits

Takeoff mode (5 min)	
Power	651,4 hp (479,0 kW)
Gas generator speed	54 117 rpm 100%
Gas temperature before turbine	897°C
Transmission torque limitation	2×78%

Maximum continuous mode	
Power	587,5 hp (432,0 kW)
Gas generator speed	53 576 rpm 99%
Gas temperature before turbine	879°C
Transmission torque limitation	2×69%

With one engine inoperative

Continuous mode	
Power	659,6 hp (485,0 kW)
Gas generator speed	54 821 rpm 101,3%
Gas temperature before turbine	942°C
Transmission torque limitation	1×89,5%

2 minutes mode	
Power	739,8 hp (544,0 kW)
Gas generator speed	56 011 rpm 103,5%
Gas temperature before turbine	994°C
Transmission torque limitation	1×125%

30 second mode	
Power	757,5 hp (557,0 kW)
Gas generator speed	56 823 rpm 105%
Gas temperature before turbine	1024°C
Transmission torque limitation	1×128%

Title	Issue	Date
FATA TCDS № FATA-EC135	03	14.12.2017

Rotor RPM Limitations:

Conditions	All engines operative	Autorotation
Minimal on transient mode (during not more than 20 sec)	85%	-
Minimal on continuous mode		
max take-off weight < 1900 kg	97%	80%
max take-off weight ≥ 1900 kg	97%	85%
Maximum on continuous regime	104%	106%
Maximum on take-off (during not more than 20 sec)	-	112%

Maximum Take-off Weight

2910 kg

2950 kg (Allowed only during operation according to requirements of Flight manual Appendices 9.1-5, 9.1-6, 9.1-7 for serial numbers 1055 and subsequent or after carrying-out EC135-62-028 Bulletin)

Maximum Cargo Weight

- Load weight, transported on external load sling :

External load sling system with one hook: 1300 kg

External load sling system with two hooks:

- Maximum load on 1 hook – 1000 kg;
- During load transportation using both hooks, maximum load on both hooks – 600 kg.

- Baggage weight:

Maximum unit load on floor – 600 kg/m²

Speed Limitations

Never exceed speed V_{ne} is limited by indicated airspeed 287 km/h (155 knots)

Center of gravity

- Forward C.G.:

4 180.0 mm aft from reference point start (for maximum take-off weight 1840 kg)

4 227.3 mm from aft reference point start (for maximum take-off weight 2910 kg)

4 229.3 mm from aft reference point start (for maximum take-off weight 2950 kg)

- Aft C.G.:

4 570.0 mm from aft reference point start (for maximum take-off weight 1500 kg)

4 369.0 mm from aft reference point start (for maximum take-off weight 2910 kg)

4 362.6 mm from aft reference point start (for maximum take-off weight 2950 kg)

Title	Issue	Date
FATA TCDS № FATA-EC135	03	14.12.2017

Center of gravity position reference point start	2160.0 mm from forward reference point start	
Minimum crew	1 pilot	
Maximum Number of Seats	6 7 (if a set referenced in the Supplement to Flight Manual is installed and under operation)	
Fuel Capacity	Maximum fuel	710 liters
	Unusable fuel	9,5 liters
Maximum Operational Altitude	6096 m (20 000 feet)	
Outside Ambient Temperature Limitations	-35 °C...ISA +39 °C (max. +50 °C)	
Fuel temperature limits	Minimum fuel temperature for starting engines – not below –19°C	

Additional conditions, limitations and information

1. Flights under icing conditions are prohibited.
2. Over-water flights without Emergency Flotation System installations are prohibited.
3. Flights in the vicinity of forecasted thunderstorm activity when weather radar is not installed are prohibited.
4. Helicopter operation in terms of non-hangar storage is allowed only with usage of protective covers and gags.
5. For other limitations see the helicopter operational documentation.
6. For helicopter operation, along with RFM it is necessary to use Master Minimum Equipment List and Flight Manual Appendix approved by FATA.

