
TYPE-CERTIFICATE DATA SHEET

UK.TC.R.00064

For
EC135

Type Certificate Holder

Airbus Helicopters Deutschland GmbH
Industriestrasse 4
D-86609 Donauwörth Germany

Model(s):

EC135 P1			
EC135 P2	EC135 P2+	EC635 P2+	
EC135 P3	EC635 P3		
EC135 T1	EC635 T1		
EC135 T2	EC135 T2+	EC635 T2+	
EC135 T3	EC635 T3		

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TABLE OF CONTENTS

TABLE OF CONTENTS.....	2
Section 1 EC135 P1(CDS).....	6
I. General.....	6
II. Certification Basis.....	6
III. Technical Characteristics and Operational Limitations	8
IV. Operating and Service Instructions	11
V. Operational Suitability Data.....	11
VI. Notes	12
Section 2 EC135 P1(CPDS).....	13
I. General.....	13
II. Certification Basis.....	13
III. Technical Characteristics and Operational Limitations	15
IV. Operating and Service Instructions	18
V. Operational Suitability Data.....	18
VI. Notes	19
Section 3 EC135 P2(CPDS).....	20
I. General.....	20
II. Certification Basis.....	20
III. Technical Characteristics and Operational Limitations	22
IV. Operating and Service Instructions	25
V. Operational Suitability Data.....	25
VI. Notes	26
Section 4 EC135 P2+	27
I. General.....	27
II. Certification Basis.....	27
III. Technical Characteristics and Operational Limitations	29
IV. Operating and Service Instructions	32
V. Operational Suitability Data.....	32
VI. Notes	33
Section 5 EC635 P2+	34
I. General.....	34
II. Certification Basis.....	34
III. Technical Characteristics and Operational Limitations	36
IV. Operating and Service Instructions	39
V. Operational Suitability Data.....	39
VI. Notes	40
Section 6 EC135 P3(CPDS).....	41
I. General.....	41
II. Certification Basis	41

III.	Technical Characteristics and Operational Limitations	43
IV.	Operating and Service Instructions	46
V.	Operational Suitability Data	47
VI.	Notes	47
	Section 7 EC635 P3(CPDS).....	48
I.	General.....	48
II.	Certification Basis	48
III.	Technical Characteristics and Operational Limitations	50
IV.	Operating and Service Instructions	53
V.	Operational Suitability Data.....	54
VI.	Notes	54
	Section 8 EC135 P3H.....	55
I.	General.....	55
II.	Certification Basis	55
III.	Technical Characteristics and Operational Limitations	57
IV.	Operating and Service Instructions	60
V.	Operational Suitability Data.....	61
VI.	Notes	61
	Section 9 EC635 P3H.....	62
I.	General.....	62
II.	Certification Basis	62
III.	Technical Characteristics and Operational Limitations	64
IV.	Operating and Service Instructions	67
V.	Operational Suitability Data.....	68
VI.	Notes	68
	Section 10 EC135 T1(CDS)	69
I.	General.....	69
II.	Certification Basis.....	69
III.	Technical Characteristics and Operational Limitations	71
IV.	Operating and Service Instructions	74
V.	Operational Suitability Data.....	74
VI.	Notes	75
	Section 11 EC135 T1(CPDS).....	76
I.	General.....	76
II.	Certification Basis.....	76
III.	Technical Characteristics and Operational Limitations	78
IV.	Operating and Service Instructions	81
V.	Operational Suitability Data.....	81
VI.	Notes	82
	Section 12 EC635 T1(CPDS).....	83
I.	General.....	83
II.	Certification Basis.....	83

III.	Technical Characteristics and Operational Limitations	85
IV.	Operating and Service Instructions	88
V.	Operational Suitability Data	88
VI.	Notes	89
	Section 13 EC135 T2(CPDS)	90
I.	General	90
II.	Certification Basis	90
III.	Technical Characteristics and Operational Limitations	92
IV.	Operating and Service Instructions	95
V.	Operational Suitability Data	95
VI.	Notes	96
	Section 14 EC135 T2+	97
I.	General	97
II.	Certification Basis	97
III.	Technical Characteristics and Operational Limitations	99
IV.	Operating and Service Instructions	102
V.	Operational Suitability Data	102
VI.	Notes	103
	Section 15 EC635 T2+	104
I.	General	104
II.	Certification Basis	104
III.	Technical Characteristics and Operational Limitations	106
IV.	Operating and Service Instructions	109
V.	Operational Suitability Data	109
VI.	Notes	110
	Section 16 EC135 T3(CPDS)	111
I.	General	111
II.	Certification Basis	111
III.	Technical Characteristics and Operational Limitations	113
IV.	Operating and Service Instructions	116
V.	Operational Suitability Data	117
VI.	Notes	117
	Section 17 EC635 T3(CPDS)	119
I.	General	119
II.	Certification Basis	119
III.	Technical Characteristics and Operational Limitations	121
IV.	Operating and Service Instructions	124
V.	Operational Suitability Data	125
VI.	Notes	125
	Section 18 EC135 T3H	127
I.	General	127
II.	Certification Basis	127

III.	Technical Characteristics and Operational Limitations	129
IV.	Operating and Service Instructions	132
V	Operational Suitability Data	133
VI.	Notes	133
	Section 19 EC635 T3H	134
I.	General	134
II.	Certification Basis	134
III.	Technical Characteristics and Operational Limitations	136
IV.	Operating and Service Instructions	139
V	Operational Suitability Data	140
VI.	Notes	140
	Section 20 Administrative	142
I.	Acronyms and Abbreviations.....	142
II.	Type Certification Holder Record	143
III.	Amendment Record	144

Section 1 EC135 P1(CDS)**I. General**

1. Type/ Model/ Variant
 - 1.1 Type EC135
 - 1.2 Model EC135 P1
 - 1.3 Variant EC135 P1(CDS)
2. **Airworthiness Category**
Small Rotorcraft
3. **Type Certificate Holder**
Airbus Helicopters Deutschland GmbH
Industriestrasse 4
D-86609 Donauwörth, Germany
4. **Manufacturer**
See Section 21 Administration, subsection II.3 Production Organisation Approval Holder
5. **Type Certification Application Date to LBA**
12 December 1994
6. **State of Design Authority**
European Union Aviation Safety Agency (EASA)
7. **EASA Type Certification Date**
28 September 2003, in accordance with CR (EU) 1702/2003, Article 2, 3., (a), (i), 2nd bullet, 1st indented bullet

II. Certification Basis

1. **Reference Date for determining the applicable requirements**
For Airworthiness and Environmental Protection: 12 December 1994
For OSD elements, Grandfathering date: 17 February 2014
2. **Airworthiness Requirements**
 - JAR-27, Issue 1, dated 6 September 1993
 - For IFR Certification: JAR-27 Appendix B, Issue 1, dated 6 September 1993
 - Category A Engine Isolation Requirements of JAR-29, Issue 1, dated 5 November 1993.

Applicable paragraphs, selected from Appendix C to JAR-27, are:

29.861 (a)	Fire Protection of Structure, controls, and other parts
29.901 (c)	Powerplant: Installation
29.903 (b),(c),(e)	Engines
29.908 (a)	Cooling fans
29.917 (b),(c)(1)	Rotor Drive System: Design
29.927 (c)(1)	Additional tests
29.953 (a)	Fuel system independence
29.1027 (a)	Transmission and gearboxes
29.1045 (a)(1),(b),(c),(d),(f)	Climb cooling test procedures
29.1047 (a)	Take-off cooling test procedures

29.1181 (a)	Designated fire zones: regions included
29.1189 (c)	Shutoff means
29.1191 (a)(1)	Firewalls
29.1193 (e)	Cowling and engine compartment covering
29.1305 (a)(6),(b)	Powerplant instruments
29.1309 (b)(2)(i),(d)	Equipment, systems and installations
29.1331 (b)	Instruments using power supply
29.1351 (d)(2)	Electrical systems and equipment: General –

- For CAT A Certification: JAR 27 Appendix C, Issue 1, dated 6 September 1993

- JAA Interim HIRF Policy (INT/POL/278.29-1, dated 1 June 1997) applies for:

-- Dual Pilot IFR certification with 3-axis SAS, Pitch-Damper and EFIS EFS 40

-- Single Pilot/ Dual Pilot IFR certification with AFCS and EFIS EFS 40

3. Special Conditions

- No. SC 1 "Primary Structures Designed with Composite Material"
- No. SC 2 "Protection for Electrical and Electronic Systems from High Intensity Radiated Fields"; this Special Condition applies only for VFR and IFR certification with conventional instruments and for VFR certification with EFIS EFS 40.
- No. SC 3 "Electronic Flight Instrument Systems"
- No. SC 4 "Protection of air intake of EC135 against ingestion of foreign objects (Rain and Hail/Bird strike)"

4. Exemptions

None

5. Deviations

None

6. Equivalent Safety Findings

- Dual Pilot IFR certification concerning JAR 27 Appendix B, Para. IV (c) "Static Longitudinal Stability"
- CS 27.865 (c) related to dual activation device for the Primary Quick Release Subsystem (Cyclic Stick) for the Double Cargo Hook System
- CS 27.601, 27.603, 27.865 (a) for Hoist Installation on Helicopters

7. Requirements elected to comply

None.

8. Environmental Protection Requirements

8.1 Noise Requirements

see TCDSN UK.TC.R.00064

8.2 Emission Requirements

n/a

9 Operational Suitability Data (OSD)

9.1 Master Minimum Equipment List (MMEL)

JAR-MMEL/MEL Section 1, Amdt. 1

CS-MMEL, Initial Issue, dated 31 January 2014, for the changes in Rev. 5

9.2 Flight Crew Data (FCD)

CS-FCD, Initial Issue, dated 31 January 2014

9.3 Simulation Data (SIMD)

Reserved.

9.4 Maintenance Certifying Staff Data (MCSD)

Reserved.

III. Technical Characteristics and Operational Limitations

1. Type Design Definition

- EC135 Basic Master List Drawing No. L000M0007051
- Drawing No. L000M0002051 and following modifications

2. Description

Main rotor: bearingless, 4 blades
 Tail rotor: Fenestron, 10 blades
 Fuselage: metal-composite structure
 Landing gear: skid-type
 Powerplant: 2 independent freewheel turbines

3. Equipment

Basic equipment must be installed and operational prior to registration of the helicopter.

4. Dimensions

4.1 Fuselage

Length: 5.87 m
 Width hull: 1.56 m
 Height: 3.35 m

4.2 Main Rotor

Diameter: 10.20 m

4.3 Tail Rotor

Diameter: 1.00 m

5. Engine

5.1 Model

Pratt & Whitney Canada
 2 x Model PW 206B

5.2 Type Certificate

TCCA TC/TCDS n°: E-23
 CAA TC/TCDS n°: EASA.IM.E.017

5.3 Limitations

5.3.1 Installed Engine Limitations and Transmission Torque Limits

	TQ limits [%]	Gas generator [rpm (%)]	PWR turbine [rpm (%)]	Temperature TOT [°C]
AEO-TOP (5 min)	2 x 75	57 250 (98.7)	104	854
AEO-MCP	2 x 69	56 500 (97.4)	104	820

2½ min OEI-TOP	1 x 100	59 400 (102.4)	104	930
OEI-MCP	1 x 86	58 250 (100.4)	104	885

6. Fluids

6.1 Fuel

Refer to approved RFM

6.2 Oil

Refer to approved RFM

6.3 Additives

Refer to approved RFM

7. Fluid capacities

7.1 Fuel

Standard fuel tank (up to s/n 0249)

Fuel tank capacity: 680.0 litres

Usable fuel: 670.5 litres

Self-sealing fuel tank (up to s/n 0249)

Fuel tank capacity: 673.4 litres

Usable fuel: 664.0 litres

Modified fuel tank (from s/n 0250, or SB EC135-28-007)

Fuel tank capacity: 710.0 litres

Usable fuel: 700.5 litres

Self-sealing fuel tank (from s/n 0250)

Fuel tank capacity: 701.0 litres

Usable fuel: 691.6 litres

7.2 Oil

Refer to approved RFM

7.3 Coolant System Capacity

n/a

8. Air Speed Limitations

V_{NE} : 155 KIAS at MSL

Refer to approved RFM for reduction in V_{NE} with altitude and other speed limitations.

9. Rotor Speed Limitations

Power on:

Maximum 104 %

Minimum 95 %

Power off:

Maximum 106 %

Minimum 80 % (up to 1 900 kg)

Minimum 85 % (above 1 900 kg)

Transient: Refer to approved RFM

10. Maximum Operating Altitude and Temperature**10.1 Altitude**

20 000 ft (6 096 m) PA, refer to approved RFM for variation according to MTOW

10.2 Temperature

Refer to approved RFM

11. Operating Limitations

VFR day and night

Non-icing conditions

For IFR, Category A operation, see additional equipment requirements and limitations in the relevant approved RFMS

For Ditching, see Note 2

12. Maximum Mass

2 720 kg

Note: Operation of the aircraft with MTOM between 2 720 kg and 2 835 kg is permitted only in accordance with RFMS 9.1-3 "Supplement for flights with gross mass above 2 720 kg up to 2 835 kg" and when SB EC135-11-003 is incorporated.

13. Centre of Gravity Range

Longitudinal C.G. limits

maximum forward limit:

4 180 mm aft of DP at 1 840 kg

4 219 mm aft of DP at 2 720 kg

4 224 mm aft of DP at 2 835 kg

maximum rearward limit:

4 570 mm aft of DP at 1 500 kg

4 387 mm aft of DP at 2 720 kg

4 369 mm aft of DP at 2 835 kg

Lateral C.G Limits

maximum deviation on right / left: 100 mm

14. Datum

Longitudinal: the datum plane (STA 0) is located at 2 160 mm forward of the levelling point in the front door frame

Lateral: fuselage median plane

15. Levelling Means

See levelling procedure document No. L082M0801X01

16. Minimum Flight Crew

1 pilot (right seat)

17. Maximum Passenger Seating Capacity

Six (or seven, if the kit described in RFMS 9.2-31 is installed and operated)

18. Passenger Emergency Exit

2, one on each side of the passenger cabin

19. Maximum Baggage/ Cargo Loads

Cargo floor max load: 1 130 kg

Cargo floor max unit load: 600 kg/m²

20. Rotor Blade Control Movement

For rigging information refer to EC135 Aircraft Maintenance Manual

21. Auxiliary Power Unit (APU)

n/a

22. Life-limited Parts

See approved ALS Chapter 4 of the EC135 Master Servicing Manual

IV. Operating and Service Instructions**1. Flight Manual**

EC135 P1(CDS), initially LBA-approved, dated 14 June 1996, or later approved revisions, including the supplements for Special Operations RFMS 9.1 and Optional Equipment RFMS 9.2.

2. Maintenance Manual

- EC135 Master Servicing Manual
- EC135 Aircraft Maintenance Manual
- Wiring Diagram Manual, latest revision
- Engine documents as per Engine TCDS No.EASA.IM.E.017

3. Structural Repair Manual

EC135 Structural Repair Manual

4. Weight and Balance Manual

Refer to approved RFM

5. Illustrated Parts Catalogue

EC135 Illustrated Parts Catalogue

6. Service Letters and Service Bulletins

Safety Information Notice (from October 2008 onwards, before: Alert Service Information), Information Notice (from October 2008 onwards, before: Service Information), Alert Service Bulletin, Service Bulletin Repair Design Approval Sheets

7. Required Equipment

Special equipment and kits necessary for intended kind of operations as defined in the approved Flight Manual Supplements RFMS 9.2, are permissible.

V. Operational Suitability Data

The OSD elements listed below were approved by the European Union Aviation Safety Agency (EASA) as per Commission Regulation (EU) 748/2012, as amended by Commission Regulation (EU) No 69/2014.

Future revisions will be approved by the UK CAA in accordance with Regulation (EU) No. 748/2012 as retained (and amended in UK domestic law) under the European Union (Withdrawal) Act 2018 and amended by the Aviation Safety (Amendment etc.) (EU Exit) Regulations 2019.

1. Master Minimum Equipment List (MMEL)

MMEL document Revision 0, approved on 18 October 2011, or later approved revision.

2. Flight Crew Data

Flight Crew Operational Suitability Data as per document OSD_L0000M403901 first Issue, EASA approval date 15 October 2015, or later approved revisions.

- Appendix 2: "Operator Difference Requirements (ODR) Tables & Master Difference Requirements (MDR) Table" to the EASA Operational Suitability Data (OSD) – Flight Crew – EC135 Family, EASA approval date 15 October 2015, or later approved revisions.

- Appendix 3: "OSD EC135 Family – EASA OPS – Instruments and Equipment", to the EASA Operational Suitability Data (OSD) – Flight Crew – EC135 Family, EASA approval date 15 October 2015, or later approved revisions.

3. SIM Data

Reserved.

4. Maintenance Certifying Staff Data

Reserved.

VI. Notes

1. Manufacturer's eligible serial numbers: s/n 0006, and subsequent.
2. The emergency floatation system in accordance with RFMS 9.2-67, is certified as ditching provision in accordance with JAR-27.

The helicopter may be certificated for ditching provided the following additional equipment are fitted and approved in accordance with the relevant airworthiness requirements:

- survival type emergency locator transmitter
- life raft installation
- life preserver.

Section 2 EC135 P1(CPDS)**I. General****1. Type/ Model/ Variant**

- | | | |
|-----|---------|----------------|
| 1.1 | Type | EC135 |
| 1.2 | Model | EC135 P1 |
| 1.3 | Variant | EC135 P1(CPDS) |

2. Airworthiness Category

Small Rotorcraft

3. Type Certificate Holder

Airbus Helicopters Deutschland GmbH
 Industriestrasse 4
 D-86609 Donauwörth, Germany

4. Manufacturer

See Section 21 Administration, subsection II.3 Production Organisation Approval Holder

5. Type Certification Application Date to LBA

11 April 1996

6. State of Design Authority

European Union Aviation Safety Agency (EASA)

7. EASA Type Certification Date

28 September 2003, in accordance with CR (EU) 1702/2003, Article 2, 3., (a), (i), 2nd bullet, 1st indented Bullet

II. Certification Basis**1. Reference Date for determining the applicable requirements**

For Airworthiness and Environmental Protection: 11 April 1996

For OSD elements, Grandfathering date: 17 February 2014

2. Airworthiness Requirements

- JAR-27, Issue 1, dated 6 September 1993
- For IFR Certification: JAR-27 Appendix B, Issue 1, dated 6 September 1993
- Category A Engine Isolation Requirements of JAR-29, Issue 1, dated 5 November 1993.

Applicable paragraphs, selected from Appendix C to JAR-27, are:

29.861 (a)	Fire Protection of Structure, controls, and other parts
29.901 (c)	Powerplant: Installation
29.903 (b),(c),(e)	Engines
29.908 (a)	Cooling fans
29.917 (b),(c)(1)	Rotor Drive System: Design
29.927 (c)(1)	Additional tests
29.953 (a)	Fuel system independence
29.1027 (a)	Transmission and gearboxes
29.1045 (a)(1),(b),(c),(d),(f)	Climb cooling test procedures

29.1047 (a)	Take-off cooling test procedures
29.1181 (a)	Designated fire zones: regions included
29.1189 (c)	Shutoff means
29.1191 (a)(1)	Firewalls
29.1193 (e)	Cowling and engine compartment covering
29.1305 (a)(6),(b)	Powerplant instruments
29.1309 (b)(2)(i),(d)	Equipment, systems and installations
29.1331 (b)	Instruments using power supply
29.1351 (d)(2)	Electrical systems and equipment: General –

- For CAT A Certification: JAR 27 Appendix C, Issue 1, dated 6 September 1993

- JAA Interim HIRF Policy (INT/POL/278.29-1, dated 1 June 1997) applies for:

- Dual Pilot IFR certification with 3-axis SAS, Pitch-Damper and Avionique Nouvelle CPDS and FCDS
- Single Pilot/ Dual Pilot IFR certification with AFCS and Avionique Nouvelle CPDS and FCDS

3. Special Conditions

- No. SC 1 "Primary Structures Designed with Composite Material"
- No. SC 2 "Protection for Electrical and Electronic Systems from High Intensity Radiated Fields"; this Special Condition applies only for VFR and IFR certification with conventional instruments and for VFR certification with EFIS EFS 40.
- No. SC 3 "Electronic Flight Instrument Systems"
- No. SC 4 "Protection of air intake of EC135 against ingestion of foreign objects (Rain and Hail/Bird strike)"

4. Exemptions

None

5. Deviations

None

6. Equivalent Safety Findings

- Dual Pilot IFR certification concerning JAR 27 Appendix B, Para. IV (c) "Static Longitudinal Stability"
- CS 27.865 (c) related to dual activation device for the Primary Quick Release Subsystem (Cyclic Stick) for the Double Cargo Hook System
- CS 27.601, 27.603, 27.865 (a) for Hoist Installation on Helicopters

7. Requirements elected to comply

None.

8. Environmental Protection Requirements

8.1 Noise Requirements

see TCDSN UK.TC.R.00064

8.2 Emission Requirements

n/a

9 Operational Suitability Data (OSD)

9.1 Master Minimum Equipment List (MMEL)

JAR-MMEL/MEL Section 1, Amdt. 1

CS-MMEL, Initial Issue, dated 31 January 2014, for the changes in Rev. 5

9.2 Flight Crew Data (FCD)

CS-FCD, Initial Issue, dated 31 January 2014

9.3 Simulation Data (SIMD)

Reserved.

9.4 Maintenance Certifying Staff Data (MCSD)

Reserved.

III. Technical Characteristics and Operational Limitations**1. Type Design Definition**

- EC135 Basic Master List Drawing No. L000M0007051
- Drawing No. L000M0002051 and following modifications

2. Description

Main rotor: bearingless, 4 blades
 Tail rotor: Fenestron, 10 blades
 Fuselage: metal-composite structure
 Landing gear: skid-type
 Powerplant: 2 independent freewheel turbines

3. Equipment

Basic equipment must be installed and operational prior to registration of the helicopter.

4. Dimensions**4.1 Fuselage**

Length: 5.87 m
 Width hull: 1.56 m
 Height: 3.35 m

4.2 Main Rotor

Diameter: 10.20 m

4.3 Tail Rotor

Diameter: 1.00 m

5. Engine**5.1 Model**

Pratt & Whitney Canada
 2 x Model PW 206B

5.2 Type Certificate

TCCA TC/TCDS n°: E-23
 CAA TC/TCDS n°: EASA.IM.E.017

5.3 Limitations**5.3.1 Installed Engine Limitations and Transmission Torque Limits**

	TQ limits [%]	Gas generator [rpm (%)]	PWR turbine [rpm (%)]	Temperature TOT [°C]
AEO-TOP (5 min)	2 x 75	57 250 (98.7)	104	854

AEO-MCP	2 x 69	56 500 (97.4)	104	820
2½ min OEI-TOP	1 x 100	59 400 (102.4)	104	930
OEI-MCP	1 x 86	58 250 (100.4)	104	885

6. Fluids

6.1 Fuel

Refer to approved RFM

6.2 Oil

Refer to approved RFM

6.3 Additives

Refer to approved RFM

7. Fluid capacities

7.1 Fuel

Standard fuel tank (up to s/n 0249)

Fuel tank capacity: 680.0 litres

Usable fuel: 670.5 litres

Self-sealing fuel tank (up to s/n 0249)

Fuel tank capacity: 673.4 litres

Usable fuel: 664.0 litres

Modified fuel tank (from s/n 0250, or SB EC135-28-007)

Fuel tank capacity: 710.0 litres

Usable fuel: 700.5 litres

Self-sealing fuel tank (from s/n 0250)

Fuel tank capacity: 701.0 litres

Usable fuel: 691.6 litres

7.2 Oil

Refer to approved RFM

7.3 Coolant System Capacity

n/a

8. Air Speed Limitations

V_{NE}: 155 KIAS at MSL

Refer to approved RFM for reduction in V_{NE} with altitude and other speed limitations.

9. Rotor Speed Limitations

Power on:

Maximum 104 %

Minimum 95 %

Power off:

Maximum 106 %

Minimum 80 % (up to 1 900 kg)

Minimum 85 % (above 1 900 kg)

Transient: Refer to approved RFM

10. Maximum Operating Altitude and Temperature

10.1 Altitude

20 000 ft (6 096 m) PA, refer to approved RFM for variation according to MTOW

10.2 Temperature

Refer to approved RFM

11. Operating Limitations

VFR day and night

Non-icing conditions

For IFR, Category A operation, see additional equipment requirements and limitations in the relevant approved RFMS

For Ditching, see Note 3

12. Maximum Mass

2 720 kg

Note: Operation of the aircraft with MTOM between 2 720 kg and 2 835 kg is permitted only in accordance with RFMS 9.1-3 "Supplement for flights with gross mass above 2 720 kg up to 2 835 kg" and when SB EC135-11-003 is incorporated.

13. Centre of Gravity Range

Longitudinal C.G. limits

maximum forward limit:

4 180 mm aft of DP at 1 840 kg

4 219 mm aft of DP at 2 720 kg

4 224 mm aft of DP at 2 835 kg

maximum rearward limit:

4 570 mm aft of DP at 1 500 kg

4 387 mm aft of DP at 2 720 kg

4 369 mm aft of DP at 2 835 kg

Lateral C.G Limits

maximum deviation on right / left: 100 mm

14. Datum

Longitudinal: the datum plane (STA 0) is located at 2 160 mm forward of the levelling point in the front door frame

Lateral: fuselage median plane

15. Levelling Means

See levelling procedure document No. L082M0801X01

16. Minimum Flight Crew

1 pilot (right seat)

17. Maximum Passenger Seating Capacity

1 cockpit, 6 cabin (or 7, if the kit described in RFMS 9.2-31 is installed and operated)

18. Passenger Emergency Exit

2, one on each side of the passenger cabin

19. Maximum Baggage/ Cargo Loads

Cargo floor max load: 1 130 kg

Cargo floor max unit load: 600 kg/m²

20. Rotor Blade Control Movement

For rigging information refer to EC135 Aircraft Maintenance Manual

21. Auxiliary Power Unit (APU)

n/a

22. Life-limited Parts

See approved ALS Chapter 4 of the EC135 Master Servicing Manual

IV. Operating and Service Instructions**1. Flight Manual**

EC135 P1(CPDS), initially LBA-approved, dated 6 November 1998, or later approved revisions, including the supplements for Special Operations RFMS 9.1 and Optional Equipment RFMS 9.2.

2. Maintenance Manual

- EC135 Master Servicing Manual
- EC135 Aircraft Maintenance Manual
- Wiring Diagram Manual, latest revision
- Engine documents as per Engine TCDS No.EASA.IM.E.017

3. Structural Repair Manual

EC135 Structural Repair Manual

4. Weight and Balance Manual

Refer to approved RFM

5. Illustrated Parts Catalogue

EC135 Illustrated Parts Catalogue

6. Service Letters and Service Bulletins

Safety Information Notice (from October 2008 onwards, before: Alert Service Information), Information Notice (from October 2008 onwards, before: Service Information), Alert Service Bulletin, Service Bulletin Repair Design Approval Sheets

7. Required Equipment

Special equipment and kits necessary for intended kind of operations as defined in the approved Flight Manual Supplements RFMS 9.2, are permissible.

V. Operational Suitability Data

The OSD elements listed below were approved by the European Union Aviation Safety Agency (EASA) as per Commission Regulation (EU) 748/2012, as amended by Commission Regulation (EU) No 69/2014.

Future revisions will be approved by the UK CAA in accordance with Regulation (EU) No. 748/2012 as retained (and amended in UK domestic law) under the European Union (Withdrawal) Act 2018 and amended by the Aviation Safety (Amendment etc.) (EU Exit) Regulations 2019.

1. Master Minimum Equipment List (MMEL)

MMEL document Revision 0, approved on 18 October 2011, or later approved revision.

2. Flight Crew Data

Flight Crew Operational Suitability Data as per document OSD_L0000M403901 first Issue, EASA approval date 15 October 2015, or later approved revisions.

- Appendix 2: "Operator Difference Requirements (ODR) Tables & Master Difference Requirements (MDR) Table" to the EASA Operational Suitability Data (OSD) – Flight Crew – EC135 Family, EASA approval date 15 October 2015, or later approved revisions.

- Appendix 3: "OSD EC135 Family – EASA OPS – Instruments and Equipment", to the EASA Operational Suitability Data (OSD) – Flight Crew – EC135 Family, EASA approval date 15 October 2015, or later approved revisions.

3. SIM Data

Reserved.

4. Maintenance Certifying Staff Data

Reserved.

VI. Notes

1. Manufacturer's eligible serial numbers: s/n 0030, and subsequent.
2. Night Vision Goggles Operational Capability:

Night Vision Goggles aided operations are permitted according to Rotorcraft Flight Manual Supplement RFMS 9.2-86 in conjunction with a serial number specific Flight Manual Appendix FMA 11-x, when the rotorcraft is equipped accordingly, and a competent authority has granted operational authorisation only. The helicopter configuration containing NVIS lighting components approved for the use with Night Vision Goggles is described in a serial number specific AHD NVIS Substantiation Report for operators having received an approval for their NVIS configuration.

3. The emergency floatation system in accordance with RFMS 9.2-67, is certified as ditching provision in accordance with JAR-27.

The helicopter may be certificated for ditching provided the following additional equipment are fitted and approved in accordance with the relevant airworthiness requirements:

- survival type emergency locator transmitter
- life raft installation
- life preserver.

Section 3 EC135 P2(CPDS)**I. General****1. Type/ Model/ Variant**

- | | | |
|-----|---------|----------------|
| 1.1 | Type | EC135 |
| 1.2 | Model | EC135 P2 |
| 1.3 | Variant | EC135 P2(CPDS) |

2. Airworthiness Category

Small Rotorcraft

3. Type Certificate Holder

Airbus Helicopters Deutschland GmbH
 Industriestrasse 4
 D-86609 Donauwörth, Germany

4. Manufacturer

See Section 21 Administration, subsection II.3 Production Organisation Approval Holder

5. Type Certification Application Date to LBA

5 June 2001

6. State of Design Authority

European Union Aviation Safety Agency (EASA)

7. EASA Type Certification Date

28 September 2003, in accordance with CR (EU) 1702/2003, Article 2, 3., (a), (i), 2nd bullet, 1st indented
 Bullet

II. Certification Basis**1. Reference Date for determining the applicable requirements**

For Airworthiness and Environmental Protection: 5 June 2001

For OSD elements, Grandfathering date: 17 February 2014

2. Airworthiness Requirements

- JAR-27, Issue 1, dated 6 September 1993
- For IFR Certification: JAR-27 Appendix B, Issue 1, dated 6 September 1993
- Category A Engine Isolation Requirements of JAR-29, Issue 1, dated 5 November 1993.

Applicable paragraphs, selected from Appendix C to JAR-27, are:

29.861 (a)	Fire Protection of Structure, controls, and other parts
29.901 (c)	Powerplant: Installation
29.903 (b),(c),(e)	Engines
29.908 (a)	Cooling fans
29.917 (b),(c)(1)	Rotor Drive System: Design
29.927 (c)(1)	Additional tests
29.953 (a)	Fuel system independence
29.1027 (a)	Transmission and gearboxes
29.1045 (a)(1),(b),(c),(d),(f)	Climb cooling test procedures
29.1047 (a)	Take-off cooling test procedures

29.1181 (a)	Designated fire zones: regions included
29.1189 (c)	Shutoff means
29.1191 (a)(1)	Firewalls
29.1193 (e)	Cowling and engine compartment covering
29.1305 (a)(6),(b)	Powerplant instruments
29.1309 (b)(2)(i),(d)	Equipment, systems and installations
29.1331 (b)	Instruments using power supply
29.1351 (d)(2)	Electrical systems and equipment: General

- For CAT A Certification: JAR 27 Appendix C, Issue 1, dated 6 September 1993

- JAA Interim HIRF Policy (INT/POL/278.29-1, dated 1 June 1997) applies for:

-- Dual Pilot IFR certification with 3-axis SAS, Pitch-Damper and Avionique Nouvelle CPDS and FCDS

-- Single Pilot/ Dual Pilot IFR certification with AFCS and Avionique Nouvelle CPDS and FCDS

3. Special Conditions

- No. SC 1 "Primary Structures Designed with Composite Material"
- No. SC 2 "Protection for Electrical and Electronic Systems from High Intensity Radiated Fields"; this Special Condition applies only for VFR and IFR certification with conventional instruments and for VFR certification with EFIS EFS 40.
- No. SC 3 "Electronic Flight Instrument Systems"
- No. SC 4 "Protection of air intake of EC135 against ingestion of foreign objects (Rain and Hail/Bird strike)"

4. Exemptions

None

5. Deviations

None

6. Equivalent Safety Findings

- Dual Pilot IFR certification concerning JAR 27 Appendix B, Para. IV (c) "Static Longitudinal Stability"
- JAR 27.1549(b) related to the installation of the Vehicle and Engine Multifunction Display (VEMD) in the CPDS variants.
- CS 27.865 (c) related to dual activation device for the Primary Quick Release Subsystem (Cyclic Stick) for the Double Cargo Hook System
- CS 27.601, 27.603, 27.865 (a) for Hoist Installation on Helicopters

7. Requirements elected to comply

None.

