

---

## 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	

Issue:	2
Date of issue:	25 March 2025

## TABLE OF CONTENTS

Section 1	General .....	6
Section 2	EC135 P1(CDS).....	7
I.	General.....	7
II.	Certification Basis.....	7
III.	Technical Characteristics and Operational Limitations .....	9
IV.	Operating and Service Instructions .....	12
V.	Operational Suitability Data.....	13
VI.	Notes .....	14
Section 3	EC135 P1(CPDS) .....	15
I.	General.....	15
II.	Certification Basis.....	15
III.	Technical Characteristics and Operational Limitations .....	17
IV.	Operating and Service Instructions .....	20
V.	Operational Suitability Data.....	21
VI.	Notes .....	22
Section 4	EC135 P2(CPDS) .....	23
I.	General.....	23
II.	Certification Basis.....	23
III.	Technical Characteristics and Operational Limitations .....	25
IV.	Operating and Service Instructions .....	28
V.	Operational Suitability Data.....	29
VI.	Notes .....	29
Section 5	EC135 P2+.....	31
I.	General.....	31
II.	Certification Basis.....	31
III.	Technical Characteristics and Operational Limitations .....	33
IV.	Operating and Service Instructions .....	36
V.	Operational Suitability Data.....	37
VI.	Notes .....	38
Section 6	EC635 P2+.....	39
I.	General.....	39
II.	Certification Basis.....	39
III.	Technical Characteristics and Operational Limitations .....	41
IV.	Operating and Service Instructions .....	44
V.	Operational Suitability Data.....	45
VI.	Notes .....	46
Section 7	EC135 P3(CPDS) .....	47
I.	General.....	47
II.	Certification Basis.....	47

III.	Technical Characteristics and Operational Limitations .....	49
IV.	Operating and Service Instructions .....	53
V.	Operational Suitability Data.....	53
VI.	Notes .....	54
Section 8	EC635 P3(CPDS) .....	55
I.	General.....	55
II.	Certification Basis.....	55
III.	Technical Characteristics and Operational Limitations .....	57
IV.	Operating and Service Instructions .....	61
V.	Operational Suitability Data.....	61
VI.	Notes .....	62
Section 9	EC135 P3H.....	63
I.	General.....	63
II.	Certification Basis.....	63
III.	Technical Characteristics and Operational Limitations .....	66
IV.	Operating and Service Instructions .....	69
V.	Operational Suitability Data.....	70
VI.	Notes .....	71
Section 10	EC635 P3H.....	73
I.	General.....	73
II.	Certification Basis.....	73
III.	Technical Characteristics and Operational Limitations .....	75
IV.	Operating and Service Instructions .....	79
V.	Operational Suitability Data.....	80
VI.	Notes .....	80
Section 11	EC135 T1(CDS).....	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.....	89
VI.	Notes .....	90
Section 12	EC135 T1(CPDS) .....	91
I.	General.....	91
II.	Certification Basis.....	91
III.	Technical Characteristics and Operational Limitations .....	93
IV.	Operating and Service Instructions .....	96
V.	Operational Suitability Data.....	97
VI.	Notes .....	98
Section 13	EC635 T1(CPDS) .....	99
I.	General.....	99

II.	Certification Basis.....	99
III.	Technical Characteristics and Operational Limitations .....	101
IV.	Operating and Service Instructions .....	104
V.	Operational Suitability Data.....	105
VI.	Notes .....	106
	Section 14 Section 14 EC135 T2(CPDS) .....	107
I.	General.....	107
II.	Certification Basis.....	107
III.	Technical Characteristics and Operational Limitations .....	109
IV.	Operating and Service Instructions .....	112
V.	Operational Suitability Data.....	113
VI.	Notes .....	114
	Section 15 EC135 T2+.....	115
I.	General.....	115
II.	Certification Basis.....	115
III.	Technical Characteristics and Operational Limitations .....	117
IV.	Operating and Service Instructions .....	120
V.	Operational Suitability Data.....	121
VI.	Notes .....	122
	Section 16 EC635 T2+.....	123
I.	General.....	123
II.	Certification Basis.....	123
III.	Technical Characteristics and Operational Limitations .....	125
IV.	Operating and Service Instructions .....	128
V.	Operational Suitability Data.....	129
VI.	Notes .....	130
	Section 17 EC135 T3(CPDS) .....	131
I.	General.....	131
II.	Certification Basis.....	131
III.	Technical Characteristics and Operational Limitations .....	134
IV.	Operating and Service Instructions .....	137
V.	Operational Suitability Data.....	138
VI.	Notes .....	138
	Section 18 EC635 T3(CPDS) .....	140
I.	General.....	140
II.	Certification Basis.....	140
III.	Technical Characteristics and Operational Limitations .....	143
IV.	Operating and Service Instructions .....	146
V.	Operational Suitability Data.....	147
VI.	Notes .....	148
	Section 19 EC135 T3H .....	149

I.	General.....	149
II.	Certification Basis.....	149
III.	Technical Characteristics and Operational Limitations .....	151
IV.	Operating and Service Instructions .....	155
V.	Operational Suitability Data.....	155
VI.	Notes .....	156
	Section 20 EC635 T3H .....	158
I.	General.....	158
II.	Certification Basis.....	158
III.	Technical Characteristics and Operational Limitations .....	160
IV.	Operating and Service Instructions .....	164
V.	Operational Suitability Data.....	165
VI.	Notes .....	165
	Section 21 Administrative .....	168
I.	Acronyms and Abbreviations.....	168
II.	Type Certification Holder Record .....	170
III.	Amendment Record .....	171

Note: In this TCDS, references to EU regulations are to those regulations as retained and amended in UK domestic law under the European Union (Withdrawal) Act 2018 and are referenced as “UK Regulation (EU) year/number or UK Regulation (EU) No. number/year”

**Section 1      General**

This Type-Certificate Data Sheet (TCDS) is the concise definition of the type-certificated product accepted and or approved by the CAA in the UK for the affected types and models.

This TCDS includes:

- a) Details of the type design that affect the TCDS that have been approved or accepted by the CAA in the UK from 01 January 2021.
- b) Details of the type design that affected the TCDS and were approved or accepted by EASA before 01 January 2021, and were incorporated into EASA TCDS EASA.R.009 at Issue 17 dated 14 December 2020, and are therefore accepted by the UK under Article 15 of Annex 30 of the UK-EU Trade and Cooperation Agreement.

**Section 2 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

**8. UK CAA Type Validation Application Date**

Prior to 31 December 2020, application dates for type certification are covered by EASA type certification application dates, as per Para 5 above.

New applications for UK CAA type validation received after 01 January 2021 will be recorded in this section. At the current issue of this UK CAA TCDS, no new applications for type validation have been received since 01 January 2021.

**9. UK CAA Type Validation Date**

Prior to 31 December 2020, dates of type certification are covered by EASA type certification, as per Para 7 above.

UK CAA type validation dates after 01 January 2021 will be recorded in this section. At the current issue of this UK CAA TCDS, no UK CAA type validations have been completed since 01 January 2021.

UK CAA TCDS UK.TC.R.00064 Issue 1 issued 05 May 2023.

**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 accepted / approved RFM

## 6.2 Oil

Refer to accepted / approved RFM

## 6.3 Additives

Refer to accepted / 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 accepted / approved RFM

## 7.3 Coolant System Capacity

n/a

**8. Air Speed Limitations**

V<sub>NE</sub>: 155 KIAS at MSL

Refer to accepted / approved RFM for reduction in V<sub>NE</sub> 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 accepted / approved RFM

**10. Maximum Operating Altitude and Temperature**

## 10.1 Altitude

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

## 10.2 Temperature

Refer to accepted / 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 accepted / 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/m<sup>2</sup>

**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 Chapter 4, Airworthiness Limitation (ALS)

**IV. Operating and Service Instructions**

The Operating and Service Instructions as listed below are approved by the European Union Aviation Safety Agency under the EASA Type Certificate EASA.R.009 in accordance with Commission Regulation (EU) 748/2012, as amended.

These instructions and any future revisions are either accepted under Article 13 of Annex 30 of the UK-EU Trade and Cooperation Agreement or subject to approval by Validation under Article 10 of Annex 30 of the UK-EU Trade and Cooperation Agreement, for use by UK operators.

The Type Certificate Holder should be contacted to verify the applicability of any Operational and Service Instructions within the UK.

**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 P1, P2, P3, T1, T2, T3 Aircraft Maintenance Manual (AMM)

- EC135 P1, P2, P3, T1, T2, T3 System Description Section (SDS)

- EC135 P1, P2, P3, T1, T2, T3 Wiring Diagram Manual (WDM)

- EC135 P1, P2, P3, T1, T2, T3 Corrosion and Erosion Control Guide (CECG)

- Standard Practices Manual

- EC135 P1,P2,P3,T1,T2,T3, limited to CDS, CPDS, P2+, T2+. Chapter 04. Airworthiness Limitation Section (ALS)

- EC135 P1,P2,P3,T1,T2,T3, limited to CDS, CPDS, P2+, T2+. Chapter 05. Master Servicing Manual (MSM)
- EC135 Avionic Manual (AVM)
- Engine documents as per Engine TCDS No.EASA.IM.E.017

### 3. Structural Repair Manual

EC135 P1,P2,P3,T1,T2,T3 Structural Repair Manual (SRM)

### 4. Weight and Balance Manual

Refer to accepted / approved RFM

### 5. Illustrated Parts Catalogue

EC135 Illustrated Parts Catalogue. All EC135 variants, except T3H/P3H

### 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 accepted / approved Flight Manual Supplements RFMS 9.2, are permissible.

## V. Operational Suitability Data

The Operational Suitability Data elements as listed below are approved by the European Union Aviation Safety Agency under the EASA Type Certificate EASA.R.009 in accordance with Commission Regulation (EU) 748/2012, as amended.

These OSD elements and any future revisions are either accepted under Article 13 of Annex 30 of the UK-EU Trade and Cooperation Agreement or subject to approval by Validation under Article 10 of Annex 30 of the UK-EU Trade and Cooperation Agreement, for use by UK operators.

### 1. Master Minimum Equipment List (MMEL)

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

The Type Certificate Holder should be contacted to verify the applicability of any MMEL revision within the UK.

### 2. Flight Crew Data

Flight Crew Operational Suitability Data as per document OSD\_L0000M403901 first Issue, EASA approval date 15 October 2015, or later accepted or 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 accepted or 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 accepted or approved revisions.

The Type Certificate Holder should be contacted to verify the applicability of any FCD revision within the UK.

### 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 3 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

**8. UK CAA Type Validation Application Date**

Prior to 31 December 2020, application dates for type certification are covered by EASA type certification application dates, as per Para 5 above.

New applications for UK CAA type validation received after 01 January 2021 will be recorded in this section. At the current issue of this UK CAA TCDS, no new applications for type validation have been received since 01 January 2021.

**9. UK CAA Type Validation Date**

Prior to 31 December 2020, dates of type certification are covered by EASA type certification, as per Para 7 above.

UK CAA type validation dates after 01 January 2021 will be recorded in this section. At the current issue of this UK CAA TCDS, no UK CAA type validations have been completed since 01 January 2021.

UK CAA TCDS UK.TC.R.00064 Issue 1 issued 05 May 2023.

**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 &amp; 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 accepted / approved RFM

## 6.2 Oil

Refer to accepted / approved RFM

## 6.3 Additives

Refer to accepted / 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 accepted / approved RFM

## 7.3 Coolant System Capacity

n/a

**8. Air Speed Limitations**V<sub>NE</sub>: 155 KIAS at MSLRefer to accepted / approved RFM for reduction in V<sub>NE</sub> 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 accepted / approved RFM

**10. Maximum Operating Altitude and Temperature**

## 10.1 Altitude

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

## 10.2 Temperature

Refer to accepted / 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 accepted / 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/m<sup>2</sup>

**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 Chapter 4, Airworthiness Limitation Section (ALS)

**IV. Operating and Service Instructions**

The Operating and Service Instructions as listed below are approved by the European Union Aviation Safety Agency under the EASA Type Certificate EASA.R.009 in accordance with Commission Regulation (EU) 748/2012, as amended.