Title	Issue	Date
FATA TCDS № FATA-EC135	03	14.12.2017

2. EC135 P2+

Type Certificate Holder	Airbus Helicopters Deutschland GmbH Donauwörth, Germany
Manufacturer	Airbus Helicopters Deutschland GmbH Donauwörth, Germany
Aircraft Description	Single-rotor helicopter with twin turbo-shaft engines and skid type landing gear
Category	Normal, A and B
Applicability	EC135P2+ helicopter is approved for VFR and IFR flights, for over land and over water flights, internal and external load transportation, for people transportation.
Type Certificate Data	Type Certificate No CT263-EC135 dated June 15, 2007 Issued by IAC AR
Type Design	Description of type design contained in document «TDD L0000M01RUS EC135 – FATA Type Design Definition», issue 3
Certification Basis	Certification Basis C5135.27 approved by IAC AR on 08 th of June 2007 Certification Basis includes: <ul style="list-style-type: none"> • Airworthiness requirements AP-27 "Aviation Regulations: Normal category rotorcraft"; • Special Technical Conditions; • Environmental protection requirements AP-36 "Aircraft noise certification"; • List of Certification basis paragraphs versus which Equivalent safety findings were established: 27. 865 (c), 27.1549 (b), Attachment B, paragraph B4(c), C.2.1587
Noise Requirements	Supplement to Type Noise Certificate №CШ168-EC135/Д01 issued on 1 st of August 2007
Engine	2 engines PW206B2 manufactured by Pratt&Whitney, Canada Engine Type certificate № CT118-Д/01 dated 18 th of July 2007
Approved Fuel Grades	TC-1, PT (for foreign fuel grades refer to Flight manual)

Title	Issue	Date
FATA TCDS № FATA-EC135	03	14.12.2017

Engine Limits

Takeoff mode (5 min)	
Power	447 hp (333 kW)
Gas generator speed	57 250 rpm 98,7%
Gas temperature before turbine	869 °C
Transmission torque limitation	2 × 78%

Maximum continuous mode	
Power	431 hp (321 kW)
Gas generator speed	56 500 rpm 97,4%
Gas temperature before turbine	835 °C
Transmission torque limitation	2 x 69%

With one engine inoperative

Continuous mode	
Power	542 hp (404 kW)
Gas generator speed	58 250 rpm 100,4%
Gas temperature before turbine	900 °C
Transmission torque limitation	1 x 89,5%

2 minutes mode	
Power	716 hp (534 kW)
Gas generator speed	59 500 rpm 102,6%
Gas temperature before turbine	950 °C
Transmission torque limitation	1 x 125%

30 second mode	
Power	734 hp (547 kW)
Gas generator speed	60 500 rpm 104,3%
Gas temperature before turbine	990 °C
Transmission torque limitation	1 x 128%

Title	Issue	Date
FATA TCDS № FATA-EC135	03	14.12.2017

Rotor RPM Limitations:

Conditions	All engines operative	Autorotation
Maximum	104%	106%
Minimum		
max take-off weight < 1900 kg	97%	80%
max take-off weight ≥ 1900 kg	97%	85%

Maximum Take-off Weight

2910 kg

2950 kg (Allowed only during operation according to requirements of Flight manual Appendices 9.1-5, 9.1-6, 9.1-7 for serial numbers 1055 and subsequent or after carrying-out EC135-62-028 Bulletin)

Maximum Cargo Weight

- Load weight, transported on external load sling :

External load sling system with one hook: 1300 kg
 External load sling system with two hooks:
 - Maximum load on 1 hook – 1000 kg;
 - During load transportation using both hooks, maximum load on both hooks – 600 kg.

- Baggage weight:

Maximum unit load on floor – 600 kg/m²

Speed Limitations

Never exceed speed V_{ne} is limited by indicated airspeed 287 km/h (155 knots)

Center of gravity

- Forward C.G.:

4 180.0 mm aft from reference point start (for maximum take-off weight 1840 kg)

4 227.3 mm from aft reference point start (for maximum take-off weight 2910 kg)

4 229.3 mm from aft reference point start (for maximum take-off weight 2950 kg)

- Aft C.G.:

4 570.0 mm from aft reference point start (for maximum take-off weight 1500 kg)

4 369.0 mm from aft reference point start (for maximum take-off weight 2910 kg)

4 362.6 mm from aft reference point start (for maximum take-off weight 2950 kg)

Center of gravity position reference point start

2160.0 mm from forward reference point start

Title	Issue	Date
FATA TCDS № FATA-EC135	03	14.12.2017

Minimum crew	1 pilot	
Maximum Number of Seats	6 7 (if a set referenced in the Supplement to Flight Manual is installed and under operation)	
Fuel Capacity	Maximum fuel	710 liter
	Unusable fuel	9,5 liter
Maximum Operational Altitude	6 096 m (20 000 feet)	
Outside Ambient Temperature Limitations	- 35 °C...ISA + 39 °C (max. +50 °C)	

Additional conditions, limitations and information

1. Flights under icing conditions are prohibited.
2. Over-water flights without Emergency Flotation System installations are prohibited.
3. Flights in the vicinity of forecasted thunderstorm activity when weather radar is not installed are prohibited.
4. Helicopter operation in terms of non-hangar storage is allowed only with usage of protective covers and gags.
5. For other limitations see the helicopter operational documentation.
6. For helicopter operation, along with RFM it is necessary to use Master Minimum Equipment List and Flight Manual Appendix approved by FATA.