8. Environmental Protection Requirements

8.1 Noise Requirements

see TCDSN UK.TC.R.00064

8.2 Emission Requirements

n/a

9 Operational Suitability Data (OSD)

9.1 Master Minimum Equipment List (MMEL)

JAR-MMEL/MEL Section 1, Amdt. 1

CS-MMEL, Initial Issue, dated 31 January 2014, for the changes in Rev. 5

9.2 Flight Crew Data (FCD)

CS-FCD, Initial Issue, dated 31 January 2014

9.3 Simulation Data (SIMD)

Reserved.

9.4 Maintenance Certifying Staff Data (MCSD)

Reserved.

III. Technical Characteristics and Operational Limitations

1. Type Design Definition

- EC135 Basic Master List Drawing No. L000M0007051
- Drawing No. L000M0010051 + L710M0013054 and following modifications

2. Description

Main rotor: bearingless, 4 blades
 Tail rotor: Fenestron, 10 blades
 Fuselage: metal-composite structure
 Landing gear: skid-type
 Powerplant: 2 independent freewheel turbines

3. Equipment

Basic equipment must be installed and operational prior to registration of the helicopter.

4. Dimensions

4.1 Fuselage

Length: 5.87 m
 Width hull: 1.56 m
 Height: 3.35 m

4.2 Main Rotor

Diameter: 10.20 m

4.3 Tail Rotor

Diameter: 1.00 m

5. Engine

5.1 Model

Pratt & Whitney Canada
 2 x Model PW 206B2

5.2 Type Certificate

TCCA TC/TCDS n°: E-23
 CAA TC/TCDS n°: EASA.IM.E.017

5.3 Limitations

5.3.1 Installed Engine Limitations and Transmission Torque Limits

	TQ limits [%]	Gas generator [rpm (%)]	PWR turbine [rpm (%)]	Temperature TOT [°C]
AEO-TOP (5 min)	2 x 75	57 250 (98.7)	104	869

AEO-MCP	2 x 69	56 500 (97.4)	104	835
30 sec OEI-TOP	1 x 128	60 500 (104.3)	104	990
2 min OEI-TOP	1 x 125	59 500 (102.6)	104	950
OEI-MCP	1 x 86	58 250 (100.4)	104	900

6. Fluids

6.1 Fuel

Refer to approved RFM

6.2 Oil

Refer to approved RFM

6.3 Additives

Refer to approved RFM

7. Fluid capacities

7.1 Fuel

Standard fuel tank (up to s/n 0249)

Fuel tank capacity: 680.0 litres

Usable fuel: 670.5 litres

Self-sealing fuel tank (up to s/n 0249)

Fuel tank capacity: 673.4 litres

Usable fuel: 664.0 litres

Modified fuel tank (from s/n 0250, or SB EC135-28-007)

Fuel tank capacity: 710.0 litres

Usable fuel: 700.5 litres

Self-sealing fuel tank (from s/n 0250)

Fuel tank capacity: 701.0 litres

Usable fuel: 691.6 litres

7.2 Oil

Refer to approved RFM

7.3 Coolant System Capacity

n/a

8. Air Speed Limitations

V_{NE} : 155 KIAS at MSL

Refer to approved RFM for reduction in V_{NE} with altitude and other speed limitations.

9. Rotor Speed Limitations

Power on:

Maximum 104 %

Minimum 97 %

Power off:

Maximum 106 %

Minimum	80 % (up to 1 900 kg)
Minimum	85 % (above 1 900 kg)
Transient:	Refer to approved RFM

10. Maximum Operating Altitude and Temperature

10.1 Altitude

20 000 ft (6 096 m) PA, refer to approved RFM for variation according to MTOW

10.2 Temperature

Refer to approved RFM

11. Operating Limitations

VFR day and night

Non-icing conditions

For IFR, Category A operation, see additional equipment requirements and limitations in the relevant approved RFMS

For Ditching, see Note 3

12. Maximum Mass

2 835 kg

13. Centre of Gravity Range

Longitudinal C.G. limits

maximum forward limit:

4 180 mm aft of DP at 1 840 kg

4 224 mm aft of DP at 2 835 kg

maximum rearward limit:

4 570 mm aft of DP at 1 500 kg

4 369 mm aft of DP at 2 835 kg

Lateral C.G Limits

maximum deviation on right / left: 100 mm

14. Datum

Longitudinal: the datum plane (STA 0) is located at 2 160 mm forward of the levelling point in the front door frame

Lateral: fuselage median plane

15. Levelling Means

See levelling procedure document No. L082M0801X01

16. Minimum Flight Crew

1 pilot (right seat)

17. Maximum Passenger Seating Capacity

1 cockpit, 6 cabin (or 7, if the kit described in RFMS 9.2-31 is installed and operated)

18. Passenger Emergency Exit

2, one on each side of the passenger cabin

19. Maximum Baggage/ Cargo Loads

Cargo floor max load: 1 130 kg

Cargo floor max unit load: 600 kg/m²

20. Rotor Blade Control Movement

For rigging information refer to EC135 Aircraft Maintenance Manual

21. Auxiliary Power Unit (APU)

n/a

22. Life-limited Parts

See approved ALS Chapter 4 of the EC135 Master Servicing Manual

IV. Operating and Service Instructions**1. Flight Manual**

EC135 P2(CPDS), initially LBA-approved, dated 10 July 2001, or later approved revisions, including the supplements for Special Operations RFMS 9.1 and Optional Equipment RFMS 9.2.

2. Maintenance Manual

- EC135 Master Servicing Manual
- EC135 Aircraft Maintenance Manual
- Wiring Diagram Manual, latest revision
- Engine documents as per Engine TCDS No.EASA.IM.E.017

3. Structural Repair Manual

EC135 Structural Repair Manual

4. Weight and Balance Manual

Refer to approved RFM

5. Illustrated Parts Catalogue

EC135 Illustrated Parts Catalogue

6. Service Letters and Service Bulletins

Safety Information Notice (from October 2008 onwards, before: Alert Service Information), Information Notice (from October 2008 onwards, before: Service Information), Alert Service Bulletin, Service Bulletin Repair Design Approval Sheets

7. Required Equipment

Special equipment and kits necessary for intended kind of operations as defined in the approved Flight Manual Supplements RFMS 9.2, are permissible.

V. Operational Suitability Data

The OSD elements listed below were approved by the European Union Aviation Safety Agency (EASA) as per Commission Regulation (EU) 748/2012, as amended by Commission Regulation (EU) No 69/2014.

Future revisions will be approved by the UK CAA in accordance with Regulation (EU) No. 748/2012 as retained (and amended in UK domestic law) under the European Union (Withdrawal) Act 2018 and amended by the Aviation Safety (Amendment etc.) (EU Exit) Regulations 2019.

1. Master Minimum Equipment List (MMEL)

MMEL document Revision 0, approved on 18 October 2011, or later approved revision.

2. light Crew Data

Flight Crew Operational Suitability Data as per document OSD_L0000M403901 first Issue, EASA approval date 15 October 2015, or later approved revisions.

- Appendix 2: "Operator Difference Requirements (ODR) Tables & Master Difference Requirements (MDR) Table" to the EASA Operational Suitability Data (OSD) – Flight Crew – EC135 Family, EASA approval date 15 October 2015, or later approved revisions.

- Appendix 3: "OSD EC135 Family – EASA OPS – Instruments and Equipment", to the EASA Operational Suitability Data (OSD) – Flight Crew – EC135 Family, EASA approval date 15 October 2015, or later approved revisions.

3. SIM Data

Reserved.

4. Maintenance Certifying Staff Data

Reserved.

VI. Notes

1. Manufacturer's eligible serial numbers:
 - 1.1 s/n 0189, and subsequent.
 - 1.2 any EC135 P1(CPDS) that has been upgraded to EC135 P2(CPDS) according to SB EC135-71-017.
 - 1.3 s/n 165 that has been upgraded to EC135 P2(CPDS) in accordance with SB EC135-71-022.

2. Night Vision Goggles Operational Capability:

Night Vision Goggles aided operations are permitted according to Rotorcraft Flight Manual Supplement RFMS 9.2-86 in conjunction with a serial number specific Flight Manual Appendix FMA 11-x, when the rotorcraft is equipped accordingly, and a competent authority has granted operational authorisation only. The helicopter configuration containing NVIS lighting components approved for the use with Night Vision Goggles is described in a serial number specific AHD NVIS Substantiation Report for operators having received an approval for their NVIS configuration.

3. The emergency floatation system in accordance with RFMS 9.2-67, is certified as ditching provision in accordance with JAR-27.

The helicopter may be certificated for ditching provided the following additional equipment are fitted and approved in accordance with the relevant airworthiness requirements:

- survival type emergency locator transmitter
- life raft installation
- life preserver.

Section 4 EC135 P2+**I. General****1. Type/ Model/ Variant**

- | | | |
|-----|---------|-----------|
| 1.1 | Type | EC135 |
| 1.2 | Model | EC135 P2+ |
| 1.3 | Variant | |

2. Airworthiness Category

Small Rotorcraft

3. Type Certificate Holder

Airbus Helicopters Deutschland GmbH
 Industriestrasse 4
 D-86609 Donauwörth, Germany

4. Manufacturer

See Section 21 Administration, subsection II.3 Production Organisation Approval Holder

5. Type Certification Application Date

8 Feb 2005

6. State of Design Authority

European Union Aviation Safety Agency (EASA)

7. EASA Type Certification Date

21 February 2006

II. Certification Basis**1. Reference Date for determining the applicable requirements**

For Airworthiness and Environmental Protection: 8 Feb 2005

For OSD elements, Grandfathering date: 17 February 2014

2. Airworthiness Requirements

- JAR-27, Issue 1, dated 6 September 1993
- For IFR Certification: JAR-27 Appendix B, Issue 1, dated 6 September 1993
- Category A Engine Isolation Requirements of JAR-29, Issue 1, dated 5 November 1993.

Applicable paragraphs, selected from Appendix C to JAR-27, are:

29.861 (a)	Fire Protection of Structure, controls, and other parts
29.901 (c)	Powerplant: Installation
29.903 (b),(c),(e)	Engines
29.908 (a)	Cooling fans
29.917 (b),(c)(1)	Rotor Drive System: Design
29.927 (c)(1)	Additional tests
29.953 (a)	Fuel system independence
29.1027 (a)	Transmission and gearboxes
29.1045 (a)(1),(b),(c),(d),(f)	Climb cooling test procedures
29.1047 (a)	Take-off cooling test procedures
29.1181 (a)	Designated fire zones: regions included
29.1189 (c)	Shutoff means

29.1191 (a)(1)	Firewalls
29.1193 (e)	Cowling and engine compartment covering
29.1305 (a)(6),(b)	Powerplant instruments
29.1309 (b)(2)(i),(d)	Equipment, systems and installations
29.1331 (b)	Instruments using power supply
29.1351 (d)(2)	Electrical systems and equipment: General

- For CAT A Certification: JAR 27 Appendix C, Issue 1, dated 6 September 1993
- JAA Interim HIRF Policy (INT/POL/278.29-1, dated 1 June 1997) applies for:
 - Dual Pilot IFR certification with 3-axis SAS, Pitch-Damper and Avionique Nouvelle CPDS and FCDS
 - Single Pilot/ Dual Pilot IFR certification with AFCS and Avionique Nouvelle CPDS and FCDS
- CS 27.1 (a) in connection with CS 27.2 (b)(2)(i).
- CS 27.25 (a) (1) and CS 27.143 (c)(1), Amdt. 2; the provisions of CS 27.143 (c)(1) are demonstrated as a function of altitude and temperature:
AHD is taking advantage of this possibility which is being provided from Amdt. 1 of CS-27 and later.

3. Special Conditions

- No. SC 1 "Primary Structures Designed with Composite Material"
- No. SC 2 "Protection for Electrical and Electronic Systems from High Intensity Radiated Fields"; this Special Condition applies only for VFR and IFR certification with conventional instruments and for VFR certification with EFIS EFS 40.
- No. SC 3 "Electronic Flight Instrument Systems"
- No. SC 4 "Protection of air intake of EC135 against ingestion of foreign objects (Rain and Hail/Bird strike)"

4. Exemptions

None

5. Deviations

None

6. Equivalent Safety Findings

- Dual Pilot IFR certification concerning JAR 27 Appendix B, Para. IV (c) "Static Longitudinal Stability"
- JAR 27.1549(b) related to the installation of the Vehicle and Engine Multifunction Display (VEMD) in the CPDS variants.
- CS 27.865 (c) related to dual activation device for the Primary Quick Release Subsystem (Cyclic Stick) for the Double Cargo Hook System
- CS 27.601, 27.603, 27.865 (a) for Hoist Installation on Helicopters

7. Requirements elected to comply

None.

8. Environmental Protection Requirements

8.1 Noise Requirements

see TCDSN UK.TC.R.00064

8.2 Emission Requirements

n/a

9 Operational Suitability Data (OSD)

9.1 Master Minimum Equipment List (MMEL)

JAR-MMEL/MEL Section 1, Amdt. 1

CS-MMEL, Initial Issue, dated 31 January 2014, for the changes in Rev. 5

9.2 Flight Crew Data (FCD)

CS-FCD, Initial Issue, dated 31 January 2014

9.3 Simulation Data (SIMD)

Reserved.

9.4 Maintenance Certifying Staff Data (MCSD)

Reserved.

III. Technical Characteristics and Operational Limitations

1. Type Design Definition

- EC135 Basic Master List Drawing No. L000M0007051
- Drawing of EC135 P2(CPDS) + L000M0022051 and following modifications

2. Description

Main rotor: bearingless, 4 blades
 Tail rotor: Fenestron, 10 blades
 Fuselage: metal-composite structure
 Landing gear: skid-type
 Powerplant: 2 independent freewheel turbines

3. Equipment

Basic equipment must be installed and operational prior to registration of the helicopter.

4. Dimensions

4.1 Fuselage

Length: 5.87 m
 Width hull: 1.56 m
 Height: 3.35 m

4.2 Main Rotor

Diameter: 10.20 m

4.3 Tail Rotor

Diameter: 1.00 m

5. Engine

5.1 Model

Pratt & Whitney Canada
 2 x Model PW 206B2

5.2 Type Certificate

TCCA TC/TCDS n°: E-23
 CAA TC/TCDS n°: EASA.IM.E.017

5.3 Limitations

5.3.1 Installed Engine Limitations and Transmission Torque Limits

	TQ limits [%]	Gas generator [rpm (%)]	PWR turbine [rpm (%)]	Temperature TOT [°C]
AEO-TOP (5 min)	2 x 78	57 250 (98.7)	104	869
AEO-MCP	2 x 69	56 500 (97.4)	104	835
30 sec OEI-TOP	1 x 128	60 500 (104.3)	104	990
2 min OEI-TOP	1 x 125	59 500 (102.6)	104	950
OEI-MCP	1 x 89.5	58 250 (100.4)	104	900

6. Fluids

6.1 Fuel

Refer to approved RFM

6.2 Oil

Refer to approved RFM

6.3 Additives

Refer to approved RFM

7. Fluid capacities

7.1 Fuel

Standard fuel tank (up to s/n 0249)

Fuel tank capacity: 680.0 litres

Usable fuel: 670.5 litres

Self-sealing fuel tank (up to s/n 0249)

Fuel tank capacity: 673.4 litres

Usable fuel: 664.0 litres

Modified fuel tank (from s/n 0250, or SB EC135-28-007)

Fuel tank capacity: 710.0 litres

Usable fuel: 700.5 litres

Self-sealing fuel tank (from s/n 0250)

Fuel tank capacity: 701.0 litres

Usable fuel: 691.6 litres

7.2 Oil

Refer to approved RFM

7.3 Coolant System Capacity

n/a

8. Air Speed Limitations

V_{NE} : 155 KIAS at MSL

Refer to approved RFM for reduction in V_{NE} with altitude and other speed limitations.

9. Rotor Speed Limitations

Power on:

Maximum	104 %
Minimum	97 %

Power off:

Maximum	106 %
Minimum	80 % (up to 1 900 kg)
Minimum	85 % (above 1 900 kg)
Transient:	Refer to approved RFM

10. Maximum Operating Altitude and Temperature

10.1 Altitude

20 000 ft (6 096 m) PA, refer to approved RFM for variation according to MTOW

10.2 Temperature

Refer to approved RFM

11. Operating Limitations

VFR day and night

Non-icing conditions

For IFR, Category A operation, see additional equipment requirements and limitations in the relevant approved RFMS

For Ditching, see Note 3

12. Maximum Mass

2 910 kg

Note: Operation of the aircraft with MTOW up to 2 950 kg is only permitted in accordance with RFMS 9.1-5, RFMS 9.1-6 and RFMS 9.1-7 from s/n 1055 and subsequent or after SB EC135-62-028.

13. Centre of Gravity Range

Longitudinal C.G. limits

maximum forward limit:

4 180 mm aft of DP at 1 840 kg
4 227.3 mm aft of DP at 2 910 kg
4 229.3 mm aft of DP at 2 950 kg

maximum rearward limit:

4 570 mm aft of DP at 1 500 kg
4 369.0 mm aft of DP at 2 910 kg
4 362.6 mm aft of DP at 2 950 kg

Lateral C.G Limits

maximum deviation on right / left: 100 mm

14. Datum

Longitudinal: the datum plane (STA 0) is located at 2 160 mm forward of the levelling point in the front door frame

Lateral: fuselage median plane

15. Levelling Means

See levelling procedure document No. L082M0801X01

16. Minimum Flight Crew

1 pilot (right seat)

17. Maximum Passenger Seating Capacity

1 cockpit, 6 cabin (or 7, if the kit described in RFMS 9.2-31 is installed and operated)

18. Passenger Emergency Exit

2, one on each side of the passenger cabin

19. Maximum Baggage/ Cargo Loads

Cargo floor max load: 1 130 kg

Cargo floor max unit load: 600 kg/m²

20. Rotor Blade Control Movement

For rigging information refer to EC135 Aircraft Maintenance Manual

21. Auxiliary Power Unit (APU)

n/a

22. Life-limited Parts

See approved ALS Chapter 4 of the EC135 Master Servicing Manual

IV. Operating and Service Instructions

1. Flight Manual

EC135 P2+, initially EASA approved, dated 21 February 2006, or later approved revisions, including the supplements for Special Operations RFMS 9.1 and Optional Equipment RFMS 9.2.

2. Maintenance Manual

- EC135 Master Servicing Manual
- EC135 Aircraft Maintenance Manual
- Wiring Diagram Manual, latest revision
- Engine documents as per Engine TCDS No.EASA.IM.E.017

3. Structural Repair Manual

EC135 Structural Repair Manual

4. Weight and Balance Manual

Refer to approved RFM

5. Illustrated Parts Catalogue

EC135 Illustrated Parts Catalogue

6. Service Letters and Service Bulletins

Safety Information Notice (from October 2008 onwards, before: Alert Service Information), Information Notice (from October 2008 onwards, before: Service Information), Alert Service Bulletin, Service Bulletin Repair Design Approval Sheets

7. Required Equipment

Special equipment and kits necessary for intended kind of operations as defined in the approved Flight Manual Supplements RFMS 9.2, are permissible.

V. Operational Suitability Data

The OSD elements listed below were approved by the European Union Aviation Safety Agency (EASA) as per Commission Regulation (EU) 748/2012, as amended by Commission Regulation (EU) No 69/2014.

Future revisions will be approved by the UK CAA in accordance with Regulation (EU) No. 748/2012 as retained (and amended in UK domestic law) under the European Union (Withdrawal) Act 2018 and amended by the Aviation Safety (Amendment etc.) (EU Exit) Regulations 2019.

1. Master Minimum Equipment List (MMEL)

MMEL document Revision 0, approved on 18 October 2011, or later approved revision.

2. Flight Crew Data

Flight Crew Operational Suitability Data as per document OSD_L0000M403901 first Issue, EASA approval date 15 October 2015, or later approved revisions.

- Appendix 2: "Operator Difference Requirements (ODR) Tables & Master Difference Requirements (MDR) Table" to the EASA Operational Suitability Data (OSD) – Flight Crew – EC135 Family, EASA approval date 15 October 2015, or later approved revisions.

- Appendix 3: "OSD EC135 Family – EASA OPS – Instruments and Equipment", to the EASA Operational Suitability Data (OSD) – Flight Crew – EC135 Family, EASA approval date 15 October 2015, or later approved revisions.

3. SIM Data

Reserved.

4. Maintenance Certifying Staff Data

Reserved.

VI. Notes

1. Manufacturer's eligible serial numbers:
 - 1.1 s/n 0505, and subsequent.
 - 1.2 any EC135 P2(CPDS) that has been upgraded to EC135 P2+ according to SB EC135-71-033.
2. Night Vision Goggles Operational Capability:

Night Vision Goggles aided operations are permitted according to Rotorcraft Flight Manual Supplement RFMS 9.2-86 in conjunction with a serial number specific Flight Manual Appendix FMA 11-x, when the rotorcraft is equipped accordingly, and a competent authority has granted operational authorisation only. The helicopter configuration containing NVIS lighting components approved for the use with Night Vision Goggles is described in a serial number specific AHD NVIS Substantiation Report for operators having received an approval for their NVIS configuration.

3. The emergency floatation system in accordance with RFMS 9.2-67, is certified as ditching provision in accordance with JAR-27.

The helicopter may be certificated for ditching provided the following additional equipment are fitted and approved in accordance with the relevant airworthiness requirements:

- survival type emergency locator transmitter
- life raft installation
- life preserver.

Section 5 EC635 P2+**I. General****1. Type/ Model/ Variant**

- | | | |
|-----|---------|-----------|
| 1.1 | Type | EC135 |
| 1.2 | Model | EC635 P2+ |
| 1.3 | Variant | |

2. Airworthiness Category

Small Rotorcraft

3. Type Certificate Holder

Airbus Helicopters Deutschland GmbH
Industriestrasse 4
D-86609 Donauwörth, Germany

4. Manufacturer

See Section 21 Administration, subsection II.3 Production Organisation Approval Holder

5. Type Certification Application Date

17 July 2006

6. State of Design Authority

European Union Aviation Safety Agency (EASA)

7. EASA Type Certification Date

6 December 2006

II. Certification Basis**1. Reference Date for determining the applicable requirements**

For Airworthiness and Environmental Protection: 17 July 2006

For OSD elements, Grandfathering date: 17 February 2014

2. Airworthiness Requirements

- JAR-27, Issue 1, dated 6 September 1993
- For IFR Certification: JAR-27 Appendix B, Issue 1, dated 6 September 1993
- Category A Engine Isolation Requirements of JAR-29, Issue 1, dated 5 November 1993.

Applicable paragraphs, selected from Appendix C to JAR-27, are:

29.861 (a)	Fire Protection of Structure, controls, and other parts
29.901 (c)	Powerplant: Installation
29.903 (b),(c),(e)	Engines
29.908 (a)	Cooling fans
29.917 (b),(c)(1)	Rotor Drive System: Design
29.927 (c)(1)	Additional tests
29.953 (a)	Fuel system independence
29.1027 (a)	Transmission and gearboxes
29.1045 (a)(1),(b),(c),(d),(f)	Climb cooling test procedures
29.1047 (a)	Take-off cooling test procedures
29.1181 (a)	Designated fire zones: regions included

29.1189 (c)	Shutoff means
29.1191 (a)(1)	Firewalls
29.1193 (e)	Cowling and engine compartment covering
29.1305 (a)(6),(b)	Powerplant instruments
29.1309 (b)(2)(i),(d)	Equipment, systems and installations
29.1331 (b)	Instruments using power supply
29.1351 (d)(2)	Electrical systems and equipment: General

- For CAT A Certification: JAR 27 Appendix C, Issue 1, dated 6 September 1993
- JAA Interim HIRF Policy (INT/POL/278.29-1, dated 1 June 1997) applies for:
 - Dual Pilot IFR certification with 3-axis SAS, Pitch-Damper and Avionique Nouvelle CPDS and FCDS
 - Single Pilot/ Dual Pilot IFR certification with AFCS and Avionique Nouvelle CPDS and FCDS
- CS 27.1 (a) in connection with CS 27.2 (b)(2)(i).
- CS 27.25 (a) (1) and CS 27.143 (c)(1), Amdt. 2; the provisions of CS 27.143 (c)(1) are demonstrated as a function of altitude and temperature:

AHD is taking advantage of this possibility which is being provided from Amdt. 1 of CS-27 and later.

3. Special Conditions

- No. SC 1 "Primary Structures Designed with Composite Material"
- No. SC 2 "Protection for Electrical and Electronic Systems from High Intensity Radiated Fields"; this Special Condition applies only for VFR and IFR certification with conventional instruments and for VFR certification with EFIS EFS 40.
- No. SC 3 "Electronic Flight Instrument Systems"
- No. SC 4 "Protection of air intake of EC135 against ingestion of foreign objects (Rain and Hail/Bird strike)"

4. Exemptions

None

5. Deviations

None

6. Equivalent Safety Findings

- Dual Pilot IFR certification concerning JAR 27 Appendix B, Para. IV (c) "Static Longitudinal Stability"
- JAR 27.1549(b) related to the installation of the Vehicle and Engine Multifunction Display (VEMD) in the CPDS variants.
- CS 27.865 (c) related to dual activation device for the Primary Quick Release Subsystem (Cyclic Stick) for the Double Cargo Hook System
- CS 27.601, 27.603, 27.865 (a) for Hoist Installation on Helicopters

7. Requirements elected to comply

None.

8. Environmental Protection Requirements

8.1 Noise Requirements

see TCDSN UK.TC.R.00064

8.2 Emission Requirements

n/a

9. Operational Suitability Data (OSD)

9.1 Master Minimum Equipment List (MMEL)

JAR-MMEL/MEL Section 1, Amdt. 1

CS-MMEL, Initial Issue, dated 31 January 2014, for the changes in Rev. 5

9.2 Flight Crew Data (FCD)

CS-FCD, Initial Issue, dated 31 January 2014

9.3 Simulation Data (SIMD)

Reserved.

9.4 Maintenance Certifying Staff Data (MCSD)

Reserved.

III. Technical Characteristics and Operational Limitations

1. Type Design Definition

- EC135 Basic Master List Drawing No. L000M0007051
- Drawing of EC135 P2(CPDS) + L000M0022051 and following modifications
- EC635 Kit (Drawing No. W533M1700051)

2. Description

Main rotor: bearingless, 4 blades

Tail rotor: Fenestron, 10 blades

Fuselage: metal-composite structure

Landing gear: skid-type

Powerplant: 2 independent freewheel turbines

Note: Note: The variant EC635 P2+ corresponds to the EC135 P2+ plus structural reinforcement of cabin structure according to the drawing W533M1700051

3. Equipment

Basic equipment must be installed and operational prior to registration of the helicopter.

4. Dimensions

4.1 Fuselage

Length: 5.87 m

Width hull: 1.56 m

Height: 3.35 m

4.2 Main Rotor

Diameter: 10.20 m

4.3 Tail Rotor

Diameter: 1.00 m

5. Engine

5.1 Model

Pratt & Whitney Canada

2 x Model PW 206B2

5.2 Type Certificate

TCCA TC/TCDS n°: E-23

CAA TC/TCDS n°: EASA.IM.E.017

5.3 Limitations

5.3.1 Installed Engine Limitations and Transmission Torque Limits

	TQ limits [%]	Gas generator [rpm (%)]	PWR turbine [rpm (%)]	Temperature TOT [°C]
AEO-TOP (5 min)	2 x 78	57 250 (98.7)	104	869
AEO-MCP	2 x 69	56 500 (97.4)	104	835
30 sec OEI-TOP	1 x 128	60 500 (104.3)	104	990
2 min OEI-TOP	1 x 125	59 500 (102.6)	104	950
OEI-MCP	1 x 89.5	58 250 (100.4)	104	900

6. Fluids**6.1 Fuel**

Refer to approved RFM

6.2 Oil

Refer to approved RFM

6.3 Additives

Refer to approved RFM

7. Fluid capacities**7.1 Fuel**

Standard fuel tank (up to s/n 0249)

Fuel tank capacity: 680.0 litres

Usable fuel: 670.5 litres

Self-sealing fuel tank (up to s/n 0249)

Fuel tank capacity: 673.4 litres

Usable fuel: 664.0 litres

Modified fuel tank (from s/n 0250, or SB EC135-28-007)

Fuel tank capacity: 710.0 litres

Usable fuel: 700.5 litres

Self-sealing fuel tank (from s/n 0250)

Fuel tank capacity: 701.0 litres

Usable fuel: 691.6 litres

7.2 Oil

Refer to approved RFM

7.3 Coolant System Capacity

n/a

8. Air Speed Limitations

V_{NE} : 155 KIAS at MSL

Refer to approved RFM for reduction in V_{NE} with altitude and other speed limitations.

9. Rotor Speed Limitations

Power on:

Maximum	104 %
Minimum	97 %

Power off:

Maximum	106 %
Minimum	80 % (up to 1 900 kg)
Minimum	85 % (above 1 900 kg)
Transient:	Refer to approved RFM

10. Maximum Operating Altitude and Temperature**10.1 Altitude**

20 000 ft (6 096 m) PA, refer to approved RFM for variation according to MTOW

10.2 Temperature

Refer to approved RFM

11. Operating Limitations

VFR day and night

Non-icing conditions

For IFR, Category A operation, see additional equipment requirements and limitations in the relevant approved RFMS

For Ditching, see Note 3

12. Maximum Mass

2 910 kg

Note: Operation of the aircraft with MTOW up to 2 950 kg is only permitted in accordance with RFMS 9.1-5, RFMS 9.1-6 and RFMS 9.1-7 from s/n 1055 and subsequent or after SB EC135-62-028.

13. Centre of Gravity Range

Longitudinal C.G. limits

maximum forward limit:

4 180 mm aft of DP at 1 840 kg
4 227.3 mm aft of DP at 2 910 kg
4 229.3 mm aft of DP at 2 950 kg

maximum rearward limit:

4 570 mm aft of DP at 1 500 kg
4 369.0 mm aft of DP at 2 910 kg
4 362.6 mm aft of DP at 2 950 kg

Lateral C.G Limits

maximum deviation on right / left: 100 mm

14. Datum

Longitudinal: the datum plane (STA 0) is located at 2 160 mm forward of the levelling point in the front door frame

Lateral: fuselage median plane

15. Levelling Means

See levelling procedure document No. L082M0801X01

16. Minimum Flight Crew

1 pilot (right seat)

17. Maximum Passenger Seating Capacity

1 cockpit, 6 cabin (or 7, if the kit described in RFMS 9.2-31 is installed and operated)

18. Passenger Emergency Exit

2, one on each side of the passenger cabin

19. Maximum Baggage/ Cargo Loads

Cargo floor max load: 1 130 kg

Cargo floor max unit load: 600 kg/m²

20. Rotor Blade Control Movement

For rigging information refer to EC135 Aircraft Maintenance Manual

21. Auxiliary Power Unit (APU)

n/a

22. Life-limited Parts

See approved ALS Chapter 4 of the EC135 Master Servicing Manual

IV. Operating and Service Instructions

1. Flight Manual

EC135 P2+, initially EASA approved, dated 6 December 2006, or later approved revisions, including the supplements for Special Operations RFMS 9.1 and Optional Equipment RFMS 9.2.