These instructions and any future revisions are either accepted under Article 13 of Annex 30 of the UK-EU Trade and Cooperation Agreement or subject to approval by Validation under Article 10 of Annex 30 of the UK-EU Trade and Cooperation Agreement, for use by UK operators.

The Type Certificate Holder should be contacted to verify the applicability of any Operational and Service Instructions within the UK.

**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 P1, P2, P3, T1, T2, T3 Aircraft Maintenance Manual (AMM)
- EC135 P1, P2, P3, T1, T2, T3 System Description Section (SDS)
- EC135 P1, P2, P3, T1, T2, T3 Wiring Diagram Manual(WDM)
- EC135 P1, P2, P3, T1, T2, T3 Corrosion and Erosion Control Guide (CECG)
- Standard Practices Manual
- EC135 P1, P2, P3, T1, T2, T3, limited to CDS, CPDS, P2+, T2+. Chapter 04. Airworthiness Limitation Section (ALS)

- EC135 P1, P2, P3, T1, T2, T3, limited to CDS, CPDS, P2+, T2+. Chapter 05. Master Servicing Manual (MSM)
- EC135 Avionic Manual (AVM)
- Engine documents as per Engine TCDS No.EASA.IM.E.017

### 3. Structural Repair Manual

EC135 P1,P2,P3,T1,T2,T3 Structural Repair Manual (SRM)

### 4. Weight and Balance Manual

Refer to accepted / approved RFM

### 5. Illustrated Parts Catalogue

EC135 Illustrated Parts Catalogue. All EC135 variants, except T3H/P3H

### 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 Operational Suitability Data elements as listed below are approved by the European Union Aviation Safety Agency under the EASA Type Certificate EASA.R.009 in accordance with Commission Regulation (EU) 748/2012, as amended.

These OSD elements and any future revisions are either accepted under Article 13 of Annex 30 of the UK-EU Trade and Cooperation Agreement or subject to approval by Validation under Article 10 of Annex 30 of the UK-EU Trade and Cooperation Agreement, for use by UK operators

#### 1. Master Minimum Equipment List (MMEL)

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

The Type Certificate Holder should be contacted to verify the applicability of any MMEL revision within the UK.

#### 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.

The Type Certificate Holder should be contacted to verify the applicability of any FCD revision within the UK.

#### 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 4 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

**8. UK CAA Type Validation Application Date**

Prior to 31 December 2020, application dates for type certification are covered by EASA type certification application dates, as per Para 5 above.

New applications for UK CAA type validation received after 01 January 2021 will be recorded in this section. At the current issue of this UK CAA TCDS, no new applications for type validation have been received since 01 January 2021.

**9. UK CAA Type Validation Date**

Prior to 31 December 2020, dates of type certification are covered by EASA type certification, as per Para 7 above.

UK CAA type validation dates after 01 January 2021 will be recorded in this section. At the current issue of this UK CAA TCDS, no UK CAA type validations have been completed since 01 January 2021.

UK CAA TCDS UK.TC.R.00064 Issue 1 issued 05 May 2023.

**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 &amp; 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 accepted / approved RFM

## 6.2 Oil

Refer to accepted / approved RFM

## 6.3 Additives

Refer to accepted / 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 accepted / approved RFM

## 7.3 Coolant System Capacity

n/a

**8. Air Speed Limitations**V<sub>NE</sub>: 155 KIAS at MSLRefer to accepted / approved RFM for reduction in V<sub>NE</sub> 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 accepted / approved RFM

**10. Maximum Operating Altitude and Temperature**

## 10.1 Altitude

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

## 10.2 Temperature

Refer to accepted / 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 accepted / 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

TCDS No.: UK.TC.R.00064

Date: 25 March 2025

AW-DAW-TP-004

Copies of this document are not controlled.

Issue: 02

Page 27 of 171

**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/m<sup>2</sup>

**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 accepted or approved Chapter 4, Airworthiness Limitation Section (ALS)

**IV. Operating and Service Instructions**

The Operating and Service Instructions as listed below are approved by the European Union Aviation Safety Agency under the EASA Type Certificate EASA.R.009 in accordance with Commission Regulation (EU) 748/2012, as amended.

These instructions and any future revisions are either accepted under Article 13 of Annex 30 of the UK-EU Trade and Cooperation Agreement or subject to approval by Validation under Article 10 of Annex 30 of the UK-EU Trade and Cooperation Agreement, for use by UK operators.

The Type Certificate Holder should be contacted to verify the applicability of any Operational and Service Instructions within the UK.

**1. Flight Manual**

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

**2. Maintenance Manual**

- EC135 P1, P2, P3, T1, T2, T3 Aircraft Maintenance Manual (AMM)
- EC135 P1, P2, P3, T1, T2, T3 System Description Section (SDS)
- EC135 P1, P2, P3, T1, T2, T3 Wiring Diagram Manual(WDM)
- EC135 P1, P2, P3, T1, T2, T3 Corrosion and Erosion Control Guide (CECG)
- Standard Practices Manual
- EC135 P1, P2, P3, T1, T2, T3, limited to CDS, CPDS, P2+, T2+. Chapter 04. Airworthiness Limitation Section (ALS)
- EC135 P1, P2, P3, T1, T2, T3, limited to CDS, CPDS, P2+, T2+. Chapter 05. Master Servicing Manual (MSM)
- EC135 Avionic Manual (AVM)
- Engine documents as per Engine TCDS No.EASA.IM.E.017

**3. Structural Repair Manual**

EC135 P1,P2,P3,T1,T2,T3 Structural Repair Manual (SRM)

TCDS No.: UK.TC.R.00064

Date: 25 March 2025

AW-DAW-TP-004

Copies of this document are not controlled.

Issue: 02

Page 28 of 171

**4. Weight and Balance Manual**

Refer to accepted / approved RFM

**5. Illustrated Parts Catalogue**

EC135 Illustrated Parts Catalogue. All EC135 variants, except T3H/P3H

**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 accepted or approved Flight Manual Supplements RFMS 9.2, are permissible.

**V. Operational Suitability Data**

The Operational Suitability Data elements as listed below are approved by the European Union Aviation Safety Agency under the EASA Type Certificate EASA.R.009 in accordance with Commission Regulation (EU) 748/2012, as amended.

These OSD elements and any future revisions are either accepted under Article 13 of Annex 30 of the UK-EU Trade and Cooperation Agreement or subject to approval by Validation under Article 10 of Annex 30 of the UK-EU Trade and Cooperation Agreement, for use by UK operators.

**1. Master Minimum Equipment List (MMEL)**

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

The Type Certificate Holder should be contacted to verify the applicability of any MMEL revision within the UK.

**2. Flight Crew Data**

Flight Crew Operational Suitability Data as per document OSD\_L0000M403901 first Issue, EASA approval date 15 October 2015, or later accepted or 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 accepted or 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 accepted or approved revisions.

The Type Certificate Holder should be contacted to verify the applicability of any FCD revision within the UK.

**3. SIM Data**

Reserved.

**4. Maintenance Certifying Staff Data**

Reserved.

**VI. Notes**

1. Manufacturer's eligible serial numbers:

s/n 0189, and subsequent.

any EC135 P1(CPDS) that has been upgraded to EC135 P2(CPDS) according to SB EC135-71-017.

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 5 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

**8. UK CAA Type Validation Application Date**

Prior to 31 December 2020, application dates for type certification are covered by EASA type certification application dates, as per Para 5 above.

New applications for UK CAA type validation received after 01 January 2021 will be recorded in this section. At the current issue of this UK CAA TCDS, no new applications for type validation have been received since 01 January 2021.

**9. UK CAA Type Validation Date**

Prior to 31 December 2020, dates of type certification are covered by EASA type certification, as per Para 7 above.

UK CAA type validation dates after 01 January 2021 will be recorded in this section. At the current issue of this UK CAA TCDS, no UK CAA type validations have been completed since 01 January 2021.

UK CAA TCDS UK.TC.R.00064 Issue 1 issued 05 May 2023.

**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). initial issue
- CS 27.25 (a) (1) and CS 27.143 (c)(1), Amdt. 2

### 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 &amp; 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 accepted / approved RFM

## 6.2 Oil

Refer to accepted / approved RFM

## 6.3 Additives

Refer to accepted / 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 accepted / approved RFM

## 7.3 Coolant System Capacity

n/a

**8. Air Speed Limitations**V<sub>NE</sub>: 155 KIAS at MSLRefer to accepted / approved RFM for reduction in V<sub>NE</sub> 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 accepted / approved RFM

**10. Maximum Operating Altitude and Temperature**

## 10.1 Altitude

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

## 10.2 Temperature

Refer to accepted / 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 accepted / 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/m<sup>2</sup>

**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 accepted or approved Chapter 4, Airworthiness Limitation Section (ALS)

**IV. Operating and Service Instructions**

The Operating and Service Instructions as listed below are approved by the European Union Aviation Safety Agency under the EASA Type Certificate EASA.R.009 in accordance with Commission Regulation (EU) 748/2012, as amended.

These instructions and any future revisions are either accepted under Article 13 of Annex 30 of the UK-EU Trade and Cooperation Agreement or subject to approval by Validation under Article 10 of Annex 30 of the UK-EU Trade and Cooperation Agreement, for use by UK operators.

The Type Certificate Holder should be contacted to verify the applicability of any Operational and Service Instructions within the UK.

**1. Flight Manual**

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

**2. Maintenance Manual**

- EC135 P1, P2, P3, T1, T2, T3 Aircraft Maintenance Manual (AMM)
- EC135 P1, P2, P3, T1, T2, T3 System Description Section (SDS)
- EC135 P1, P2, P3, T1, T2, T3 Wiring Diagram Manual(WDM)
- EC135 P1, P2, P3, T1, T2, T3 Corrosion and Erosion Control Guide (CECG)
- Standard Practices Manual
- EC135 P1, P2, P3, T1, T2, T3, limited to CDS, CPDS, P2+, T2+. Chapter 04. Airworthiness Limitation Section (ALS)
- EC135 P1, P2, P3, T1, T2, T3, limited to CDS, CPDS, P2+, T2+. Chapter 05. Master Servicing Manual (MSM)

- EC135 Avionic Manual (AVM)
- Engine documents as per Engine TCDS No.EASA.IM.E.017

### 3. **Structural Repair Manual**

EC135 P1,P2,P3,T1,T2,T3 Structural Repair Manual (SRM)

### 4. **Weight and Balance Manual**

Refer to accepted / approved RFM

### 5. **Illustrated Parts Catalogue**

EC135 Illustrated Parts Catalogue. All EC135 variants, except T3H/P3H

### 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 accepted or approved Flight Manual Supplements RFMS 9.2, are permissible.

## V. **Operational Suitability Data**

The Operational Suitability Data elements as listed below are approved by the European Union Aviation Safety Agency under the EASA Type Certificate EASA.R.009 in accordance with Commission Regulation (EU) 748/2012, as amended.

These OSD elements and any future revisions are either accepted under Article 13 of Annex 30 of the UK-EU Trade and Cooperation Agreement or subject to approval by Validation under Article 10 of Annex 30 of the UK-EU Trade and Cooperation Agreement, for use by UK operators.

### 1. **Master Minimum Equipment List (MMEL)**

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

The Type Certificate Holder should be contacted to verify the applicability of any MMEL revision within the UK.

### 2. **Flight Crew Data**

Flight Crew Operational Suitability Data as per document OSD\_L0000M403901 first Issue, EASA approval date 15 October 2015, or later accepted or 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 accepted or 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 accepted or approved revisions.