Title	Issue	Date
FATA TCDS № FATA-EC135	03	14.12.2017

3. EC135 T3

Variant	EC135T3 (CPDS)
Type Certificate Data	№ФАБТ-СТ-ЕС-135, issued by FATA on 29.12.2016 Reissued on 22.03.2017
Type Certificate Holder	Airbus Helicopters Deutschland GmbH Donauwörth, Germany
Manufacturer	Airbus Helicopters Deutschland GmbH Donauwörth, Germany
Aircraft Description	Single-rotor helicopter with twin turbo-shaft engines and skid type landing gear
Category	Normal, A and B
Applicability	EC135T3 helicopter is approved for VFR and IFR flights, for over land and over water flights, internal and external load transportation, for people transportation.
Type Design	Description of type design contained in document "TDD L000M01RUS EC135 Type Design Definition for Russia", issue 3
Certification Basis	Certification Basis CE135.27 approved by IAC AR on 08 th of June 2007 Certification Basis includes: <ul style="list-style-type: none"> • Airworthiness requirements AP-27 "Aviation Regulations: Normal category rotorcraft"; • Special Technical Conditions; • Environmental protection requirements AP-36 "Aircraft noise certification" • List of Certification basis paragraphs versus which Equivalent safety findings were established: 27. 865 (c), 27.1549 (b), Attachment B, paragraph B4(c), C.2.1587

Noise Requirements

Version	Max. take-off weight	Take-off	Fly-over	Approach
CPDS	2980 kg	86.1	82.7	90.3
Regulation limit		94.8	93.8	95.8

Engine	2 engines ARRIUS 2B2 manufactured by Turbomeca Engine Type certificate № CT258-AMД dated 28 th of July 2006 with Major change№ФАБТ-ОГИ-ARRIUS2-02
---------------	---

Title	Issue	Date
FATA TCDS № FATA-EC135	03	14.12.2017

Approved Fuel Grades

TC-1, PT
(for foreign fuel grades refer to Flight manual)

Engine Limits

Takeoff mode (5 min)	
Power	479,0 kW
Gas generator speed	54 117 rpm 100%
Gas temperature before turbine	897 °C
Transmission torque limitation	2 x 78%

Maximum continuous mode	
Power	432,0 kW
Gas generator speed	53 576 rpm 99 %
Gas temperature before turbine	879°C
Transmission torque limitation	2 x 69%

With one engine inoperative

Continuous mode	
Power	485,0 kW
Gas generator speed	54 793 rpm 101,25 %
Gas temperature before turbine	942 °C
Transmission torque limitation	1 x 89.5%

2 minutes mode	
Power	544,0 kW
Gas generator speed	56 011 rpm 103,5%
Gas temperature before turbine	994°C
Transmission torque limitation	1 x 125%

30 second mode	
Power	557,0 kW
Gas generator speed	56 715 rpm 104,8 %
Gas temperature before turbine	1024°C
Transmission torque limitation	1 x 128%

Title	Issue	Date
FATA TCDS № FATA-EC135	03	14.12.2017

Rotor RPM Limitations:

Conditions	All engines operative	Autorotation
Maximum	105,5%	107,5 %
Minimum	97%	80% (max take-off weight < 1900kg) 85% (max take-off weight ≥1900 kg)

Maximum Take-off Weight

2980 kg

3000 kg (for parking and towing)

Maximum Cargo Weight

- Load weight, transported on external load sling :

External load sling system with one hook:1300 kg

External load sling system with two hooks:

- Maximum load

on 1 hook – 1000 kg;

- During load transportation using both hooks, maximum load on both hooks – 600 kg

- Baggage weight/ Maximum unit load on floor:

1130 kg/600 kg/m²

Speed Limitations

Never exceed speed Vne is limited by indicated airspeed 277 km/h (150 knots)

Center of gravity

- Forward C.G.:

4 152.0 mm aft from reference point start (for maximum take-off weight 2039 kg)

4 201.0 mm from aft reference point start (for maximum take-off weight 2980 kg)

- Aft C.G.:

4 369.0 mm from aft reference point start (for maximum take-off weight 2980 kg)

4 555.0 mm from aft reference point start (for maximum take-off weight 1600 kg)

Center of gravity position reference point start

2160.0 mm forward from leveling point in the front door frame

Minimum crew

1 pilot (right seat)

Maximum Number of Seats

7

Fuel Capacity

Maximum fuel

710 liter

Unusable fuel

9.5 liter

Maximum Operational Altitude

6 096 m (20000 feet)

Title	Issue	Date
FATA TCDS № FATA-EC135	03	14.12.2017

Outside Ambient Temperature Limitations

- 35°C...ISA+ 39°C
(max. +50 °C)

Fuel temperature limits

Minimum fuel temperature for starting engines – not below –19°C

Additional conditions, limitations and information

1. Flights under icing conditions are prohibited.
2. Over-water flights without Emergency Flotation System installations are prohibited.
3. Flights in the vicinity of forecasted thunderstorm activity when weather radar is not installed are prohibited.
4. Helicopter operation in terms of non-hangar storage is allowed only with usage of protective covers and gags.
5. For other limitations see the helicopter operational documentation.
6. For helicopter operation, along with RFM it is necessary to use Master Minimum Equipment List and Flight Manual Appendix approved by FATA.