2. Maintenance Manual

- EC135 Master Servicing Manual
- EC135 Aircraft Maintenance Manual
- Wiring Diagram Manual, latest revision
- Engine documents as per Engine TCDS No.EASA.IM.E.017

3. Structural Repair Manual

EC135 Structural Repair Manual

4. Weight and Balance Manual

Refer to approved RFM

5. Illustrated Parts Catalogue

EC135 Illustrated Parts Catalogue

6. Service Letters and Service Bulletins

Safety Information Notice (from October 2008 onwards, before: Alert Service Information), Information Notice (from October 2008 onwards, before: Service Information), Alert Service Bulletin, Service Bulletin Repair Design Approval Sheets

7. Required Equipment

Special equipment and kits necessary for intended kind of operations as defined in the approved Flight Manual Supplements RFMS 9.2, are permissible.

V. Operational Suitability Data

The OSD elements listed below were approved by the European Union Aviation Safety Agency (EASA) as per Commission Regulation (EU) 748/2012, as amended by Commission Regulation (EU) No 69/2014.

Future revisions will be approved by the UK CAA in accordance with Regulation (EU) No. 748/2012 as retained (and amended in UK domestic law) under the European Union (Withdrawal) Act 2018 and amended by the Aviation Safety (Amendment etc.) (EU Exit) Regulations 2019.

1. Master Minimum Equipment List (MMEL)

MMEL document Revision 0, approved on 18 October 2011, or later approved revision.

2. Flight Crew Data

Flight Crew Operational Suitability Data as per document OSD_L0000M403901 first Issue, EASA approval date 15 October 2015, or later approved revisions.

- Appendix 2: "Operator Difference Requirements (ODR) Tables & Master Difference Requirements (MDR) Table" to the EASA Operational Suitability Data (OSD) – Flight Crew – EC135 Family, EASA approval date 15 October 2015, or later approved revisions.

- Appendix 3: "OSD EC135 Family – EASA OPS – Instruments and Equipment", to the EASA Operational Suitability Data (OSD) – Flight Crew – EC135 Family, EASA approval date 15 October 2015, or later approved revisions.

3. **SIM Data**

Reserved.

4. **Maintenance Certifying Staff Data**

Reserved.

VI. **Notes**

1. Manufacturer's eligible serial numbers:

1.1 s/n 0505, and subsequent.

1.2 any EC135 P2(CPDS) that has been upgraded to EC135 P2+ according to SB EC135-71-033.

2. Night Vision Goggles Operational Capability:

Night Vision Goggles aided operations are permitted according to Rotorcraft Flight Manual Supplement RFMS 9.2-86 in conjunction with a serial number specific Flight Manual Appendix FMA 11-x, when the rotorcraft is equipped accordingly, and a competent authority has granted operational authorisation only. The helicopter configuration containing NVIS lighting components approved for the use with Night Vision Goggles is described in a serial number specific AHD NVIS Substantiation Report for operators having received an approval for their NVIS configuration.

3. The emergency floatation system in accordance with RFMS 9.2-67, is certified as ditching provision in accordance with JAR-27.

The helicopter may be certificated for ditching provided the following additional equipment are fitted and approved in accordance with the relevant airworthiness requirements:

- survival type emergency locator transmitter
- life raft installation
- life preserver.

Section 6 EC135 P3(CPDS)**I. General****1. Type/ Model/ Variant**

- | | | |
|-----|---------|----------------|
| 1.1 | Type | EC135 |
| 1.2 | Model | EC135 P3 |
| 1.3 | Variant | EC135 P3(CPDS) |

2. Airworthiness Category

Small Rotorcraft

3. Type Certificate Holder

Airbus Helicopters Deutschland GmbH
 Industriestrasse 4
 D-86609 Donauwörth, Germany

4. Manufacturer

See Section 21 Administration, subsection II.3 Production Organisation Approval Holder

5. Type Certification Application Date

4 July 2014

6. State of Design Authority

European Union Aviation Safety Agency (EASA)

7. EASA Type Certification Date

18 March 2015

II. Certification Basis**1. Reference Date for determining the applicable requirements**

For Airworthiness and Environmental Protection: 4 July 2014

For OSD elements, Grandfathering date: 17 February 2014

2. Airworthiness Requirements

- JAR-27, Issue 1, dated 6 September 1993, supplemented by the following CS-27 Amdt. 2 requirements:
 CS 27.1 (a) in connection with CS 27.2(b)(2)(i).

CS 27.0021	CS 27.0161	CS 27.0341	CS 27.0607	CS 27.0771	CS 27.1193	CS 27.1521
CS 27.0025	CS 27.0171	CS 27.0351	CS 27.0609	CS 27.0853	CS 27.1301	CS 27.1525
CS 27.0027	CS 27.0173	CS 27.0361	CS 27.0610	CS 27.0865	CS 27.1305	CS 27.1527
CS 27.0029	CS 27.0175	CS 27.0391	CS 27.0611	CS 27.0901	CS 27.1309	CS 27.1529
CS 27.0031	CS 27.0177	CS 27.0427	CS 27.0613	CS 27.0903	CS 27.1321	CS 27.1541
CS 27.0033	CS 27.0231	CS 27.0471	CS 27.0629	CS 27.0907	CS 27.1323	CS 27.1545
CS 27.0045	CS 27.0241	CS 27.0473	CS 27.0653	CS 27.0931	CS 27.1329	CS 27.1549
CS 27.0049	CS 27.0251	CS 27.0501	CS 27.0659	CS 27.0939	CS 27.1351	CS 27.1559
CS 27.0051	CS 27.0301	CS 27.0521	CS 27.0661	CS 27.1041	CS 27.1365	CS 27.1581
CS 27.0065	CS 27.0303	CS 27.0547	CS 27.0663	CS 27.1043	CS 27.1381	CS 27.1583
CS 27.0067	CS 27.0305	CS 27.0549	CS 27.0671	CS 27.1045	CS 27.1435	
CS 27.0075	CS 27.0307	CS 27.0561	CS 27.0672	CS 27.1091	CS 27.1501	

CS 27.0079	CS 27.0309	CS 27.0571	CS 27.0681	CS 27.1093	CS 27.1503
CS 27.0141	CS 27.0321	CS 27.0601	CS 27.0683	CS 27.1141	CS 27.1505
CS 27.0143	CS 27.0337	CS 27.0602	CS 27.0691	CS 27.1143	CS 27.1509
CS 27.0151	CS 27.0339	CS 27.0603	CS 27.0695	CS 27.1187	CS 27.1519

- For IFR Certification: CS 27 Amdt 2, Appendix B, Issue 1, dated 10 November 2008
- Category A Engine Isolation Requirements of JAR-29, Issue 1, dated 5 November 1993.

Applicable paragraphs, selected from Appendix C to JAR-27, are:

29.861 (a)	Fire Protection of Structure, controls, and other parts
29.901 (c)	Powerplant: Installation
29.903 (b),(c),(e)	Engines
29.908 (a)	Cooling fans
29.917 (b),(c)(1)	Rotor Drive System: Design
29.927 (c)(1)	Additional tests
29.953 (a)	Fuel system independence
29.1027 (a)	Transmission and gearboxes
29.1045 (a)(1),(b),(c),(d),(f)	Climb cooling test procedures
29.1047 (a)	Take-off cooling test procedures
29.1181 (a)	Designated fire zones: regions included
29.1189 (c)	Shutoff means
29.1191 (a)(1)	Firewalls
29.1193 (e)	Cowling and engine compartment covering
29.1305 (a)(6),(b)	Powerplant instruments
29.1309 (b)(2)(i),(d)	Equipment, systems and installations
29.1331 (b)	Instruments using power supply
29.1351 (d)(2)	Electrical systems and equipment: General

- For CAT A Certification: CS 27 Amdt 2, Appendix C, requirements

3. Special Conditions

- No. SC 1 "Primary Structures Designed with Composite Material"
- No. SC 3 "Electronic Flight Instrument Systems"

4. Exemptions

None

5. Deviations

None

6. Equivalent Safety Findings

- JAR 27.1549(b) related to the installation of the Vehicle and Engine Multifunction Display (VEMD) in the CPDS variants.
- CS 27.865 (c) related to dual activation device for the Primary Quick Release Subsystem (Cyclic Stick) for the Double Cargo Hook System

- CS 27.1557(d) related to safety enhanced colour scheme ('black&yellow' in place of 'red') for the emergency exit handle cap
- CS 27.571, 27.602 (b), 27.865 (f) for Hoist Installation on Helicopters
- CS 27.601, 27.603, 27.865 (a) for Hoist Installation on Helicopters

7. Requirements elected to comply

None.

8. Environmental Protection Requirements

8.1 Noise Requirements

see TCDSN UK.TC.R.00064

8.2 Emission Requirements

ICAO Annex 16, Volume II, Part II, Chapter 2, (CS-34, Initial Issue)

9 Operational Suitability Data (OSD)

9.1 Master Minimum Equipment List (MMEL)

JAR-MMEL/MEL Section 1, Amdt. 1

CS-MMEL, Initial Issue, dated 31 January 2014, for the changes in Rev. 5

9.2 Flight Crew Data (FCD)

CS-FCD, Initial Issue, dated 31 January 2014

9.3 Simulation Data (SIMD)

Reserved.

9.4 Maintenance Certifying Staff Data (MCSD)

Reserved.

III. Technical Characteristics and Operational Limitations

1. Type Design Definition

- TDD L0000M333300, Issue A

2. Description

Main rotor: bearingless, 4 blades
 Tail rotor: Fenestron, 10 blades
 Fuselage: metal-composite structure
 Landing gear: skid-type
 Powerplant: 2 independent freewheel turbines

3. Equipment

Basic equipment must be installed and operational prior to registration of the helicopter.

4. Dimensions

4.1 Fuselage

Length: 5.87 m
 Width hull: 1.56 m
 Height: 3.35 m

4.2 Main Rotor

Diameter: 10.40 m

4.3 Tail Rotor

Diameter: 1.00 m

5. Engine**5.1 Model**

Pratt & Whitney Canada

2 x Model PW 206B3

5.2 Type Certificate

TCCA TC/TCDS n°: E-23

CAA TC/TCDS n°: EASA.IM.E.017

5.3 Limitations**5.3.1 Installed Engine Limitations and Transmission Torque Limits**

	TQ limits [%]	Max N1 speed (Gas generator) [%]	PWR turbine [rpm (%)]	Temperature TOT [°C]
AEO-TOP (5 min)	2 x 78	99.8	105.5	900
AEO-MCP	2 x 69	97.4	105.5	835
30 sec OEI-TOP	1 x 128	104.3	104.5	990
2 min OEI-TOP	1 x 125	102.6	104.5	950
OEI-MCP	1 x 89.5	99.8	104.5	900

6. Fluids**6.1 Fuel**

Refer to approved RFM

6.2 Oil

Refer to approved RFM

6.3 Additives

Refer to approved RFM

7. Fluid capacities**7.1 Fuel**

Standard fuel tank (up to s/n 0249)

Fuel tank capacity: 680.0 litres

Usable fuel: 670.5 litres

Self-sealing fuel tank (up to s/n 0249)

Fuel tank capacity: 673.4 litres

Usable fuel: 664.0 litres

Modified fuel tank (from s/n 0250, or SB EC135-28-007)

Fuel tank capacity: 710.0 litres

Usable fuel: 700.5 litres

Self-sealing fuel tank (from s/n 0250)

Fuel tank capacity: 701.0 litres

Usable fuel: 691.6 litres

7.2 Oil

Refer to approved RFM

7.3 Coolant System Capacity

n/a

8. Air Speed Limitations

V_{NE} : 150 KIAS at MSL or as shown in the V_{NE} -tables, whichever is less.

Refer to approved RFM for reduction in V_{NE} with altitude and other speed limitations.

9. Rotor Speed Limitations

Power on:

Maximum	105.5 %
Minimum	97 %

Power off:

Maximum	107.5 %
Minimum	80 % (up to 1 900 kg)
Minimum	85 % (above 1 900 kg)
Transient:	Refer to approved RFM

10. Maximum Operating Altitude and Temperature

10.1 Altitude

20 000 ft (6 096 m) PA, refer to approved RFM for variation according to MTOW

10.2 Temperature

Refer to approved RFM

11. Operating Limitations

VFR day and night

Non-icing conditions

For IFR, Category A operation, see additional equipment requirements and limitations in the relevant approved RFMS

For Ditching, see Note 3

12. Maximum Mass

Maximum mass:

Ramp and taxi mass: 3 000 kg

Gross mass: 2 980 kg

Minimum mass:

Gross mass: 1 600 kg

13. Centre of Gravity Range

Longitudinal C.G. limits

maximum forward limit:

4 152 mm aft of DP at 2 039 kg

4 201 mm aft of DP at 2 980 kg

maximum rearward limit:

4 369.0 mm aft of DP at 2 980 kg

4 555 mm aft of DP at 1600 kg

Lateral C.G Limits

maximum deviation on right / left: 100 mm

14. Datum

Longitudinal: the datum plane (STA 0) is located at 2 160 mm forward of the levelling point in the front door frame

Lateral: fuselage median plane

15. Levelling Means

See levelling procedure document No. L082M0801X01

16. Minimum Flight Crew

1 pilot (right seat)

17. Maximum Passenger Seating Capacity

7

18. Passenger Emergency Exit

2, one on each side of the passenger cabin

19. Maximum Baggage/ Cargo Loads

Cargo floor max load: 1 130 kg

Cargo floor max unit load: 600 kg/m²

20. Rotor Blade Control Movement

For rigging information refer to EC135 Aircraft Maintenance Manual

21. Auxiliary Power Unit (APU)

n/a

22. Life-limited Parts

See approved ALS Chapter 4 of the EC135 Master Servicing Manual

IV. Operating and Service Instructions

1. Flight Manual

EC135 P3, initially EASA approved, dated 18 March 2015, or later approved revisions, including the supplements for Special Operations RFMS 9.1 and Optional Equipment RFMS 9.2.

2. Maintenance Manual

- EC135 Master Servicing Manual
- EC135 Aircraft Maintenance Manual
- Wiring Diagram Manual, latest revision
- Engine documents as per Engine TCDS No.EASA.IM.E.017

3. Structural Repair Manual

EC135 Structural Repair Manual

4. Weight and Balance Manual

Refer to approved RFM

5. Illustrated Parts Catalogue

EC135 Illustrated Parts Catalogue

6. Service Letters and Service Bulletins

Safety Information Notice, Information Notice, Alert Service Bulletin, Service Bulletin Repair Design Approval Sheets

7. Required Equipment

Special equipment and kits necessary for intended kind of operations as defined in the approved Flight Manual Supplements RFMS 9.2, are permissible.

V. Operational Suitability Data

The OSD elements listed below were approved by the European Union Aviation Safety Agency (EASA) as per Commission Regulation (EU) 748/2012, as amended by Commission Regulation (EU) No 69/2014.

Future revisions will be approved by the UK CAA in accordance with Regulation (EU) No. 748/2012 as retained (and amended in UK domestic law) under the European Union (Withdrawal) Act 2018 and amended by the Aviation Safety (Amendment etc.) (EU Exit) Regulations 2019.

1. Master Minimum Equipment List (MMEL)

MMEL document Revision 3, approved on 15 October 2014, or later approved revision.

2. Flight Crew Data

Flight Crew Operational Suitability Data as per document OSD_L0000M403901 first Issue, EASA approval date 15 October 2015, or later approved revisions.

- Appendix 2: "Operator Difference Requirements (ODR) Tables & Master Difference Requirements (MDR) Table" to the EASA Operational Suitability Data (OSD) – Flight Crew – EC135 Family, EASA approval date 15 October 2015, or later approved revisions.

- Appendix 3: "OSD EC135 Family – EASA OPS – Instruments and Equipment", to the EASA Operational Suitability Data (OSD) – Flight Crew – EC135 Family, EASA approval date 15 October 2015, or later approved revisions.

3. SIM Data

Reserved.

4. Maintenance Certifying Staff Data

Reserved.

VI. Notes

1. Manufacturer's eligible serial numbers:

1.1 s/n 1178, and subsequent.

1.2 any EC135 P2+ that has been upgraded to EC135 P3(CPDS) according to SB EC135-71-045.

2. Night Vision Goggles Operational Capability:

Night Vision Goggles aided operations are permitted according to Rotorcraft Flight Manual Supplement RFMS 9.2-86 in conjunction with a serial number specific Flight Manual Appendix FMA 11-x, when the rotorcraft is equipped accordingly, and a competent authority has granted operational authorisation only. The helicopter configuration containing NVIS lighting components approved for the use with Night Vision Goggles is described in a serial number specific AHD NVIS Substantiation Report for operators having received an approval for their NVIS configuration.

3. The emergency floatation system in accordance with RFMS 9.2-67, is certified as ditching provision in accordance with JAR-27.

The helicopter may be certificated for ditching provided the following additional equipment are fitted and approved in accordance with the relevant airworthiness requirements:

- survival type emergency locator transmitter
- life raft installation
- life preserver.

4. Designation:

"H135" is used as marketing designation for EC135 P3(CPDS) helicopters.

Section 7 EC635 P3(CPDS)**I. General****1. Type/ Model/ Variant**

- | | | |
|-----|---------|----------------|
| 1.1 | Type | EC135 |
| 1.2 | Model | EC635 P3 |
| 1.3 | Variant | EC635 P3(CPDS) |

2. Airworthiness Category

Small Rotorcraft

3. Type Certificate Holder

Airbus Helicopters Deutschland GmbH
 Industriestrasse 4
 D-86609 Donauwörth, Germany

4. Manufacturer

See Section 21 Administration, subsection II.3 Production Organisation Approval Holder

5. Type Certification Application Date

4 July 2014

6. State of Design Authority

European Union Aviation Safety Agency (EASA)

7. EASA Type Certification Date

18 March 2015

II. Certification Basis**1. Reference Date for determining the applicable requirements**

For Airworthiness and Environmental Protection: 4 July 2014

For OSD elements, Grandfathering date: 17 February 2014

2. Airworthiness Requirements

- JAR-27, Issue 1, dated 6 September 1993, supplemented by the following CS-27 Amdt. 2 requirements:
 CS 27.1 (a) in connection with CS 27.2(b)(2)(i).

CS 27.0021	CS 27.0161	CS 27.0341	CS 27.0607	CS 27.0771	CS 27.1193	CS 27.1521
CS 27.0025	CS 27.0171	CS 27.0351	CS 27.0609	CS 27.0853	CS 27.1301	CS 27.1525
CS 27.0027	CS 27.0173	CS 27.0361	CS 27.0610	CS 27.0865	CS 27.1305	CS 27.1527
CS 27.0029	CS 27.0175	CS 27.0391	CS 27.0611	CS 27.0901	CS 27.1309	CS 27.1529
CS 27.0031	CS 27.0177	CS 27.0427	CS 27.0613	CS 27.0903	CS 27.1321	CS 27.1541
CS 27.0033	CS 27.0231	CS 27.0471	CS 27.0629	CS 27.0907	CS 27.1323	CS 27.1545
CS 27.0045	CS 27.0241	CS 27.0473	CS 27.0653	CS 27.0931	CS 27.1329	CS 27.1549
CS 27.0049	CS 27.0251	CS 27.0501	CS 27.0659	CS 27.0939	CS 27.1351	CS 27.1559
CS 27.0051	CS 27.0301	CS 27.0521	CS 27.0661	CS 27.1041	CS 27.1365	CS 27.1581
CS 27.0065	CS 27.0303	CS 27.0547	CS 27.0663	CS 27.1043	CS 27.1381	CS 27.1583
CS 27.0067	CS 27.0305	CS 27.0549	CS 27.0671	CS 27.1045	CS 27.1435	
CS 27.0075	CS 27.0307	CS 27.0561	CS 27.0672	CS 27.1091	CS 27.1501	

CS 27.0079	CS 27.0309	CS 27.0571	CS 27.0681	CS 27.1093	CS 27.1503
CS 27.0141	CS 27.0321	CS 27.0601	CS 27.0683	CS 27.1141	CS 27.1505
CS 27.0143	CS 27.0337	CS 27.0602	CS 27.0691	CS 27.1143	CS 27.1509
CS 27.0151	CS 27.0339	CS 27.0603	CS 27.0695	CS 27.1187	CS 27.1519

- For IFR Certification: CS 27 Amdt 2, Appendix B, Issue 1, dated 10 November 2008
- Category A Engine Isolation Requirements of JAR-29, Issue 1, dated 5 November 1993.

Applicable paragraphs, selected from Appendix C to JAR-27, are:

29.861 (a)	Fire Protection of Structure, controls, and other parts
29.901 (c)	Powerplant: Installation
29.903 (b),(c),(e)	Engines
29.908 (a)	Cooling fans
29.917 (b),(c)(1)	Rotor Drive System: Design
29.927 (c)(1)	Additional tests
29.953 (a)	Fuel system independence
29.1027 (a)	Transmission and gearboxes
29.1045 (a)(1),(b),(c),(d),(f)	Climb cooling test procedures
29.1047 (a)	Take-off cooling test procedures
29.1181 (a)	Designated fire zones: regions included
29.1189 (c)	Shutoff means
29.1191 (a)(1)	Firewalls
29.1193 (e)	Cowling and engine compartment covering
29.1305 (a)(6),(b)	Powerplant instruments
29.1309 (b)(2)(i),(d)	Equipment, systems and installations
29.1331 (b)	Instruments using power supply
29.1351 (d)(2)	Electrical systems and equipment: General

- For CAT A Certification: CS 27 Amdt 2, Appendix C, requirements

3. Special Conditions

- No. SC 1 "Primary Structures Designed with Composite Material"
- No. SC 3 "Electronic Flight Instrument Systems"

4. Exemptions

None

5. Deviations

None

6. Equivalent Safety Findings

- JAR 27.1549(b) related to the installation of the Vehicle and Engine Multifunction Display (VEMD) in the CPDS variants.
- CS 27.865 (c) related to dual activation device for the Primary Quick Release Subsystem (Cyclic Stick) for the Double Cargo Hook System
- CS 27.1557(d) related to safety enhanced colour scheme ('black&yellow' in place of 'red') for the emergency exit handle cap

- CS 27.571, 27.602 (b), 27.865 (f) for Hoist Installation on Helicopters
- CS 27.601, 27.603, 27.865 (a) for Hoist Installation on Helicopters

7. Requirements elected to comply

None.

8. Environmental Protection Requirements

8.1 Noise Requirements

see TCDSN UK.TC.R.00064

8.2 Emission Requirements

ICAO Annex 16, Volume II, Part II, Chapter 2, (CS-34, Initial Issue)

9 Operational Suitability Data (OSD)

9.1 Master Minimum Equipment List (MMEL)

JAR-MMEL/MEL Section 1, Amdt. 1

CS-MMEL, Initial Issue, dated 31 January 2014, for the changes in Rev. 5

9.2 Flight Crew Data (FCD)

CS-FCD, Initial Issue, dated 31 January 2014

9.3 Simulation Data (SIMD)

Reserved.

9.4 Maintenance Certifying Staff Data (MCSD)

Reserved.

III. Technical Characteristics and Operational Limitations

1. Type Design Definition

- TDD L0000M333300, Issue A
- + EC635 Kit (Drawing No. W530M0700052)

2. Description

Main rotor: bearingless, 4 blades
 Tail rotor: Fenestron, 10 blades
 Fuselage: metal-composite structure
 Landing gear: skid-type
 Powerplant: 2 independent freewheel turbines

3. Equipment

Basic equipment must be installed and operational prior to registration of the helicopter.

4. Dimensions

4.1 Fuselage

Length: 5.87 m
 Width hull: 1.56 m
 Height: 3.35 m

4.2 Main Rotor

Diameter: 10.40 m

4.3 Tail Rotor

Diameter: 1.00 m

5. Engine

5.1 Model

Pratt & Whitney Canada

2 x Model PW 206B3

5.2 Type Certificate

TCCA TC/TCDS n°: E-23

CAA TC/TCDS n°: EASA.IM.E.017

5.3 Limitations

5.3.1 Installed Engine Limitations and Transmission Torque Limits

	TQ limits [%]	Max N1 speed (Gas generator) [%]	PWR turbine [rpm (%)]	Temperature TOT [°C]
AEO-TOP (5 min)	2 x 78	99.8	105.5	900
AEO-MCP	2 x 69	97.4	105.5	835
30 sec OEI-TOP	1 x 128	104.3	104.5	990
2 min OEI-TOP	1 x 125	102.6	104.5	950
OEI-MCP	1 x 89.5	99.8	104.5	900

6. Fluids

6.1 Fuel

Refer to approved RFM

6.2 Oil

Refer to approved RFM

6.3 Additives

Refer to approved RFM

7. Fluid capacities

7.1 Fuel

Standard fuel tank (up to s/n 0249)

Fuel tank capacity: 680.0 litres

Usable fuel: 670.5 litres

Self-sealing fuel tank (up to s/n 0249)

Fuel tank capacity: 673.4 litres

Usable fuel: 664.0 litres

Modified fuel tank (from s/n 0250, or SB EC135-28-007)

Fuel tank capacity: 710.0 litres

Usable fuel: 700.5 litres

Self-sealing fuel tank (from s/n 0250)

Fuel tank capacity: 701.0 litres

Usable fuel: 691.6 litres

7.2 Oil

Refer to approved RFM

7.3 Coolant System Capacity

n/a

8. Air Speed Limitations

V_{NE} : 150 KIAS at MSL or as shown in the V_{NE} -tables, whichever is less.

Refer to approved RFM for reduction in V_{NE} with altitude and other speed limitations.

9. Rotor Speed Limitations

Power on:

Maximum	105.5 %
Minimum	97 %

Power off:

Maximum	107.5 %
Minimum	80 % (up to 1 900 kg)
Minimum	85 % (above 1 900 kg)
Transient:	Refer to approved RFM

10. Maximum Operating Altitude and Temperature

10.1 Altitude

20 000 ft (6 096 m) PA, refer to approved RFM for variation according to MTOW

10.2 Temperature

Refer to approved RFM

11. Operating Limitations

VFR day and night

Non-icing conditions

For IFR, Category A operation, see additional equipment requirements and limitations in the relevant approved RFMS

For Ditching, see Note 3

12. Maximum Mass

Maximum mass:

Ramp and taxi mass: 3 000 kg

Gross mass: 2 980 kg

Minimum mass:

Gross mass: 1 600 kg

13. Centre of Gravity Range

Longitudinal C.G. limits

maximum forward limit:

4 152 mm aft of DP at 2 039 kg
4 201 mm aft of DP at 2 980 kg

maximum rearward limit:

4 369.0 mm aft of DP at 2 980 kg
4 555 mm aft of DP at 1600 kg

Lateral C.G Limits

maximum deviation on right / left: 100 mm

14. Datum

Longitudinal: the datum plane (STA 0) is located at 2 160 mm forward of the levelling point in the front door frame

Lateral: fuselage median plane

15. Levelling Means

See levelling procedure document No. L082M0801X01

16. Minimum Flight Crew

1 pilot (right seat)

17. Maximum Passenger Seating Capacity

7

18. Passenger Emergency Exit

2, one on each side of the passenger cabin

19. Maximum Baggage/ Cargo Loads

Cargo floor max load: 1 130 kg

Cargo floor max unit load: 600 kg/m²

20. Rotor Blade Control Movement

For rigging information refer to EC135 Aircraft Maintenance Manual

21. Auxiliary Power Unit (APU)

n/a

22. Life-limited Parts

See approved ALS Chapter 4 of the EC135 Master Servicing Manual

IV. Operating and Service Instructions**1. Flight Manual**

EC635 P3, initially EASA approved, dated 18 March 2015, or later approved revisions, including the supplements for Special Operations RFMS 9.1 and Optional Equipment RFMS 9.2.

2. Maintenance Manual

- EC135 Master Servicing Manual
- EC135 Aircraft Maintenance Manual
- Wiring Diagram Manual, latest revision
- Engine documents as per Engine TCDS No.EASA.IM.E.017

3. Structural Repair Manual

EC135 Structural Repair Manual

4. Weight and Balance Manual

Refer to approved RFM

5. Illustrated Parts Catalogue

EC135 Illustrated Parts Catalogue

6. Service Letters and Service Bulletins

Safety Information Notice, Information Notice, Alert Service Bulletin, Service Bulletin Repair Design Approval Sheets

7. Required Equipment

Special equipment and kits necessary for intended kind of operations as defined in the approved Flight Manual Supplements RFMS 9.2, are permissible.

V. Operational Suitability Data

The OSD elements listed below were approved by the European Union Aviation Safety Agency (EASA) as per Commission Regulation (EU) 748/2012, as amended by Commission Regulation (EU) No 69/2014.

Future revisions will be approved by the UK CAA in accordance with Regulation (EU) No. 748/2012 as retained (and amended in UK domestic law) under the European Union (Withdrawal) Act 2018 and amended by the Aviation Safety (Amendment etc.) (EU Exit) Regulations 2019.

1. Master Minimum Equipment List (MMEL)

MMEL document Revision 3, approved on 15 October 2014, or later approved revision.

2. Flight Crew Data

Flight Crew Operational Suitability Data as per document OSD_L0000M403901 first Issue, EASA approval date 15 October 2015, or later approved revisions.

- Appendix 2: "Operator Difference Requirements (ODR) Tables & Master Difference Requirements (MDR) Table" to the EASA Operational Suitability Data (OSD) – Flight Crew – EC135 Family, EASA approval date 15 October 2015, or later approved revisions.

- Appendix 3: "OSD EC135 Family – EASA OPS – Instruments and Equipment", to the EASA Operational Suitability Data (OSD) – Flight Crew – EC135 Family, EASA approval date 15 October 2015, or later approved revisions.

3. SIM Data

Reserved.

4. Maintenance Certifying Staff Data

Reserved.

VI. Notes

1. Manufacturer's eligible serial numbers:
s/n 1178, and subsequent.

2. Night Vision Goggles Operational Capability:

Night Vision Goggles aided operations are permitted according to Rotorcraft Flight Manual Supplement RFMS 9.2-86 in conjunction with a serial number specific Flight Manual Appendix FMA 11-x, when the rotorcraft is equipped accordingly, and a competent authority has granted operational authorisation only. The helicopter configuration containing NVIS lighting components approved for the use with Night Vision Goggles is described in a serial number specific AHD NVIS Substantiation Report for operators having received an approval for their NVIS configuration.

3. The emergency floatation system in accordance with RFMS 9.2-67, is certified as ditching provision in accordance with JAR-27.

The helicopter may be certificated for ditching provided the following additional equipment are fitted and approved in accordance with the relevant airworthiness requirements:

- survival type emergency locator transmitter
- life raft installation
- life preserver.

4. Designation:

"H135M" is used as marketing designation for EC635 P3(CPDS) helicopters.

Section 8 EC135 P3H**I. General****1. Type/ Model/ Variant**

1.1	Type	EC135
1.2	Model	EC135 P3
1.3	Variant	EC135 P3H

2. Airworthiness Category

Small Rotorcraft

3. Type Certificate Holder

Airbus Helicopters Deutschland GmbH
Industriestrasse 4
D-86609 Donauwörth, Germany

4. Manufacturer

See Section 21 Administration, subsection II.3 Production Organisation Approval Holder

5. Type Certification Application Date

11 May 2012

6. State of Design Authority

European Union Aviation Safety Agency (EASA)

7. EASA Type Certification Date

15 November 2016

II. Certification Basis**1. Reference Date for determining the applicable requirements**

For Airworthiness and Environmental Protection: 11 May 2012

For OSD elements, Grandfathering date: 17 February 2014

2. Airworthiness Requirements

- JAR-27, Issue 1, dated 6 September 1993, supplemented by the following CS-27 Amdt. 2 requirements:
CS 27.1 (a) in connection with CS 27.2(b)(2)(i).