The Type Certificate Holder should be contacted to verify the applicability of any FCD revision within the UK.

### 3. **SIM Data**

Reserved.

### 4. **Maintenance Certifying Staff Data**

Reserved.

**VI. Notes**

1. Manufacturer's eligible serial numbers:

s/n 0505, and subsequent.

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 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

**8. UK CAA Type Validation Application Date**

Prior to 31 December 2020, application dates for type certification are covered by EASA type certification application dates, as per Para 5 above.

New applications for UK CAA type validation received after 01 January 2021 will be recorded in this section. At the current issue of this UK CAA TCDS, no new applications for type validation have been received since 01 January 2021.

**9. UK CAA Type Validation Date**

Prior to 31 December 2020, dates of type certification are covered by EASA type certification, as per Para 7 above.

UK CAA type validation dates after 01 January 2021 will be recorded in this section. At the current issue of this UK CAA TCDS, no UK CAA type validations have been completed since 01 January 2021.

UK CAA TCDS UK.TC.R.00064 Issue 1 issued 05 May 2023.

**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

TCDS No.: UK.TC.R.00064

Date: 25 March 2025

AW-DAW-TP-004

Copies of this document are not controlled.

- 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), initial issue
- CS 27.25 (a) (1) and CS 27.143 (c)(1), Amdt. 2.

### 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: 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 &amp; 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 accepted / approved RFM

## 6.2 Oil

Refer to accepted / approved RFM

## 6.3 Additives

Refer to accepted / 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)

TCDS No.: UK.TC.R.00064

Date: 25 March 2025

AW-DAW-TP-004

Copies of this document are not controlled.

Issue: 02

Page 42 of 171

Fuel tank capacity: 701.0 litres

Usable fuel: 691.6 litres

## 7.2 Oil

Refer to accepted / approved RFM

## 7.3 Coolant System Capacity

n/a

## 8. Air Speed Limitations

V<sub>NE</sub>: 155 KIAS at MSL

Refer to accepted / approved RFM for reduction in V<sub>NE</sub> 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 accepted / approved RFM

## 10. Maximum Operating Altitude and Temperature

### 10.1 Altitude

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

### 10.2 Temperature

Refer to accepted / 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 accepted / 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/m<sup>2</sup>

#### 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 accepted or approved Chapter 4, Airworthiness Limitation Section (ALS)

### IV. Operating and Service Instructions

The Operating and Service Instructions as listed below are approved by the European Union Aviation Safety Agency under the EASA Type Certificate EASA.R.009 in accordance with Commission Regulation (EU) 748/2012, as amended.

These instructions and any future revisions are either accepted under Article 13 of Annex 30 of the UK-EU Trade and Cooperation Agreement or subject to approval by Validation under Article 10 of Annex 30 of the UK-EU Trade and Cooperation Agreement, for use by UK operators.

The Type Certificate Holder should be contacted to verify the applicability of any Operational and Service Instructions within the UK.

#### 1. Flight Manual

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

#### 2. Maintenance Manual

- EC135 P1, P2, P3, T1, T2, T3 Aircraft Maintenance Manual (AMM)
- EC135 P1, P2, P3, T1, T2, T3 System Description Section (SDS)

TCDS No.: UK.TC.R.00064

Date: 25 March 2025

AW-DAW-TP-004

Copies of this document are not controlled.

Issue: 02

Page 44 of 171

- EC135 P1, P2, P3, T1, T2, T3 Wiring Diagram Manual(WDM)
- EC135 P1, P2, P3, T1, T2, T3 Corrosion and Erosion Control Guide (CECG)
- Standard Practices Manual
- EC135 P1, P2, P3, T1, T2, T3, limited to CDS, CPDS, P2+, T2+. Chapter 04. Airworthiness Limitation Section (ALS)
- EC135 P1, P2, P3, T1, T2, T3, limited to CDS, CPDS, P2+, T2+. Chapter 05. Master Servicing Manual (MSM)
- EC135 Avionic Manual (AVM)
- Engine documents as per Engine TCDS No.EASA.IM.E.017

### 3. Structural Repair Manual

EC135 P1,P2,P3,T1,T2,T3 Structural Repair Manual (SRM)

### 4. Weight and Balance Manual

Refer to accepted / approved RFM

### 5. Illustrated Parts Catalogue

EC135 Illustrated Parts Catalogue. All EC135 variants, except T3H/P3H

### 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 accepted or approved Flight Manual Supplements RFMS 9.2, are permissible.

## V. Operational Suitability Data

The Operational Suitability Data elements as listed below are approved by the European Union Aviation Safety Agency under the EASA Type Certificate EASA.R.009 in accordance with Commission Regulation (EU) 748/2012, as amended.

These OSD elements and any future revisions are either accepted under Article 13 of Annex 30 of the UK-EU Trade and Cooperation Agreement or subject to approval by Validation under Article 10 of Annex 30 of the UK-EU Trade and Cooperation Agreement, for use by UK operators.

### 1. Master Minimum Equipment List (MMEL)

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

The Type Certificate Holder should be contacted to verify the applicability of any MMEL revision within the UK.

### 2. Flight Crew Data

Flight Crew Operational Suitability Data as per document OSD\_L0000M403901 first Issue, EASA approval date 15 October 2015, or later accepted or 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 accepted or 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 accepted or approved revisions.

The Type Certificate Holder should be contacted to verify the applicability of any FCD revision within the UK.

### 3. SIM Data

Reserved.

#### 4. Maintenance Certifying Staff Data

Reserved.

#### VI. Notes

1. Manufacturer's eligible serial numbers:

s/n 0505, and subsequent.

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 7 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

**8. UK CAA Type Validation Application Date**

Prior to 31 December 2020, application dates for type certification are covered by EASA type certification application dates, as per Para 5 above.

New applications for UK CAA type validation received after 01 January 2021 will be recorded in this section. At the current issue of this UK CAA TCDS, no new applications for type validation have been received since 01 January 2021.

**9. UK CAA Type Validation Date**

Prior to 31 December 2020, dates of type certification are covered by EASA type certification, as per Para 7 above.

UK CAA type validation dates after 01 January 2021 will be recorded in this section. At the current issue of this UK CAA TCDS, no UK CAA type validations have been completed since 01 January 2021.

UK CAA TCDS UK.TC.R.00064 Issue 1 issued 05 May 2023.

**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 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**

- 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

TCDS No.: UK.TC.R.00064

Date: 25 March 2025

AW-DAW-TP-004

Copies of this document are not controlled.

Issue: 02

Page 49 of 171

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 accepted / approved RFM

#### 6.2 Oil

Refer to accepted / approved RFM

TCDS No.: UK.TC.R.00064

Date: 25 March 2025

AW-DAW-TP-004

Copies of this document are not controlled.

### 6.3 Additives

Refer to accepted / 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 accepted / 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 accepted / 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 accepted / approved RFM

## 10. Maximum Operating Altitude and Temperature

### 10.1 Altitude

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

### 10.2 Temperature

Refer to accepted / 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 accepted / 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/m<sup>2</sup>

## 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 accepted or approved Chapter 4. Airworthiness Limitation Section (ALS)

**IV. Operating and Service Instructions**

The Operating and Service Instructions as listed below are approved by the European Union Aviation Safety Agency under the EASA Type Certificate EASA.R.009 in accordance with Commission Regulation (EU) 748/2012, as amended.

These instructions and any future revisions are either accepted under Article 13 of Annex 30 of the UK-EU Trade and Cooperation Agreement or subject to approval by Validation under Article 10 of Annex 30 of the UK-EU Trade and Cooperation Agreement, for use by UK operators.

The Type Certificate Holder should be contacted to verify the applicability of any Operational and Service Instructions within the UK.

**1. Flight Manual**

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

**2. Maintenance Manual**

- EC135 P1, P2, P3, T1, T2, T3 Aircraft Maintenance Manual (AMM)
- EC135 P1, P2, P3, T1, T2, T3 System Description Section (SDS)
- EC135 P1, P2, P3, T1, T2, T3 Wiring Diagram Manual(WDM)
- EC135 P1, P2, P3, T1, T2, T3 Corrosion and Erosion Control Guide (CECG)
- Standard Practices Manual
- EC135 P1, P2, P3, T1, T2, T3, limited to CDS, CPDS, P2+, T2+. Chapter 04. Airworthiness Limitation Section (ALS)
- EC135 P1, P2, P3, T1, T2, T3, limited to CDS, CPDS, P2+, T2+. Chapter 05. Master Servicing Manual (MSM)
- EC135 Avionic Manual (AVM)
- Engine documents as per Engine TCDS No.EASA.IM.E.017

**3. Structural Repair Manual**

EC135 P1,P2,P3,T1,T2,T3 Structural Repair Manual (SRM)

**4. Weight and Balance Manual**

Refer to accepted / approved RFM

**5. Illustrated Parts Catalogue**

EC135 Illustrated Parts Catalogue. All EC135 variants, except T3H/P3H

**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 accepted or approved Flight Manual Supplements RFMS 9.2, are permissible.

**V. Operational Suitability Data**

The Operational Suitability Data elements as listed below are approved by the European Union Aviation Safety Agency under the EASA Type Certificate EASA.R.009 in accordance with Commission Regulation (EU) 748/2012, as amended.

These OSD elements and any future revisions are either accepted under Article 13 of Annex 30 of the UK-EU Trade and Cooperation Agreement or subject to approval by Validation under Article 10 of Annex 30 of the UK-EU Trade and Cooperation Agreement, for use by UK operators.

**1. Master Minimum Equipment List (MMEL)**

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

The Type Certificate Holder should be contacted to verify the applicability of any MMEL revision within the UK.

**2. Flight Crew Data**

Flight Crew Operational Suitability Data as per document OSD\_L0000M403901 first Issue, EASA approval date 15 October 2015, or later accepted or 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 accepted or 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 accepted or approved revisions.

The Type Certificate Holder should be contacted to verify the applicability of any FCD revision within the UK.

**3. SIM Data**

Reserved.

**4. Maintenance Certifying Staff Data**

Reserved.

**VI. Notes**

1. Manufacturer's eligible serial numbers:

s/n 1178, and subsequent.

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 8 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

**8. UK CAA Type Validation Application Date**

Prior to 31 December 2020, application dates for type certification are covered by EASA type certification application dates, as per Para 5 above.

New applications for UK CAA type validation received after 01 January 2021 will be recorded in this section. At the current issue of this UK CAA TCDS, no new applications for type validation have been received since 01 January 2021.

**9. UK CAA Type Validation Date**

Prior to 31 December 2020, dates of type certification are covered by EASA type certification, as per Para 7 above.

UK CAA type validation dates after 01 January 2021 will be recorded in this section. At the current issue of this UK CAA TCDS, no UK CAA type validations have been completed since 01 January 2021.

UK CAA TCDS UK.TC.R.00064 Issue 1 issued 05 May 2023.

**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 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**

- 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 accepted / approved RFM

TCDS No.: UK.TC.R.00064

Date: 25 March 2025

AW-DAW-TP-004

Copies of this document are not controlled.

## 6.2 Oil

Refer to accepted / approved RFM

## 6.3 Additives

Refer to accepted / 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 accepted / 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 accepted / 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 accepted / approved RFM

**10. Maximum Operating Altitude and Temperature**

## 10.1 Altitude

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

## 10.2 Temperature

Refer to accepted / 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 accepted / 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/m<sup>2</sup>

**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 accepted or approved Chapter 4, Airworthiness Limitation Section (ALS)

**IV. Operating and Service Instructions**

The Operating and Service Instructions as listed below are approved by the European Union Aviation Safety Agency under the EASA Type Certificate EASA.R.009 in accordance with Commission Regulation (EU) 748/2012, as amended.