Title	Issue	Date
FATA TCDS № FATA-EC135	03	14.12.2017

Variant	EC135T3 H
Type certificate data	№ ФАБТ-СТ-ЕС-135, - issued by FATA on 29.12.2016 - reissued by FATA on 22.03.2017
Type certificate Holder	Airbus Helicopters Deutschland GmbH Donauwörth, Germany
Manufacturer	Airbus Helicopters Deutschland GmbH Donauwörth, Germany
Aircraft Description	Single-rotor helicopter with twin turbo-shaft engines and skid type landing gear
Category	Normal, А и В
Applicability	EC135T3 helicopter is approved for VFR and IFR flights, for over land and over water flights, internal and external load transportation, for people transportation.
Type Design	Description of type design contained in document «TDD L0000M01RUS EC135 – FATA Type Design Definition», issue 3
Certification Basis	Certification Basis СБ 135.27, approved by IAC AR on 08th of June 2007 Certification Basis includes: - Airworthiness requirements AP-27 «Aviation Regulations: Normal category rotorcraft»; - Special Technical Conditions; - Environmental protection requirements AP-36 “Aircraft noise certification” - List of Certification basis paragraphs versus which Equivalent safety findings were established: 27.1305, 27.1309, 27.1321(a), 27.1351(d)(1), 27.1545(b)(4), 27.1549, Attachment C 1305(a)(6)(b)(1).

Noise requirements

Variant	Max. take-off weight	Take-off	Fly-over	Approach
H	2980 kg	86.1	82.7	90.3
Regulations Limit		94.8	93.8	95.8

Engine	2 engines ARRIUS 2B2 manufactured by Turbomeca Engine Type certificate №258-АМД dated 28 th of July 2006 with Major change ФАБТ-ОГН-АМД-АМД-02
---------------	---

Title	Issue	Date
FATA TCDS № FATA-EC135	03	14.12.2017

Approved Fuel Grades

TC-1, RT.
(for foreign grades refer to Flight manual).

Engine Limits

Takeoff mode (5 min)	
Power	479,0 kW
Gas generator speed	54 117 rpm 100%
Gas temperature before turbine	897 °C
Transmission torque limitation	2 x 78%

Maximum continuous mode	
Power	432,0 kW
Gas generator speed	53 576 rpm 99 %
Gas temperature before turbine	879°C
Transmission torque limitation	2 x 69%

With one engine inoperative

Continuous mode	
Power	485,0 kW
Gas generator speed	54 793 rpm 101,25 %
Gas temperature before turbine	942 °C
Transmission torque limitation	1 x 89.5%

2 minutes mode	
Power	544,0 kW
Gas generator speed	56 011 rpm 103,5%
Gas temperature before turbine	994°C
Transmission torque limitation	1 x 125%

30 second mode	
Power	557,0 kW
Gas generator speed	56 715 rpm 104,8 %
Gas temperature before turbine	1024°C
Transmission torque limitation	1 x 128%

Title	Issue	Date
FATA TCDS № FATA-EC135	03	14.12.2017

Rotor RPM Limitations:

Conditions	All engines operative	Autorotation
Maximum	105,5%	107,5 %
Minimum	97%	80% (max take-off weight < 1900kg) 85% (max take-off weight ≥1900 kg)

Max Take-off weight

2980 kg

3000 kg (for parking and towing)

Maximum Cargo Weight

- Load weight, transported on external load sling :

External load sling system with one hook:1300 kg

External load sling system with two hooks:

- Maximum load

on 1 hook – 1000 kg;

- During load transportation using both hooks, maximum load on both hooks – 600 kg

- Baggage weight/ Maximum unit load on floor:

1130 kg/600 kg/m²

Speed Limitations

Never exceed speed Vne is limited by 277 km/h (150 knots)

Center of gravity

- Forward C.G.:

4 121,0 mm aft from reference point start (for maximum take-off weight 2150 kg)

4 171,0 mm aft from reference point start (for maximum take-off weight 2 980 kg)

- Aft C.G.:

4 369,0 mm aft from reference point start (for maximum take-off weight 2 980 kg)

4 541,0 mm aft from reference point start (for maximum take-off weight 1 700 kg)

Center of gravity position reference point start

2 160 mm forward from reference start point on front door frame

Minimum crew

1 pilot (RH side)

Maximum number of Seats

7

Fuel Capacity

Maximum fuel 710 liter

Unusable fuel 9.5 liter

Maximum Operational Altitude

6 096 m (20000 feet)

Title	Issue	Date
FATA TCDS № FATA-EC135	03	14.12.2017

Outside Ambient Temperature Limitations

-35 °C...ISA +39 °C
(max +50 °C)

Fuel temperature limitation

Min. fuel temperature during engines start – not lower than - 19 °C

Additional conditions, limitations and information

1. Flights under icing conditions are prohibited.
2. Over-water flights without Emergency Flotation System installations are prohibited.
3. Flights in the vicinity of forecasted thunderstorm activity when weather radar is not installed are prohibited.
4. Helicopter operation in terms of non-hangar storage is allowed only with usage of protective covers and gags.
5. For other limitations see the helicopter operational documentation.
6. For helicopter operation, along with RFM it is necessary to use Master Minimum Equipment List and Flight Manual Appendix approved by FATA.