CS 27.0021	CS 27.0303	CS 27.0611	CS 27.0855	CS 27.1305	CS 27.1381	CS 27.1543
CS 27.0025	CS 27.0305	CS 27.0613	CS 27.0863	CS 27.1307	CS 27.1383	CS 27.1545
CS 27.0027	CS 27.0307	CS 27.0661	CS 27.0901	CS 27.1309	CS 27.1385	CS 27.1547
CS 27.0029	CS 27.0395	CS 27.0671	CS 27.1019	CS 27.1321	CS 27.1387	CS 27.1549
CS 27.0033	CS 27.0397	CS 27.0672	CS 27.1041	CS 27.1322	CS 27.1401	CS 27.1555
CS 27.0045	CS 27.0399	CS 27.0674	CS 27.1043	CS 27.1323	CS 27.1411	CS 27.1559
CS 27.0065	CS 27.0549	CS 27.0681	CS 27.1045	CS 27.1325	CS 27.1457	CS 27.1581
CS 27.0067	CS 27.0561	CS 27.0683	CS 27.1091	CS 27.1327	CS 27.1459	CS 27.1583
CS 27.0141	CS 27.0562	CS 27.0685	CS 27.1093	CS 27.1329	CS 27.1501	CS 27.1585
CS 27.0143	CS 27.0601	CS 27.0687	CS 27.1141	CS 27.1337	CS 27.1503	CS 27.1587
CS 27.0151	CS 27.0602	CS 27.0771	CS 27.1143	CS 27.1351	CS 27.1505	CS 27.1589
CS 27.0161	CS 27.0603	CS 27.0773	CS 27.1145	CS 27.1353	CS 27.1523	

CS 27.0171	CS 27.0605	CS 27.0777	CS 27.1151	CS 27.1357	CS 27.1525
CS 27.0241	CS 27.0607	CS 27.0785	CS 27.1193	CS 27.1361	CS 27.1527
CS 27.0251	CS 27.0609	CS 27.0831	CS 27.1301	CS 27.1365	CS 27.1529
CS 27.0301	CS 27.0610	CS 27.0853	CS 27.1303	CS 27.1367	CS 27.1541

- For IFR Certification: CS 27 Amdt 2, Appendix B, Issue 1, dated 10 November 2008
- Category A Engine Isolation Requirements of JAR-29, Issue 1, dated 5 November 1993.

Applicable paragraphs, selected from Appendix C to JAR-27, are:

29.861 (a)	Fire Protection of Structure, controls, and other parts
29.901 (c)	Powerplant: Installation
29.903 (b),(c),(e)	Engines
29.908 (a)	Cooling fans
29.917 (b),(c)(1)	Rotor Drive System: Design
29.927 (c)(1)	Additional tests
29.953 (a)	Fuel system independence
29.1027 (a)	Transmission and gearboxes
29.1045 (a)(1),(b),(c),(d),(f)	Climb cooling test procedures
29.1047 (a)	Take-off cooling test procedures
29.1181 (a)	Designated fire zones: regions included
29.1189 (c)	Shutoff means
29.1191 (a)(1)	Firewalls
29.1193 (e)	Cowling and engine compartment covering
29.1305 (a)(6),(b)	Powerplant instruments
29.1309 (b)(2)(i),(d)	Equipment, systems and installations
29.1331 (b)	Instruments using power supply
29.1351 (d)(2)	Electrical systems and equipment: General

- For CAT A Certification: CS 27 Amdt 2, Appendix C, requirements
- For EASA Approvals 10077342 and 10077343: Certification Basis for the original product amended by additional airworthiness requirements 27.1319 and A27.5 at CS-27 Amdt. 7

3. Special Conditions

- "Protection from effects of HIRF"
- "Lithium Battery Installations"

4. Exemptions

None

5. Deviations

None

6. Equivalent Safety Findings

- CS-27 Subpart B, CS 27.1305, CS 27.1309, CS 27.1549 "Engine Training Mode"
- CS 27.1305, CS 27.1321(a), CS 27.1351(d1) and CS-27 Appendix C for CS 29.1305(a)(6) and (b)(1) "Part Time Display of Vehicle Parameters"
- CS 27.1545(b)(4), CS 27.1549(b) "Airspeed & Powerplant indication green marking"
- CS 27.601, 27.603, 27.865 (a) for Hoist Installation on Helicopters

7. Requirements elected to comply

None.

8. Environmental Protection Requirements**8.1 Noise Requirements**

see TCDSN UK.TC.R.00064

8.2 Emission Requirements

ICAO Annex 16, Volume II, Part II, Chapter 2, (CS-34, Initial Issue)

9 Operational Suitability Data (OSD)**9.1 Master Minimum Equipment List (MMEL)**

JAR-MMEL/MEL Section 1, Amdt. 1

CS-MMEL, Initial Issue, dated 31 January 2014, for the changes in Rev. 5

9.2 Flight Crew Data (FCD)

CS-FCD, Initial Issue, dated 31 January 2014

9.3 Simulation Data (SIMD)

Reserved.

9.4 Maintenance Certifying Staff Data (MCSD)

Reserved.

III. Technical Characteristics and Operational Limitations**1. Type Design Definition**

- TDD E0000M269800, Issue B

2. Description

Main rotor: bearingless, 4 blades

Tail rotor: Fenestron, 10 blades

Fuselage: metal-composite structure

Landing gear: skid-type

Powerplant: 2 independent freewheel turbines

3. Equipment

Basic equipment must be installed and operational prior to registration of the helicopter.

4. Dimensions**4.1 Fuselage**

Length: 5.87 m

Width hull: 1.56 m

Height: 3.35 m

4.2 Main Rotor

Diameter: 10.40 m

4.3 Tail Rotor

Diameter: 1.00 m

5. Engine**5.1 Model**

Pratt & Whitney Canada

2 x Model PW 206B3

5.2 Type Certificate

TCCA TC/TCDS n°: E-23

CAA TC/TCDS n°: EASA.IM.E.017

5.3 Limitations**5.3.1 Installed Engine Limitations and Transmission Torque Limits**

	TQ limits [%]	Max N1 speed (Gas generator) [%]	PWR turbine [rpm (%)]	Temperature TOT [°C]
AEO-TOP (5 min)	2 x 78	99.8	105.5	900
AEO-MCP	2 x 69	97.4	105.5	835
30 sec OEI-TOP	1 x 128	104.3	104.5	990
2 min OEI-TOP	1 x 125	102.6	104.5	950
OEI-MCP	1 x 89.5	99.8	104.5	900

6. Fluids**6.1 Fuel**

Refer to approved RFM

6.2 Oil

Refer to approved RFM

6.3 Additives

Refer to approved RFM

7. Fluid capacities**7.1 Fuel**

Standard fuel tank (up to s/n 0249)

Fuel tank capacity: 680.0 litres

Usable fuel: 670.5 litres

Self-sealing fuel tank (up to s/n 0249)

Fuel tank capacity: 673.4 litres

Usable fuel: 664.0 litres

Modified fuel tank (from s/n 0250, or SB EC135-28-007)

Fuel tank capacity: 710.0 litres

Usable fuel: 700.5 litres

Self-sealing fuel tank (from s/n 0250)

Fuel tank capacity: 701.0 litres

Usable fuel: 691.6 litres

7.2 Oil

TCDS No.: UK.TC.R.00064

Date: 05 May 2023

AW-DAW-TP-004

Copies of this document are not controlled.

Issue: 01

Page 58 of 144

Refer to approved RFM

7.3 Coolant System Capacity

n/a

8. Air Speed Limitations

V_{NE} : 150 KIAS at MSL or as shown in the VNE-tables, whichever is less.

Refer to approved RFM for reduction in V_{NE} with altitude and other speed limitations.

9. Rotor Speed Limitations

Power on:

Maximum	105.5 %
Minimum	97 %

Power off:

Maximum	107.5 %
Minimum	80 % (up to 1 900 kg)
Minimum	85 % (above 1 900 kg)
Transient:	Refer to approved RFM

10. Maximum Operating Altitude and Temperature

10.1 Altitude

20 000 ft (6 096 m) PA, refer to approved RFM for variation according to MTOW

10.2 Temperature

Refer to approved RFM

11. Operating Limitations

VFR day and night

Non-icing conditions

For IFR, Category A operation, see additional equipment requirements and limitations in the relevant approved RFMS

For Ditching, see Note 3

12. Maximum Mass

12.1 Maximum gross mass	2 980 kg
12.2 Maximum ramp and taxi mass	3 000 kg
12.3 Minimum gross mass	1 700 kg
12.4 Alternative maximum gross mass	3 100 kg, operation permitted only in accordance with FMA 11-11 and EASA Approval 10075155
12.5 Alternative maximum ramp and taxi mass	3 100 kg, operation permitted only in accordance with FMA 11-11 and EASA Approval 10075155

13. Centre of Gravity Range

Longitudinal C.G. limits

maximum forward limit:

4 121 mm aft of DP at 2 150 kg
4 178 mm aft of DP at 3100 kg

maximum rearward limit:

4 353 mm aft of DP at 3100 kg
4 541 mm aft of DP at 1700 kg

Lateral C.G Limits

maximum deviation on right / left: 100 mm

14. Datum

Longitudinal: the datum plane (STA 0) is located at 2 160 mm forward of the levelling point in the front door frame

Lateral: fuselage median plane

15. Levelling Means

See levelling procedure document No. L082M0801X01

16. Minimum Flight Crew

1 pilot (right seat)

17. Maximum Passenger Seating Capacity

7

18. Passenger Emergency Exit

2, one on each side of the passenger cabin

19. Maximum Baggage/ Cargo Loads

Cargo floor max load: 1 130 kg

Cargo floor max unit load: 600 kg/m²

20. Rotor Blade Control Movement

For rigging information refer to EC135 Aircraft Maintenance Manual

21. Auxiliary Power Unit (APU)

n/a

22. Life-limited Parts

See approved ALS Chapter 4 of the EC135 Master Servicing Manual

IV. Operating and Service Instructions

1. Flight Manual

EC135 P3H, initially EASA approved, dated 15 November 2016, or later approved revisions, including the supplements for Special Operations RFMS 9.1 and Optional Equipment RFMS 9.2.

2. Maintenance Manual

- EC135 Master Servicing Manual
- EC135 Aircraft Maintenance Manual
- Wiring Diagram Manual, latest revision
- Engine documents as per Engine TCDS No.EASA.IM.E.017

3. Structural Repair Manual

EC135 Structural Repair Manual

4. Weight and Balance Manual

Refer to approved RFM

5. Illustrated Parts Catalogue

EC135 Illustrated Parts Catalogue

6. Service Letters and Service Bulletins

Safety Information Notice, Information Notice, Alert Service Bulletin, Service Bulletin Repair Design Approval Sheets

7. Required Equipment

Special equipment and kits necessary for intended kind of operations as defined in the approved Flight Manual Supplements RFMS 9.2, are permissible.

V. Operational Suitability Data

The OSD elements listed below were approved by the European Union Aviation Safety Agency (EASA) as per Commission Regulation (EU) 748/2012, as amended by Commission Regulation (EU) No 69/2014.

Future revisions will be approved by the UK CAA in accordance with Regulation (EU) No. 748/2012 as retained (and amended in UK domestic law) under the European Union (Withdrawal) Act 2018 and amended by the Aviation Safety (Amendment etc.) (EU Exit) Regulations 2019.

1. Master Minimum Equipment List (MMEL)

MMEL document Revision 5, approved on 23 November 2017, or later approved revision.

2. Flight Crew Data

Flight Crew Operational Suitability Data as per document OSD_L0000M403901 first Issue, EASA approval date 15 October 2015, or later approved revisions.

- Appendix 2: "Operator Difference Requirements (ODR) Tables & Master Difference Requirements (MDR) Table" to the EASA Operational Suitability Data (OSD) – Flight Crew – EC135 Family, EASA approval date 15 October 2015, or later approved revisions.

- Appendix 3: "OSD EC135 Family – EASA OPS – Instruments and Equipment", to the EASA Operational Suitability Data (OSD) – Flight Crew – EC135 Family, EASA approval date 15 October 2015, or later approved revisions.

3. SIM Data

Reserved.

4. Maintenance Certifying Staff Data

Reserved.

VI. Notes

1. Manufacturer's eligible serial numbers:
s/n 2006, and subsequent.

2. Designation:

"H135" is used as marketing designation for EC135 P3H helicopters.

3. Night Vision Goggles Operational Capability:

Night Vision Goggles aided operations are permitted according to Rotorcraft Flight Manual Supplement RFMS 9.2-86 in conjunction with a serial number specific Flight Manual Appendix FMA 11-x, when the rotorcraft is equipped accordingly, and a competent authority has granted operational authorisation only. The helicopter configuration containing NVIS lighting components approved for the use with Night Vision Goggles is described in a serial number specific AHD NVIS Substantiation Report for operators having received an approval for their NVIS configuration.

Section 9 EC635 P3H**I. General****1. Type/ Model/ Variant**

1.1	Type	EC135
1.2	Model	EC635 P3
1.3	Variant	EC635 P3H

2. Airworthiness Category

Small Rotorcraft

3. Type Certificate Holder

Airbus Helicopters Deutschland GmbH
Industriestrasse 4
D-86609 Donauwörth, Germany

4. Manufacturer

See Section 21 Administration, subsection II.3 Production Organisation Approval Holder

5. Type Certification Application Date

11 May 2012

6. State of Design Authority

European Union Aviation Safety Agency (EASA)

7. EASA Type Certification Date

15 November 2016

II. Certification Basis**1. Reference Date for determining the applicable requirements**

For Airworthiness and Environmental Protection: 11 May 2012

For OSD elements, Grandfathering date: 17 February 2014

2. Airworthiness Requirements

- JAR-27, Issue 1, dated 6 September 1993, supplemented by the following CS-27 Amdt. 2 requirements:
CS 27.1 (a) in connection with CS 27.2(b)(2)(i).

CS 27.0021	CS 27.0303	CS 27.0611	CS 27.0855	CS 27.1305	CS 27.1381	CS 27.1543
CS 27.0025	CS 27.0305	CS 27.0613	CS 27.0863	CS 27.1307	CS 27.1383	CS 27.1545
CS 27.0027	CS 27.0307	CS 27.0661	CS 27.0901	CS 27.1309	CS 27.1385	CS 27.1547
CS 27.0029	CS 27.0395	CS 27.0671	CS 27.1019	CS 27.1321	CS 27.1387	CS 27.1549
CS 27.0033	CS 27.0397	CS 27.0672	CS 27.1041	CS 27.1322	CS 27.1401	CS 27.1555
CS 27.0045	CS 27.0399	CS 27.0674	CS 27.1043	CS 27.1323	CS 27.1411	CS 27.1559
CS 27.0065	CS 27.0549	CS 27.0681	CS 27.1045	CS 27.1325	CS 27.1457	CS 27.1581
CS 27.0067	CS 27.0561	CS 27.0683	CS 27.1091	CS 27.1327	CS 27.1459	CS 27.1583
CS 27.0141	CS 27.0562	CS 27.0685	CS 27.1093	CS 27.1329	CS 27.1501	CS 27.1585
CS 27.0143	CS 27.0601	CS 27.0687	CS 27.1141	CS 27.1337	CS 27.1503	CS 27.1587

CS 27.0151	CS 27.0602	CS 27.0771	CS 27.1143	CS 27.1351	CS 27.1505	CS 27.1589
CS 27.0161	CS 27.0603	CS 27.0773	CS 27.1145	CS 27.1353	CS 27.1523	
CS 27.0171	CS 27.0605	CS 27.0777	CS 27.1151	CS 27.1357	CS 27.1525	
CS 27.0241	CS 27.0607	CS 27.0785	CS 27.1193	CS 27.1361	CS 27.1527	
CS 27.0251	CS 27.0609	CS 27.0831	CS 27.1301	CS 27.1365	CS 27.1529	
CS 27.0301	CS 27.0610	CS 27.0853	CS 27.1303	CS 27.1367	CS 27.1541	

- For IFR Certification: CS 27 Amdt 2, Appendix B, Issue 1, dated 10 November 2008
- Category A Engine Isolation Requirements of JAR-29, Issue 1, dated 5 November 1993.

Applicable paragraphs, selected from Appendix C to JAR-27, are:

29.861 (a)	Fire Protection of Structure, controls, and other parts
29.901 (c)	Powerplant: Installation
29.903 (b),(c),(e)	Engines
29.908 (a)	Cooling fans
29.917 (b),(c)(1)	Rotor Drive System: Design
29.927 (c)(1)	Additional tests
29.953 (a)	Fuel system independence
29.1027 (a)	Transmission and gearboxes
29.1045 (a)(1),(b),(c),(d),(f)	Climb cooling test procedures
29.1047 (a)	Take-off cooling test procedures
29.1181 (a)	Designated fire zones: regions included
29.1189 (c)	Shutoff means
29.1191 (a)(1)	Firewalls
29.1193 (e)	Cowling and engine compartment covering
29.1305 (a)(6),(b)	Powerplant instruments
29.1309 (b)(2)(i),(d)	Equipment, systems and installations
29.1331 (b)	Instruments using power supply
29.1351 (d)(2)	Electrical systems and equipment: General

- For CAT A Certification: CS 27 Amdt 2, Appendix C, requirements
- For EASA Approvals 10077342 and 10077343: Certification Basis for the original product amended by additional airworthiness requirements 27.1319 and A27.5 at CS-27 Amdt. 7

3. Special Conditions

- "Protection from effects of HIRF"
- "Lithium Battery Installations"

4. Exemptions

None

5. Deviations

None

6. Equivalent Safety Findings

- CS-27 Subpart B, CS 27.1305, CS 27.1309, CS 27.1549 "Engine Training Mode"

- CS 27.1305, CS 27.1321(a), CS 27.1351(d1) and CS-27 Appendix C for CS 29.1305(a)(6) and (b)(1)
"Part Time Display of Vehicle Parameters"
- CS 27.1545(b)(4), CS 27.1549(b) "Airspeed & Powerplant indication green marking"
- CS 27.601, 27.603, 27.865 (a) for Hoist Installation on Helicopters

7. Requirements elected to comply

None.

8. Environmental Protection Requirements

8.1 Noise Requirements

see TCDSN UK.TC.R.00064

8.2 Emission Requirements

ICAO Annex 16, Volume II, Part II, Chapter 2, (CS-34, Initial Issue)

9 Operational Suitability Data (OSD)

9.1 Master Minimum Equipment List (MMEL)

JAR-MMEL/MEL Section 1, Amdt. 1

CS-MMEL, Initial Issue, dated 31 January 2014, for the changes in Rev. 5

9.2 Flight Crew Data (FCD)

CS-FCD, Initial Issue, dated 31 January 2014

9.3 Simulation Data (SIMD)

Reserved.

9.4 Maintenance Certifying Staff Data (MCSD)

Reserved.

III. Technical Characteristics and Operational Limitations

1. Type Design Definition

- TDD E0000M269800, Issue B
- + EC635 Kit (Drawing No. W530M0700052)

2. Description

Main rotor: bearingless, 4 blades
 Tail rotor: Fenestron, 10 blades
 Fuselage: metal-composite structure
 Landing gear: skid-type
 Powerplant: 2 independent freewheel turbines

3. Equipment

Basic equipment must be installed and operational prior to registration of the helicopter.

4. Dimensions

4.1 Fuselage

Length: 5.87 m
 Width hull: 1.56 m
 Height: 3.35 m

4.2 Main Rotor

Diameter: 10.40 m

4.3 Tail Rotor

Diameter: 1.00 m

5. Engine**5.1 Model**

Pratt & Whitney Canada

2 x Model PW 206B3

5.2 Type Certificate

TCCA TC/TCDS n°: E-23

CAA TC/TCDS n°: EASA.IM.E.017

5.3 Limitations**5.3.1 Installed Engine Limitations and Transmission Torque Limits**

	TQ limits [%]	Max N1 speed (Gas generator) [%]	PWR turbine [rpm (%)]	Temperature TOT [°C]
AEO-TOP (5 min)	2 x 78	99.8	105.5	900
AEO-MCP	2 x 69	97.4	105.5	835
30 sec OEI-TOP	1 x 128	104.3	104.5	990
2 min OEI-TOP	1 x 125	102.6	104.5	950
OEI-MCP	1 x 89.5	99.8	104.5	900

6. Fluids**6.1 Fuel**

Refer to approved RFM

6.2 Oil

Refer to approved RFM

6.3 Additives

Refer to approved RFM

7. Fluid capacities**7.1 Fuel**

Standard fuel tank (up to s/n 0249)

Fuel tank capacity: 680.0 litres

Usable fuel: 670.5 litres

Self-sealing fuel tank (up to s/n 0249)

Fuel tank capacity: 673.4 litres

Usable fuel: 664.0 litres

Modified fuel tank (from s/n 0250, or SB EC135-28-007)

Fuel tank capacity: 710.0 litres

Usable fuel: 700.5 litres

Self-sealing fuel tank (from s/n 0250)

Fuel tank capacity: 701.0 litres

Usable fuel: 691.6 litres

7.2 Oil

Refer to approved RFM

7.3 Coolant System Capacity

n/a

8. Air Speed Limitations

V_{NE} : 150 KIAS at MSL or as shown in the VNE-tables, whichever is less.

Refer to approved RFM for reduction in V_{NE} with altitude and other speed limitations.

9. Rotor Speed Limitations

Power on:

Maximum 105.5 %

Minimum 97 %

Power off:

Maximum 107.5 %

Minimum 80 % (up to 1 900 kg)

Minimum 85 % (above 1 900 kg)

Transient: Refer to approved RFM

10. Maximum Operating Altitude and Temperature

10.1 Altitude

20 000 ft (6 096 m) PA, refer to approved RFM for variation according to MTOW

10.2 Temperature

Refer to approved RFM

11. Operating Limitations

VFR day and night

Non-icing conditions

For IFR, Category A operation, see additional equipment requirements and limitations in the relevant approved RFMS

For Ditching, see Note 3

12. Maximum Mass

12.1	Maximum gross mass	2 980 kg
12.2	Maximum ramp and taxi mass	3 000 kg
12.3	Minimum gross mass	1 700 kg
12.4	Alternative maximum gross mass	3 100 kg, operation permitted only in accordance with FMA 11-11 and EASA Approval 10075155
12.5	Alternative maximum ramp and taxi mass	3 100 kg, operation permitted only in accordance with FMA 11-11 and EASA Approval 10075155

13. Centre of Gravity Range

TCDS No.: UK.TC.R.00064

Date: 05 May 2023

AW-DAW-TP-004

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Issue: 01

Page 66 of 144

Longitudinal C.G. limits

maximum forward limit:

- 4 121 mm aft of DP at 2 150 kg
- 4 178 mm aft of DP at 3100 kg

maximum rearward limit:

- 4 353 mm aft of DP at 3100 kg
- 4 541 mm aft of DP at 1700 kg

Lateral C.G Limits

maximum deviation on right / left: 100 mm

14. Datum

Longitudinal: the datum plane (STA 0) is located at 2 160 mm forward of the levelling point in the front door frame

Lateral: fuselage median plane

15. Levelling Means

See levelling procedure document No. L082M0801X01

16. Minimum Flight Crew

1 pilot (right seat)

17. Maximum Passenger Seating Capacity

7

18. Passenger Emergency Exit

2, one on each side of the passenger cabin

19. Maximum Baggage/ Cargo Loads

Cargo floor max load: 1 130 kg

Cargo floor max unit load: 600 kg/m²

20. Rotor Blade Control Movement

For rigging information refer to EC135 Aircraft Maintenance Manual

21. Auxiliary Power Unit (APU)

n/a

22. Life-limited Parts

See approved ALS Chapter 4 of the EC135 Master Servicing Manual

IV. Operating and Service Instructions

1. Flight Manual

EC635 P3H, initially EASA approved, dated 15 November 2016, or later approved revisions, including the supplements for Special Operations RFMS 9.1 and Optional Equipment RFMS 9.2.

2. Maintenance Manual

- EC135 Master Servicing Manual
- EC135 Aircraft Maintenance Manual
- Wiring Diagram Manual, latest revision
- Engine documents as per Engine TCDS No.EASA.IM.E.017

3. Structural Repair Manual

EC135 Structural Repair Manual

4. Weight and Balance Manual

Refer to approved RFM

5. Illustrated Parts Catalogue

EC135 Illustrated Parts Catalogue

6. Service Letters and Service Bulletins

Safety Information Notice, Information Notice, Alert Service Bulletin, Service Bulletin Repair Design Approval Sheets

7. Required Equipment

Special equipment and kits necessary for intended kind of operations as defined in the approved Flight Manual Supplements RFMS 9.2, are permissible.

V. Operational Suitability Data

The OSD elements listed below were approved by the European Union Aviation Safety Agency (EASA) as per Commission Regulation (EU) 748/2012, as amended by Commission Regulation (EU) No 69/2014.

Future revisions will be approved by the UK CAA in accordance with Regulation (EU) No. 748/2012 as retained (and amended in UK domestic law) under the European Union (Withdrawal) Act 2018 and amended by the Aviation Safety (Amendment etc.) (EU Exit) Regulations 2019.

1. Master Minimum Equipment List (MMEL)

MMEL document Revision 5, approved on 23 November 2017, or later approved revision.

2. Flight Crew Data

Flight Crew Operational Suitability Data as per document OSD_L0000M403901 first Issue, EASA approval date 15 October 2015, or later approved revisions.

- Appendix 2: "Operator Difference Requirements (ODR) Tables & Master Difference Requirements (MDR) Table" to the EASA Operational Suitability Data (OSD) – Flight Crew – EC135 Family, EASA approval date 15 October 2015, or later approved revisions.

- Appendix 3: "OSD EC135 Family – EASA OPS – Instruments and Equipment", to the EASA Operational Suitability Data (OSD) – Flight Crew – EC135 Family, EASA approval date 15 October 2015, or later approved revisions.

3. SIM Data

Reserved.

4. Maintenance Certifying Staff Data

Reserved.

VI. Notes

1. Manufacturer's eligible serial numbers:
s/n 2006, and subsequent.

2. Designation:

"H135" is used as marketing designation for EC135 P3H helicopters.

3. Night Vision Goggles Operational Capability:

Night Vision Goggles aided operations are permitted according to Rotorcraft Flight Manual Supplement RFMS 9.2-86 in conjunction with a serial number specific Flight Manual Appendix FMA 11-x, when the rotorcraft is equipped accordingly, and a competent authority has granted operational authorisation only. The helicopter configuration containing NVIS lighting components approved for the use with Night Vision Goggles is described in a serial number specific AHD NVIS Substantiation Report for operators having received an approval for their NVIS configuration.

Section 10 EC135 T1(CDS)**I. General****1. Type/ Model/ Variant**

- | | | |
|-----|---------|---------------|
| 1.1 | Type | EC135 |
| 1.2 | Model | EC135 T1 |
| 1.3 | Variant | EC135 T1(CDS) |

2. Airworthiness Category

Small Rotorcraft

3. Type Certificate Holder

Airbus Helicopters Deutschland GmbH
 Industriestrasse 4
 D-86609 Donauwörth, Germany

4. Manufacturer

See Section 21 Administration, subsection II.3 Production Organisation Approval Holder

5. Type Certification Application Date to LBA

12 December 1994

6. State of Design Authority

European Union Aviation Safety Agency (EASA)

7. EASA Type Certification Date

28 September 2003, in accordance with CR (EU) 1702/2003, Article 2, 3., (a), (i), 2nd bullet, 1st indented Bullet

II. Certification Basis**1. Reference Date for determining the applicable requirements**

For Airworthiness and Environmental Protection: 12 December 1994

For OSD elements, Grandfathering date: 17 February 2014

2. Airworthiness Requirements

- JAR-27, Issue 1, dated 6 September 1993
- For IFR Certification: JAR-27 Appendix B, Issue 1, dated 6 September 1993
- Category A Engine Isolation Requirements of JAR-29, Issue 1, dated 5 November 1993.

Applicable paragraphs, selected from Appendix C to JAR-27, are:

29.861 (a)	Fire Protection of Structure, controls, and other parts
29.901 (c)	Powerplant: Installation
29.903 (b),(c),(e)	Engines
29.908 (a)	Cooling fans
29.917 (b),(c)(1)	Rotor Drive System: Design
29.927 (c)(1)	Additional tests
29.953 (a)	Fuel system independence
29.1027 (a)	Transmission and gearboxes

29.1045 (a)(1),(b),(c),(d),(f)	Climb cooling test procedures
29.1047 (a)	Take-off cooling test procedures
29.1181 (a)	Designated fire zones: regions included
29.1189 (c)	Shutoff means
29.1191 (a)(1)	Firewalls
29.1193 (e)	Cowling and engine compartment covering
29.1305 (a)(6),(b)	Powerplant instruments
29.1309 (b)(2)(i),(d)	Equipment, systems and installations
29.1331 (b)	Instruments using power supply
29.1351 (d)(2)	Electrical systems and equipment: General –

- For CAT A Certification: JAR 27 Appendix C, Issue 1, dated 6 September 1993

- JAA Interim HIRF Policy (INT/POL/278.29-1, dated 1 June 1997) applies for:

- Dual Pilot IFR certification with 3-axis SAS, Pitch-Damper and EFIS EFS 40
- Single Pilot/ Dual Pilot IFR certification with AFCS and EFIS EFS 40

3. Special Conditions

- No. SC 1 "Primary Structures Designed with Composite Material"
- No. SC 2 "Protection for Electrical and Electronic Systems from High Intensity Radiated Fields"; this Special Condition applies only for VFR and IFR certification with conventional instruments and for VFR certification with EFIS EFS 40.
- No. SC 3 "Electronic Flight Instrument Systems"
- No. SC 4 "Protection of air intake of EC135 against ingestion of foreign objects (Rain and Hail/Bird strike)"

4. Exemptions

None

5. Deviations

None

6. Equivalent Safety Findings

- Dual Pilot IFR certification concerning JAR 27 Appendix B, Para. IV (c) "Static Longitudinal Stability"
- CS 27.865 (c) related to dual activation device for the Primary Quick Release Subsystem (Cyclic Stick) for the Double Cargo Hook System
- CS 27.601, 27.603, 27.865 (a) for Hoist Installation on Helicopters

7. Requirements elected to comply

None.

8. Environmental Protection Requirements

8.1 Noise Requirements

see TCDSN UK.TC.R.00064

8.2 Emission Requirements

n/a

9. Operational Suitability Data (OSD)

9.1 Master Minimum Equipment List (MMEL)

JAR-MMEL/MEL Section 1, Amdt. 1

CS-MMEL, Initial Issue, dated 31 January 2014, for the changes in Rev. 5

9.2 Flight Crew Data (FCD)

CS-FCD, Initial Issue, dated 31 January 2014

9.3 Simulation Data (SIMD)

Reserved.

9.4 Maintenance Certifying Staff Data (MCSD)

Reserved.

III. Technical Characteristics and Operational Limitations

1. Type Design Definition

- EC135 Basic Master List Drawing No. L000M0007051
- Drawing No. L000M0010051 + L710M0013054 and following modifications

2. Description

Main rotor: bearingless, 4 blades
 Tail rotor: Fenestron, 10 blades
 Fuselage: metal-composite structure
 Landing gear: skid-type
 Powerplant: 2 independent freewheel turbines

3. Equipment

Basic equipment must be installed and operational prior to registration of the helicopter.

4. Dimensions

4.1 Fuselage

Length: 5.87 m
 Width hull: 1.56 m
 Height: 3.35 m

4.2 Main Rotor

Diameter: 10.20 m

4.3 Tail Rotor

Diameter: 1.00 m

5. Engine

5.1 Model

Safran Helicopter Engines (former: Turbomeca)
 2 x Model Arrius 2B1/2B1A/2B1A_1

5.2 Type Certificate

EASA TC/TCDS n°: TCDS No.E.029
 CAA TC/TCDS n°: TCDS No.E.029

5.3 Limitations

5.3.1 Installed Engine Limitations and Transmission Torque Limits

	TQ limits [%]	Gas generator [rpm (%)]	PWR turbine [rpm (%)]	Temperature TOT [°C]
AEO-TOP (5 min)	2 x 75	53 895 (99.6)	104	895
AEO-MCP	2 x 69	53 406 (98.7)	104	855
2½ min OEI-TOP (2B1)	1 x 119.8	56113 (103.7)	104	945
2½ min OEI-TOP (2B1A)	1 x 119.8	56113 (103.7)	104	945
Arrius 2B1A_1	1 x 119.8	56113 (103.7)	104	945
OEI-MCP	1 x 86	54 706 (101.1)	104	895

6. Fluids

6.1 Fuel

Refer to approved RFM

6.2 Oil

Refer to approved RFM

6.3 Additives

Refer to approved RFM

7. Fluid capacities

7.1 Fuel

Standard fuel tank (up to s/n 0249)

Fuel tank capacity: 680.0 litres

Usable fuel: 670.5 litres

Self-sealing fuel tank (up to s/n 0249)

Fuel tank capacity: 673.4 litres

Usable fuel: 664.0 litres

Modified fuel tank (from s/n 0250, or SB EC135-28-007)

Fuel tank capacity: 710.0 litres

Usable fuel: 700.5 litres

Self-sealing fuel tank (from s/n 0250)

Fuel tank capacity: 701.0 litres

Usable fuel: 691.6 litres

7.2 Oil

Refer to approved RFM

7.3 Coolant System Capacity

n/a

8. Air Speed Limitations

V_{NE}: 155 KIAS at MSL

Refer to approved RFM for reduction in V_{NE} with altitude and other speed limitations.