These instructions and any future revisions are either accepted under Article 13 of Annex 30 of the UK-EU Trade and Cooperation Agreement or subject to approval by Validation under Article 10 of Annex 30 of the UK-EU Trade and Cooperation Agreement, for use by UK operators.

The Type Certificate Holder should be contacted to verify the applicability of any Operational and Service Instructions within the UK.

**1. Flight Manual**

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

**2. Maintenance Manual**

- EC135 P1, P2, P3, T1, T2, T3 Aircraft Maintenance Manual (AMM)
- EC135 P1, P2, P3, T1, T2, T3 System Description Section (SDS)
- EC135 P1, P2, P3, T1, T2, T3 Wiring Diagram Manual(WDM)
- EC135 P1, P2, P3, T1, T2, T3 Corrosion and Erosion Control Guide (CECG)
- Standard Practices Manual
- EC135 P1, P2, P3, T1, T2, T3, limited to CDS, CPDS, P2+, T2+. Chapter 04. Airworthiness Limitation Section (ALS)
- EC135 P1, P2, P3, T1, T2, T3, limited to CDS, CPDS, P2+, T2+. Chapter 05. Master Servicing Manual (MSM)
- EC135 Avionic Manual (AVM)
- Engine documents as per Engine TCDS No.EASA.IM.E.017

**3. Structural Repair Manual**

EC135 P1,P2,P3,T1,T2,T3 Structural Repair Manual (SRM)

**4. Weight and Balance Manual**

Refer to accepted / approved RFM

**5. Illustrated Parts Catalogue**

EC635 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 accepted or approved Flight Manual Supplements RFMS 9.2, are permissible.

**V. Operational Suitability Data**

The Operational Suitability Data elements as listed below are approved by the European Union Aviation Safety Agency under the EASA Type Certificate EASA.R.009 in accordance with Commission Regulation (EU) 748/2012, as amended.

These OSD elements and any future revisions are either accepted under Article 13 of Annex 30 of the UK-EU Trade and Cooperation Agreement or subject to approval by Validation under Article 10 of Annex 30 of the UK-EU Trade and Cooperation Agreement, for use by UK operators.

### 1. Master Minimum Equipment List (MMEL)

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

The Type Certificate Holder should be contacted to verify the applicability of any MMEL revision within the UK.

### 2. Flight Crew Data

Flight Crew Operational Suitability Data as per document OSD\_L0000M403901 first Issue, EASA approval date 15 October 2015, or later accepted or 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 accepted or 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 accepted or approved revisions.

The Type Certificate Holder should be contacted to verify the applicability of any FCD revision within the UK.

### 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 9 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

**8. UK CAA Type Validation Application Date**

Prior to 31 December 2020, application dates for type certification are covered by EASA type certification application dates, as per Para 5 above.

New applications for UK CAA type validation received after 01 January 2021 will be recorded in this section. At the current issue of this UK CAA TCDS, no new applications for type validation have been received since 01 January 2021.

**9. UK CAA Type Validation Date**

Prior to 31 December 2020, dates of type certification are covered by EASA type certification, as per Para 7 above.

UK CAA type validation dates after 01 January 2021 will be recorded in this section. At the current issue of this UK CAA TCDS, no UK CAA type validations have been completed since 01 January 2021.

UK CAA TCDS UK.TC.R.00064 Issue 1 issued 05 May 2023.

**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).

CS27.0021	CS27.0231	CS27.0501	CS27.0671	CS27.0931	CS27.1323	CS27.1503
CS27.0025	CS27.0241	CS27.0521	CS27.0672	CS27.0939	CS27.1325	CS27.1505
CS27.0027	CS27.0251	CS27.0547	CS27.0674	CS27.1019	CS27.1327	CS27.1509
CS27.0029	CS27.0301	CS27.0549	CS27.0681	CS27.1041	CS27.1329	CS27.1519
CS27.0031	CS27.0303	CS27.0561	CS27.0683	CS27.1043	CS27.1337	CS27.1521
CS27.0033	CS27.0305	CS27.0562	CS27.0685	CS27.1045	CS27.1351	CS27.1523
CS27.0045	CS27.0307	CS27.0571	CS27.0687	CS27.1091	CS27.1353	CS27.1525
CS27.0049	CS27.0309	CS27.0601	CS27.0691	CS27.1093	CS27.1357	CS27.1527
CS27.0051	CS27.0321	CS27.0602	CS27.0695	CS27.1141	CS27.1361	CS27.1529
CS27.0065	CS27.0337	CS27.0603	CS27.0771	CS27.1143	CS27.1365	CS27.1541
CS27.0067	CS27.0339	CS27.0605	CS27.0773	CS27.1145	CS27.1367	CS27.1543
CS27.0075	CS27.0341	CS27.0607	CS27.0777	CS27.1151	CS27.1381	CS27.1545
CS27.0079	CS27.0351	CS27.0609	CS27.0785	CS27.1187	CS27.1383	CS27.1547
CS27.0141	CS27.0361	CS27.0610	CS27.0831	CS27.1193	CS27.1385	CS27.1549
CS27.0143	CS27.0391	CS27.0611	CS27.0853	CS27.1301	CS27.1387	CS27.1555
CS27.0151	CS27.0395	CS27.0613	CS27.0855	CS27.1303	CS27.1401	CS27.1559
CS27.0161	CS27.0397	CS27.0629	CS27.0863	CS27.1305	CS27.1411	CS27.1581
CS27.0171	CS27.0399	CS27.0653	CS27.0865	CS27.1307	CS27.1435	CS27.1583
CS27.0173	CS27.0427	CS27.0659	CS27.0901	CS27.1309	CS27.1457	CS27.1585
CS27.0175	CS27.0471	CS27.0661	CS27.0903	CS27.1321	CS27.1459	CS27.1587
CS27.0177	CS27.0473	CS27.0663	CS27.0907	CS27.1322	CS27.1501	CS27.1589

- 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, both at revision 1: Certification Basis for the original product amended by additional airworthiness requirements 27.1319 and A27.5 at CS-27 Amdt. 7
-	For EASA Approval 10078010 see §V, Note 4
-	For EASA Approval 10080963 Rev.1 see §V, Note 5
-	For EASA Approval 10084418: Certification Basis for the original product amended by additional airworthiness requirement 27.1458 at CS-27 Amdt. 10

### 3. Special Conditions

- "Protection from effects of HIRF"
- "Lithium Battery Installations"
- For EASA Approval 10082775: "Pressure refuelling and fuelling provisions below fuel level"

### 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 accepted / approved RFM

### 6.2 Oil

Refer to accepted / approved RFM

### 6.3 Additives

Refer to accepted / 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 accepted / approved RFM

### 7.3 Coolant System Capacity

n/a

## 8. Air Speed Limitations

V<sub>NE</sub>: 150 KIAS at MSL or as shown in the VNE-tables, whichever is less.

Refer to accepted / 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 accepted / approved RFM

## 10. Maximum Operating Altitude and Temperature

### 10.1 Altitude

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

### 10.2 Temperature

Refer to accepted / 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 accepted / 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/m<sup>2</sup>

#### 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 accepted or approved Chapter 4, Airworthiness Limitation Section (ALS)

### IV. Operating and Service Instructions

The Operating and Service Instructions as listed below are approved by the European Union Aviation Safety Agency under the EASA Type Certificate EASA.R.009 in accordance with Commission Regulation (EU) 748/2012, as amended.

These instructions and any future revisions are either accepted under Article 13 of Annex 30 of the UK-EU Trade and Cooperation Agreement or subject to approval by Validation under Article 10 of Annex 30 of the UK-EU Trade and Cooperation Agreement, for use by UK operators.

The Type Certificate Holder should be contacted to verify the applicability of any Operational and Service Instructions within the UK.

#### 1. Flight Manual

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

#### 2. Maintenance Manual

- EC135 P3H, T3H Aircraft Maintenance Manual (AMM)
- EC135 P3H, T3H System Description Section (SDS)
- EC135 P3H, T3H Wiring Diagram Manual (WDM)
- EC135 P3H, T3H Corrosion and Erosion Control Guide (CECG)
- Standard Practices Manual
- EC135 P3H, T3H. Chapter 04. Airworthiness Limitation Section (ALS)

TCDS No.: UK.TC.R.00064

Date: 25 March 2025

AW-DAW-TP-004

Copies of this document are not controlled.

Issue: 02

Page 69 of 171

- EC135 P3H, T3H. Chapter 05. Master Servicing Manual (MSM)
- e-Dynamic Troubleshooting (eDTS)
- EC135 Avionic Manual (AVM)- Engine documents as per Engine TCDS No.EASA.IM.E.017

### 3. **Structural Repair Manual**

EC135 P3H, T3H Structural Repair Manual (SRM)

### 4. **Weight and Balance Manual**

Refer to accepted / approved RFM

### 5. **Illustrated Parts Catalogue**

EC135 P3H, T3H 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 accepted or approved Flight Manual Supplements RFMS 9.2, are permissible.

## V. **Operational Suitability Data**

The Operational Suitability Data elements as listed below are approved by the European Union Aviation Safety Agency under the EASA Type Certificate EASA.R.009 in accordance with Commission Regulation (EU) 748/2012, as amended.

These OSD elements and any future revisions are either accepted under Article 13 of Annex 30 of the UK-EU Trade and Cooperation Agreement or subject to approval by Validation under Article 10 of Annex 30 of the UK-EU Trade and Cooperation Agreement, for use by UK operators.

### 1. **Master Minimum Equipment List (MMEL)**

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

The Type Certificate Holder should be contacted to verify the applicability of any MMEL revision within the UK.

### 2. **Flight Crew Data**

Flight Crew Operational Suitability Data as per document OSD\_L0000M403901 first Issue, EASA approval date 15 October 2015, or later accepted or 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 accepted or 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 accepted or approved revisions.

The Type Certificate Holder should be contacted to verify the applicability of any FCD revision within the UK.

### 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.

4. For EASA Approval 10078010: The TCH has shown compliance with CS-ACNS Issue 3, as applicable to helicopter communications, navigation, and surveillance equipage criteria in reference to the associated paragraphs detailed below:

CS ACNS.A.GEN.010	CS ACNS.D.ELS.010 -c	CS ACNS.D.ADSB.010
CS ACNS.A.GEN.015-a	CS ACNS.D.ELS.010-a	CS ACNS.D.ADSB.020-a
CS ACNS.A.GEN.015-b	CS ACNS.D.ELS.010-d	CS ACNS.D.ADSB.020-b
CS ACNS.A.GEN.020	CS ACNS.D.ELS.015-a	CS ACNS.D.ADSB.025-a
CS ACNS.D.AC.010-a	CS ACNS.D.ELS.015-b1	CS ACNS.D.ADSB.025-b
CS ACNS.D.AC.010-b	CS ACNS.D.ELS.015-b2	CS ACNS.D.ADSB.025-c
CS ACNS.D.AC.010-c	CS ACNS.D.ELS.020-a	CS ACNS.D.ADSB.030
CS ACNS.D.AC.010-d	CS ACNS.D.ELS.020-b	CS ACNS.D.ADSB.035
CS ACNS.D.AC.015-a	CS ACNS.D.ELS.025-a	CS ACNS.D.ADSB.040
CS ACNS.D.AC.015-b	CS ACNS.D.ELS.025-b	CS ACNS.D.ADSB.045
CS ACNS.D.AC.015-c	CS ACNS.D.ELS.025-c	CS ACNS.D.ADSB.050
CS ACNS.D.AC.020 -a	CS ACNS.D.ELS.030-a	CS ACNS.D.ADSB.060-a
CS ACNS.D.AC.020 -b	CS ACNS.D.ELS.030-b	CS ACNS.D.ADSB.060-b
CS ACNS.D.AC.020 -c	CS ACNS.D.ELS.040	CS ACNS.D.ADSB.070-a
CS ACNS.D.AC.025-a	CS ACNS.D.ELS.045	CS ACNS.D.ADSB.070-b
CS ACNS.D.AC.025-b	CS ACNS.D.ELS.055	CS ACNS.D.ADSB.070-c
CS ACNS.D.AC.025-c	CS ACNS.D.ELS.060-a	CS ACNS.D.ADSB.080
CS ACNS.D.AC.025-d	CS ACNS.D.ELS.060-b	CS ACNS.D.ADSB.085-a
CS ACNS.D.AC.025-e	CS ACNS.D.ELS.065	CS ACNS.D.ADSB.085-b
CS ACNS.D.AC.025-f		CS ACNS.D.ADSB.090-a
CS ACNS.D.AC.025-g		CS ACNS.D.ADSB.090-b
CS ACNS.D.AC.030		CS ACNS.D.ADSB.100-a
CS ACNS.D.AC.035		CS ACNS.D.ADSB.100-b
CS ACNS.D.AC.045		CS ACNS.D.ADSB.105-a
		CS ACNS.D.ADSB.110
		CS ACNS.D.ADSB.115
		CS ACNS.D.ADSB.120