Title	Issue	Date
FATA TCDS № FATA-EC135	03	14.12.2017

4. EC135 P3

Variant	EC135P3 (CPDS)
Type Certificate data	№ ФАВТ-СТ-ЕС-135, issued by FATA on 22.03.2017
Type Certificate Holder	Airbus Helicopters Deutschland GmbH Donauwörth, Germany
Manufacturer	Airbus Helicopters Deutschland GmbH Donauwörth, Germany
Aircraft Description	Single-rotor helicopter with twin turbo-shaft engines and skid type landing gear
Category	Normal, A and B
Applicability	EC135P3 helicopter is approved for VFR and IFR flights, for over land and over water flights, internal and external load transportation, for people transportation.
Type Design	Description of type design contained in document «TDD L000M01RUS EC135 – FATA Type Design Definition», issue 3
Certification Basis	Certification Basis СБ135.27 approved by IAC AR on 08 th of June 2007 Certification Basis includes: <ul style="list-style-type: none"> • Airworthiness requirements AP-27 "Aviation Regulations: Normal category rotorcraft"; • Special Technical Conditions; • Environmental protection requirements AP-36 "Aircraft noise certification" • List of Certification basis paragraphs versus which Equivalent safety findings were established: 27. 865 (c), 27.1549 (b), Attachment B, paragraph B4(c), C.2.1587

Noise Requirements

Version	Max. take-off weight	Take-off	Fly-over	Approach
CPDS	2980 kg	86.1	82.7	90.3
Regulations limit		94.8	93.8	95.8

Engine	2 engines PW 206B3 manufactured by Pratt & Whitney Canada Engine Type certificate №118-Д/01 dated 18 th of July 2007 with Major change FATA-02080E-MC-003
---------------	---

Title	Issue	Date
FATA TCDS № FATA-EC135	03	14.12.2017

Approved Fuel Grades

TC-1, RT
(for foreign fuel grades refer to Flight manual)

Engine Limits

Takeoff mode (5 min)	
Power	451 hp (336 kW)
Gas generator speed	57 900 rpm 100 %
Gas temperature before turbine	900°C
Transmission torque limitation	2 x 78 %

Maximum continuous mode	
Power	435 hp (324 kW)
Gas generator speed	56 500 rpm
Gas temperature before turbine	835°C
Transmission torque limitation	2 x 69 %

With one engine inoperative

Continuous mode	
Power	542 hp (404 kW)
Gas generator speed	57 900 rpm
Gas temperature before turbine	900°C
Transmission torque limitation	1 x 89,5%

2 minutes mode	
Power	716 hp (534 kW)
Gas generator speed	59 500 rpm
Gas temperature before turbine	950°C
Transmission torque limitation	1 x 125%

30 second mode	
Power	743.92 hp (547 kW)

Title	Issue	Date
FATA TCDS № FATA-EC135	03	14.12.2017

Gas generator speed	60 500 rpm
Gas temperature before turbine	990°C
Transmission torque limitation	1 x 128 %

Rotor RPM Limitations:

Conditions	All engines operative	Autorotation
Maximal	105,5%	107,5 %
Minimal	97 %	80 % (max. take-off weight <1900 kg) 85 % (max. take-off weight > 1900 kg)

Maximum Take-off Weight

2980 kg

3000 kg (for parking and towing)

Maximum Cargo Weight

- Baggage weight / Maximum unit load on floor:

1130 kg / 600 kg/m²

Speed Limitations

Never exceed speed Vne is limited by indicated airspeed 277 km/h (150 knots)

Center of gravity

- Forward C.G.:

4 152.0 mm aft from reference point start (for maximum take-off weight 2039 kg)

4 201.0 mm from aft reference point start (for maximum take-off weight 2980 kg)

- Aft C.G.:

4 369.0 mm from aft reference point start (for maximum take-off weight 2980 kg)

4 555.0 mm from aft reference point start (for maximum take-off weight 1600 kg)

Center of gravity position reference point start

2160.0 mm from forward reference point start

Minimum crew

1 pilot (RH side)