9. Rotor Speed Limitations

Power on:

Maximum	104 %
Minimum	95 %

Power off:

Maximum	106 %
Minimum	80 % (up to 1 900 kg)
Minimum	85 % (above 1 900 kg)
Transient:	Refer to approved RFM

10. Maximum Operating Altitude and Temperature

10.1 Altitude

20 000 ft (6 096 m) PA, refer to approved RFM for variation according to MTOW

10.2 Temperature

Refer to approved RFM

11. Operating Limitations

VFR day and night

Non-icing conditions

For IFR, Category A operation, see additional equipment requirements and limitations in the relevant approved RFMS

For Ditching, see Note 3

12. Maximum Mass

2 720 kg

Note: Operation of the aircraft with MTOM between 2 720 kg and 2 835 kg is permitted only in accordance with RFMS 9.1-3 "Supplement for flights with gross mass above 2 720 kg up to 2 835 kg" and when SB EC135-11-003 is incorporated.

13. Centre of Gravity Range

Longitudinal C.G. limits

maximum forward limit:

4 180 mm aft of DP at 1 840 kg
4 219 mm aft of DP at 2 720 kg
4 224 mm aft of DP at 2 835 kg

maximum rearward limit:

4 570 mm aft of DP at 1 500 kg
4 387 mm aft of DP at 2 720 kg
4 369 mm aft of DP at 2 835 kg

Lateral C.G Limits

maximum deviation on right / left: 100 mm

14. Datum

Longitudinal: the datum plane (STA 0) is located at 2 160 mm forward of the levelling point in the front door frame

Lateral: fuselage median plane

15. Levelling Means

See levelling procedure document No. L082M0801X01

16. Minimum Flight Crew

1 pilot (right seat)

17. Maximum Passenger Seating Capacity

1 cockpit, 6 cabin (or 7, if the kit described in RFMS 9.2-31 is installed and operated)

18. Passenger Emergency Exit

2, one on each side of the passenger cabin

19. Maximum Baggage/ Cargo Loads

Cargo floor max load: 1 130 kg

Cargo floor max unit load: 600 kg/m²

20. Rotor Blade Control Movement

For rigging information refer to EC135 Aircraft Maintenance Manual

21. Auxiliary Power Unit (APU)

n/a

22. Life-limited Parts

See approved ALS Chapter 4 of the EC135 Master Servicing Manual

IV. Operating and Service Instructions**1. Flight Manual**

EC135 T1(CDS), initially LBA-approved, dated 14 June 1996, or later approved revisions, including the supplements for Special Operations RFMS 9.1 and Optional Equipment RFMS 9.2.

2. Maintenance Manual

- EC135 Master Servicing Manual
- EC135 Aircraft Maintenance Manual
- Wiring Diagram Manual, latest revision
- Engine documents as per Engine TCDS No.EASA.E.029

3. Structural Repair Manual

EC135 Structural Repair Manual

4. Weight and Balance Manual

Refer to approved RFM

5. Illustrated Parts Catalogue

EC135 Illustrated Parts Catalogue

6. Service Letters and Service Bulletins

Safety Information Notice (from October 2008 onwards, before: Alert Service Information), Information Notice (from October 2008 onwards, before: Service Information), Alert Service Bulletin, Service Bulletin Repair Design Approval Sheets

7. Required Equipment

Special equipment and kits necessary for intended kind of operations as defined in the approved Flight Manual Supplements RFMS 9.2, are permissible.

V. Operational Suitability Data

The OSD elements listed below were approved by the European Union Aviation Safety Agency (EASA) as per Commission Regulation (EU) 748/2012, as amended by Commission Regulation (EU) No 69/2014.

Future revisions will be approved by the UK CAA in accordance with Regulation (EU) No. 748/2012 as retained (and amended in UK domestic law) under the European Union (Withdrawal) Act 2018 and amended by the Aviation Safety (Amendment etc.) (EU Exit) Regulations 2019.

1. Master Minimum Equipment List (MMEL)

MMEL document Revision 0, approved on 18 October 2011, or later approved revision.

2. Flight Crew Data

Flight Crew Operational Suitability Data as per document OSD_L0000M403901 first Issue, EASA approval date 15 October 2015, or later approved revisions.

- Appendix 2: "Operator Difference Requirements (ODR) Tables & Master Difference Requirements (MDR) Table" to the EASA Operational Suitability Data (OSD) – Flight Crew – EC135 Family, EASA approval date 15 October 2015, or later approved revisions.

- Appendix 3: "OSD EC135 Family – EASA OPS – Instruments and Equipment", to the EASA Operational Suitability Data (OSD) – Flight Crew – EC135 Family, EASA approval date 15 October 2015, or later approved revisions.

3. SIM Data

Reserved.

4. Maintenance Certifying Staff Data

Reserved.

VI. Notes

1. Manufacturer's eligible serial numbers:
s/n 0005, and subsequent.

2. Engine:

If the engine "Arrius 2B1A" is installed, the RFMS 9.2-57 is applicable.

If the engine "Arrius 2B1A" is modified by application of the software TU45C, the engine is identified as "Arrius 2B1A_1" on the engine identification plate. In case that an engine "Arrius 2B1A_1" is installed, the RFMS 9.2-62 is applicable."

3. The emergency floatation system in accordance with RFMS 9.2-67, is certified as ditching provision in accordance with JAR-27.

The helicopter may be certificated for ditching provided the following additional equipment are fitted and approved in accordance with the relevant airworthiness requirements:

- survival type emergency locator transmitter
- life raft installation
- life preserver.

Section 11 EC135 T1(CPDS)**I. General****1. Type/ Model/ Variant**

- | | | |
|-----|---------|----------------|
| 1.1 | Type | EC135 |
| 1.2 | Model | EC135 T1 |
| 1.3 | Variant | EC135 T1(CPDS) |

2. Airworthiness Category

Small Rotorcraft

3. Type Certificate Holder

Airbus Helicopters Deutschland GmbH
 Industriestrasse 4
 D-86609 Donauwörth, Germany

4. Manufacturer

See Section 21 Administration, subsection II.3 Production Organisation Approval Holder

5. Type Certification Application Date to LBA

26 May 1999

6. State of Design Authority

European Union Aviation Safety Agency (EASA)

7. EASA Type Certification Date

28 September 2003, in accordance with CR (EU) 1702/2003, Article 2, 3., (a), (i), 2nd bullet, 1st indented
 Bullet

II. Certification Basis**1. Reference Date for determining the applicable requirements**

For Airworthiness and Environmental Protection: 26 May 1999

For OSD elements, Grandfathering date: 17 February 2014

2. Airworthiness Requirements

- JAR-27, Issue 1, dated 6 September 1993
- For IFR Certification: JAR-27 Appendix B, Issue 1, dated 6 September 1993
- Category A Engine Isolation Requirements of JAR-29, Issue 1, dated 5 November 1993.

Applicable paragraphs, selected from Appendix C to JAR-27, are:

29.861 (a)	Fire Protection of Structure, controls, and other parts
29.901 (c)	Powerplant: Installation
29.903 (b),(c),(e)	Engines
29.908 (a)	Cooling fans
29.917 (b),(c)(1)	Rotor Drive System: Design
29.927 (c)(1)	Additional tests
29.953 (a)	Fuel system independence
29.1027 (a)	Transmission and gearboxes

29.1045 (a)(1),(b),(c),(d),(f)	Climb cooling test procedures
29.1047 (a)	Take-off cooling test procedures
29.1181 (a)	Designated fire zones: regions included
29.1189 (c)	Shutoff means
29.1191 (a)(1)	Firewalls
29.1193 (e)	Cowling and engine compartment covering
29.1305 (a)(6),(b)	Powerplant instruments
29.1309 (b)(2)(i),(d)	Equipment, systems and installations
29.1331 (b)	Instruments using power supply
29.1351 (d)(2)	Electrical systems and equipment: General –

- For CAT A Certification: JAR 27 Appendix C, Issue 1, dated 6 September 1993

- JAA Interim HIRF Policy (INT/POL/278.29-1, dated 1 June 1997) applies for:

- Dual Pilot IFR certification with 3-axis SAS, Pitch-Damper and Avionique Nouvelle CPDS and FCDS
- Single Pilot/ Dual Pilot IFR certification with AFCS and Avionique Nouvelle CPDS and FCDS

3. Special Conditions

- No. SC 1 "Primary Structures Designed with Composite Material"
- No. SC 2 "Protection for Electrical and Electronic Systems from High Intensity Radiated Fields"; this Special Condition applies only for VFR and IFR certification with conventional instruments and for VFR certification with EFIS EFS 40.
- No. SC 3 "Electronic Flight Instrument Systems"
- No. SC 4 "Protection of air intake of EC135 against ingestion of foreign objects (Rain and Hail/Bird strike)"

4. Exemptions

None

5. Deviations

None

6. Equivalent Safety Findings

- Dual Pilot IFR certification concerning JAR 27 Appendix B, Para. IV (c) "Static Longitudinal Stability"
- JAR 27.1549 (b) related to the installation of the Vehicle and Engine Multifunction Display (VEMD) in the CPDS variants
- CS 27.865 (c) related to dual activation device for the Primary Quick Release Subsystem (Cyclic Stick) for the Double Cargo Hook System
- CS 27.601, 27.603, 27.865 (a) for Hoist Installation on Helicopters

7. Requirements elected to comply

None.

8. Environmental Protection Requirements

8.1 Noise Requirements

see TCDSN UK.TC.R.00064

8.2 Emission Requirements

n/a

9 Operational Suitability Data (OSD)**9.1 Master Minimum Equipment List (MMEL)**

JAR-MMEL/MEL Section 1, Amdt. 1

CS-MMEL, Initial Issue, dated 31 January 2014, for the changes in Rev. 5

9.2 Flight Crew Data (FCD)

CS-FCD, Initial Issue, dated 31 January 2014

9.3 Simulation Data (SIMD)

Reserved.

9.4 Maintenance Certifying Staff Data (MCSD)

Reserved.

III. Technical Characteristics and Operational Limitations**1. Type Design Definition**

- EC135 Basic Master List Drawing No. L000M0007051
- Drawing No. L000M0009051 and following modifications

2. Description

Main rotor: bearingless, 4 blades
 Tail rotor: Fenestron, 10 blades
 Fuselage: metal-composite structure
 Landing gear: skid-type
 Powerplant: 2 independent freewheel turbines

3. Equipment

Basic equipment must be installed and operational prior to registration of the helicopter.

4. Dimensions**4.1 Fuselage**

Length: 5.87 m
 Width hull: 1.56 m
 Height: 3.35 m

4.2 Main Rotor

Diameter: 10.20 m

4.3 Tail Rotor

Diameter: 1.00 m

5. Engine**5.1 Model**

Safran Helicopter Engines (former: Turbomeca)

2 x Model Arrius 2B1/2B1A/2B1A_1

5.2 Type Certificate

EASA TC/TCDS n°: TCDS No.E.029

CAA TC/TCDS n°: TCDS No.E.029

5.3 Limitations

5.3.1 Installed Engine Limitations and Transmission Torque Limits

	TQ limits [%]	Gas generator [rpm (%)]	PWR turbine [rpm (%)]	Temperature TOT [°C]
AEO-TOP (5 min)	2 x 75	53 895 (99.6)	104	895
AEO-MCP	2 x 69	53 406 (98.7)	104	855
2½ min OEI-TOP (2B1)	1 x 100	56113 (103.7)	104	945
2½ min OEI-TOP (2B1A)	1 x 119.8	56113 (103.7)	104	945
Arrius 2B1A_1	1 x 128	56113 (103.7)	104	945
OEI-MCP	1 x 86	54 706 (101.1)	104	895

6. Fluids**6.1 Fuel**

Refer to approved RFM

6.2 Oil

Refer to approved RFM

6.3 Additives

Refer to approved RFM

7. Fluid capacities**7.1 Fuel**

Standard fuel tank (up to s/n 0249)

Fuel tank capacity: 680.0 litres

Usable fuel: 670.5 litres

Self-sealing fuel tank (up to s/n 0249)

Fuel tank capacity: 673.4 litres

Usable fuel: 664.0 litres

Modified fuel tank (from s/n 0250, or SB EC135-28-007)

Fuel tank capacity: 710.0 litres

Usable fuel: 700.5 litres

Self-sealing fuel tank (from s/n 0250)

Fuel tank capacity: 701.0 litres

Usable fuel: 691.6 litres

7.2 Oil

Refer to approved RFM

7.3 Coolant System Capacity

n/a

8. Air Speed Limitations

TCDS No.: UK.TC.R.00064

Date: 05 May 2023

AW-DAW-TP-004

Copies of this document are not controlled.

Issue: 01

Page 79 of 144

V_{NE} : 155 KIAS at MSL

Refer to approved RFM for reduction in V_{NE} with altitude and other speed limitations.

9. Rotor Speed Limitations

Power on:

Maximum	104 %
Minimum	95 %

Power off:

Maximum	106 %
Minimum	80 % (up to 1 900 kg)
Minimum	85 % (above 1 900 kg)
Transient:	Refer to approved RFM

10. Maximum Operating Altitude and Temperature

10.1 Altitude

20 000 ft (6 096 m) PA, refer to approved RFM for variation according to MTOW

10.2 Temperature

Refer to approved RFM

11. Operating Limitations

VFR day and night

Non-icing conditions

For IFR, Category A operation, see additional equipment requirements and limitations in the relevant approved RFMS

For Ditching, see Note 3

12. Maximum Mass

2 720 kg

Note: Operation of the aircraft with MTOM between 2 720 kg and 2 835 kg is permitted only in accordance with RFMS 9.1-3 "Supplement for flights with gross mass above 2 720 kg up to 2 835 kg" and when SB EC135-11-003 is incorporated.

13. Centre of Gravity Range

Longitudinal C.G. limits

maximum forward limit:

4 180 mm aft of DP at 1 840 kg
4 219 mm aft of DP at 2 720 kg
4 224 mm aft of DP at 2 835 kg

maximum rearward limit:

4 570 mm aft of DP at 1 500 kg
4 387 mm aft of DP at 2 720 kg
4 369 mm aft of DP at 2 835 kg

Lateral C.G Limits

maximum deviation on right / left: 100 mm

14. Datum

Longitudinal: the datum plane (STA 0) is located at 2 160 mm forward of the levelling point in the front door frame

Lateral: fuselage median plane

15. Levelling Means

See levelling procedure document No. L082M0801X01

16. Minimum Flight Crew

TCDS No.: UK.TC.R.00064

Date: 05 May 2023

AW-DAW-TP-004

Copies of this document are not controlled.

Issue: 01

Page 80 of 144

1 pilot (right seat)

17. Maximum Passenger Seating Capacity

1 cockpit, 6 cabin (or 7, if the kit described in RFMS 9.2-31 is installed and operated)

18. Passenger Emergency Exit

2, one on each side of the passenger cabin

19. Maximum Baggage/ Cargo Loads

Cargo floor max load: 1 130 kg

Cargo floor max unit load: 600 kg/m²

20. Rotor Blade Control Movement

For rigging information refer to EC135 Aircraft Maintenance Manual

21. Auxiliary Power Unit (APU)

n/a

22. Life-limited Parts

See approved ALS Chapter 4 of the EC135 Master Servicing Manual

IV. Operating and Service Instructions

1. Flight Manual

EC135 T1(CPDS), initially LBA-approved, dated 26 May 1999, or later approved revisions, including the supplements for Special Operations RFMS 9.1 and Optional Equipment RFMS 9.2.

2. Maintenance Manual

- EC135 Master Servicing Manual
- EC135 Aircraft Maintenance Manual
- Wiring Diagram Manual, latest revision
- Engine documents as per Engine TCDS No.EASA.E.029

3. Structural Repair Manual

EC135 Structural Repair Manual

4. Weight and Balance Manual

Refer to approved RFM

5. Illustrated Parts Catalogue

EC135 Illustrated Parts Catalogue

6. Service Letters and Service Bulletins

Safety Information Notice (from October 2008 onwards, before: Alert Service Information), Information Notice (from October 2008 onwards, before: Service Information), Alert Service Bulletin, Service Bulletin Repair Design Approval Sheets

7. Required Equipment

Special equipment and kits necessary for intended kind of operations as defined in the approved Flight Manual Supplements RFMS 9.2, are permissible.

V. Operational Suitability Data

The OSD elements listed below were approved by the European Union Aviation Safety Agency (EASA) as per Commission Regulation (EU) 748/2012, as amended by Commission Regulation (EU) No 69/2014.

Future revisions will be approved by the UK CAA in accordance with Regulation (EU) No. 748/2012 as retained (and amended in UK domestic law) under the European Union (Withdrawal) Act 2018 and amended by the Aviation Safety (Amendment etc.) (EU Exit) Regulations 2019.

1. Master Minimum Equipment List (MMEL)

MMEL document Revision 0, approved on 18 October 2011, or later approved revision.

2. Flight Crew Data

Flight Crew Operational Suitability Data as per document OSD_L0000M403901 first Issue, EASA approval date 15 October 2015, or later approved revisions.

- Appendix 2: "Operator Difference Requirements (ODR) Tables & Master Difference Requirements (MDR) Table" to the EASA Operational Suitability Data (OSD) – Flight Crew – EC135 Family, EASA approval date 15 October 2015, or later approved revisions.

- Appendix 3: "OSD EC135 Family – EASA OPS – Instruments and Equipment", to the EASA Operational Suitability Data (OSD) – Flight Crew – EC135 Family, EASA approval date 15 October 2015, or later approved revisions.

3. SIM Data

Reserved.

4. Maintenance Certifying Staff Data

Reserved.

VI. Notes

1. Manufacturer's eligible serial numbers:
s/n 0092, and subsequent.

2. Night Vision Goggles Operational Capability:

Night Vision Goggles aided operations are permitted according to Rotorcraft Flight Manual Supplement RFMS 9.2-86 in conjunction with a serial number specific Flight Manual Appendix FMA 11-x, when the rotorcraft is equipped accordingly, and a competent authority has granted operational authorisation only. The helicopter configuration containing NVIS lighting components approved for the use with Night Vision Goggles is described in a serial number specific AHD NVIS Substantiation Report for operators having received an approval for their NVIS configuration.

3. The emergency floatation system in accordance with RFMS 9.2-67, is certified as ditching provision in accordance with JAR-27.

The helicopter may be certificated for ditching provided the following additional equipment are fitted and approved in accordance with the relevant airworthiness requirements:

- survival type emergency locator transmitter
- life raft installation
- life preserver.

4. Engine:

If the engine "Arrius 2B1A" is installed, the RFMS 9.2-57 is applicable.

If the engine "Arrius 2B1A" is modified by application of the software TU45C, the engine is identified as "Arrius 2B1A_1" on the engine identification plate. In case that an engine "Arrius 2B1A_1" is installed, the RFMS 9.2-62 is applicable."

Section 12 EC635 T1(CPDS)**I. General****1. Type/ Model/ Variant**

- | | | |
|-----|---------|----------------|
| 1.1 | Type | EC135 |
| 1.2 | Model | EC635 T1 |
| 1.3 | Variant | EC635 T1(CPDS) |

2. Airworthiness Category

Small Rotorcraft

3. Type Certificate Holder

Airbus Helicopters Deutschland GmbH
 Industriestrasse 4
 D-86609 Donauwörth, Germany

4. Manufacturer

See Section 21 Administration, subsection II.3 Production Organisation Approval Holder

5. Type Certification Application Date to LBA

10 August 2001

6. State of Design Authority

European Union Aviation Safety Agency (EASA)

7. EASA Type Certification Date

28 September 2003, in accordance with CR (EU) 1702/2003, Article 2, 3., (a), (i), 2nd bullet, 1st indented
 Bullet

II. Certification Basis**1. Reference Date for determining the applicable requirements**

For Airworthiness and Environmental Protection: 10 August 2001

For OSD elements, Grandfathering date: 17 February 2014

2. Airworthiness Requirements

- JAR-27, Issue 1, dated 6 September 1993
- For IFR Certification: JAR-27 Appendix B, Issue 1, dated 6 September 1993
- Category A Engine Isolation Requirements of JAR-29, Issue 1, dated 5 November 1993.

Applicable paragraphs, selected from Appendix C to JAR-27, are:

29.861 (a)	Fire Protection of Structure, controls, and other parts
29.901 (c)	Powerplant: Installation
29.903 (b),(c),(e)	Engines
29.908 (a)	Cooling fans
29.917 (b),(c)(1)	Rotor Drive System: Design
29.927 (c)(1)	Additional tests
29.953 (a)	Fuel system independence
29.1027 (a)	Transmission and gearboxes

29.1045 (a)(1),(b),(c),(d),(f)	Climb cooling test procedures
29.1047 (a)	Take-off cooling test procedures
29.1181 (a)	Designated fire zones: regions included
29.1189 (c)	Shutoff means
29.1191 (a)(1)	Firewalls
29.1193 (e)	Cowling and engine compartment covering
29.1305 (a)(6),(b)	Powerplant instruments
29.1309 (b)(2)(i),(d)	Equipment, systems and installations
29.1331 (b)	Instruments using power supply
29.1351 (d)(2)	Electrical systems and equipment: General –

- For CAT A Certification: JAR 27 Appendix C, Issue 1, dated 6 September 1993

- JAA Interim HIRF Policy (INT/POL/278.29-1, dated 1 June 1997) applies for:

- Dual Pilot IFR certification with 3-axis SAS, Pitch-Damper and Avionique Nouvelle CPDS and FCDS
- Single Pilot/ Dual Pilot IFR certification with AFCS and Avionique Nouvelle CPDS and FCDS

3. Special Conditions

- No. SC 1 "Primary Structures Designed with Composite Material"
- No. SC 2 "Protection for Electrical and Electronic Systems from High Intensity Radiated Fields"; this Special Condition applies only for VFR and IFR certification with conventional instruments and for VFR certification with EFIS EFS 40.
- No. SC 3 "Electronic Flight Instrument Systems"
- No. SC 4 "Protection of air intake of EC135 against ingestion of foreign objects (Rain and Hail/Bird strike)"

4. Exemptions

None

5. Deviations

None

6. Equivalent Safety Findings

- Dual Pilot IFR certification concerning JAR 27 Appendix B, Para. IV (c) "Static Longitudinal Stability"
- JAR 27.1549 (b) related to the installation of the Vehicle and Engine Multifunction Display (VEMD) in the CPDS variants
- CS 27.865 (c) related to dual activation device for the Primary Quick Release Subsystem (Cyclic Stick) for the Double Cargo Hook System
- CS 27.601, 27.603, 27.865 (a) for Hoist Installation on Helicopters

7. Requirements elected to comply

None.

8. Environmental Protection Requirements

8.1 Noise Requirements

see TCDSN UK.TC.R.00064

8.2 Emission Requirements

n/a

9 Operational Suitability Data (OSD)**9.1 Master Minimum Equipment List (MMEL)**

JAR-MMEL/MEL Section 1, Amdt. 1

CS-MMEL, Initial Issue, dated 31 January 2014, for the changes in Rev. 5

9.2 Flight Crew Data (FCD)

CS-FCD, Initial Issue, dated 31 January 2014

9.3 Simulation Data (SIMD)

Reserved.

9.4 Maintenance Certifying Staff Data (MCSD)

Reserved.

III. Technical Characteristics and Operational Limitations**1. Type Design Definition**

- EC135 Basic Master List Drawing No. L000M0007051
- Drawing No. L000M0009051 and following modifications
- EC635 Kit (Drawing No. W530M0700051)

2. Description

Main rotor: bearingless, 4 blades
 Tail rotor: Fenestron, 10 blades
 Fuselage: metal-composite structure
 Landing gear: skid-type
 Powerplant: 2 independent freewheel turbines

3. Equipment

Basic equipment must be installed and operational prior to registration of the helicopter.

4. Dimensions**4.1 Fuselage**

Length: 5.87 m
 Width hull: 1.56 m
 Height: 3.35 m

4.2 Main Rotor

Diameter: 10.20 m

4.3 Tail Rotor

Diameter: 1.00 m

5. Engine**5.1 Model**

Safran Helicopter Engines (former: Turbomeca)

2 x Model Arrius 2B1/2B1A/2B1A_1

5.2 Type Certificate

EASA TC/TCDS n°: TCDS No.E.029

CAA TC/TCDS n°: TCDS No.E.029

5.3 Limitations

5.3.1 Installed Engine Limitations and Transmission Torque Limits

	TQ limits [%]	Gas generator [rpm (%)]	PWR turbine [rpm (%)]	Temperature TOT [°C]
AEO-TOP (5 min)	2 x 75	53 895 (99.6)	104	895
AEO-MCP	2 x 69	53 406 (98.7)	104	855
2½ min OEI-TOP (2B1)	1 x 100	56113 (103.7)	104	945
2½ min OEI-TOP (2B1A)	1 x 119.8	56113 (103.7)	104	945
Arrius 2B1A_1	1 x 128	56113 (103.7)	104	945
OEI-MCP	1 x 86	54 706 (101.1)	104	895

6. Fluids

6.1 Fuel

Refer to approved RFM

6.2 Oil

Refer to approved RFM

6.3 Additives

Refer to approved RFM

7. Fluid capacities

7.1 Fuel

Standard fuel tank (up to s/n 0249)

Fuel tank capacity: 680.0 litres

Usable fuel: 670.5 litres

Self-sealing fuel tank (up to s/n 0249)

Fuel tank capacity: 673.4 litres

Usable fuel: 664.0 litres

Modified fuel tank (from s/n 0250, or SB EC135-28-007)

Fuel tank capacity: 710.0 litres

Usable fuel: 700.5 litres

Self-sealing fuel tank (from s/n 0250)

Fuel tank capacity: 701.0 litres

Usable fuel: 691.6 litres

7.2 Oil

Refer to approved RFM

7.3 Coolant System Capacity

n/a

8. Air Speed Limitations

V_{NE} : 155 KIAS at MSL

Refer to approved RFM for reduction in V_{NE} with altitude and other speed limitations.

9. Rotor Speed Limitations

Power on:

Maximum	104 %
Minimum	95 %

Power off:

Maximum	106 %
Minimum	80 % (up to 1 900 kg)
Minimum	85 % (above 1 900 kg)
Transient:	Refer to approved RFM

10. Maximum Operating Altitude and Temperature**10.1 Altitude**

20 000 ft (6 096 m) PA, refer to approved RFM for variation according to MTOW

10.2 Temperature

Refer to approved RFM

11. Operating Limitations

VFR day and night

Non-icing conditions

For IFR, Category A operation, see additional equipment requirements and limitations in the relevant approved RFMS

For Ditching, see Note 3

12. Maximum Mass

2 720 kg

Note: Operation of the aircraft with MTOM between 2 720 kg and 2 835 kg is permitted only in accordance with RFMS 9.1-3 "Supplement for flights with gross mass above 2 720 kg up to 2 835 kg" and when SB EC135-11-003 is incorporated.

13. Centre of Gravity Range

Longitudinal C.G. limits

maximum forward limit:

4 180 mm aft of DP at 1 840 kg
4 219 mm aft of DP at 2 720 kg
4 224 mm aft of DP at 2 835 kg

maximum rearward limit:

4 570 mm aft of DP at 1 500 kg
4 387 mm aft of DP at 2 720 kg
4 369 mm aft of DP at 2 835 kg

Lateral C.G Limits

maximum deviation on right / left: 100 mm

14. Datum

Longitudinal: the datum plane (STA 0) is located at 2 160 mm forward of the levelling point in the front door frame

Lateral: fuselage median plane

15. Levelling Means

See levelling procedure document No. L082M0801X01

- 16. Minimum Flight Crew**
1 pilot (right seat)
- 17. Maximum Passenger Seating Capacity**
1 cockpit, 6 cabin (or 7, if the kit described in RFMS 9.2-31 is installed and operated)
- 18. Passenger Emergency Exit**
2, one on each side of the passenger cabin
- 19. Maximum Baggage/ Cargo Loads**
Cargo floor max load: 1 130 kg
Cargo floor max unit load: 600 kg/m²
- 20. Rotor Blade Control Movement**
For rigging information refer to EC135 Aircraft Maintenance Manual
- 21. Auxiliary Power Unit (APU)**
n/a
- 22. Life-limited Parts**
See approved ALS Chapter 4 of the EC135 Master Servicing Manual

IV. Operating and Service Instructions

- 1. Flight Manual**
EC635 T1(CPDS), initially LBA-approved, dated 31 August 2001, or later approved revisions, including the supplements for Special Operations RFMS 9.1 and Optional Equipment RFMS 9.2.
- 2. Maintenance Manual**
 - EC135 Master Servicing Manual
 - EC135 Aircraft Maintenance Manual
 - Wiring Diagram Manual, latest revision
 - Engine documents as per Engine TCDS No.EASA.E.029
- 3. Structural Repair Manual**
EC135 Structural Repair Manual
- 4. Weight and Balance Manual**
Refer to approved RFM
- 5. Illustrated Parts Catalogue**
EC135 Illustrated Parts Catalogue
- 6. Service Letters and Service Bulletins**
Safety Information Notice (from October 2008 onwards, before: Alert Service Information), Information Notice (from October 2008 onwards, before: Service Information), Alert Service Bulletin, Service Bulletin Repair Design Approval Sheets
- 7. Required Equipment**
Special equipment and kits necessary for intended kind of operations as defined in the approved Flight Manual Supplements RFMS 9.2, are permissible.

V. Operational Suitability Data

The OSD elements listed below were approved by the European Union Aviation Safety Agency (EASA) as per Commission Regulation (EU) 748/2012, as amended by Commission Regulation (EU) No 69/2014.

Future revisions will be approved by the UK CAA in accordance with Regulation (EU) No. 748/2012 as retained (and amended in UK domestic law) under the European Union (Withdrawal) Act 2018 and amended by the Aviation Safety (Amendment etc.) (EU Exit) Regulations 2019.

1. Master Minimum Equipment List (MMEL)

MMEL document Revision 0, approved on 18 October 2011, or later approved revision.

2. Flight Crew Data

Flight Crew Operational Suitability Data as per document OSD_L0000M403901 first Issue, EASA approval date 15 October 2015, or later approved revisions.

- Appendix 2: "Operator Difference Requirements (ODR) Tables & Master Difference Requirements (MDR) Table" to the EASA Operational Suitability Data (OSD) – Flight Crew – EC135 Family, EASA approval date 15 October 2015, or later approved revisions.

- Appendix 3: "OSD EC135 Family – EASA OPS – Instruments and Equipment", to the EASA Operational Suitability Data (OSD) – Flight Crew – EC135 Family, EASA approval date 15 October 2015, or later approved revisions.

3. SIM Data

Reserved.

4. Maintenance Certifying Staff Data

Reserved.

VI. Notes

1. Manufacturer's eligible serial numbers:
s/n 0173, and subsequent.

2. Night Vision Goggles Operational Capability:

Night Vision Goggles aided operations are permitted according to Rotorcraft Flight Manual Supplement RFMS 9.2-86 in conjunction with a serial number specific Flight Manual Appendix FMA 11-x, when the rotorcraft is equipped accordingly, and a competent authority has granted operational authorisation only. The helicopter configuration containing NVIS lighting components approved for the use with Night Vision Goggles is described in a serial number specific AHD NVIS Substantiation Report for operators having received an approval for their NVIS configuration.

3. The emergency floatation system in accordance with RFMS 9.2-67, is certified as ditching provision in accordance with JAR-27.

The helicopter may be certificated for ditching provided the following additional equipment are fitted and approved in accordance with the relevant airworthiness requirements:

- survival type emergency locator transmitter
- life raft installation
- life preserver.

4. Engine:

If the engine "Arrius 2B1A" is installed, the RFMS 9.2-57 is applicable.

If the engine "Arrius 2B1A" is modified by application of the software TU45C, the engine is identified as "Arrius 2B1A_1" on the engine identification plate. In case that an engine "Arrius 2B1A_1" is installed, the RFMS 9.2-62 is applicable."