5. For EASA Approval 10080963 REV. 1: The TCH has shown compliance with CS-ACNS Issue 3, as applicable to helicopter communications, navigation, and surveillance equipage criteria in reference to the associated paragraphs detailed below:

CS ACNS.A.GEN.010	CS ACNS.D.EHS.010	CS ACNS.D.ADSB.010
CS ACNS.A.GEN.015-a	CS ACNS.D.EHS.015-a	CS ACNS.D.ADSB.020-a
CS ACNS.A.GEN.015-b	CS ACNS.D.EHS.015-b	CS ACNS.D.ADSB.020-b
CS ACNS.A.GEN.020	CS ACNS.D.EHS.015-c	CS ACNS.D.ADSB.025-a
CS ACNS.D.AC.010-a	CS ACNS.D.EHS.020	CS ACNS.D.ADSB.025-b
CS ACNS.D.AC.010-b	CS ACNS.D.EHS.025	CS ACNS.D.ADSB.025-c

CS ACNS.D.AC.010-c	CS ACNS.D.ELS.010-a	CS ACNS.D.ADSB.030
CS ACNS.D.AC.010-d	CS ACNS.D.ELS.010-c	CS ACNS.D.ADSB.035
CS ACNS.D.AC.015-a	CS ACNS.D.ELS.010-d	CS ACNS.D.ADSB.040
CS ACNS.D.AC.015-b	CS ACNS.D.ELS.015-a	CS ACNS.D.ADSB.045
CS ACNS.D.AC.015-c	CS ACNS.D.ELS.015-b1	CS ACNS.D.ADSB.050
CS ACNS.D.AC.020 -a	CS ACNS.D.ELS.015-b2	CS ACNS.D.ADSB.060-a
CS ACNS.D.AC.020 -b	CS ACNS.D.ELS.020-a	CS ACNS.D.ADSB.060-b
CS ACNS.D.AC.020 -c	CS ACNS.D.ELS.020-b	CS ACNS.D.ADSB.070-a
CS ACNS.D.AC.025-a	CS ACNS.D.ELS.025-a	CS ACNS.D.ADSB.070-b
CS ACNS.D.AC.025-b	CS ACNS.D.ELS.025-b	CS ACNS.D.ADSB.070-c
CS ACNS.D.AC.025-c	CS ACNS.D.ELS.025-c	CS ACNS.D.ADSB.080
CS ACNS.D.AC.025-d	CS ACNS.D.ELS.030-a	CS ACNS.D.ADSB.085-a
CS ACNS.D.AC.025-e	CS ACNS.D.ELS.030-b	CS ACNS.D.ADSB.085-b
CS ACNS.D.AC.025-f	CS ACNS.D.ELS.040	CS ACNS.D.ADSB.090-a
CS ACNS.D.AC.025-g	CS ACNS.D.ELS.045	CS ACNS.D.ADSB.090-b
CS ACNS.D.AC.030	CS ACNS.D.ELS.055	CS ACNS.D.ADSB.100-a
CS ACNS.D.AC.035	CS ACNS.D.ELS.060-a	CS ACNS.D.ADSB.100-b
CS ACNS.D.AC.045	CS ACNS.D.ELS.060-b	CS ACNS.D.ADSB.105-a
	CS ACNS.D.ELS.065	CS ACNS.D.ADSB.110
		CS ACNS.D.ADSB.115



**Section 10 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

**8. UK CAA Type Validation Application Date**

Prior to 31 December 2020, application dates for type certification are covered by EASA type certification application dates, as per Para 5 above.

New applications for UK CAA type validation received after 01 January 2021 will be recorded in this section. At the current issue of this UK CAA TCDS, no new applications for type validation have been received since 01 January 2021.

**9. UK CAA Type Validation Date**

Prior to 31 December 2020, dates of type certification are covered by EASA type certification, as per Para 7 above.

UK CAA type validation dates after 01 January 2021 will be recorded in this section. At the current issue of this UK CAA TCDS, no UK CAA type validations have been completed since 01 January 2021.

UK CAA TCDS UK.TC.R.00064 Issue 1 issued 05 May 2023.

**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).

CS27.0021	CS27.0231	CS27.0501	CS27.0671	CS27.0931	CS27.1323	CS27.1503
CS27.0025	CS27.0241	CS27.0521	CS27.0672	CS27.0939	CS27.1325	CS27.1505
CS27.0027	CS27.0251	CS27.0547	CS27.0674	CS27.1019	CS27.1327	CS27.1509
CS27.0029	CS27.0301	CS27.0549	CS27.0681	CS27.1041	CS27.1329	CS27.1519
CS27.0031	CS27.0303	CS27.0561	CS27.0683	CS27.1043	CS27.1337	CS27.1521
CS27.0033	CS27.0305	CS27.0562	CS27.0685	CS27.1045	CS27.1351	CS27.1523
CS27.0045	CS27.0307	CS27.0571	CS27.0687	CS27.1091	CS27.1353	CS27.1525
CS27.0049	CS27.0309	CS27.0601	CS27.0691	CS27.1093	CS27.1357	CS27.1527
CS27.0051	CS27.0321	CS27.0602	CS27.0695	CS27.1141	CS27.1361	CS27.1529
CS27.0065	CS27.0337	CS27.0603	CS27.0771	CS27.1143	CS27.1365	CS27.1541
CS27.0067	CS27.0339	CS27.0605	CS27.0773	CS27.1145	CS27.1367	CS27.1543
CS27.0075	CS27.0341	CS27.0607	CS27.0777	CS27.1151	CS27.1381	CS27.1545
CS27.0079	CS27.0351	CS27.0609	CS27.0785	CS27.1187	CS27.1383	CS27.1547
CS27.0141	CS27.0361	CS27.0610	CS27.0831	CS27.1193	CS27.1385	CS27.1549
CS27.0143	CS27.0391	CS27.0611	CS27.0853	CS27.1301	CS27.1387	CS27.1555
CS27.0151	CS27.0395	CS27.0613	CS27.0855	CS27.1303	CS27.1401	CS27.1559
CS27.0161	CS27.0397	CS27.0629	CS27.0863	CS27.1305	CS27.1411	CS27.1581
CS27.0171	CS27.0399	CS27.0653	CS27.0865	CS27.1307	CS27.1435	CS27.1583
CS27.0173	CS27.0427	CS27.0659	CS27.0901	CS27.1309	CS27.1457	CS27.1585
CS27.0175	CS27.0471	CS27.0661	CS27.0903	CS27.1321	CS27.1459	CS27.1587
CS27.0177	CS27.0473	CS27.0663	CS27.0907	CS27.1322	CS27.1501	CS27.1589

- 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, both at revision 1: Certification Basis for the original product amended by additional airworthiness requirements 27.1319 and A27.5 at CS-27 Amdt. 7
- For EASA Approval 10078010 see §V, Note 4
- For EASA Approval 10080963 Rev.1 see §V, Note 5
- For EASA Approval 10084418: Certification Basis for the original product amended by additional airworthiness requirement 27.1458 at CS-27 Amdt. 10

### 3. Special Conditions

- "Protection from effects of HIRF"
- "Lithium Battery Installations"
- For EASA Approval 10082775: "Pressure refuelling and fuelling provisions below fuel level"

### 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

TCDS No.: UK.TC.R.00064

Date: 25 March 2025

AW-DAW-TP-004

Copies of this document are not controlled.

Issue: 02

Page 75 of 171

**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 accepted / approved RFM

## 6.2 Oil

Refer to accepted / approved RFM

## 6.3 Additives

Refer to accepted / 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 accepted / 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 accepted / 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 accepted / approved RFM

**10. Maximum Operating Altitude and Temperature**

## 10.1 Altitude

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

## 10.2 Temperature

Refer to accepted / 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 accepted / 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/m<sup>2</sup>

**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 accepted or approved Chapter 4, Airworthiness Limitation Section (ALS)

**IV. Operating and Service Instructions**

The Operating and Service Instructions as listed below are approved by the European Union Aviation Safety Agency under the EASA Type Certificate EASA.R.009 in accordance with Commission Regulation (EU) 748/2012, as amended.

These instructions and any future revisions are either accepted under Article 13 of Annex 30 of the UK-EU Trade and Cooperation Agreement or subject to approval by Validation under Article 10 of Annex 30 of the UK-EU Trade and Cooperation Agreement, for use by UK operators.

The Type Certificate Holder should be contacted to verify the applicability of any Operational and Service Instructions within the UK.

**1. Flight Manual**

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

**2. Maintenance Manual**

- EC135 P3H, T3H Aircraft Maintenance Manual (AMM)
- EC135 P3H, T3H System Description Section (SDS)
- EC135 P3H, T3H Wiring Diagram Manual (WDM)
- EC135 P3H, T3H Corrosion and Erosion Control Guide (CECG)
- Standard Practices Manual
- EC135 P3H, T3H. Chapter 04. Airworthiness Limitation Section (ALS)
- EC135 P3H, T3H. Chapter 05. Master Servicing Manual (MSM)
- e-Dynamic Troubleshooting (eDTS)
- EC135 Avionic Manual (AVM)
- Engine documents as per Engine TCDS No. EASA.IM.E.017

**3. Structural Repair Manual**

EC135 P3H, T3H Structural Repair Manual (SRM)

**4. Weight and Balance Manual**

Refer to accepted / approved RFM

**5. Illustrated Parts Catalogue**

EC635 P3H, T3H 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 accepted or approved Flight Manual Supplements RFMS 9.2, are permissible.

**V. Operational Suitability Data**

The Operational Suitability Data elements as listed below are approved by the European Union Aviation Safety Agency under the EASA Type Certificate EASA.R.009 in accordance with Commission Regulation (EU) 748/2012, as amended.

These OSD elements and any future revisions are either accepted under Article 13 of Annex 30 of the UK-EU Trade and Cooperation Agreement or subject to approval by Validation under Article 10 of Annex 30 of the UK-EU Trade and Cooperation Agreement, for use by UK operators.

**1. Master Minimum Equipment List (MMEL)**

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

The Type Certificate Holder should be contacted to verify the applicability of any MMEL revision within the UK.

**2. Flight Crew Data**

Flight Crew Operational Suitability Data as per document OSD\_L0000M403901 first Issue, EASA approval date 15 October 2015, or later accepted or 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 accepted or 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 accepted or approved revisions.

The Type Certificate Holder should be contacted to verify the applicability of any FCD revision within the UK.