Maximum Number of Seats

7

Fuel Capacity

Maximum fuel

710 liter

Unusable fuel

9,5 liter

Title	Issue	Date
FATA TCDS № FATA-EC135	03	14.12.2017

Maximum Operational Altitude 6096 m (20 000 feet)

Outside Ambient Temperature Limitations -35°C...ISA+39°C
(max. +50°C)

Additional conditions, limitations and information

1. Flights under icing conditions are prohibited.
2. Over-water flights without Emergency Flotation System installations are prohibited.
3. Flights in the vicinity of forecasted thunderstorm activity when weather radar is not installed are prohibited.
4. Helicopter operation in terms of non-hangar storage is allowed only with usage of protective covers and gags.
5. For other limitations see the helicopter operational documentation.
6. For helicopter operation, along with RFM it is necessary to use Master Minimum Equipment List and Flight Manual Appendix approved by FATA.

Title	Issue	Date
FATA TCDS № FATA-EC135	03	14.12.2017

Variant	EC135P3 H															
Type certificate data	№ ФАВТ-СТ-ЕС-135, issued by FATA on 22.03.2017															
Type certificate Holder	Airbus Helicopters Deutschland GmbH Donauwörth, Germany															
Manufacturer	Airbus Helicopters Deutschland GmbH Donauwörth, Germany															
Aircraft Description	Single-rotor helicopter with twin turbo-shaft engines and skid type landing gear															
Category	Normal, А и В															
Applicability	EC135P3 helicopter is approved for VFR and IFR flights, for over land and over water flights, internal and external load transportation, for people transportation.															
Type Design	Description of type design contained in document «TDD L0000M01RUS EC135 – FATA Type Design Definition», issue 3															
Certification Basis	Certification Basis СБ 135.27, approved by IAC AR on 08 th of June 2007 Certification Basis includes: <ul style="list-style-type: none"> - Airworthiness requirements AP-27 «Aviation Regulations: Normal category rotorcraft»; - Special Technical Conditions; - Environmental protection requirements AP-36 “Aircraft noise certification” - List of Certification basis paragraphs versus which Equivalent safety findings were established: 27.1305, 27.1309, 27.1321(a), 27.1351(d)(1), 27.1545(b)(4), 27.1549, Attachment C 1305(a)(6)(b)(1). 															
Noise Requirements	<table border="1" data-bbox="715 1541 1461 1850"> <thead> <tr> <th>Version</th> <th>Max. take-off weight</th> <th>Take-off</th> <th>Fly-over</th> <th>Approach</th> </tr> </thead> <tbody> <tr> <td>H</td> <td>2980 kg</td> <td>86.1</td> <td>82.7</td> <td>90.3</td> </tr> <tr> <td>Regulations limit</td> <td></td> <td>94.8</td> <td>93.8</td> <td>95.8</td> </tr> </tbody> </table>	Version	Max. take-off weight	Take-off	Fly-over	Approach	H	2980 kg	86.1	82.7	90.3	Regulations limit		94.8	93.8	95.8
Version	Max. take-off weight	Take-off	Fly-over	Approach												
H	2980 kg	86.1	82.7	90.3												
Regulations limit		94.8	93.8	95.8												
Engine	2 engines PW 206B3 manufactured by Pratt & Whitney Canada Engine Type certificate №118-Д/01 dated 18 th of July 2007 with Major change FATA-02080E-MC-003															

Title	Issue	Date
FATA TCDS № FATA-EC135	03	14.12.2017

Approved Fuel Grades

TC-1, RT.
(for foreign grades refer to Flight manual).

Engine Limits

Takeoff mode (5 min)	
Power	451 hp (336 kW)
Gas generator speed	57 900 rpm 100 %
Gas temperature before turbine	900°C
Transmission torque limitation	2 x 78 %

Maximum continuous mode	
Power	435 hp (324 kW)
Gas generator speed	56 500 rpm
Gas temperature before turbine	835°C
Transmission torque limitation	2 x 69 %

With one engine inoperative

Continuous mode	
Power	542 hp (404 kW)
Gas generator speed	57 900 rpm
Gas temperature before turbine	900°C
Transmission torque limitation	1 x 89,5%

2 minutes mode	
Power	716 hp (534 kW)
Gas generator speed	59 500 rpm
Gas temperature before turbine	950°C
Transmission torque limitation	1 x 125%

30 second mode	
Power	743.92 hp (547 kW)

Title	Issue	Date
FATA TCDS № FATA-EC135	03	14.12.2017

Gas generator speed	60 500 rpm
Gas temperature before turbine	990°C
Transmission torque limitation	1 x 128 %

Rotor RPM Limitations:

Conditions	All engines operative	Autorotation
Maximal	105,5%	107,5 %
Minimal	97 %	80 % (max. take-off weight <1900 kg) 85 % (max. take-off weight > 1900 kg)

Max Take-off weight

2980 kg

3000 kg (for parking and towing)