Section 13 EC135 T2(CPDS)**I. General****1. Type/ Model/ Variant**

- | | | |
|-----|---------|----------------|
| 1.1 | Type | EC135 |
| 1.2 | Model | EC135 T2 |
| 1.3 | Variant | EC135 T2(CPDS) |

2. Airworthiness Category

Small Rotorcraft

3. Type Certificate Holder

Airbus Helicopters Deutschland GmbH
 Industriestrasse 4
 D-86609 Donauwörth, Germany

4. Manufacturer

See Section 21 Administration, subsection II.3 Production Organisation Approval Holder

5. Type Certification Application Date to LBA

5 February 2002

6. State of Design Authority

European Union Aviation Safety Agency (EASA)

7. EASA Type Certification Date

28 September 2003, in accordance with CR (EU) 1702/2003, Article 2, 3., (a), (i), 2nd bullet, 1st indented Bullet

II. Certification Basis**1. Reference Date for determining the applicable requirements**

For Airworthiness and Environmental Protection: 11 April 1997

For OSD elements, Grandfathering date: 17 February 2014

2. Airworthiness Requirements

- JAR-27, Issue 1, dated 6 September 1993
- For IFR Certification: JAR-27 Appendix B, Issue 1, dated 6 September 1993
- Category A Engine Isolation Requirements of JAR-29, Issue 1, dated 5 November 1993.

Applicable paragraphs, selected from Appendix C to JAR-27, are:

29.861 (a)	Fire Protection of Structure, controls, and other parts
29.901 (c)	Powerplant: Installation
29.903 (b),(c),(e)	Engines
29.908 (a)	Cooling fans
29.917 (b),(c)(1)	Rotor Drive System: Design
29.927 (c)(1)	Additional tests
29.953 (a)	Fuel system independence
29.1027 (a)	Transmission and gearboxes

29.1045 (a)(1),(b),(c),(d),(f)	Climb cooling test procedures
29.1047 (a)	Take-off cooling test procedures
29.1181 (a)	Designated fire zones: regions included
29.1189 (c)	Shutoff means
29.1191 (a)(1)	Firewalls
29.1193 (e)	Cowling and engine compartment covering
29.1305 (a)(6),(b)	Powerplant instruments
29.1309 (b)(2)(i),(d)	Equipment, systems and installations
29.1331 (b)	Instruments using power supply
29.1351 (d)(2)	Electrical systems and equipment: General –

- For CAT A Certification: JAR 27 Appendix C, Issue 1, dated 6 September 1993

- JAA Interim HIRF Policy (INT/POL/278.29-1, dated 1 June 1997) applies for:

- Dual Pilot IFR certification with 3-axis SAS, Pitch-Damper and Avionique Nouvelle CPDS and FCDS
- Single Pilot/ Dual Pilot IFR certification with AFCS and Avionique Nouvelle CPDS and FCDS

3. Special Conditions

- No. SC 1 "Primary Structures Designed with Composite Material"
- No. SC 2 "Protection for Electrical and Electronic Systems from High Intensity Radiated Fields"; this Special Condition applies only for VFR and IFR certification with conventional instruments and for VFR certification with EFIS EFS 40.
- No. SC 3 "Electronic Flight Instrument Systems"
- No. SC 4 "Protection of air intake of EC135 against ingestion of foreign objects (Rain and Hail/Bird strike)"

4. Exemptions

None

5. Deviations

None

6. Equivalent Safety Findings

- Dual Pilot IFR certification concerning JAR 27 Appendix B, Para. IV (c) "Static Longitudinal Stability"
- JAR 27.1549 (b) related to the installation of the Vehicle and Engine Multifunction Display (VEMD) in the CPDS variants
- CS 27.865 (c) related to dual activation device for the Primary Quick Release Subsystem (Cyclic Stick) for the Double Cargo Hook System
- CS 27.601, 27.603, 27.865 (a) for Hoist Installation on Helicopters

7. Requirements elected to comply

None.

8. Environmental Protection Requirements

8.1 Noise Requirements

see TCDSN UK.TC.R.00064

8.2 Emission Requirements

n/a

9 Operational Suitability Data (OSD)**9.1 Master Minimum Equipment List (MMEL)**

JAR-MMEL/MEL Section 1, Amdt. 1

CS-MMEL, Initial Issue, dated 31 January 2014, for the changes in Rev. 5

9.2 Flight Crew Data (FCD)

CS-FCD, Initial Issue, dated 31 January 2014

9.3 Simulation Data (SIMD)

Reserved.

9.4 Maintenance Certifying Staff Data (MCSD)

Reserved.

III. Technical Characteristics and Operational Limitations**1. Type Design Definition**

- EC135 Basic Master List Drawing No. L000M0007051
- Drawing No. L000M0009051 + L710M0012054 and following modifications

2. Description

Main rotor: bearingless, 4 blades
 Tail rotor: Fenestron, 10 blades
 Fuselage: metal-composite structure
 Landing gear: skid-type
 Powerplant: 2 independent freewheel turbines

3. Equipment

Basic equipment must be installed and operational prior to registration of the helicopter.

4. Dimensions**4.1 Fuselage**

Length: 5.87 m
 Width hull: 1.56 m
 Height: 3.35 m

4.2 Main Rotor

Diameter: 10.20 m

4.3 Tail Rotor

Diameter: 1.00 m

5. Engine**5.1 Model**

Safran Helicopter Engines (former: Turbomeca)

2 x Model Arrius 2B2

5.2 Type Certificate

EASA TC/TCDS n°: TCDS No.E.029

CAA TC/TCDS n°: TCDS No.E.029

5.3 Limitations

5.3.1 Installed Engine Limitations and Transmission Torque Limits

	TQ limits [%]	Gas generator [rpm (%)]	PWR turbine [rpm (%)]	Temperature TOT [°C]
AEO-TOP (5 min)	2 x 75	54 117 (100)	104	897
AEO-MCP	2 x 69	53 576 (99)	104	879
30 sec OEI-TOP	1 x 128	56 823 (105)	104	1024
2 min OEI-TOP	1 x 125	56 011 (103.5)	104	994
OEI-MCP	1 x 86	54 821 (101.3)	104	942

6. Fluids**6.1 Fuel**

Refer to approved RFM

6.2 Oil

Refer to approved RFM

6.3 Additives

Refer to approved RFM

7. Fluid capacities**7.1 Fuel**

Standard fuel tank (up to s/n 0249)

Fuel tank capacity: 680.0 litres

Usable fuel: 670.5 litres

Self-sealing fuel tank (up to s/n 0249)

Fuel tank capacity: 673.4 litres

Usable fuel: 664.0 litres

Modified fuel tank (from s/n 0250, or SB EC135-28-007)

Fuel tank capacity: 710.0 litres

Usable fuel: 700.5 litres

Self-sealing fuel tank (from s/n 0250)

Fuel tank capacity: 701.0 litres

Usable fuel: 691.6 litres

7.2 Oil

Refer to approved RFM

7.3 Coolant System Capacity

n/a

8. Air Speed Limitations

V_{NE}: 155 KIAS at MSL

Refer to approved RFM for reduction in V_{NE} with altitude and other speed limitations.

9. Rotor Speed Limitations

Power on:

Maximum	104 %
Minimum	97 %

Power off:

Maximum	106 %
Minimum	80 % (up to 1 900 kg)
Minimum	85 % (above 1 900 kg)
Transient:	Refer to approved RFM

10. Maximum Operating Altitude and Temperature

10.1 Altitude

20 000 ft (6 096 m) PA, refer to approved RFM for variation according to MTOW

10.2 Temperature

Refer to approved RFM

11. Operating Limitations

VFR day and night

Non-icing conditions

For IFR, Category A operation, see additional equipment requirements and limitations in the relevant approved RFMS

For Ditching, see Note 3

12. Maximum Mass

2 835 kg

13. Centre of Gravity Range

Longitudinal C.G. limits

maximum forward limit:

4 180 mm aft of DP at 1 840 kg
4 224 mm aft of DP at 2 835 kg

maximum rearward limit:

4 570 mm aft of DP at 1 500 kg
4 369 mm aft of DP at 2 835 kg

Lateral C.G Limits

maximum deviation on right / left: 100 mm

14. Datum

Longitudinal: the datum plane (STA 0) is located at 2 160 mm forward of the levelling point in the front door frame

Lateral: fuselage median plane

15. Levelling Means

See levelling procedure document No. L082M0801X01

16. Minimum Flight Crew

1 pilot (right seat)

17. Maximum Passenger Seating Capacity

1 cockpit, 6 cabin (or 7, if the kit described in RFMS 9.2-31 is installed and operated)

18. Passenger Emergency Exit

2, one on each side of the passenger cabin

19. Maximum Baggage/ Cargo Loads

Cargo floor max load: 1 130 kg

Cargo floor max unit load: 600 kg/m²

20. Rotor Blade Control Movement

For rigging information refer to EC135 Aircraft Maintenance Manual

21. Auxiliary Power Unit (APU)

n/a

22. Life-limited Parts

See approved ALS Chapter 4 of the EC135 Master Servicing Manual

IV. Operating and Service Instructions

1. Flight Manual

EC135 T2(CPDS), initially LBA-approved, dated 9 August 2002, or later approved revisions, including the supplements for Special Operations RFMS 9.1 and Optional Equipment RFMS 9.2.

2. Maintenance Manual

- EC135 Master Servicing Manual
- EC135 Aircraft Maintenance Manual
- Wiring Diagram Manual, latest revision
- Engine documents as per Engine TCDS No.EASA.E.029

3. Structural Repair Manual

EC135 Structural Repair Manual

4. Weight and Balance Manual

Refer to approved RFM

5. Illustrated Parts Catalogue

EC135 Illustrated Parts Catalogue

6. Service Letters and Service Bulletins

Safety Information Notice (from October 2008 onwards, before: Alert Service Information), Information Notice (from October 2008 onwards, before: Service Information), Alert Service Bulletin, Service Bulletin Repair Design Approval Sheets

7. Required Equipment

Special equipment and kits necessary for intended kind of operations as defined in the approved Flight Manual Supplements RFMS 9.2, are permissible.

V. Operational Suitability Data

The OSD elements listed below were approved by the European Union Aviation Safety Agency (EASA) as per Commission Regulation (EU) 748/2012, as amended by Commission Regulation (EU) No 69/2014.

Future revisions will be approved by the UK CAA in accordance with Regulation (EU) No. 748/2012 as retained (and amended in UK domestic law) under the European Union (Withdrawal) Act 2018 and amended by the Aviation Safety (Amendment etc.) (EU Exit) Regulations 2019.

1. Master Minimum Equipment List (MMEL)

MMEL document Revision 0, approved on 18 October 2011, or later approved revision.

2. Flight Crew Data

TCDS No.: UK.TC.R.00064

Date: 05 May 2023

AW-DAW-TP-004

Copies of this document are not controlled.

Issue: 01

Page 95 of 144

Flight Crew Operational Suitability Data as per document OSD_L0000M403901 first Issue, EASA approval date 15 October 2015, or later approved revisions.

- Appendix 2: "Operator Difference Requirements (ODR) Tables & Master Difference Requirements (MDR) Table" to the EASA Operational Suitability Data (OSD) – Flight Crew – EC135 Family, EASA approval date 15 October 2015, or later approved revisions.

- Appendix 3: "OSD EC135 Family – EASA OPS – Instruments and Equipment", to the EASA Operational Suitability Data (OSD) – Flight Crew – EC135 Family, EASA approval date 15 October 2015, or later approved revisions.

3. **SIM Data**

Reserved.

4. **Maintenance Certifying Staff Data**

Reserved.

VI. **Notes**

1. Manufacturer's eligible serial numbers:
 - 1.1 s/n 0243, and subsequent.
 - 1.2 any EC135 T1(CPDS) that has been upgraded to EC135 T2(CPDS) according to SB EC135-71-023.

2. **Night Vision Goggles Operational Capability:**

Night Vision Goggles aided operations are permitted according to Rotorcraft Flight Manual Supplement RFMS 9.2-86 in conjunction with a serial number specific Flight Manual Appendix FMA 11-x, when the rotorcraft is equipped accordingly, and a competent authority has granted operational authorisation only. The helicopter configuration containing NVIS lighting components approved for the use with Night Vision Goggles is described in a serial number specific AHD NVIS Substantiation Report for operators having received an approval for their NVIS configuration.

3. The emergency floatation system in accordance with RFMS 9.2-67, is certified as ditching provision in accordance with JAR-27.

The helicopter may be certificated for ditching provided the following additional equipment are fitted and approved in accordance with the relevant airworthiness requirements:

- survival type emergency locator transmitter
- life raft installation
- life preserver.

Section 14 EC135 T2+**I. General****1. Type/ Model/ Variant**

- | | | |
|-----|---------|-----------|
| 1.1 | Type | EC135 |
| 1.2 | Model | EC135 T2+ |
| 1.3 | Variant | |

2. Airworthiness Category

Small Rotorcraft

3. Type Certificate Holder

Airbus Helicopters Deutschland GmbH
 Industriestrasse 4
 D-86609 Donauwörth, Germany

4. Manufacturer

See Section 21 Administration, subsection II.3 Production Organisation Approval Holder

5. Type Certification Application Date to LBA

8 February 2005

6. State of Design Authority

European Union Aviation Safety Agency (EASA)

7. EASA Type Certification Date

21 February 2006

II. Certification Basis**1. Reference Date for determining the applicable requirements**

For Airworthiness and Environmental Protection: 8 February 2005

For OSD elements, Grandfathering date: 17 February 2014

2. Airworthiness Requirements

- JAR-27, Issue 1, dated 6 September 1993
- For IFR Certification: JAR-27 Appendix B, Issue 1, dated 6 September 1993
- Category A Engine Isolation Requirements of JAR-29, Issue 1, dated 5 November 1993.

Applicable paragraphs, selected from Appendix C to JAR-27, are:

29.861 (a)	Fire Protection of Structure, controls, and other parts
29.901 (c)	Powerplant: Installation
29.903 (b),(c),(e)	Engines
29.908 (a)	Cooling fans
29.917 (b),(c)(1)	Rotor Drive System: Design
29.927 (c)(1)	Additional tests
29.953 (a)	Fuel system independence
29.1027 (a)	Transmission and gearboxes
29.1045 (a)(1),(b),(c),(d),(f)	Climb cooling test procedures

29.1047 (a)	Take-off cooling test procedures
29.1181 (a)	Designated fire zones: regions included
29.1189 (c)	Shutoff means
29.1191 (a)(1)	Firewalls
29.1193 (e)	Cowling and engine compartment covering
29.1305 (a)(6),(b)	Powerplant instruments
29.1309 (b)(2)(i),(d)	Equipment, systems and installations
29.1331 (b)	Instruments using power supply
29.1351 (d)(2)	Electrical systems and equipment: General –

- For CAT A Certification: JAR 27 Appendix C, Issue 1, dated 6 September 1993
- JAA Interim HIRF Policy (INT/POL/278.29-1, dated 1 June 1997) applies for:
 - Dual Pilot IFR certification with 3-axis SAS, Pitch-Damper and Avionique Nouvelle CPDS and FCDS
 - Single Pilot/ Dual Pilot IFR certification with AFCS and Avionique Nouvelle CPDS and FCDS

3. Special Conditions

- No. SC 1 "Primary Structures Designed with Composite Material"
- No. SC 2 "Protection for Electrical and Electronic Systems from High Intensity Radiated Fields"; this Special Condition applies only for VFR and IFR certification with conventional instruments and for VFR certification with EFIS EFS 40.
- No. SC 3 "Electronic Flight Instrument Systems"
- No. SC 4 "Protection of air intake of EC135 against ingestion of foreign objects (Rain and Hail/Bird strike)"

4. Exemptions

None

5. Deviations

None

6. Equivalent Safety Findings

- Dual Pilot IFR certification concerning JAR 27 Appendix B, Para. IV (c) "Static Longitudinal Stability"
- JAR 27.1549 (b) related to the installation of the Vehicle and Engine Multifunction Display (VEMD) in the CPDS variants
- CS 27.865 (c) related to dual activation device for the Primary Quick Release Subsystem (Cyclic Stick) for the Double Cargo Hook System
- CS 27.601, 27.603, 27.865 (a) for Hoist Installation on Helicopters

7. Requirements elected to comply

None.

8. Environmental Protection Requirements

8.1 Noise Requirements

see TCDSN UK.TC.R.00064

8.2 Emission Requirements

n/a

9 Operational Suitability Data (OSD)

9.1 Master Minimum Equipment List (MMEL)

JAR-MMEL/MEL Section 1, Amdt. 1

CS-MMEL, Initial Issue, dated 31 January 2014, for the changes in Rev. 5

9.2 Flight Crew Data (FCD)

CS-FCD, Initial Issue, dated 31 January 2014

9.3 Simulation Data (SIMD)

Reserved.

9.4 Maintenance Certifying Staff Data (MCSD)

Reserved.

III. Technical Characteristics and Operational Limitations**1. Type Design Definition**

- EC135 Basic Master List Drawing No. L000M0007051
- Drawing of EC135 T2(CPDS) + L000M0021051 and following modifications

2. Description

Main rotor: bearingless, 4 blades
 Tail rotor: Fenestron, 10 blades
 Fuselage: metal-composite structure
 Landing gear: skid-type
 Powerplant: 2 independent freewheel turbines

3. Equipment

Basic equipment must be installed and operational prior to registration of the helicopter.

4. Dimensions**4.1 Fuselage**

Length: 5.87 m
 Width hull: 1.56 m
 Height: 3.35 m

4.2 Main Rotor

Diameter: 10.20 m

4.3 Tail Rotor

Diameter: 1.00 m

5. Engine**5.1 Model**

Safran Helicopter Engines (former: Turbomeca)
 2 x Model Arrius 2B2

5.2 Type Certificate

EASA TC/TCDS n°: TCDS No.E.029
 CAA TC/TCDS n°: TCDS No.E.029

5.3 Limitations

5.3.1 Installed Engine Limitations and Transmission Torque Limits

	TQ limits [%]	Gas generator [rpm (%)]	PWR turbine [rpm (%)]	Temperature TOT [°C]
AEO-TOP (5 min)	2 x 78	54 117 (100)	104	897
AEO-MCP	2 x 69	53 576 (99)	104	879
30 sec OEI-TOP	1 x 128	56 823 (105)	104	1024
2 min OEI-TOP	1 x 125	56 011 (103.5)	104	994
OEI-MCP	1 x 89.5	54 821 (101.3)	104	942

6. Fluids**6.1 Fuel**

Refer to approved RFM

6.2 Oil

Refer to approved RFM

6.3 Additives

Refer to approved RFM

7. Fluid capacities**7.1 Fuel**

Standard fuel tank (up to s/n 0249)

Fuel tank capacity: 680.0 litres

Usable fuel: 670.5 litres

Self-sealing fuel tank (up to s/n 0249)

Fuel tank capacity: 673.4 litres

Usable fuel: 664.0 litres

Modified fuel tank (from s/n 0250, or SB EC135-28-007)

Fuel tank capacity: 710.0 litres

Usable fuel: 700.5 litres

Self-sealing fuel tank (from s/n 0250)

Fuel tank capacity: 701.0 litres

Usable fuel: 691.6 litres

7.2 Oil

Refer to approved RFM

7.3 Coolant System Capacity

n/a

8. Air Speed Limitations

V_{NE}: 155 KIAS at MSL

Refer to approved RFM for reduction in V_{NE} with altitude and other speed limitations.

9. Rotor Speed Limitations

Power on:

Maximum	104 %
Minimum	97 %

Power off:

Maximum	106 %
Minimum	80 % (up to 1 900 kg)
Minimum	85 % (above 1 900 kg)
Transient:	Refer to approved RFM

10. Maximum Operating Altitude and Temperature

10.1 Altitude

20 000 ft (6 096 m) PA, refer to approved RFM for variation according to MTOW

10.2 Temperature

Refer to approved RFM

11. Operating Limitations

VFR day and night

Non-icing conditions

For IFR, Category A operation, see additional equipment requirements and limitations in the relevant approved RFMS

For Ditching, see Note 3

12. Maximum Mass

2 910 kg

Note: Operation of the aircraft with MTOW up to 2 950 kg is only permitted in accordance with RFMS 9.1-5, RFMS 9.1-6 and RFMS 9.1-7 from s/n 1055 and subsequent, or after SB EC135-62-028.

13. Centre of Gravity Range

Longitudinal C.G. limits

maximum forward limit:

4 180.0 mm aft of DP at 1 840 kg
4 227.3 mm aft of DP at 2 910 kg
4 229.3 mm aft of DP at 2 950 kg

maximum rearward limit:

4 570 mm aft of DP at 1 500 kg
4 369.0 mm aft of DP at 2 910 kg
4 362.6 mm aft of DP at 2 950 kg

Lateral C.G Limits

maximum deviation on right / left: 100 mm

14. Datum

Longitudinal: the datum plane (STA 0) is located at 2 160 mm forward of the levelling point in the front door frame

Lateral: fuselage median plane

15. Levelling Means

See levelling procedure document No. L082M0801X01

16. Minimum Flight Crew

1 pilot (right seat)

17. Maximum Passenger Seating Capacity

1 cockpit, 6 cabin (or 7, if the kit described in RFMS 9.2-31 is installed and operated)

18. Passenger Emergency Exit

2, one on each side of the passenger cabin

19. Maximum Baggage/ Cargo Loads

Cargo floor max load: 1 130 kg

Cargo floor max unit load: 600 kg/m²

20. Rotor Blade Control Movement

For rigging information refer to EC135 Aircraft Maintenance Manual

21. Auxiliary Power Unit (APU)

n/a

22. Life-limited Parts

See approved ALS Chapter 4 of the EC135 Master Servicing Manual

IV. Operating and Service Instructions**1. Flight Manual**

EC135 T2+, initially EASA-approved, dated 21 February 2006, or later approved revisions, including the supplements for Special Operations RFMS 9.1 and Optional Equipment RFMS 9.2.

2. Maintenance Manual

- EC135 Master Servicing Manual
- EC135 Aircraft Maintenance Manual
- Wiring Diagram Manual, latest revision
- Engine documents as per Engine TCDS No.EASA.E.029

3. Structural Repair Manual

EC135 Structural Repair Manual

4. Weight and Balance Manual

Refer to approved RFM

5. Illustrated Parts Catalogue

EC135 Illustrated Parts Catalogue

6. Service Letters and Service Bulletins

Safety Information Notice (from October 2008 onwards, before: Alert Service Information), Information Notice (from October 2008 onwards, before: Service Information), Alert Service Bulletin, Service Bulletin Repair Design Approval Sheets

7. Required Equipment

Special equipment and kits necessary for intended kind of operations as defined in the approved Flight Manual Supplements RFMS 9.2, are permissible.

V. Operational Suitability Data

The OSD elements listed below were approved by the European Union Aviation Safety Agency (EASA) as per Commission Regulation (EU) 748/2012, as amended by Commission Regulation (EU) No 69/2014.

Future revisions will be approved by the UK CAA in accordance with Regulation (EU) No. 748/2012 as retained (and amended in UK domestic law) under the European Union (Withdrawal) Act 2018 and amended by the Aviation Safety (Amendment etc.) (EU Exit) Regulations 2019.

1. Master Minimum Equipment List (MMEL)

MMEL document Revision 0, approved on 18 October 2011, or later approved revision.

2. Flight Crew Data

Flight Crew Operational Suitability Data as per document OSD_L0000M403901 first Issue, EASA approval date 15 October 2015, or later approved revisions.

- Appendix 2: "Operator Difference Requirements (ODR) Tables & Master Difference Requirements (MDR) Table" to the EASA Operational Suitability Data (OSD) – Flight Crew – EC135 Family, EASA approval date 15 October 2015, or later approved revisions.

- Appendix 3: "OSD EC135 Family – EASA OPS – Instruments and Equipment", to the EASA Operational Suitability Data (OSD) – Flight Crew – EC135 Family, EASA approval date 15 October 2015, or later approved revisions.

3. SIM Data

Reserved.

4. Maintenance Certifying Staff Data

Reserved.

VI. Notes**1. Manufacturer's eligible serial numbers:**

- 1.1 s/n 0506, and subsequent.
- 1.2 any EC135 T2(CPDS) that has been upgraded to EC135 T2+ according to SB EC135-71-033.
- 1.3 s/n 858 that has been retrofitted to EC135 T2+ according to SB EC135-00-002.

2. Night Vision Goggles Operational Capability:

Night Vision Goggles aided operations are permitted according to Rotorcraft Flight Manual Supplement RFMS 9.2-86 in conjunction with a serial number specific Flight Manual Appendix FMA 11-x, when the rotorcraft is equipped accordingly, and a competent authority has granted operational authorisation only. The helicopter configuration containing NVIS lighting components approved for the use with Night Vision Goggles is described in a serial number specific AHD NVIS Substantiation Report for operators having received an approval for their NVIS configuration.

3. The emergency floatation system in accordance with RFMS 9.2-67, is certified as ditching provision in accordance with JAR-27.

The helicopter may be certificated for ditching provided the following additional equipment are fitted and approved in accordance with the relevant airworthiness requirements:

- survival type emergency locator transmitter
- life raft installation
- life preserver.

Section 15 EC635 T2+**I. General****1. Type/ Model/ Variant**

- | | | |
|-----|---------|-----------|
| 1.1 | Type | EC135 |
| 1.2 | Model | EC635 T2+ |
| 1.3 | Variant | |

2. Airworthiness Category

Small Rotorcraft

3. Type Certificate Holder

Airbus Helicopters Deutschland GmbH
 Industriestrasse 4
 D-86609 Donauwörth, Germany

4. Manufacturer

See Section 21 Administration, subsection II.3 Production Organisation Approval Holder

5. Type Certification Application Date to LBA

17 July 2006

6. State of Design Authority

European Union Aviation Safety Agency (EASA)

7. EASA Type Certification Date

6 December 2006

II. Certification Basis**1. Reference Date for determining the applicable requirements**

For Airworthiness and Environmental Protection: 17 July 2006

For OSD elements, Grandfathering date: 17 February 2014

2. Airworthiness Requirements

- JAR-27, Issue 1, dated 6 September 1993
- For IFR Certification: JAR-27 Appendix B, Issue 1, dated 6 September 1993
- Category A Engine Isolation Requirements of JAR-29, Issue 1, dated 5 November 1993.

Applicable paragraphs, selected from Appendix C to JAR-27, are:

29.861 (a)	Fire Protection of Structure, controls, and other parts
29.901 (c)	Powerplant: Installation
29.903 (b),(c),(e)	Engines
29.908 (a)	Cooling fans
29.917 (b),(c)(1)	Rotor Drive System: Design
29.927 (c)(1)	Additional tests
29.953 (a)	Fuel system independence
29.1027 (a)	Transmission and gearboxes
29.1045 (a)(1),(b),(c),(d),(f)	Climb cooling test procedures

29.1047 (a)	Take-off cooling test procedures
29.1181 (a)	Designated fire zones: regions included
29.1189 (c)	Shutoff means
29.1191 (a)(1)	Firewalls
29.1193 (e)	Cowling and engine compartment covering
29.1305 (a)(6),(b)	Powerplant instruments
29.1309 (b)(2)(i),(d)	Equipment, systems and installations
29.1331 (b)	Instruments using power supply
29.1351 (d)(2)	Electrical systems and equipment: General –

- For CAT A Certification: JAR 27 Appendix C, Issue 1, dated 6 September 1993

- JAA Interim HIRF Policy (INT/POL/278.29-1, dated 1 June 1997) applies for:

- Dual Pilot IFR certification with 3-axis SAS, Pitch-Damper and Avionique Nouvelle CPDS and FCDS
- Single Pilot/ Dual Pilot IFR certification with AFCS and Avionique Nouvelle CPDS and FCDS

3. Special Conditions

- No. SC 1 "Primary Structures Designed with Composite Material"
- No. SC 2 "Protection for Electrical and Electronic Systems from High Intensity Radiated Fields"; this Special Condition applies only for VFR and IFR certification with conventional instruments and for VFR certification with EFIS EFS 40.
- No. SC 3 "Electronic Flight Instrument Systems"
- No. SC 4 "Protection of air intake of EC135 against ingestion of foreign objects (Rain and Hail/Bird strike)"

4. Exemptions

None

5. Deviations

None

6. Equivalent Safety Findings

- Dual Pilot IFR certification concerning JAR 27 Appendix B, Para. IV (c) "Static Longitudinal Stability"
- JAR 27.1549 (b) related to the installation of the Vehicle and Engine Multifunction Display (VEMD) in the CPDS variants
- CS 27.865 (c) related to dual activation device for the Primary Quick Release Subsystem (Cyclic Stick) for the Double Cargo Hook System
- CS 27.601, 27.603, 27.865 (a) for Hoist Installation on Helicopters

7. Requirements elected to comply

None.

8. Environmental Protection Requirements

8.1 Noise Requirements

see TCDSN UK.TC.R.00064

8.2 Emission Requirements

n/a

9 Operational Suitability Data (OSD)

9.1 Master Minimum Equipment List (MMEL)

JAR-MMEL/MEL Section 1, Amdt. 1

CS-MMEL, Initial Issue, dated 31 January 2014, for the changes in Rev. 5

9.2 Flight Crew Data (FCD)

CS-FCD, Initial Issue, dated 31 January 2014

9.3 Simulation Data (SIMD)

Reserved.

9.4 Maintenance Certifying Staff Data (MCSD)

Reserved.

III. Technical Characteristics and Operational Limitations**1. Type Design Definition**

- EC135 Basic Master List Drawing No. L000M0007051
- Drawing of EC135 T2(CPDS) + L000M0021051 and following modifications
- EC635 Kit (Drawing No. W533M1700051)

2. Description

Main rotor: bearingless, 4 blades
 Tail rotor: Fenestron, 10 blades
 Fuselage: metal-composite structure
 Landing gear: skid-type
 Powerplant: 2 independent freewheel turbines

3. Equipment

Basic equipment must be installed and operational prior to registration of the helicopter.

4. Dimensions**4.1 Fuselage**

Length: 5.87 m
 Width hull: 1.56 m
 Height: 3.35 m

4.2 Main Rotor

Diameter: 10.20 m

4.3 Tail Rotor

Diameter: 1.00 m

5. Engine**5.1 Model**

Safran Helicopter Engines (former: Turbomeca)

2 x Model Arrius 2B2

5.2 Type Certificate

EASA TC/TCDS n°: TCDS No.E.029

CAA TC/TCDS n°: TCDS No.E.029

5.3 Limitations

5.3.1 Installed Engine Limitations and Transmission Torque Limits

	TQ limits [%]	Gas generator [rpm (%)]	PWR turbine [rpm (%)]	Temperature TOT [°C]
AEO-TOP (5 min)	2 x 78	54 117 (100)	104	897
AEO-MCP	2 x 69	53 576 (99)	104	879
30 sec OEI-TOP	1 x 128	56 823 (105)	104	1024
2 min OEI-TOP	1 x 125	56 011 (103.5)	104	994
OEI-MCP	1 x 89.5	54 821 (101.3)	104	942

6. Fluids

6.1 Fuel

Refer to approved RFM

6.2 Oil

Refer to approved RFM

6.3 Additives

Refer to approved RFM

7. Fluid capacities

7.1 Fuel

Standard fuel tank (up to s/n 0249)

Fuel tank capacity: 680.0 litres

Usable fuel: 670.5 litres

Self-sealing fuel tank (up to s/n 0249)

Fuel tank capacity: 673.4 litres

Usable fuel: 664.0 litres

Modified fuel tank (from s/n 0250, or SB EC135-28-007)

Fuel tank capacity: 710.0 litres

Usable fuel: 700.5 litres

Self-sealing fuel tank (from s/n 0250)

Fuel tank capacity: 701.0 litres

Usable fuel: 691.6 litres

7.2 Oil

Refer to approved RFM

7.3 Coolant System Capacity

n/a

8. Air Speed Limitations

V_{NE}: 155 KIAS at MSL

Refer to approved RFM for reduction in V_{NE} with altitude and other speed limitations.