**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.

4. For EASA Approval 10078010: The TCH has shown compliance with CS-ACNS Issue 3, as applicable to helicopter communications, navigation, and surveillance equipage criteria in reference to the associated paragraphs detailed below:

CS ACNS.A.GEN.010	CS ACNS.D.ELS.010 -c	CS ACNS.D.ADSB.010
CS ACNS.A.GEN.015-a	CS ACNS.D.ELS.010-a	CS ACNS.D.ADSB.020-a
CS ACNS.A.GEN.015-b	CS ACNS.D.ELS.010-d	CS ACNS.D.ADSB.020-b
CS ACNS.A.GEN.020	CS ACNS.D.ELS.015-a	CS ACNS.D.ADSB.025-a
CS ACNS.D.AC.010-a	CS ACNS.D.ELS.015-b1	CS ACNS.D.ADSB.025-b
CS ACNS.D.AC.010-b	CS ACNS.D.ELS.015-b2	CS ACNS.D.ADSB.025-c
CS ACNS.D.AC.010-c	CS ACNS.D.ELS.020-a	CS ACNS.D.ADSB.030
CS ACNS.D.AC.010-d	CS ACNS.D.ELS.020-b	CS ACNS.D.ADSB.035
CS ACNS.D.AC.015-a	CS ACNS.D.ELS.025-a	CS ACNS.D.ADSB.040
CS ACNS.D.AC.015-b	CS ACNS.D.ELS.025-b	CS ACNS.D.ADSB.045
CS ACNS.D.AC.015-c	CS ACNS.D.ELS.025-c	CS ACNS.D.ADSB.050
CS ACNS.D.AC.020 -a	CS ACNS.D.ELS.030-a	CS ACNS.D.ADSB.060-a
CS ACNS.D.AC.020 -b	CS ACNS.D.ELS.030-b	CS ACNS.D.ADSB.060-b
CS ACNS.D.AC.020 -c	CS ACNS.D.ELS.040	CS ACNS.D.ADSB.070-a
CS ACNS.D.AC.025-a	CS ACNS.D.ELS.045	CS ACNS.D.ADSB.070-b
CS ACNS.D.AC.025-b	CS ACNS.D.ELS.055	CS ACNS.D.ADSB.070-c
CS ACNS.D.AC.025-c	CS ACNS.D.ELS.060-a	CS ACNS.D.ADSB.080
CS ACNS.D.AC.025-d	CS ACNS.D.ELS.060-b	CS ACNS.D.ADSB.085-a
CS ACNS.D.AC.025-e	CS ACNS.D.ELS.065	CS ACNS.D.ADSB.085-b
CS ACNS.D.AC.025-f		CS ACNS.D.ADSB.090-a
CS ACNS.D.AC.025-g		CS ACNS.D.ADSB.090-b
CS ACNS.D.AC.030		CS ACNS.D.ADSB.100-a
CS ACNS.D.AC.035		CS ACNS.D.ADSB.100-b
CS ACNS.D.AC.045		CS ACNS.D.ADSB.105-a
		CS ACNS.D.ADSB.110
		CS ACNS.D.ADSB.115
		CS ACNS.D.ADSB.120

5. For EASA Approval 10080963 REV. 1: The TCH has shown compliance with CS-ACNS Issue 3, as applicable to helicopter communications, navigation, and surveillance equipage criteria in reference to the associated paragraphs detailed below:

CS ACNS.A.GEN.010	CS ACNS.D.EHS.010	CS ACNS.D.ADSB.010
CS ACNS.A.GEN.015-a	CS ACNS.D.EHS.015-a	CS ACNS.D.ADSB.020-a
CS ACNS.A.GEN.015-b	CS ACNS.D.EHS.015-b	CS ACNS.D.ADSB.020-b
CS ACNS.A.GEN.020	CS ACNS.D.EHS.015-c	CS ACNS.D.ADSB.025-a
CS ACNS.D.AC.010-a	CS ACNS.D.EHS.020	CS ACNS.D.ADSB.025-b
CS ACNS.D.AC.010-b	CS ACNS.D.EHS.025	CS ACNS.D.ADSB.025-c
CS ACNS.D.AC.010-c	CS ACNS.D.ELS.010-a	CS ACNS.D.ADSB.030
CS ACNS.D.AC.010-d	CS ACNS.D.ELS.010-c	CS ACNS.D.ADSB.035
CS ACNS.D.AC.015-a	CS ACNS.D.ELS.010-d	CS ACNS.D.ADSB.040
CS ACNS.D.AC.015-b	CS ACNS.D.ELS.015-a	CS ACNS.D.ADSB.045
CS ACNS.D.AC.015-c	CS ACNS.D.ELS.015-b1	CS ACNS.D.ADSB.050

CS ACNS.D.AC.020 -a	CS ACNS.D.ELS.015-b2	CS ACNS.D.ADSB.060-a
CS ACNS.D.AC.020 -b	CS ACNS.D.ELS.020-a	CS ACNS.D.ADSB.060-b
CS ACNS.D.AC.020 -c	CS ACNS.D.ELS.020-b	CS ACNS.D.ADSB.070-a
CS ACNS.D.AC.025-a	CS ACNS.D.ELS.025-a	CS ACNS.D.ADSB.070-b
CS ACNS.D.AC.025-b	CS ACNS.D.ELS.025-b	CS ACNS.D.ADSB.070-c
CS ACNS.D.AC.025-c	CS ACNS.D.ELS.025-c	CS ACNS.D.ADSB.080
CS ACNS.D.AC.025-d	CS ACNS.D.ELS.030-a	CS ACNS.D.ADSB.085-a
CS ACNS.D.AC.025-e	CS ACNS.D.ELS.030-b	CS ACNS.D.ADSB.085-b
CS ACNS.D.AC.025-f	CS ACNS.D.ELS.040	CS ACNS.D.ADSB.090-a
CS ACNS.D.AC.025-g	CS ACNS.D.ELS.045	CS ACNS.D.ADSB.090-b
CS ACNS.D.AC.030	CS ACNS.D.ELS.055	CS ACNS.D.ADSB.100-a
CS ACNS.D.AC.035	CS ACNS.D.ELS.060-a	CS ACNS.D.ADSB.100-b
CS ACNS.D.AC.045	CS ACNS.D.ELS.060-b	CS ACNS.D.ADSB.105-a
	CS ACNS.D.ELS.065	CS ACNS.D.ADSB.110
		CS ACNS.D.ADSB.115

**Section 11 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

**8. UK CAA Type Validation Application Date**

Prior to 31 December 2020, application dates for type certification are covered by EASA type certification application dates, as per Para 5 above.

New applications for UK CAA type validation received after 01 January 2021 will be recorded in this section. At the current issue of this UK CAA TCDS, no new applications for type validation have been received since 01 January 2021.

**9. UK CAA Type Validation Date**

Prior to 31 December 2020, dates of type certification are covered by EASA type certification, as per Para 7 above.

UK CAA type validation dates after 01 January 2021 will be recorded in this section. At the current issue of this UK CAA TCDS, no UK CAA type validations have been completed since 01 January 2021.

UK CAA TCDS UK.TC.R.00064 Issue 1 issued 05 May 2023.

**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 accepted / approved RFM

## 6.2 Oil

Refer to accepted / approved RFM

## 6.3 Additives

Refer to accepted / 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 accepted / approved RFM

## 7.3 Coolant System Capacity

n/a

## 8. Air Speed Limitations

V<sub>NE</sub>: 155 KIAS at MSL

Refer to accepted / approved RFM for reduction in V<sub>NE</sub> 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 accepted / approved RFM

## 10. Maximum Operating Altitude and Temperature

### 10.1 Altitude

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

### 10.2 Temperature

Refer to accepted / 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 accepted / 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/m<sup>2</sup>

#### 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 accepted or approved Chapter 4, Airworthiness Limitation Section (ALS)

### IV. Operating and Service Instructions

The Operating and Service Instructions as listed below are approved by the European Union Aviation Safety Agency under the EASA Type Certificate EASA.R.009 in accordance with Commission Regulation (EU) 748/2012, as amended.

These instructions and any future revisions are either accepted under Article 13 of Annex 30 of the UK-EU Trade and Cooperation Agreement or subject to approval by Validation under Article 10 of Annex 30 of the UK-EU Trade and Cooperation Agreement, for use by UK operators.

The Type Certificate Holder should be contacted to verify the applicability of any Operational and Service Instructions within the UK.



**1. Flight Manual**

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

**2. Maintenance Manual**

- EC135 P1,P2,P3,T2,T2,T3 Aircraft Maintenance Manual (AMM)
- EC135 P1,P2,P3,T2,T2,T3 System Description Section (SDS)
- EC135 P1,P2,P3,T2,T2,T3 Wiring Diagram Manual (WDM)
- EC135 P1,P2,P3,T2,T2,T3 Corrosion and Erosion Control Guide (CECG)
- Standard Practices Manual
- EC135 P1,P2,P3,T1,T2,T3, limited to CDS, CPDS, P2+, T2+. Chapter 04. Airworthiness Limitation Section (ALS)
- EC135 P1,P2,P3,T1,T2,T3, limited to CDS, CPDS, P2+, T2+. Chapter 05. Master Servicing Manual (MSM)
- EC135 Avionic Manual (AVM)
- Engine documents as per Engine TCDS No. EASA.E.029

**3. Structural Repair Manual**

EC135 P1,P2,P3,T1,T2,T3 Structural Repair Manual (SRM)

**4. Weight and Balance Manual**

Refer to accepted / approved RFM

**5. Illustrated Parts Catalogue**

EC135 Illustrated Parts Catalogue. All EC135 variants, except T3H/P3H

**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 accepted or approved Flight Manual Supplements RFMS 9.2, are permissible.

**V. Operational Suitability Data**

The Operational Suitability Data elements as listed below are approved by the European Union Aviation Safety Agency under the EASA Type Certificate EASA.R.009 in accordance with Commission Regulation (EU) 748/2012, as amended.

These OSD elements and any future revisions are either accepted under Article 13 of Annex 30 of the UK-EU Trade and Cooperation Agreement or subject to approval by Validation under Article 10 of Annex 30 of the UK-EU Trade and Cooperation Agreement, for use by UK operators.

**1. Master Minimum Equipment List (MMEL)**

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

The Type Certificate Holder should be contacted to verify the applicability of any MMEL revision within the UK.

**2. Flight Crew Data**

Flight Crew Operational Suitability Data as per document OSD\_L0000M403901 first Issue, EASA approval date 15 October 2015, or later accepted or 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 accepted or 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 accepted or approved revisions.

The Type Certificate Holder should be contacted to verify the applicability of any FCD revision within the UK.

### 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 12 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

**8. UK CAA Type Validation Application Date**

Prior to 31 December 2020, application dates for type certification are covered by EASA type certification application dates, as per Para 5 above.

New applications for UK CAA type validation received after 01 January 2021 will be recorded in this section. At the current issue of this UK CAA TCDS, no new applications for type validation have been received since 01 January 2021.

**9. UK CAA Type Validation Date**

Prior to 31 December 2020, dates of type certification are covered by EASA type certification, as per Para 7 above.

UK CAA type validation dates after 01 January 2021 will be recorded in this section. At the current issue of this UK CAA TCDS, no UK CAA type validations have been completed since 01 January 2021.

UK CAA TCDS UK.TC.R.00064 Issue 1 issued 05 May 2023.

**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 accepted / approved RFM

## 6.2 Oil

Refer to accepted / approved RFM

## 6.3 Additives

Refer to accepted / 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 accepted / approved RFM

## 7.3 Coolant System Capacity

n/a

## 8. Air Speed Limitations

V<sub>NE</sub>: 155 KIAS at MSL

Refer to accepted / approved RFM for reduction in V<sub>NE</sub> 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 accepted / approved RFM

## 10. Maximum Operating Altitude and Temperature

### 10.1 Altitude

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

### 10.2 10.2 Temperature

Refer to accepted / 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 accepted / 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

TCDS No.: UK.TC.R.00064

Date: 25 March 2025

AW-DAW-TP-004

Copies of this document are not controlled.