Maximum Cargo Weight

- Baggage weight / Maximum unit load on floor:

1130 kg / 600 kg/m²

Speed Limitations

Never exceed speed Vne is limited by indicated airspeed 277 km/h (150 knots)

Center of gravity

- Forward C.G.:

4 121,0 mm aft from reference point start (for maximum take-off weight 2150 kg)

4 171,0 mm aft from reference point start (for maximum take-off weight 2 980 kg)

- Aft C.G.:

4 369,0 mm aft from reference point start (for maximum take-off weight 2 980 kg)

4 541,0 mm aft from reference point start (for maximum take-off weight 1 700 kg)

Center of gravity position reference point start

2 160 mm forward from reference start point on front door frame

Minimum crew

1 pilot (RH side)

Maximum number of Seats

7

Fuel Capacity

Maximum fuel

710 liter

Unusable fuel

9,5 liter

Title	Issue	Date
FATA TCDS № FATA-EC135	03	14.12.2017

Maximum Operational Altitude 6 096 m (20 000 feet)

Outside Ambient Temperature Limitations -35 °C...ISA +39 °C
(max +50 °C)

Additional conditions, limitations and information

1. Flights under icing conditions are prohibited.
2. Over-water flights without Emergency Flotation System installations are prohibited.
3. Flights in the vicinity of forecasted thunderstorm activity when weather radar is not installed are prohibited.
4. Helicopter operation in terms of non-hangar storage is allowed only with usage of protective covers and gags.
5. For other limitations see the helicopter operational documentation.
6. For helicopter operation, along with RFM it is necessary to use Master Minimum Equipment List and Flight Manual Appendix approved by FATA.

Supplemental Type Certificates (STC)

№	STC title	STC Holder	Type Design Reference	Issued by	Aircraft model
1	RS00462, Rev.3 Installation VIP Interior •p/n 135-25- 20-5000-925; • p/n 135-25- 20-5000-929	Air Ambulance Technology Gmbh	MDL-EC135- 5000-925, Rev. 0 (for p/n 135-25-20-5000-925) MDL-EC135- 5000-929, Rev. 0 (for p/n 135-25-20-5000-929)	EASA	EC135P2+ EC135T2+ EC135T3 EC135P3
2	RS00462, Rev.3 Installation Air Ambulance Equipment •p/n 135-25- 20-5000- 629*	Air Ambulance Technology Gmbh	MDL-EC135- 5000-629, Rev. 0	EASA	EC135P2+ EC135T2+ EC135T3 EC135P3

* Electronic equipment installed on ambulance modification of helicopter is not covered by this Type Certificate. Installation and operation of medical electronic equipment should be agreed with Developer of helicopter.

Supplements to Type Certificate

№	Major Change Description	Aircraft model
263-EC135/Д01	PW206B2 engine installation	EC135P2+
263-EC135/Д02	Installation of "TRANZAS AVIATSIA" Company equipment: TDS-12 MFD, TTA-12H TAWS, TSS ASNS	EC135T2+

Title	Issue	Date
FATA TCDS № FATA-EC135	03	14.12.2017

№	Major Change Description	Aircraft model
263-EC135/Д03	Mechanical Air Condition (change E-1780)	EC135P2+ EC135T2+ EC135T3 EC135P3
263-EC135/Д04	Increased MTOW up to 2950 kg; Stiffness optimized lead-lag damper	EC 135P2+ EC135T2+
263-EC135/Д05	Installation of New Placards in Russian (Approval of EC 135 FMA 11-36, Rev.1). SMD45H NG Symbology Update for SBAS Navigation Capability	EC135P2+ EC135T2+ EC135T3 EC135P3
263-EC135/Д06	Reduction of the payload and dual actuation device on pilot stick Installation HF9000 Inlet barrier filter for TM engines, Cat. B Inlet barrier filter for PW engines, Cat. A Inlet barrier filter for PW engines with operational limitation to 20000 ft. HTAWS functional on Garmin GNS 530W TAWS Emergency floatation system on intermediate landing gear	EC135P2+ EC135T2+ EC135T3 EC135P3

Major changes approvals to Type design

FATA Ref. number	Major change description	CRD number	Applicability
FATA-020105R-MC-007	Installation of new system Helionix on P3 model (P3H variant) and T3 (T3H variant)	CRDE0000M269801_C	EC135P3H EC135T3H
FATA-020105R-MC-008	Applicability extension of FMS 9.2-60 FCDS 3-screen version SW V650 from P2+/T2+ to P3/T3	CRDL1501M358001-A	EC135T3(CPDS)
	Update of MSM Chapter 4 revision 16	CRDL0400M318501-A	EC135P2+ EC135T2+ EC135T3(CPDS)
	EC135 T3(CPDS) CAT A Full Envelope / OEI Training Performance Update	CRDL0201M355801-A	EC135T3(CPDS)
	T3(CPDS) SP/DP IFR including AFCS	CRDL2200M263901-C	EC135T3(CPDS)
	Applicability extension of a number of FMS from P2+/T2+ to P3/T3	CRDL1501M374401-A	EC135P3(CPDS) EC135T3(CPDS)
	Installation of a dual color anti- collision light (red/high intensity white)	CRDL3340M360201-A	EC135P2+ EC135T2+ EC135P3(CPDS) EC135T3(CPDS)