9. Rotor Speed Limitations

Power on:

Maximum	104 %
Minimum	97 %

Power off:

Maximum	106 %
Minimum	80 % (up to 1 900 kg)
Minimum	85 % (above 1 900 kg)
Transient:	Refer to approved RFM

10. Maximum Operating Altitude and Temperature

10.1 Altitude

20 000 ft (6 096 m) PA, refer to approved RFM for variation according to MTOW

10.2 Temperature

Refer to approved RFM

11. Operating Limitations

VFR day and night

Non-icing conditions

For IFR, Category A operation, see additional equipment requirements and limitations in the relevant approved RFMS

For Ditching, see Note 3

12. Maximum Mass

2 910 kg

Note: Operation of the aircraft with MTOW up to 2 950 kg is only permitted in accordance with RFMS 9.1-5, RFMS 9.1-6 and RFMS 9.1-7 from s/n 1055 and subsequent, or after SB EC135-62-028.

13. Centre of Gravity Range

Longitudinal C.G. limits

maximum forward limit:

4 180.0 mm aft of DP at 1 840 kg
4 227.3 mm aft of DP at 2 910 kg
4 229.3 mm aft of DP at 2 950 kg

maximum rearward limit:

4 570 mm aft of DP at 1 500 kg
4 369.0 mm aft of DP at 2 910 kg
4 362.6 mm aft of DP at 2 950 kg

Lateral C.G Limits

maximum deviation on right / left: 100 mm

14. Datum

Longitudinal: the datum plane (STA 0) is located at 2 160 mm forward of the levelling point in the front door frame

Lateral: fuselage median plane

15. Levelling Means

See levelling procedure document No. L082M0801X01

16. Minimum Flight Crew

1 pilot (right seat)

17. Maximum Passenger Seating Capacity

1 cockpit, 6 cabin (or 7, if the kit described in RFMS 9.2-31 is installed and operated)

18. Passenger Emergency Exit

2, one on each side of the passenger cabin

19. Maximum Baggage/ Cargo Loads

Cargo floor max load: 1 130 kg

Cargo floor max unit load: 600 kg/m²

20. Rotor Blade Control Movement

For rigging information refer to EC135 Aircraft Maintenance Manual

21. Auxiliary Power Unit (APU)

n/a

22. Life-limited Parts

See approved ALS Chapter 4 of the EC135 Master Servicing Manual

IV. Operating and Service Instructions**1. Flight Manual**

EC635 T2+, initially EASA-approved, dated 6 December 2006, or later approved revisions, including the supplements for Special Operations RFMS 9.1 and Optional Equipment RFMS 9.2.

2. Maintenance Manual

- EC135 Master Servicing Manual
- EC135 Aircraft Maintenance Manual
- Wiring Diagram Manual, latest revision
- Engine documents as per Engine TCDS No.EASA.E.029

3. Structural Repair Manual

EC135 Structural Repair Manual

4. Weight and Balance Manual

Refer to approved RFM

5. Illustrated Parts Catalogue

EC135 Illustrated Parts Catalogue

6. Service Letters and Service Bulletins

Safety Information Notice (from October 2008 onwards, before: Alert Service Information), Information Notice (from October 2008 onwards, before: Service Information), Alert Service Bulletin, Service Bulletin Repair Design Approval Sheets

7. Required Equipment

Special equipment and kits necessary for intended kind of operations as defined in the approved Flight Manual Supplements RFMS 9.2, are permissible.

V. Operational Suitability Data

The OSD elements listed below were approved by the European Union Aviation Safety Agency (EASA) as per Commission Regulation (EU) 748/2012, as amended by Commission Regulation (EU) No 69/2014.

Future revisions will be approved by the UK CAA in accordance with Regulation (EU) No. 748/2012 as retained (and amended in UK domestic law) under the European Union (Withdrawal) Act 2018 and amended by the Aviation Safety (Amendment etc.) (EU Exit) Regulations 2019.

1. Master Minimum Equipment List (MMEL)

MMEL document Revision 0, approved on 18 October 2011, or later approved revision.

2. Flight Crew Data

Flight Crew Operational Suitability Data as per document OSD_L0000M403901 first Issue, EASA approval date 15 October 2015, or later approved revisions.

- Appendix 2: "Operator Difference Requirements (ODR) Tables & Master Difference Requirements (MDR) Table" to the EASA Operational Suitability Data (OSD) – Flight Crew – EC135 Family, EASA approval date 15 October 2015, or later approved revisions.

- Appendix 3: "OSD EC135 Family – EASA OPS – Instruments and Equipment", to the EASA Operational Suitability Data (OSD) – Flight Crew – EC135 Family, EASA approval date 15 October 2015, or later approved revisions.

3. SIM Data

Reserved.

4. Maintenance Certifying Staff Data

Reserved.

VI. Notes**1. Manufacturer's eligible serial numbers:**

s/n 0506, and subsequent.

2. Night Vision Goggles Operational Capability:

Night Vision Goggles aided operations are permitted according to Rotorcraft Flight Manual Supplement RFMS 9.2-86 in conjunction with a serial number specific Flight Manual Appendix FMA 11-x, when the rotorcraft is equipped accordingly, and a competent authority has granted operational authorisation only. The helicopter configuration containing NVIS lighting components approved for the use with Night Vision Goggles is described in a serial number specific AHD NVIS Substantiation Report for operators having received an approval for their NVIS configuration.

3. The emergency floatation system in accordance with RFMS 9.2-67, is certified as ditching provision in accordance with JAR-27.

The helicopter may be certificated for ditching provided the following additional equipment are fitted and approved in accordance with the relevant airworthiness requirements:

- survival type emergency locator transmitter
- life raft installation
- life preserver.

Section 16 EC135 T3(CPDS)**I. General****1. Type/ Model/ Variant**

1.1	Type	EC135
1.2	Model	EC135 T3
1.3	Variant	EC135 T3

2. Airworthiness Category

Small Rotorcraft

3. Type Certificate Holder

Airbus Helicopters Deutschland GmbH
Industriestrasse 4
D-86609 Donauwörth, Germany

4. Manufacturer

See Section 21 Administration, subsection II.3 Production Organisation Approval Holder

5. Type Certification Application Date to LBA

10 June 2011

6. State of Design Authority

European Union Aviation Safety Agency (EASA)

7. EASA Type Certification Date

17 October 2014

II. Certification Basis**1. Reference Date for determining the applicable requirements**

For Airworthiness and Environmental Protection: 10 June 2011

For OSD elements, Grandfathering date: 17 February 2014

2. Airworthiness Requirements

- JAR-27, Issue 1, dated 6 September 1993, supplemented by the following CS-27 Amdt. 2 requirements:
CS 27.1 (a) in connection with CS 27.2(b)(2)(i).

CS 27.0021	CS 27.0161	CS 27.0341	CS 27.0607	CS 27.0771	CS 27.1193	CS 27.1521
CS 27.0025	CS 27.0171	CS 27.0351	CS 27.0609	CS 27.0853	CS 27.1301	CS 27.1525
CS 27.0027	CS 27.0173	CS 27.0361	CS 27.0610	CS 27.0865	CS 27.1305	CS 27.1527
CS 27.0029	CS 27.0175	CS 27.0391	CS 27.0611	CS 27.0901	CS 27.1309	CS 27.1529
CS 27.0031	CS 27.0177	CS 27.0427	CS 27.0613	CS 27.0903	CS 27.1321	CS 27.1541
CS 27.0033	CS 27.0231	CS 27.0471	CS 27.0629	CS 27.0907	CS 27.1323	CS 27.1545
CS 27.0045	CS 27.0241	CS 27.0473	CS 27.0653	CS 27.0931	CS 27.1329	CS 27.1549
CS 27.0049	CS 27.0251	CS 27.0501	CS 27.0659	CS 27.0939	CS 27.1351	CS 27.1559
CS 27.0051	CS 27.0301	CS 27.0521	CS 27.0661	CS 27.1041	CS 27.1365	CS 27.1581
CS 27.0065	CS 27.0303	CS 27.0547	CS 27.0663	CS 27.1043	CS 27.1381	CS 27.1583

CS 27.0067	CS 27.0305	CS 27.0549	CS 27.0671	CS 27.1045	CS 27.1435
CS 27.0075	CS 27.0307	CS 27.0561	CS 27.0672	CS 27.1091	CS 27.1501
CS 27.0079	CS 27.0309	CS 27.0571	CS 27.0681	CS 27.1093	CS 27.1503
CS 27.0141	CS 27.0321	CS 27.0601	CS 27.0683	CS 27.1141	CS 27.1505
CS 27.0143	CS 27.0337	CS 27.0602	CS 27.0691	CS 27.1143	CS 27.1509
CS 27.0151	CS 27.0339	CS 27.0603	CS 27.0695	CS 27.1187	CS 27.1519

- For IFR Certification: CS 27 Amdt 2, Appendix B, Issue 1, dated 10 November 2008
- Category A Engine Isolation Requirements of JAR-29, Issue 1, dated 5 November 1993.

Applicable paragraphs, selected from Appendix C to JAR-27, are:

29.861 (a)	Fire Protection of Structure, controls, and other parts
29.901 (c)	Powerplant: Installation
29.903 (b),(c),(e)	Engines
29.908 (a)	Cooling fans
29.917 (b),(c)(1)	Rotor Drive System: Design
29.927 (c)(1)	Additional tests
29.953 (a)	Fuel system independence
29.1027 (a)	Transmission and gearboxes
29.1045 (a)(1),(b),(c),(d),(f)	Climb cooling test procedures
29.1047 (a)	Take-off cooling test procedures
29.1181 (a)	Designated fire zones: regions included
29.1189 (c)	Shutoff means
29.1191 (a)(1)	Firewalls
29.1193 (e)	Cowling and engine compartment covering
29.1305 (a)(6),(b)	Powerplant instruments
29.1309 (b)(2)(i),(d)	Equipment, systems and installations
29.1331 (b)	Instruments using power supply
29.1351 (d)(2)	Electrical systems and equipment: General

- For CAT A Certification: CS 27 Amdt 2, Appendix C, requirements

3. Special Conditions

- No. SC 1 "Primary Structures Designed with Composite Material"
- No. SC 3 "Electronic Flight Instrument Systems"

4. Exemptions

None

5. Deviations

None

6. Equivalent Safety Findings

- JAR 27.1549 (b) related to the installation of the Vehicle and Engine Multifunction Display (VEMD) in the CPDS variants

- CS 27.865 (c) related to dual activation device for the Primary Quick Release Subsystem (Cyclic Stick) for the Double Cargo Hook System
- CS 27.1557 (d) related to safety enhanced colour scheme ('black&yellow' in place of 'red') for the emergency exit handle cap.
- CS 27.571, 27.602 (b), 27.865 (f) for Hoist Installation on Helicopters
- CS 27.601, 27.603, 27.865 (a) for Hoist Installation on Helicopters

7. Requirements elected to comply

None.

8. Environmental Protection Requirements

8.1 Noise Requirements

see TCDSN UK.TC.R.00064

8.2 Emission Requirements

ICAO Annex 16, Volume II, Part II, Chapter 2, (CS-34, Initial Issue)

9 Operational Suitability Data (OSD)

9.1 Master Minimum Equipment List (MMEL)

JAR-MMEL/MEL Section 1, Amdt. 1

CS-MMEL, Initial Issue, dated 31 January 2014, for the changes in Rev. 5

9.2 Flight Crew Data (FCD)

CS-FCD, Initial Issue, dated 31 January 2014

9.3 Simulation Data (SIMD)

Reserved.

9.4 Maintenance Certifying Staff Data (MCSD)

Reserved.

III. Technical Characteristics and Operational Limitations

1. Type Design Definition

- TDD L000M233400, Issue A

2. Description

Main rotor: bearingless, 4 blades
 Tail rotor: Fenestron, 10 blades
 Fuselage: metal-composite structure
 Landing gear: skid-type
 Powerplant: 2 independent freewheel turbines

3. Equipment

Basic equipment must be installed and operational prior to registration of the helicopter.

4. Dimensions

4.1 Fuselage

Length: 5.87 m
 Width hull: 1.56 m
 Height: 3.35 m

4.2 Main Rotor

Diameter: 10.40 m

4.3 Tail Rotor

Diameter: 1.00 m

5. Engine**5.1 Model**

Safran Helicopter Engines (former: Turbomeca)

2 x Model Arrius 2B2

5.2 Type Certificate

EASA TC/TCDS n°: TCDS No.E.029

CAA TC/TCDS n°: TCDS No.E.029

5.3 Limitations**5.3.1 Installed Engine Limitations and Transmission Torque Limits**

	TQ limits [%]	Max N1 speed (gas generator) [%]	Max N2 speed (output shaft) [%]	Temperature TOT [°C]
AEO-TOP (5 min)	2 x 78	86.1-100	106	897
AEO-MCP	2 x 69	85.3-99	106	879
30 sec OEI-TOP	1 x 128	91.7-104.80	106	1024
2 min OEI-TOP	1 x 125	91.7-103.50	106	994
OEI-MCP	1 x 89.5	87.4-101.25	106	942

6. Fluids**6.1 Fuel**

Refer to approved RFM

6.2 Oil

Refer to approved RFM

6.3 Additives

Refer to approved RFM

7. Fluid capacities**7.1 Fuel**

Standard fuel tank (up to s/n 0249)

Fuel tank capacity: 680.0 litres

Usable fuel: 670.5 litres

Self-sealing fuel tank (up to s/n 0249)

Fuel tank capacity: 673.4 litres

Usable fuel: 664.0 litres

Modified fuel tank (from s/n 0250, or SB EC135-28-007)

Fuel tank capacity: 710.0 litres

Usable fuel: 700.5 litres

Self-sealing fuel tank (from s/n 0250)

Fuel tank capacity: 701.0 litres

Usable fuel: 691.6 litres

7.2 Oil

Refer to approved RFM

7.3 Coolant System Capacity

n/a

8. Air Speed Limitations

V_{NE} : 150 KIAS at MSL, or as shown in the V_{NE} -tables, whichever is less.

Refer to approved RFM for reduction in V_{NE} with altitude and other speed limitations.

9. Rotor Speed Limitations

Power on:

Maximum	105.5 %
Minimum	97 %

Power off:

Maximum	107.5 %
Minimum	80 % (up to 1 900 kg)
Minimum	85 % (above 1 900 kg)
Transient:	Refer to approved RFM

10. Maximum Operating Altitude and Temperature

10.1 Altitude

20 000 ft (6 096 m) PA, refer to approved RFM for variation according to MTOW

10.2 Temperature

Refer to approved RFM

11. Operating Limitations

VFR day and night

Non-icing conditions

For IFR, Category A operation, see additional equipment requirements and limitations in the relevant approved RFMS

For Ditching, see Note 3

12. Maximum Mass

12.1	Maximum gross mass	2 980 kg
12.2	Maximum ramp and taxi mass	3 000 kg
12.3	Minimum gross mass	1 600 kg

13. Centre of Gravity Range

Longitudinal C.G. limits

maximum forward limit:

4 152 mm aft of DP at 2 039 kg
4 201 mm aft of DP at 2 980 kg

maximum rearward limit:

4 369 mm aft of DP at 2 980 kg
 4 555 mm aft of DP at 1 600 kg

Lateral C.G Limits

maximum deviation on right / left: 100 mm

14. Datum

Longitudinal: the datum plane (STA 0) is located at 2 160 mm forward of the levelling point in the front door frame

Lateral: fuselage median plane

15. Levelling Means

See levelling procedure document No. L082M0801X01

16. Minimum Flight Crew

1 pilot (right seat)

17. Maximum Passenger Seating Capacity

7

18. Passenger Emergency Exit

2, one on each side of the passenger cabin

19. Maximum Baggage/ Cargo Loads

Cargo floor max load: 1 130 kg

Cargo floor max unit load: 600 kg/m²

20. Rotor Blade Control Movement

For rigging information refer to EC135 Aircraft Maintenance Manual

21. Auxiliary Power Unit (APU)

n/a

22. Life-limited Parts

See approved ALS Chapter 4 of the EC135 Master Servicing Manual

IV. Operating and Service Instructions

1. Flight Manual

EC135 T3, initially EASA-approved, dated 17 October 2014, or later approved revisions, including the supplements for Special Operations RFMS 9.1 and Optional Equipment RFMS 9.2.

2. Maintenance Manual

- EC135 Master Servicing Manual
- EC135 Aircraft Maintenance Manual
- Wiring Diagram Manual, latest revision
- Engine documents as per Engine TCDS No.EASA.E.029

3. Structural Repair Manual

EC135 Structural Repair Manual

4. Weight and Balance Manual

Refer to approved RFM

5. Illustrated Parts Catalogue

EC135 Illustrated Parts Catalogue

6. Service Letters and Service Bulletins

Safety Information Notice, Information Notice, Alert Service Bulletin, Service Bulletin Repair Design Approval Sheets

7. Required Equipment

Special equipment and kits necessary for intended kind of operations as defined in the approved Flight Manual Supplements RFMS 9.2, are permissible.

V Operational Suitability Data

The OSD elements listed below were approved by the European Union Aviation Safety Agency (EASA) as per Commission Regulation (EU) 748/2012, as amended by Commission Regulation (EU) No 69/2014.

Future revisions will be approved by the UK CAA in accordance with Regulation (EU) No. 748/2012 as retained (and amended in UK domestic law) under the European Union (Withdrawal) Act 2018 and amended by the Aviation Safety (Amendment etc.) (EU Exit) Regulations 2019.

1. Master Minimum Equipment List (MMEL)

MMEL document Revision 3, approved on 15 October 2014, or later approved revision.

2. Flight Crew Data

Flight Crew Operational Suitability Data as per document OSD_L0000M403901 first Issue, EASA approval date 15 October 2015, or later approved revisions.

- Appendix 2: "Operator Difference Requirements (ODR) Tables & Master Difference Requirements (MDR) Table" to the EASA Operational Suitability Data (OSD) – Flight Crew – EC135 Family, EASA approval date 15 October 2015, or later approved revisions.

- Appendix 3: "OSD EC135 Family – EASA OPS – Instruments and Equipment", to the EASA Operational Suitability Data (OSD) – Flight Crew – EC135 Family, EASA approval date 15 October 2015, or later approved revisions.

3. SIM Data

Reserved.

4. Maintenance Certifying Staff Data

Reserved

VI. Notes**1. Manufacturer's eligible serial numbers:**

1.1 s/n 1155, and subsequent.

1.2 any EC135 T2+ that has been upgraded to EC135 T3(CPDS) according to SB EC135-71T-045.

2. Night Vision Goggles Operational Capability:

Night Vision Goggles aided operations are permitted according to Rotorcraft Flight Manual Supplement RFMS 9.2-86 in conjunction with a serial number specific Flight Manual Appendix FMA 11-x, when the rotorcraft is equipped accordingly, and a competent authority has granted operational authorisation only. The helicopter configuration containing NVIS lighting components approved for the use with Night Vision Goggles is described in a serial number specific AHD NVIS Substantiation Report for operators having received an approval for their NVIS configuration.

3. The emergency floatation system in accordance with RFMS 9.2-67, is certified as ditching provision in accordance with JAR-27.

The helicopter may be certificated for ditching provided the following additional equipment are fitted and approved in accordance with the relevant airworthiness requirements:

- survival type emergency locator transmitter
- life raft installation
- life preserver.

4. Designation:

“H135” is used as marketing designation for EC135 T3(CPDS) helicopters.

Section 17 EC635 T3(CPDS)**I. General****1. Type/ Model/ Variant**

- | | | |
|-----|---------|----------------|
| 1.1 | Type | EC135 |
| 1.2 | Model | EC635 T3 |
| 1.3 | Variant | EC635 T3(CPDS) |

2. Airworthiness Category

Small Rotorcraft

3. Type Certificate Holder

Airbus Helicopters Deutschland GmbH
Industriestrasse 4
D-86609 Donauwörth, Germany

4. Manufacturer

See Section 21 Administration, subsection II.3 Production Organisation Approval Holder

5. Type Certification Application Date to LBA

10 June 2011

6. State of Design Authority

European Union Aviation Safety Agency (EASA)

7. EASA Type Certification Date

17 October 2014

II. Certification Basis**1. Reference Date for determining the applicable requirements**

For Airworthiness and Environmental Protection: 10 June 2011

For OSD elements, Grandfathering date: 17 February 2014

2. Airworthiness Requirements

- JAR-27, Issue 1, dated 6 September 1993, supplemented by the following CS-27 Amdt. 2 requirements:
CS 27.1 (a) in connection with CS 27.2(b)(2)(i).

CS 27.0021	CS 27.0161	CS 27.0341	CS 27.0607	CS 27.0771	CS 27.1193	CS 27.1521
CS 27.0025	CS 27.0171	CS 27.0351	CS 27.0609	CS 27.0853	CS 27.1301	CS 27.1525
CS 27.0027	CS 27.0173	CS 27.0361	CS 27.0610	CS 27.0865	CS 27.1305	CS 27.1527
CS 27.0029	CS 27.0175	CS 27.0391	CS 27.0611	CS 27.0901	CS 27.1309	CS 27.1529
CS 27.0031	CS 27.0177	CS 27.0427	CS 27.0613	CS 27.0903	CS 27.1321	CS 27.1541
CS 27.0033	CS 27.0231	CS 27.0471	CS 27.0629	CS 27.0907	CS 27.1323	CS 27.1545
CS 27.0045	CS 27.0241	CS 27.0473	CS 27.0653	CS 27.0931	CS 27.1329	CS 27.1549
CS 27.0049	CS 27.0251	CS 27.0501	CS 27.0659	CS 27.0939	CS 27.1351	CS 27.1559
CS 27.0051	CS 27.0301	CS 27.0521	CS 27.0661	CS 27.1041	CS 27.1365	CS 27.1581

CS 27.0065	CS 27.0303	CS 27.0547	CS 27.0663	CS 27.1043	CS 27.1381	CS 27.1583
CS 27.0067	CS 27.0305	CS 27.0549	CS 27.0671	CS 27.1045	CS 27.1435	
CS 27.0075	CS 27.0307	CS 27.0561	CS 27.0672	CS 27.1091	CS 27.1501	
CS 27.0079	CS 27.0309	CS 27.0571	CS 27.0681	CS 27.1093	CS 27.1503	
CS 27.0141	CS 27.0321	CS 27.0601	CS 27.0683	CS 27.1141	CS 27.1505	
CS 27.0143	CS 27.0337	CS 27.0602	CS 27.0691	CS 27.1143	CS 27.1509	
CS 27.0151	CS 27.0339	CS 27.0603	CS 27.0695	CS 27.1187	CS 27.1519	

- For IFR Certification: CS 27 Amdt 2, Appendix B, Issue 1, dated 10 November 2008
- Category A Engine Isolation Requirements of JAR-29, Issue 1, dated 5 November 1993.

Applicable paragraphs, selected from Appendix C to JAR-27, are:

29.861 (a)	Fire Protection of Structure, controls, and other parts
29.901 (c)	Powerplant: Installation
29.903 (b),(c),(e)	Engines
29.908 (a)	Cooling fans
29.917 (b),(c)(1)	Rotor Drive System: Design
29.927 (c)(1)	Additional tests
29.953 (a)	Fuel system independence
29.1027 (a)	Transmission and gearboxes
29.1045 (a)(1),(b),(c),(d),(f)	Climb cooling test procedures
29.1047 (a)	Take-off cooling test procedures
29.1181 (a)	Designated fire zones: regions included
29.1189 (c)	Shutoff means
29.1191 (a)(1)	Firewalls
29.1193 (e)	Cowling and engine compartment covering
29.1305 (a)(6),(b)	Powerplant instruments
29.1309 (b)(2)(i),(d)	Equipment, systems and installations
29.1331 (b)	Instruments using power supply
29.1351 (d)(2)	Electrical systems and equipment: General

- For CAT A Certification: CS 27 Amdt 2, Appendix C, requirements

3. Special Conditions

- No. SC 1 "Primary Structures Designed with Composite Material"
- No. SC 3 "Electronic Flight Instrument Systems"

4. Exemptions

None

5. Deviations

None

6. Equivalent Safety Findings

- JAR 27.1549 (b) related to the installation of the Vehicle and Engine Multifunction Display (VEMD) in the CPDS variants
- CS 27.865 (c) related to dual activation device for the Primary Quick Release Subsystem (Cyclic Stick) for the Double Cargo Hook System
- CS 27.1557 (d) related to safety enhanced colour scheme ('black&yellow' in place of 'red') for the emergency exit handle cap.
- CS 27.571, 27.602 (b), 27.865 (f) for Hoist Installation on Helicopters
- CS 27.601, 27.603, 27.865 (a) for Hoist Installation on Helicopters

7. Requirements elected to comply

None.

8. Environmental Protection Requirements

8.1 Noise Requirements

see TCDSN UK.TC.R.00064

8.2 Emission Requirements

ICAO Annex 16, Volume II, Part II, Chapter 2, (CS-34, Initial Issue)

9 Operational Suitability Data (OSD)

9.1 Master Minimum Equipment List (MMEL)

JAR-MMEL/MEL Section 1, Amdt. 1

CS-MMEL, Initial Issue, dated 31 January 2014, for the changes in Rev. 5

9.2 Flight Crew Data (FCD)

CS-FCD, Initial Issue, dated 31 January 2014

9.3 Simulation Data (SIMD)

Reserved.

9.4 Maintenance Certifying Staff Data (MCSD)

Reserved.

III. Technical Characteristics and Operational Limitations

1. Type Design Definition

- TDD L000M233400, Issue A
- + EC635 Kit (Drawing No. W530M0700052)

2. Description

Main rotor: bearingless, 4 blades

Tail rotor: Fenestron, 10 blades

Fuselage: metal-composite structure

Landing gear: skid-type

Powerplant: 2 independent freewheel turbines

Note: The variant EC635 T3 corresponds to the EC135 T3 plus structural reinforcement of cabin structure according to the drawing W530M0700052.

3. Equipment

Basic equipment must be installed and operational prior to registration of the helicopter.

4. Dimensions

4.1 Fuselage

Length: 5.87 m
Width hull: 1.56 m
Height: 3.35 m

4.2 Main Rotor

Diameter: 10.40 m

4.3 Tail Rotor

Diameter: 1.00 m

5. Engine

5.1 Model

Safran Helicopter Engines (former: Turbomeca)
2 x Model Arrius 2B2

5.2 Type Certificate

EASA TC/TCDS n°: TCDS No.E.029
CAA TC/TCDS n°: TCDS No.E.029

5.3 Limitations

5.3.1 Installed Engine Limitations and Transmission Torque Limits

	TQ limits [%]	Max N1 speed (gas generator) [%]	Max N2 speed (output shaft) [%]	Temperature TOT [°C]
AEO-TOP (5 min)	2 x 78	86.1-100	106	897
AEO-MCP	2 x 69	85.3-99	106	879
30 sec OEI-TOP	1 x 128	91.7-104.80	106	1024
2 min OEI-TOP	1 x 125	91.7-103.50	106	994
OEI-MCP	1 x 89.5	87.4-101.25	106	942

6. Fluids

6.1 Fuel

Refer to approved RFM

6.2 Oil

Refer to approved RFM

6.3 Additives

Refer to approved RFM

7. Fluid capacities

7.1 Fuel

Standard fuel tank (up to s/n 0249)

Fuel tank capacity: 680.0 litres

Usable fuel: 670.5 litres

Self-sealing fuel tank (up to s/n 0249)

Fuel tank capacity: 673.4 litres

Usable fuel: 664.0 litres

Modified fuel tank (from s/n 0250, or SB EC135-28-007)

Fuel tank capacity: 710.0 litres

Usable fuel: 700.5 litres

Self-sealing fuel tank (from s/n 0250)

Fuel tank capacity: 701.0 litres

Usable fuel: 691.6 litres

7.2 Oil

Refer to approved RFM

7.3 Coolant System Capacity

n/a

8. Air Speed Limitations

V_{NE} : 150 KIAS at MSL, or as shown in the V_{NE} -tables, whichever is less.

Refer to approved RFM for reduction in V_{NE} with altitude and other speed limitations.

9. Rotor Speed Limitations

Power on:

Maximum	105.5 %
Minimum	97 %

Power off:

Maximum	107.5 %
Minimum	80 % (up to 1 900 kg)
Minimum	85 % (above 1 900 kg)
Transient:	Refer to approved RFM

10. Maximum Operating Altitude and Temperature

10.1 Altitude

20 000 ft (6 096 m) PA, refer to approved RFM for variation according to MTOW

10.2 Temperature

Refer to approved RFM

11. Operating Limitations

VFR day and night

Non-icing conditions

For IFR, Category A operation, see additional equipment requirements and limitations in the relevant approved RFMS

For Ditching, see Note 3

12. Maximum Mass

12.1	Maximum gross mass	2 980 kg
12.2	Maximum ramp and taxi mass	3 000 kg
12.3	Minimum gross mass	1 600 kg

13. Centre of Gravity Range

Longitudinal C.G. limits

maximum forward limit:

- 4 152 mm aft of DP at 2 039 kg
- 4 201 mm aft of DP at 2 980 kg

maximum rearward limit:

- 4 369 mm aft of DP at 2 980 kg
- 4 555 mm aft of DP at 1 600 kg

Lateral C.G Limits

maximum deviation on right / left: 100 mm

14. Datum

Longitudinal: the datum plane (STA 0) is located at 2 160 mm forward of the levelling point in the front door frame

Lateral: fuselage median plane

15. Levelling Means

See levelling procedure document No. L082M0801X01

16. Minimum Flight Crew

1 pilot (right seat)

17. Maximum Passenger Seating Capacity

7

18. Passenger Emergency Exit

2, one on each side of the passenger cabin

19. Maximum Baggage/ Cargo Loads

Cargo floor max load: 1 130 kg

Cargo floor max unit load: 600 kg/m²

20. Rotor Blade Control Movement

For rigging information refer to EC135 Aircraft Maintenance Manual

21. Auxiliary Power Unit (APU)

n/a

22. Life-limited Parts

See approved ALS Chapter 4 of the EC135 Master Servicing Manual

IV. Operating and Service Instructions

1. Flight Manual

EC635 T3(CPDS), initially EASA-approved, dated 17 October 2014, or later approved revisions, including the supplements for Special Operations RFMS 9.1 and Optional Equipment RFMS 9.2.

2. Maintenance Manual

- EC135 Master Servicing Manual
- EC135 Aircraft Maintenance Manual
- Wiring Diagram Manual, latest revision
- Engine documents as per Engine TCDS No.EASA.E.029

3. Structural Repair Manual

EC135 Structural Repair Manual

4. Weight and Balance Manual

Refer to approved RFM

5. Illustrated Parts Catalogue

EC135 Illustrated Parts Catalogue

6. Service Letters and Service Bulletins

Safety Information Notice, Information Notice, Alert Service Bulletin, Service Bulletin Repair Design Approval Sheets

7. Required Equipment

Special equipment and kits necessary for intended kind of operations as defined in the approved Flight Manual Supplements RFMS 9.2, are permissible.

V Operational Suitability Data

The OSD elements listed below were approved by the European Union Aviation Safety Agency (EASA) as per Commission Regulation (EU) 748/2012, as amended by Commission Regulation (EU) No 69/2014.

Future revisions will be approved by the UK CAA in accordance with Regulation (EU) No. 748/2012 as retained (and amended in UK domestic law) under the European Union (Withdrawal) Act 2018 and amended by the Aviation Safety (Amendment etc.) (EU Exit) Regulations 2019.

1. Master Minimum Equipment List (MMEL)

MMEL document Revision 0, approved on 15 October 2014, or later approved revision.

2. Flight Crew Data

Flight Crew Operational Suitability Data as per document OSD_L0000M403901 first Issue, EASA approval date 15 October 2015, or later approved revisions.

- Appendix 2: "Operator Difference Requirements (ODR) Tables & Master Difference Requirements (MDR) Table" to the EASA Operational Suitability Data (OSD) – Flight Crew – EC135 Family, EASA approval date 15 October 2015, or later approved revisions.

- Appendix 3: "OSD EC135 Family – EASA OPS – Instruments and Equipment", to the EASA Operational Suitability Data (OSD) – Flight Crew – EC135 Family, EASA approval date 15 October 2015, or later approved revisions.

3. SIM Data

Reserved.

4. Maintenance Certifying Staff Data

Reserved.

VI. Notes**1. Manufacturer's eligible serial numbers:**

- a. s/n 1155, and subsequent.

2. Night Vision Goggles Operational Capability:

Night Vision Goggles aided operations are permitted according to Rotorcraft Flight Manual Supplement RFMS 9.2-86 in conjunction with a serial number specific Flight Manual Appendix FMA 11-x, when the rotorcraft is equipped accordingly, and a competent authority has granted operational authorisation only. The helicopter configuration containing NVIS lighting components approved for the use with Night Vision Goggles is described in a serial number specific AHD NVIS Substantiation Report for operators having received an approval for their NVIS configuration.