Issue: 02

Page 95 of 171

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/m<sup>2</sup>

#### 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 accepted or approved Chapter 4, Airworthiness Limitation Section (ALS)

### IV. Operating and Service Instructions

The Operating and Service Instructions as listed below are approved by the European Union Aviation Safety Agency under the EASA Type Certificate EASA.R.009 in accordance with Commission Regulation (EU) 748/2012, as amended.

These instructions and any future revisions are either accepted under Article 13 of Annex 30 of the UK-EU Trade and Cooperation Agreement or subject to approval by Validation under Article 10 of Annex 30 of the UK-EU Trade and Cooperation Agreement, for use by UK operators.

The Type Certificate Holder should be contacted to verify the applicability of any Operational and Service Instructions within the UK.



**1. Flight Manual**

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

**2. Maintenance Manual**

- EC135 P1,P2,P3,T1,T2,T3 Aircraft Maintenance Manual (AMM)
- EC135 P1,P2,P3,T1,T2,T3 System Description Section (SDS)
- EC135 P1,P2,P3,T1,T2,T3 Wiring Diagram Manual (WDM)
- EC135 P1,P2,P3,T1,T2,T3 Corrosion and Erosion Control Guide (CECG)
- Standard Practices Manual
- EC135 P1,P2,P3,T1,T2,T3, limited to CDS, CPDS, P2+, T2+. Chapter 04. Airworthiness Limitation Section (ALS)
- EC135 P1,P2,P3,T1,T2,T3, limited to CDS, CPDS, P2+, T2+. Chapter 05. Master Servicing Manual (MSM)
- EC135 Avionic Manual (AVM)
- Engine documents as per Engine TCDS No. EASA.E.029

**3. Structural Repair Manual**

EC135 P1,P2,P3,T1,T2,T3 Structural Repair Manual (SRM)

**4. Weight and Balance Manual**

Refer to accepted / approved RFM

**5. Illustrated Parts Catalogue**

EC135 Illustrated Parts Catalogue. All EC135 variants, except T3H/P3H

**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 accepted or approved Flight Manual Supplements RFMS 9.2, are permissible.

**V. Operational Suitability Data**

The Operational Suitability Data elements as listed below are approved by the European Union Aviation Safety Agency under the EASA Type Certificate EASA.R.009 in accordance with Commission Regulation (EU) 748/2012, as amended.

These OSD elements and any future revisions are either accepted under Article 13 of Annex 30 of the UK-EU Trade and Cooperation Agreement or subject to approval by Validation under Article 10 of Annex 30 of the UK-EU Trade and Cooperation Agreement, for use by UK operators.

**1. Master Minimum Equipment List (MMEL)**

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

The Type Certificate Holder should be contacted to verify the applicability of any MMEL revision within the UK.

**2. Flight Crew Data**

Flight Crew Operational Suitability Data as per document OSD\_L0000M403901 first Issue, EASA approval date 15 October 2015, or later accepted or 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 accepted or 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 accepted or approved revisions.

The Type Certificate Holder should be contacted to verify the applicability of any FCD revision within the UK.

### 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 13 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

**8. UK CAA Type Validation Application Date**

Prior to 31 December 2020, application dates for type certification are covered by EASA type certification application dates, as per Para 5 above.

New applications for UK CAA type validation received after 01 January 2021 will be recorded in this section. At the current issue of this UK CAA TCDS, no new applications for type validation have been received since 01 January 2021.

**9. UK CAA Type Validation Date**

Prior to 31 December 2020, dates of type certification are covered by EASA type certification, as per Para 7 above.

UK CAA type validation dates after 01 January 2021 will be recorded in this section. At the current issue of this UK CAA TCDS, no UK CAA type validations have been completed since 01 January 2021.

UK CAA TCDS UK.TC.R.00064 Issue 1 issued 05 May 2023.

**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 accepted / approved RFM

#### 6.2 Oil

Refer to accepted / approved RFM

#### 6.3 Additives

Refer to accepted / 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)

TCDS No.: UK.TC.R.00064

Date: 25 March 2025

AW-DAW-TP-004

Copies of this document are not controlled.

Issue: 02

Page 102 of 171

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 accepted / approved RFM

## 7.3 Coolant System Capacity

n/a

## 8. Air Speed Limitations

V<sub>NE</sub>: 155 KIAS at MSL

Refer to accepted / approved RFM for reduction in V<sub>NE</sub> 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 accepted / approved RFM

## 10. Maximum Operating Altitude and Temperature

### 10.1 Altitude

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

### 10.2 Temperature

Refer to accepted / 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 accepted / 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

TCDS No.: UK.TC.R.00064

Date: 25 March 2025

AW-DAW-TP-004

Copies of this document are not controlled.

Issue: 02

Page 103 of 171

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/m<sup>2</sup>

#### 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 accepted or approved Chapter 4, Airworthiness Limitation Section (ALS)

### IV. Operating and Service Instructions

The Operating and Service Instructions as listed below are approved by the European Union Aviation Safety Agency under the EASA Type Certificate EASA.R.009 in accordance with Commission Regulation (EU) 748/2012, as amended.

These instructions and any future revisions are either accepted under Article 13 of Annex 30 of the UK-EU Trade and Cooperation Agreement or subject to approval by Validation under Article 10 of Annex 30 of the UK-EU Trade and Cooperation Agreement, for use by UK operators.

The Type Certificate Holder should be contacted to verify the applicability of any Operational and Service Instructions within the UK.



**1. Flight Manual**

EC635 T1(CPDS), initially LBA-approved, dated 31 August 2001, or later accepted or approved revisions, including the supplements for Special Operations RFMS 9.1 and Optional Equipment RFMS 9.2.

**2. Maintenance Manual**

- EC135 P1,P2,P3,T1,T2,T3 Aircraft Maintenance Manual (AMM)
- EC135 P1,P2,P3,T1,T2,T3 System Description Section (SDS)
- EC135 P1,P2,P3,T1,T2,T3 Wiring Diagram Manual (WDM)
- EC135 P1,P2,P3,T1,T2,T3 Corrosion and Erosion Control Guide (CECG)
- Standard Practices Manual
- EC135 P1,P2,P3,T1,T2,T3, limited to CDS, CPDS, P2+, T2+. Chapter 04. Airworthiness Limitation Section (ALS)
- EC135 P1,P2,P3,T1,T2,T3, limited to CDS, CPDS, P2+, T2+. Chapter 05. Master Servicing Manual (MSM)
- EC135 Avionic Manual (AVM)
- Engine documents as per Engine TCDS No. EASA.E.029

**3. Structural Repair Manual**

EC135 P1,P2,P3,T1,T2,T3 Structural Repair Manual (SRM)

**4. Weight and Balance Manual**

Refer to accepted / approved RFM

**5. Illustrated Parts Catalogue**

EC135 Illustrated Parts Catalogue. All EC135 variants, except T3H/P3H

**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 accepted or approved Flight Manual Supplements RFMS 9.2, are permissible.

**V. Operational Suitability Data**

The Operational Suitability Data elements as listed below are approved by the European Union Aviation Safety Agency under the EASA Type Certificate EASA.R.009 in accordance with Commission Regulation (EU) 748/2012, as amended.

These OSD elements and any future revisions are either accepted under Article 13 of Annex 30 of the UK-EU Trade and Cooperation Agreement or subject to approval by Validation under Article 10 of Annex 30 of the UK-EU Trade and Cooperation Agreement, for use by UK operators.

**1. Master Minimum Equipment List (MMEL)**

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

The Type Certificate Holder should be contacted to verify the applicability of any MMEL revision within the UK.

**2. Flight Crew Data**

Flight Crew Operational Suitability Data as per document OSD\_L0000M403901 first Issue, EASA approval date 15 October 2015, or later accepted or 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 accepted or 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 accepted or approved revisions.

The Type Certificate Holder should be contacted to verify the applicability of any FCD revision within the UK.

### 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 14 Section 14 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

**8. UK CAA Type Validation Application Date**

Prior to 31 December 2020, application dates for type certification are covered by EASA type certification application dates, as per Para 5 above.

New applications for UK CAA type validation received after 01 January 2021 will be recorded in this section. At the current issue of this UK CAA TCDS, no new applications for type validation have been received since 01 January 2021.

**9. UK CAA Type Validation Date**

Prior to 31 December 2020, dates of type certification are covered by EASA type certification, as per Para 7 above.

UK CAA type validation dates after 01 January 2021 will be recorded in this section. At the current issue of this UK CAA TCDS, no UK CAA type validations have been completed since 01 January 2021.

UK CAA TCDS UK.TC.R.00064 Issue 1 issued 05 May 2023.

**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 accepted / approved RFM

6.2 Oil  
Refer to accepted / approved RFM

6.3 Additives  
Refer to accepted / 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 accepted / approved RFM

## 7.3 Coolant System Capacity

n/a

## 8. Air Speed Limitations

V<sub>NE</sub>: 155 KIAS at MSL

Refer to accepted / approved RFM for reduction in V<sub>NE</sub> 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 accepted / approved RFM

## 10. Maximum Operating Altitude and Temperature

### 10.1 Altitude

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

### 10.2 Temperature

Refer to accepted / 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 accepted / 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/m<sup>2</sup>

#### 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 accepted or approved Chapter 4, Airworthiness Limitation Section (ALS)

### IV. Operating and Service Instructions

The Operating and Service Instructions as listed below are approved by the European Union Aviation Safety Agency under the EASA Type Certificate EASA.R.009 in accordance with Commission Regulation (EU) 748/2012, as amended.

These instructions and any future revisions are either accepted under Article 13 of Annex 30 of the UK-EU Trade and Cooperation Agreement or subject to approval by Validation under Article 10 of Annex 30 of the UK-EU Trade and Cooperation Agreement, for use by UK operators.

The Type Certificate Holder should be contacted to verify the applicability of any Operational and Service Instructions within the UK.

#### 1. Flight Manual

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



**2. Maintenance Manual**

- EC135 P1,P2,P3,T1,T2,T3 Aircraft Maintenance Manual (AMM)
- EC135 P1,P2,P3,T1,T2,T3 System Description Section (SDS)
- EC135 P1,P2,P3,T1,T2,T3 Wiring Diagram Manual (WDM)
- EC135 P1,P2,P3,T1,T2,T3 Corrosion and Erosion Control Guide (CECG)
- Standard Practices Manual
- EC135 P1,P2,P3,T1,T2,T3, limited to CDS, CPDS, P2+, T2+. Chapter 04. Airworthiness Limitation Section (ALS)
- EC135 P1,P2,P3,T1,T2,T3, limited to CDS, CPDS, P2+, T2+. Chapter 05. Master Servicing Manual (MSM)
- EC135 Avionic Manual (AVM)
- Engine documents as per Engine TCDS No. EASA.E.029

**3. Structural Repair Manual**

EC135 P1,P2,P3,T1,T2,T3 Structural Repair Manual (SRM)

**4. Weight and Balance Manual**

Refer to accepted / approved RFM

**5. Illustrated Parts Catalogue**

EC135 Illustrated Parts Catalogue. All EC135 variants, except T3H/P3H

**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 accepted or approved Flight Manual Supplements RFMS 9.2, are permissible.

**V. Operational Suitability Data**

The Operational Suitability Data elements as listed below are approved by the European Union Aviation Safety Agency under the EASA Type Certificate EASA.R.009 in accordance with Commission Regulation (EU) 748/2012, as amended.

These OSD elements and any future revisions are either accepted under Article 13 of Annex 30 of the UK-EU Trade and Cooperation Agreement or subject to approval by Validation under Article 10 of Annex 30 of the UK-EU Trade and Cooperation Agreement, for use by UK operators.

**1. Master Minimum Equipment List (MMEL)**

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

The Type Certificate Holder should be contacted to verify the applicability of any MMEL revision within the UK.