Title	Issue	Date
FATA TCDS № FATA-EC135	03	14.12.2017

	FMS 9.1-2 Operation with opened/removed doors	CRDL1501M378701-A	EC135P2+ EC135T2+ EC135P3(CPDS) EC135T3(CPDS)
	Change in fenestron rigging angles	CRDL6420M378901-A	EC135P3(CPDS) EC135T3(CPDS)
	Installation of ELRS as optional equipment, applicability extended to P3/T3	CRDL2568M380801-C	EC135P2+ EC135T2+ EC135P3(CPDS) EC135T3(CPDS)
	Dual External Cargo Hook (HEC) and Mirror	CRDL2598M134701-A	EC135P2+ EC135T2+ EC135P3(CPDS) EC135T3(CPDS)
	T3(CPDS) Inlet Barrier Filter Installation	CRDL7160M351301-B	EC135T3(CPDS)
	Update of FMS for cargo hook ring dimensions	CRDL2598M359601-A	EC135P2+ EC135T2+ EC135P3(CPDS) EC135T3(CPDS)
	Improvement of external noise level P3/T3	CRDL1510M384701-B	EC135P3(CPDS) EC135T3(CPDS)
	Applicability extension of CVFDR (Honeywell) for P3/T3	CRDL1501M390501-A	EC135P3(CPDS) EC135T3(CPDS)
	Modification of APIRS Sagem to replace obsolete components	CRDL3420M351601-A	EC135P2+ EC135T2+ EC135P3(CPDS) EC135T3(CPDS)
	New revisions of basic RFM and FMS	CRDL1501M402601-A	EC135P2+ EC135T2+ EC135P3(CPDS) EC135T3(CPDS)
	LPV approach with 2xSMD45 and 1xSMD68 configuration	CRDL3460M403101-A	EC135P2+ EC135T2+ EC135P3(CPDS) EC135T3(CPDS)
	Improved retractable search light	CRDL3340M405401-A	EC135P2+ EC135T2+ EC135P3(CPDS) EC135T3(CPDS)
	Removal of OAT Limitation for P3	CRDL1501M416101-A	EC135P3(CPDS)
	HEC Hoist 230 kg and 272 kg	CRDL0000M358803-A	EC135P3(CPDS) EC135T3(CPDS)
	Correction of wind diagram in EC135 P3/T3 RFM and FMS	CRDL1501M408101-B	EC135P3(CPDS) EC135T3(CPDS)
	Improvement of Ground/Flight detection for AHRS 1 and 2	CRDL6710M403401-A	EC135P2+ EC135T2+ EC135P3(CPDS) EC135T3(CPDS)
	Extension of applicability of FMS 9.2-44 (Dual Pilot IFR Operation kit) for P3(CPDS)	CRDL0000M432701-A	EC135P3(CPDS)
	Improvement Blade Damper	CRDL0053M407701-A	EC135P2+ EC135T2+ EC135P3(CPDS) EC135T3(CPDS)

Title	Issue	Date
FATA TCDS № FATA-EC135	03	14.12.2017

	Installation of a new windshield wiper motor due to obsolescence	CRDL0000M428703-A	EC135P2+ EC135T2+ EC135P3(CPDS) EC135T3(CPDS)
	Implementation of wind credit of hoist and hook in FMS	CRDL1501M431301-A	EC135P2+ EC135T2+ EC135P3(CPDS) EC135T3(CPDS)
FATA-020105R-MC-009	Integration of vendor part Euronav 7 DMAP and Flarm Module for Helionix	CRD E3400M450101-B	EC135P3H EC135T3H
	Installation of vendor part Avidyne TAS620A for Helionix	CRD E3445M449902 A	EC135P3H EC135T3H
	Introduce double seals and HVOF coated main piston rod of MR actuator, as well as extend service life for rotor blade damper (EC135 family)	CRD L0000M438402 C CRD L0000M446703 C	EC135P2+ EC135T2+ EC135P3(CPDS) EC135T3(CPDS) EC135P3H EC135T3H
	Integration of vendor part MR6000R tactical radio and GB6500 control unit for Helionix	CRD E4300M450001-C	EC135P3H EC135T3H
	Minimum airspeed 40 knots for CR.HT mode in Helionix RFM section 2	CRDE1501M467402_A	EC135P3H EC135T3H

*Original in Russian is signed by
Mikhail Bulanov
Deputy Director General*