3. The emergency floatation system in accordance with RFMS 9.2-67, is certified as ditching provision in accordance with JAR-27.

The helicopter may be certificated for ditching provided the following additional equipment are fitted and approved in accordance with the relevant airworthiness requirements:

- survival type emergency locator transmitter
- life raft installation
- life preserver.

4. Designation:

“H135” is used as marketing designation for EC635 T3(CPDS) helicopters.

Section 18 EC135 T3H**I. General****1. Type/ Model/ Variant**

1.1	Type	EC135
1.2	Model	EC135 T3
1.3	Variant	EC135 T3H

2. Airworthiness Category

Small Rotorcraft

3. Type Certificate Holder

Airbus Helicopters Deutschland GmbH
Industriestrasse 4
D-86609 Donauwörth, Germany

4. Manufacturer

See Section 21 Administration, subsection II.3 Production Organisation Approval Holder

5. Type Certification Application Date to LBA

11 May 2012

6. State of Design Authority

European Union Aviation Safety Agency (EASA)

7. EASA Type Certification Date

15 November 2016

II. Certification Basis**1. Reference Date for determining the applicable requirements**

For Airworthiness and Environmental Protection: 11 May 2012

For OSD elements, Grandfathering date: 17 February 2014

2. Airworthiness Requirements

- JAR-27, Issue 1, dated 6 September 1993, supplemented by the following CS-27 Amdt. 2 requirements:
CS 27.1 (a) in connection with CS 27.2(b)(2)(i).

CS 27.0021	CS 27.0303	CS 27.0611	CS 27.0855	CS 27.1305	CS 27.1381	CS 27.1543
CS 27.0025	CS 27.0305	CS 27.0613	CS 27.0863	CS 27.1307	CS 27.1383	CS 27.1545
CS 27.0027	CS 27.0307	CS 27.0661	CS 27.0901	CS 27.1309	CS 27.1385	CS 27.1547
CS 27.0029	CS 27.0395	CS 27.0671	CS 27.1019	CS 27.1321	CS 27.1387	CS 27.1549
CS 27.0033	CS 27.0397	CS 27.0672	CS 27.1041	CS 27.1322	CS 27.1401	CS 27.1555
CS 27.0045	CS 27.0399	CS 27.0674	CS 27.1043	CS 27.1323	CS 27.1411	CS 27.1559
CS 27.0065	CS 27.0549	CS 27.0681	CS 27.1045	CS 27.1325	CS 27.1457	CS 27.1581
CS 27.0067	CS 27.0561	CS 27.0683	CS 27.1091	CS 27.1327	CS 27.1459	CS 27.1583
CS 27.0141	CS 27.0562	CS 27.0685	CS 27.1093	CS 27.1329	CS 27.1501	CS 27.1585
CS 27.0143	CS 27.0601	CS 27.0687	CS 27.1141	CS 27.1337	CS 27.1503	CS 27.1587

CS 27.0151	CS 27.0602	CS 27.0771	CS 27.1143	CS 27.1351	CS 27.1505	CS 27.1589
CS 27.0161	CS 27.0603	CS 27.0773	CS 27.1145	CS 27.1353	CS 27.1523	
CS 27.0171	CS 27.0605	CS 27.0777	CS 27.1151	CS 27.1357	CS 27.1525	
CS 27.0241	CS 27.0607	CS 27.0785	CS 27.1193	CS 27.1361	CS 27.1527	
CS 27.0251	CS 27.0609	CS 27.0831	CS 27.1301	CS 27.1365	CS 27.1529	
CS 27.0301	CS 27.0610	CS 27.0853	CS 27.1303	CS 27.1367	CS 27.1541	

- For IFR Certification: CS 27 Amdt 2, Appendix B, Issue 1, dated 10 November 2008
- Category A Engine Isolation Requirements of JAR-29, Issue 1, dated 5 November 1993.

Applicable paragraphs, selected from Appendix C to JAR-27, are:

29.861 (a)	Fire Protection of Structure, controls, and other parts
29.901 (c)	Powerplant: Installation
29.903 (b),(c),(e)	Engines
29.908 (a)	Cooling fans
29.917 (b),(c)(1)	Rotor Drive System: Design
29.927 (c)(1)	Additional tests
29.953 (a)	Fuel system independence
29.1027 (a)	Transmission and gearboxes
29.1045 (a)(1),(b),(c),(d),(f)	Climb cooling test procedures
29.1047 (a)	Take-off cooling test procedures
29.1181 (a)	Designated fire zones: regions included
29.1189 (c)	Shutoff means
29.1191 (a)(1)	Firewalls
29.1193 (e)	Cowling and engine compartment covering
29.1305 (a)(6),(b)	Powerplant instruments
29.1309 (b)(2)(i),(d)	Equipment, systems and installations
29.1331 (b)	Instruments using power supply
29.1351 (d)(2)	Electrical systems and equipment: General

- For CAT A Certification: CS 27 Amdt 2, Appendix C, requirements
- For EASA Approvals 10077342 and 10077343: Certification Basis for the original product amended by additional airworthiness requirements 27.1319 and A27.5 at CS-27 Amdt. 7

3. Special Conditions

- "Protection from effects of HIRF"
- "Lithium Battery Installations"

4. Exemptions

None

5. Deviations

None

6. Equivalent Safety Findings

TCDS No.: UK.TC.R.00064

Date: 05 May 2023

AW-DAW-TP-004

Copies of this document are not controlled.

Issue: 01

Page 128 of 144

- CS-27 Subpart B, CS 27.1305, CS 27.1309, CS 27.1549 “Engine Training Mode”
- CS 27.1305, CS 27.1321 (a), CS 27.1351 (d1) and CS-27 Appendix C for CS 29.1305(a)(6) and (b)(1) “Part Time Display of Vehicle Parameters”
- CS 27.1545 (b)(4), CS 27.1549(b) “Airspeed & Powerplant indication green marking”
- CS 27.601, 27.603, 27.865 (a) for Hoist Installation on Helicopters

7. Requirements elected to comply

None.

8. Environmental Protection Requirements

8.1 Noise Requirements

see TCDSN UK.TC.R.00064

8.2 Emission Requirements

ICAO Annex 16, Volume II, Part II, Chapter 2, (CS-34, Initial Issue)

9 Operational Suitability Data (OSD)

9.1 Master Minimum Equipment List (MMEL)

JAR-MMEL/MEL Section 1, Amtd. 1

CS-MMEL, Initial Issue, dated 31 January 2014, for the changes in Rev. 5

9.2 Flight Crew Data (FCD)

CS-FCD, Initial Issue, dated 31 January 2014

9.3 Simulation Data (SIMD)

Reserved.

9.4 Maintenance Certifying Staff Data (MCSD)

Reserved.

III. Technical Characteristics and Operational Limitations

1. Type Design Definition

- TDD E0000M269800, Issue B

2. Description

Main rotor: bearingless, 4 blades
 Tail rotor: Fenestron, 10 blades
 Fuselage: metal-composite structure
 Landing gear: skid-type
 Powerplant: 2 independent freewheel turbines

3. Equipment

Basic equipment must be installed and operational prior to registration of the helicopter.

4. Dimensions

4.1 Fuselage

Length: 5.87 m
 Width hull: 1.56 m
 Height: 3.35 m

4.2 Main Rotor

Diameter: 10.40 m

4.3 Tail Rotor

Diameter: 1.00 m

5. Engine

5.1 Model

Safran Helicopter Engines (former: Turbomeca)

2 x Model Arrius 2B2

5.2 Type Certificate

EASA TC/TCDS n°: TCDS No.E.029

CAA TC/TCDS n°: TCDS No.E.029

5.3 Limitations

5.3.1 Installed Engine Limitations and Transmission Torque Limits

	TQ limits [%]	Max N1 speed (gas generator) [%]	Max N2 speed (output shaft) [%]	Temperature TOT [°C]
AEO-TOP (5 min)	2 x 78	100	106	897
AEO-MCP	2 x 69	99	106	879
30 sec OEI-TOP	1 x 128	104.80	106	1024
2 min OEI-TOP	1 x 125	103.50	106	994
OEI-MCP	1 x 89.5	101.25	106	942

6. Fluids

6.1 Fuel

Refer to approved RFM

6.2 Oil

Refer to approved RFM

6.3 Additives

Refer to approved RFM

7. Fluid capacities

7.1 Fuel

Standard fuel tank (up to s/n 0249)

Fuel tank capacity: 680.0 litres

Usable fuel: 670.5 litres

Self-sealing fuel tank (up to s/n 0249)

Fuel tank capacity: 673.4 litres

Usable fuel: 664.0 litres

Modified fuel tank (from s/n 0250, or SB EC135-28-007)

Fuel tank capacity: 710.0 litres

Usable fuel: 700.5 litres

Self-sealing fuel tank (from s/n 0250)

Fuel tank capacity: 701.0 litres

Usable fuel: 691.6 litres

7.2 Oil

Refer to approved RFM

7.3 Coolant System Capacity

n/a

8. Air Speed Limitations

V_{NE} : 150 KIAS at MSL, or as shown in the VNE-tables, whichever is less.

Refer to approved RFM for reduction in V_{NE} with altitude and other speed limitations.

9. Rotor Speed Limitations

Power on:

Maximum	105.5 %
Minimum	97 %

Power off:

Maximum	107.5 %
Minimum	80 % (GM < 1 900 kg)
Minimum	85 % (GM > 1 900 kg)
Transient:	Refer to approved RFM

10. Maximum Operating Altitude and Temperature

10.1 Altitude

20 000 ft (6 096 m) PA, refer to approved RFM for variation according to MTOW

10.2 Temperature

Refer to approved RFM

11. Operating Limitations

VFR day and night

Non-icing conditions

For IFR, Category A operation, see additional equipment requirements and limitations in the relevant approved RFMS

12. Maximum Mass

- | | | |
|------|---|----------|
| 12.1 | Maximum gross mass | 2 980 kg |
| 12.2 | Maximum ramp and taxi mass | 3 000 kg |
| 12.3 | Minimum gross mass | 1 700 kg |
| 12.4 | Alternative maximum gross mass: 3 100 kg, operation permitted only in accordance with FMA 11-11 and EASA Approval 10075155 | |
| 12.5 | Alternative maximum ramp and taxi: 3 100 kg, operation permitted only in accordance with FMA 11-11 and EASA Approval 10075155 | |

13. Centre of Gravity Range

Longitudinal C.G. limits

maximum forward limit:

4 121 mm aft of DP at 2 150 kg
 4 178 mm aft of DP at 3 100 kg

maximum rearward limit:

4 353 mm aft of DP at 3 100 kg
 4 541 mm aft of DP at 1 700 kg

Lateral C.G Limits

maximum deviation on right / left: 100 mm

14. Datum

Longitudinal: the datum plane (STA 0) is located at 2 160 mm forward of the levelling point in the front door frame

Lateral: fuselage median plane

15. Levelling Means

See levelling procedure document No. L082M0801X01

16. Minimum Flight Crew

1 pilot (right seat)

17. Maximum Passenger Seating Capacity

7

18. Passenger Emergency Exit

2, one on each side of the passenger cabin

19. Maximum Baggage/ Cargo Loads

Cargo floor max load: 1 130 kg

Cargo floor max unit load: 600 kg/m²

20. Rotor Blade Control Movement

For rigging information refer to EC135 Aircraft Maintenance Manual

21. Auxiliary Power Unit (APU)

n/a

22. Life-limited Parts

See approved ALS Chapter 4 of the EC135 Master Servicing Manual

IV. Operating and Service Instructions

1. Flight Manual

EC135 T3H, initially EASA-approved, dated 15 November 2016, or later approved revisions, including the supplements for Special Operations RFMS 9.1 and Optional Equipment RFMS 9.2.

2. Maintenance Manual

- EC135 Master Servicing Manual
- EC135 Aircraft Maintenance Manual
- Wiring Diagram Manual, latest revision
- Engine documents as per Engine TCDS No.EASA.E.029

3. Structural Repair Manual

EC135 Structural Repair Manual

4. Weight and Balance Manual

TCDS No.: UK.TC.R.00064

Date: 05 May 2023

AW-DAW-TP-004

Copies of this document are not controlled.

Issue: 01

Page 132 of 144

Refer to approved RFM

5. Illustrated Parts Catalogue

EC135 Illustrated Parts Catalogue

6. Service Letters and Service Bulletins

Safety Information Notice, Information Notice, Alert Service Bulletin, Service Bulletin Repair Design Approval Sheets

7. Required Equipment

Special equipment and kits necessary for intended kind of operations as defined in the approved Flight Manual Supplements RFMS 9.2, are permissible.

V Operational Suitability Data

The OSD elements listed below were approved by the European Union Aviation Safety Agency (EASA) as per Commission Regulation (EU) 748/2012, as amended by Commission Regulation (EU) No 69/2014.

Future revisions will be approved by the UK CAA in accordance with Regulation (EU) No. 748/2012 as retained (and amended in UK domestic law) under the European Union (Withdrawal) Act 2018 and amended by the Aviation Safety (Amendment etc.) (EU Exit) Regulations 2019.

1. Master Minimum Equipment List (MMEL)

MMEL document Revision 5, approved on 23 November 2017, or later approved revision.

2. Flight Crew Data

Flight Crew Operational Suitability Data as per document OSD_L0000M403901 first Issue, EASA approval date 15 October 2015, or later approved revisions.

- Appendix 2: "Operator Difference Requirements (ODR) Tables & Master Difference Requirements (MDR) Table" to the EASA Operational Suitability Data (OSD) – Flight Crew – EC135 Family, EASA approval date 15 October 2015, or later approved revisions.

- Appendix 3: "OSD EC135 Family – EASA OPS – Instruments and Equipment", to the EASA Operational Suitability Data (OSD) – Flight Crew – EC135 Family, EASA approval date 15 October 2015, or later approved revisions.

3. SIM Data

Reserved.

4. Maintenance Certifying Staff Data

Reserved.

VI. Notes

1. Manufacturer's eligible serial numbers:

s/n 2001, and subsequent.

2. Designation:

"H135" is used as marketing designation for EC135 T3H helicopters.

3. Night Vision Goggles Operational Capability:

Night Vision Goggles aided operations are permitted according to Rotorcraft Flight Manual Supplement RFMS 9.2-16 in conjunction with a serial number specific Flight Manual Appendix FMA 11-x, when the rotorcraft is equipped accordingly, and a Competent Authority has granted operational authorisation only. The helicopter configuration containing NVIS lighting components approved for the use with Night Vision Goggles is described in a serial number specific AHD NVIS Substantiation Report for operators having received an approval for their NVIS configuration.

Section 19 EC635 T3H**I. General****1. Type/ Model/ Variant**

1.1	Type	EC135
1.2	Model	EC635 T3
1.3	Variant	EC635 T3H

2. Airworthiness Category

Small Rotorcraft

3. Type Certificate Holder

Airbus Helicopters Deutschland GmbH
Industriestrasse 4
D-86609 Donauwörth, Germany

4. Manufacturer

See Section 21 Administration, subsection II.3 Production Organisation Approval Holder

5. Type Certification Application Date to LBA

11 May 2012

6. State of Design Authority

European Union Aviation Safety Agency (EASA)

7. EASA Type Certification Date

15 November 2016

II. Certification Basis**1. Reference Date for determining the applicable requirements**

For Airworthiness and Environmental Protection: 11 May 2012

For OSD elements, Grandfathering date: 17 February 2014

2. Airworthiness Requirements

- JAR-27, Issue 1, dated 6 September 1993, supplemented by the following CS-27 Amdt. 2 requirements:
CS 27.1 (a) in connection with CS 27.2(b)(2)(i).

CS 27.0021	CS 27.0303	CS 27.0611	CS 27.0855	CS 27.1305	CS 27.1381	CS 27.1543
CS 27.0025	CS 27.0305	CS 27.0613	CS 27.0863	CS 27.1307	CS 27.1383	CS 27.1545
CS 27.0027	CS 27.0307	CS 27.0661	CS 27.0901	CS 27.1309	CS 27.1385	CS 27.1547
CS 27.0029	CS 27.0395	CS 27.0671	CS 27.1019	CS 27.1321	CS 27.1387	CS 27.1549
CS 27.0033	CS 27.0397	CS 27.0672	CS 27.1041	CS 27.1322	CS 27.1401	CS 27.1555
CS 27.0045	CS 27.0399	CS 27.0674	CS 27.1043	CS 27.1323	CS 27.1411	CS 27.1559
CS 27.0065	CS 27.0549	CS 27.0681	CS 27.1045	CS 27.1325	CS 27.1457	CS 27.1581
CS 27.0067	CS 27.0561	CS 27.0683	CS 27.1091	CS 27.1327	CS 27.1459	CS 27.1583
CS 27.0141	CS 27.0562	CS 27.0685	CS 27.1093	CS 27.1329	CS 27.1501	CS 27.1585

CS 27.0143	CS 27.0601	CS 27.0687	CS 27.1141	CS 27.1337	CS 27.1503	CS 27.1587
CS 27.0151	CS 27.0602	CS 27.0771	CS 27.1143	CS 27.1351	CS 27.1505	CS 27.1589
CS 27.0161	CS 27.0603	CS 27.0773	CS 27.1145	CS 27.1353	CS 27.1523	
CS 27.0171	CS 27.0605	CS 27.0777	CS 27.1151	CS 27.1357	CS 27.1525	
CS 27.0241	CS 27.0607	CS 27.0785	CS 27.1193	CS 27.1361	CS 27.1527	
CS 27.0251	CS 27.0609	CS 27.0831	CS 27.1301	CS 27.1365	CS 27.1529	
CS 27.0301	CS 27.0610	CS 27.0853	CS 27.1303	CS 27.1367	CS 27.1541	

- For IFR Certification: CS 27 Amdt 2, Appendix B, Issue 1, dated 10 November 2008
- Category A Engine Isolation Requirements of JAR-29, Issue 1, dated 5 November 1993.

Applicable paragraphs, selected from Appendix C to JAR-27, are:

29.861 (a)	Fire Protection of Structure, controls, and other parts
29.901 (c)	Powerplant: Installation
29.903 (b),(c),(e)	Engines
29.908 (a)	Cooling fans
29.917 (b),(c)(1)	Rotor Drive System: Design
29.927 (c)(1)	Additional tests
29.953 (a)	Fuel system independence
29.1027 (a)	Transmission and gearboxes
29.1045 (a)(1),(b),(c),(d),(f)	Climb cooling test procedures
29.1047 (a)	Take-off cooling test procedures
29.1181 (a)	Designated fire zones: regions included
29.1189 (c)	Shutoff means
29.1191 (a)(1)	Firewalls
29.1193 (e)	Cowling and engine compartment covering
29.1305 (a)(6),(b)	Powerplant instruments
29.1309 (b)(2)(i),(d)	Equipment, systems and installations
29.1331 (b)	Instruments using power supply
29.1351 (d)(2)	Electrical systems and equipment: General

- For CAT A Certification: CS 27 Amdt 2, Appendix C, requirements
- For EASA Approvals 10077342 and 10077343: Certification Basis for the original product amended by additional airworthiness requirements 27.1319 and A27.5 at CS-27 Amdt. 7

3. Special Conditions

- "Protection from effects of HIRF"
- "Lithium Battery Installations"

4. Exemptions

None

5. Deviations

None

6. Equivalent Safety Findings

- CS-27 Subpart B, CS 27.1305, CS 27.1309, CS 27.1549 “Engine Training Mode”
- CS 27.1305, CS 27.1321 (a), CS 27.1351 (d1) and CS-27 Appendix C for CS 29.1305(a)(6) and (b)(1) “Part Time Display of Vehicle Parameters”
- CS 27.1545 (b)(4), CS 27.1549(b) “Airspeed & Powerplant indication green marking”
- CS 27.601, 27.603, 27.865 (a) for Hoist Installation on Helicopters

7. Requirements elected to comply

None.

8. Environmental Protection Requirements

8.1 Noise Requirements

see TCDSN UK.TC.R.00064

8.2 Emission Requirements

ICAO Annex 16, Volume II, Part II, Chapter 2, (CS-34, Initial Issue)

9 Operational Suitability Data (OSD)

9.1 Master Minimum Equipment List (MMEL)

JAR-MMEL/MEL Section 1, Amdt. 1

CS-MMEL, Initial Issue, dated 31 January 2014, for the changes in Rev. 5

9.2 Flight Crew Data (FCD)

CS-FCD, Initial Issue, dated 31 January 2014

9.3 Simulation Data (SIMD)

Reserved.

9.4 Maintenance Certifying Staff Data (MCSD)

Reserved.

III. Technical Characteristics and Operational Limitations

1. Type Design Definition

- TDD E0000M269800, Issue B
- + EC635 Kit (Drawing No. W530M0700052)

2. Description

Main rotor: bearingless, 4 blades

Tail rotor: Fenestron, 10 blades

Fuselage: metal-composite structure

Landing gear: skid-type

Powerplant: 2 independent freewheel turbines

Note: The variant EC635 T3 corresponds to the EC135 T3 plus structural reinforcement of cabin structure according to the drawing W530M0700052.

3. Equipment

Basic equipment must be installed and operational prior to registration of the helicopter.

4. Dimensions

4.1 Fuselage

Length: 5.87 m
 Width hull: 1.56 m
 Height: 3.35 m

4.2 Main Rotor

Diameter: 10.40 m

4.3 Tail Rotor

Diameter: 1.00 m

5. Engine

5.1 Model

Safran Helicopter Engines (former: Turbomeca)
 2 x Model Arrius 2B2

5.2 Type Certificate

EASA TC/TCDS n°: TCDS No.E.029
 CAA TC/TCDS n°: TCDS No.E.029

5.3 Limitations

5.3.1 Installed Engine Limitations and Transmission Torque Limits

	TQ limits [%]	Max N1 speed (gas generator) [%]	Max N2 speed (output shaft) [%]	Temperature TOT [°C]
AEO-TOP (5 min)	2 x 78	100	106	897
AEO-MCP	2 x 69	99	106	879
30 sec OEI-TOP	1 x 128	104.80	106	1024
2 min OEI-TOP	1 x 125	103.50	106	994
OEI-MCP	1 x 89.5	101.25	106	942

6. Fluids

6.1 Fuel

Refer to approved RFM

6.2 Oil

Refer to approved RFM

6.3 Additives

Refer to approved RFM

7. Fluid capacities

7.1 Fuel

Standard fuel tank (up to s/n 0249)

Fuel tank capacity: 680.0 litres

Usable fuel: 670.5 litres

Self-sealing fuel tank (up to s/n 0249)

Fuel tank capacity: 673.4 litres

Usable fuel: 664.0 litres

Modified fuel tank (from s/n 0250, or SB EC135-28-007)

Fuel tank capacity: 710.0 litres

Usable fuel: 700.5 litres

Self-sealing fuel tank (from s/n 0250)

Fuel tank capacity: 701.0 litres

Usable fuel: 691.6 litres

7.2 Oil

Refer to approved RFM

7.3 Coolant System Capacity

n/a

8. Air Speed Limitations

V_{NE} : 150 KIAS at MSL, or as shown in the V_{NE} -tables, whichever is less.

Refer to approved RFM for reduction in V_{NE} with altitude and other speed limitations.

9. Rotor Speed Limitations

Power on:

Maximum	105.5 %
Minimum	97 %

Power off:

Maximum	107.5 %
Minimum	80 % (GM < 1 900 kg)
Minimum	85 % (GM > 1 900 kg)
Transient:	Refer to approved RFM

10. Maximum Operating Altitude and Temperature

10.1 Altitude

20 000 ft (6 096 m) PA, refer to approved RFM for variation according to MTOW

10.2 Temperature

Refer to approved RFM

11. Operating Limitations

VFR day and night

Non-icing conditions

For IFR, Category A operation, see additional equipment requirements and limitations in the relevant approved RFMS

12. Maximum Mass

12.1 Maximum gross mass 2 980 kg

12.2 Maximum ramp and taxi mass 3 000 kg

12.3 Minimum gross mass 1 700 kg

12.4 Alternative maximum gross mass: 3 100 kg, operation permitted only in accordance with FMA 11-11 and EASA Approval 10075155

12.5 Alternative maximum ramp and taxi: 3 100 kg, operation permitted only in accordance with FMA 11-11 and EASA Approval 10075155

13. Centre of Gravity Range

Longitudinal C.G. limits

maximum forward limit:

4 121 mm aft of DP at 2 150 kg

4 178 mm aft of DP at 3 100 kg

maximum rearward limit:

4 353 mm aft of DP at 3 100 kg

4 541 mm aft of DP at 1 700 kg

Lateral C.G Limits:

maximum deviation on right / left: 100 mm

14. Datum

Longitudinal: the datum plane (STA 0) is located at 2 160 mm forward of the levelling point in the front door frame

Lateral: fuselage median plane

15. Levelling Means

See levelling procedure document No. L082M0801X01

16. Minimum Flight Crew

1 pilot (right seat)

17. Maximum Passenger Seating Capacity

7

18. Passenger Emergency Exit

2, one on each side of the passenger cabin

19. Maximum Baggage/ Cargo Loads

Cargo floor max load: 1 130 kg

Cargo floor max unit load: 600 kg/m²

20. Rotor Blade Control Movement

For rigging information refer to EC135 Aircraft Maintenance Manual

21. Auxiliary Power Unit (APU)

n/a

22. Life-limited Parts

See approved ALS Chapter 4 of the EC135 Master Servicing Manual

IV. Operating and Service Instructions

1. Flight Manual

EC635 T3H initially EASA-approved, dated 15 November 2016, or later approved revisions, including the supplements for Special Operations RFMS 9.1 and Optional Equipment RFMS 9.2.

2. Maintenance Manual

- EC135 Master Servicing Manual
- EC135 Aircraft Maintenance Manual
- Wiring Diagram Manual, latest revision
- Engine documents as per Engine TCDS No.EASA.E.029

3. **Structural Repair Manual**

EC135 Structural Repair Manual

4. **Weight and Balance Manual**

Refer to approved RFM

5. **Illustrated Parts Catalogue**

EC135 Illustrated Parts Catalogue

6. **Service Letters and Service Bulletins**

Safety Information Notice, Information Notice, Alert Service Bulletin, Service Bulletin Repair Design Approval Sheets

7. **Required Equipment**

Special equipment and kits necessary for intended kind of operations as defined in the approved Flight Manual Supplements RFMS 9.2, are permissible.

V **Operational Suitability Data**

The OSD elements listed below were approved by the European Union Aviation Safety Agency (EASA) as per Commission Regulation (EU) 748/2012, as amended by Commission Regulation (EU) No 69/2014.

Future revisions will be approved by the UK CAA in accordance with Regulation (EU) No. 748/2012 as retained (and amended in UK domestic law) under the European Union (Withdrawal) Act 2018 and amended by the Aviation Safety (Amendment etc.) (EU Exit) Regulations 2019.

1. **Master Minimum Equipment List (MMEL)**

MMEL document Revision 5, approved on 23 November 2017, or later approved revision.

2. **Flight Crew Data**

Flight Crew Operational Suitability Data as per document OSD_L0000M403901 first Issue, EASA approval date 15 October 2015, or later approved revisions.

- Appendix 2: "Operator Difference Requirements (ODR) Tables & Master Difference Requirements (MDR) Table" to the EASA Operational Suitability Data (OSD) – Flight Crew – EC135 Family, EASA approval date 15 October 2015, or later approved revisions.

- Appendix 3: "OSD EC135 Family – EASA OPS – Instruments and Equipment", to the EASA Operational Suitability Data (OSD) – Flight Crew – EC135 Family, EASA approval date 15 October 2015, or later approved revisions.

3. **SIM Data**

Reserved.

4. **Maintenance Certifying Staff Data**

Reserved

VI. **Notes**

1. Manufacturer's eligible serial numbers:
s/n 2001, and subsequent.
2. Designation:
"H135" is used as marketing designation for EC635 T3H helicopters.
3. Night Vision Goggles Operational Capability:

Night Vision Goggles aided operations are permitted according to Rotorcraft Flight Manual Supplement RFMS 9.2-16 in conjunction with a serial number specific Flight Manual Appendix FMA 11-x, when the rotorcraft is equipped accordingly, and a Competent Authority has granted operational authorisation only. The helicopter configuration containing NVIS lighting components approved for the use with Night Vision Goggles is described in a serial number specific AHD NVIS Substantiation Report for operators having received an approval for their NVIS configuration.

Section 20 Administrative

I. Acronyms and Abbreviations

Acronym / Abbreviation	Definition
°C	Degree Celsius
AEO	All Engines Operative
ALS	Airworthiness Limitations Section
Amdt.	Amendment
B.L.	Buttock Line
C.G.	Centre of Gravity
CAA	Civil Aviation Authority
CRI	Certification Review Item
CS	Certification Specifications
DA	Density Altitude
Doc.	Document
EASA	European Union Aviation Safety Agency
FCD	Flight Crew Data
ft	Feet
IAS	Indicated Air Speed
ICAO	International Civil Aviation Organization
IFR	Instrumental Flight Rules
ITT	Interstage Turbine Temperature
HIRF	High intensity Radiated Field
HP	Pressure Altitude
JAA	Joint Aviation Authorities
KIAS	Knots Indicated Air Speed
LH	Left Hand
m	Metre(s)
mm	Millimetre(s)
MLG	Main Landing Gear
MMEL	Master Minimum Equipment List
p/n Nf	Power turbine (free turbine) rotation speed
Ng	Gas generator rotation speed
NLG	Nose Landing Gear
Nm	Newton per metre
No.	Number
NVG	Night Vision Goggles
OAT	Outside Air Temperature
OSD	Operational Suitability Data
P/N	Part Number
PA	Pressure Altitude
PWR	Power

Acronym / Abbreviation	Definition
RFM	Rotorcraft Flight Manual
RFMS	Rotorcraft Flight Manual Supplement
RH	Right Hand
rpm	Revolution per minute
S/N	Serial Number
STA	Station
SW	Software
TAS	True Air Speed
TC	Type Certificate
TCCA	Transport Canada
TCDS	Type Certificate Data Sheet
TCDSN	Type Certificate Data Sheet for Noise
TCH	Type Certificate Holder
TOP	Take-Off Power
TR	Tail Rotor
UK	United Kingdom
VFR	Visual Flight Rules
V _{NE}	Never Exceed Speed
V _{NE PWR OFF}	Power-off Speed (Autorotation)
V _{NE PWR ON}	Power-on speed

II. Type Certification Holder Record

II.1 Type Certificate Holder	Period
Eurocopter Deutschland GmbH Industriestrasse 4, D-86609 Donauwörth, Germany	From 14 June 1996 until 6 January 2014
Airbus Helicopters Deutschland GmbH - address unchanged	Since 7 January 2014
II.2 Contracted DOA Holder (21.A.2)	Period
DOA Certificate No. EASA.21J.700 held by: Airbus Helicopters Aéroport International Marseille-Provence 13725 Marignane CEDEX, France	Since 21 June 2016

II.3 Production Organisation Approval Holder (21.A.135)	Period
Eurocopter Deutschland GmbH Postfach 13 53, W-8850 Donauwörth, or, 86603 Donauwörth, or, 86607 Donauwörth, Germany	Until 21 June 2014
Airbus Helicopters Deutschland GmbH Industriestrasse 4, 86609 Donauwörth, Germany	Since 7 January 2014
For P2+: España S.A., Polígono de los Llanos, Carretera de las Penas (CM3203), Km 5.3, 02006 Albacete, España	Since 8 February 2005

III. Amendment Record

TCDS Issue No.	TCDS Issue Date	Changes	TC issue and Date
Issue 1	05 May 2023	<p>The content of the initial issue of this UK CAA TCDS was taken from EASA TCDS No. EASA.R.009 Issue 17 dated 14 December 2020 which was the current EASA version at 31 December 2020 and therefore the version of the TCDS for the EC135 accepted by the UK under Article 15 of Annex 30 of the UK-EU Trade and Cooperation Agreement.</p> <p>The following changes were also added in this initial issue;</p> <p>Section 8, 9, 18, 19, II.2: Certification Basis amended for EASA approvals 10077342 and 10077343.</p>	Issue 1 05 May 2023

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