## 2. Flight Crew Data

Flight Crew Operational Suitability Data as per document OSD\_L0000M403901 first Issue, EASA approval date 15 October 2015, or later accepted or 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 accepted or 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 accepted or approved revisions.

The Type Certificate Holder should be contacted to verify the applicability of any FCD revision within the UK.

## 3. SIM Data

Reserved.

## 4. Maintenance Certifying Staff Data

Reserved.

## VI. Notes

1. Manufacturer's eligible serial numbers:

s/n 0243, and subsequent.

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 15 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**

1. February 2006

**8. UK CAA Type Validation Application Date**

Prior to 31 December 2020, application dates for type certification are covered by EASA type certification application dates, as per Para 5 above.

New applications for UK CAA type validation received after 01 January 2021 will be recorded in this section. At the current issue of this UK CAA TCDS, no new applications for type validation have been received since 01 January 2021.

**9. UK CAA Type Validation Date**

Prior to 31 December 2020, dates of type certification are covered by EASA type certification, as per Para 7 above.

UK CAA type validation dates after 01 January 2021 will be recorded in this section. At the current issue of this UK CAA TCDS, no UK CAA type validations have been completed since 01 January 2021.

UK CAA TCDS UK.TC.R.00064 Issue 1 issued 05 May 2023.

**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
- CS 27.25 (a) (1) and CS 27.143 (c)(1), Amdt. 2

## 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 accepted / approved RFM

## 6.2 Oil

Refer to accepted / approved RFM

## 6.3 Additives

Refer to accepted / 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

TCDS No.: UK.TC.R.00064

Date: 25 March 2025

AW-DAW-TP-004

Copies of this document are not controlled.

Issue: 02

Page 118 of 171

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

Fuel tank capacity: 701.0 litres

Usable fuel: 691.6 litres

## 7.2 Oil

Refer to accepted / approved RFM

## 7.3 Coolant System Capacity

n/a

## 8. Air Speed Limitations

V<sub>NE</sub>: 155 KIAS at MSL

Refer to accepted / approved RFM for reduction in V<sub>NE</sub> 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 accepted / approved RFM

## 10. Maximum Operating Altitude and Temperature

### 10.1 Altitude

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

### 10.2 Temperature

Refer to accepted / 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 accepted / 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

TCDS No.: UK.TC.R.00064

Date: 25 March 2025

AW-DAW-TP-004

Copies of this document are not controlled.

Issue: 02

Page 119 of 171

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/m<sup>2</sup>

#### 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 accepted or approved Chapter 4, Airworthiness Limitation Section (ALS)

### IV. Operating and Service Instructions

The Operating and Service Instructions as listed below are approved by the European Union Aviation Safety Agency under the EASA Type Certificate EASA.R.009 in accordance with Commission Regulation (EU) 748/2012, as amended.

These instructions and any future revisions are either accepted under Article 13 of Annex 30 of the UK-EU Trade and Cooperation Agreement or subject to approval by Validation under Article 10 of Annex 30 of the UK-EU Trade and Cooperation Agreement, for use by UK operators.

The Type Certificate Holder should be contacted to verify the applicability of any Operational and Service Instructions within the UK.



**1. Flight Manual**

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

**2. Maintenance Manual**

- EC135 P1,P2,P3,T1,T2,T3 Aircraft Maintenance Manual (AMM)
- EC135 P1,P2,P3,T1,T2,T3 System Description Section (SDS)
- EC135 P1,P2,P3,T1,T2,T3 Wiring Diagram Manual (WDM)
- EC135 P1,P2,P3,T1,T2,T3 Corrosion and Erosion Control Guide (CECG)
- Standard Practices Manual
- EC135 P1,P2,P3,T1,T2,T3, limited to CDS, CPDS, P2+, T2+. Chapter 04. Airworthiness Limitation Section (ALS)
- EC135 P1,P2,P3,T1,T2,T3, limited to CDS, CPDS, P2+, T2+. Chapter 05. Master Servicing Manual (MSM)
- EC135 Avionic Manual (AVM)
- Engine documents as per Engine TCDS No. EASA.E.029

**3. Structural Repair Manual**

EC135 P1,P2,P3,T1,T2,T3 Structural Repair Manual (SRM)

**4. Weight and Balance Manual**

Refer to accepted / approved RFM

**5. Illustrated Parts Catalogue**

EC135 Illustrated Parts Catalogue. All EC135 variants, except T3H/P3H

**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 accepted or approved Flight Manual Supplements RFMS 9.2, are permissible.

**V. Operational Suitability Data**

The Operational Suitability Data elements as listed below are approved by the European Union Aviation Safety Agency under the EASA Type Certificate EASA.R.009 in accordance with Commission Regulation (EU) 748/2012, as amended.

These OSD elements and any future revisions are either accepted under Article 13 of Annex 30 of the UK-EU Trade and Cooperation Agreement or subject to approval by Validation under Article 10 of Annex 30 of the UK-EU Trade and Cooperation Agreement, for use by UK operators.

**1. Master Minimum Equipment List (MMEL)**

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

The Type Certificate Holder should be contacted to verify the applicability of any MMEL revision within the UK.

**2. Flight Crew Data**

Flight Crew Operational Suitability Data as per document OSD\_L0000M403901 first Issue, EASA approval date 15 October 2015, or later accepted or 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 accepted or 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 accepted or approved revisions.

The Type Certificate Holder should be contacted to verify the applicability of any FCD revision within the UK.

### 3. SIM Data

Reserved.

### 4. Maintenance Certifying Staff Data

Reserved.

## VI. Notes

1. Manufacturer's eligible serial numbers:

s/n 0506, and subsequent.

any EC135 T2(CPDS) that has been upgraded to EC135 T2+ according to SB EC135-71-033.

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 16 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

**8. UK CAA Type Validation Application Date**

Prior to 31 December 2020, application dates for type certification are covered by EASA type certification application dates, as per Para 5 above.

New applications for UK CAA type validation received after 01 January 2021 will be recorded in this section. At the current issue of this UK CAA TCDS, no new applications for type validation have been received since 01 January 2021.

**9. UK CAA Type Validation Date**

Prior to 31 December 2020, dates of type certification are covered by EASA type certification, as per Para 7 above.

UK CAA type validation dates after 01 January 2021 will be recorded in this section. At the current issue of this UK CAA TCDS, no UK CAA type validations have been completed since 01 January 2021.

UK CAA TCDS UK.TC.R.00064 Issue 1 issued 05 May 2023.

**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 27.25 (a) (1) and CS 27.143 (c)(1), Amdt. 2

**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 accepted / approved RFM

#### 6.2 Oil

Refer to accepted / approved RFM

#### 6.3 Additives

Refer to accepted / 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

TCDS No.: UK.TC.R.00064

Date: 25 March 2025

AW-DAW-TP-004

Copies of this document are not controlled.

Issue: 02

Page 126 of 171

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 accepted / approved RFM

## 7.3 Coolant System Capacity

n/a

## 8. Air Speed Limitations

$V_{NE}$ : 155 KIAS at MSL

Refer to accepted / 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 accepted / approved RFM

## 10. Maximum Operating Altitude and Temperature

### 10.1 Altitude

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

### 10.2 Temperature

Refer to accepted / 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 accepted / 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/m<sup>2</sup>

#### 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 accepted or approved Chapter 4, Airworthiness Limitation Section (ALS)

### IV. Operating and Service Instructions

The Operating and Service Instructions as listed below are approved by the European Union Aviation Safety Agency under the EASA Type Certificate EASA.R.009 in accordance with Commission Regulation (EU) 748/2012, as amended.

These instructions and any future revisions are either accepted under Article 13 of Annex 30 of the UK-EU Trade and Cooperation Agreement or subject to approval by Validation under Article 10 of Annex 30 of the UK-EU Trade and Cooperation Agreement, for use by UK operators.

The Type Certificate Holder should be contacted to verify the applicability of any Operational and Service Instructions within the UK.



**1. Flight Manual**

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

**2. Maintenance Manual**

- EC135 P1,P2,P3,T1,T2,T3 Aircraft Maintenance Manual (AMM)
- EC135 P1,P2,P3,T1,T2,T3 System Description Section (SDS)
- EC135 P1,P2,P3,T1,T2,T3 Wiring Diagram Manual (WDM)
- EC135 P1,P2,P3,T1,T2,T3 Corrosion and Erosion Control Guide (CECG)
- Standard Practices Manual
- EC135 P1,P2,P3,T1,T2,T3, limited to CDS, CPDS, P2+, T2+. Chapter 04. Airworthiness Limitation Section (ALS)
- EC135 P1,P2,P3,T1,T2,T3, limited to CDS, CPDS, P2+, T2+. Chapter 05. Master Servicing Manual (MSM)
- EC135 Avionic Manual (AVM)
- Engine documents as per Engine TCDS No. EASA.E.029

**3. Structural Repair Manual**

EC135 P1,P2,P3,T1,T2,T3 Structural Repair Manual (SRM)

**4. Weight and Balance Manual**

Refer to accepted / approved RFM

**5. Illustrated Parts Catalogue**

EC135 Illustrated Parts Catalogue. All EC135 variants, except T3H/P3H

**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 accepted or approved Flight Manual Supplements RFMS 9.2, are permissible.

**V. Operational Suitability Data**

The Operational Suitability Data elements as listed below are approved by the European Union Aviation Safety Agency under the EASA Type Certificate EASA.R.009 in accordance with Commission Regulation (EU) 748/2012, as amended.

These OSD elements and any future revisions are either accepted under Article 13 of Annex 30 of the UK-EU Trade and Cooperation Agreement or subject to approval by Validation under Article 10 of Annex 30 of the UK-EU Trade and Cooperation Agreement, for use by UK operators.

**1. Master Minimum Equipment List (MMEL)**

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

The Type Certificate Holder should be contacted to verify the applicability of any MMEL revision within the UK.

**2. Flight Crew Data**

Flight Crew Operational Suitability Data as per document OSD\_L0000M403901 first Issue, EASA approval date 15 October 2015, or later accepted or 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 accepted or 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 accepted or approved revisions.

The Type Certificate Holder should be contacted to verify the applicability of any FCD revision within the UK.

### 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 17 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

**8. UK CAA Type Validation Application Date**

Prior to 31 December 2020, application dates for type certification are covered by EASA type certification application dates, as per Para 5 above.

New applications for UK CAA type validation received after 01 January 2021 will be recorded in this section. At the current issue of this UK CAA TCDS, no new applications for type validation have been received since 01 January 2021.

**9. UK CAA Type Validation Date**

Prior to 31 December 2020, dates of type certification are covered by EASA type certification, as per Para 7 above.

UK CAA type validation dates after 01 January 2021 will be recorded in this section. At the current issue of this UK CAA TCDS, no UK CAA type validations have been completed since 01 January 2021.

UK CAA TCDS UK.TC.R.00064 Issue 1 issued 05 May 2023.

**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 EASA approval 10050866: Certification Basis for the original product amended by additional airworthiness requirements 27.773, 27.777, , 27.1357, , at CS-27 Amdt. 2 and 29.1431 at CS-29 Initial Issue
- 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 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

- 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.

TCDS No.: UK.TC.R.00064

Date: 25 March 2025

AW-DAW-TP-004

Copies of this document are not controlled.

Issue: 02

Page 133 of 171

### 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 accepted / approved RFM

## 6.2 Oil

Refer to accepted / approved RFM

## 6.3 Additives

Refer to accepted / 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 accepted / 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 accepted / 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 accepted / approved RFM

**10. Maximum Operating Altitude and Temperature**

## 10.1 Altitude

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

## 10.2 Temperature

Refer to accepted / 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 accepted / 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/m<sup>2</sup>

**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 accepted or approved Chapter 4, Airworthiness Limitation Section (ALS)

**IV. Operating and Service Instructions**

The Operating and Service Instructions as listed below are approved by the European Union Aviation Safety Agency under the EASA Type Certificate EASA.R.009 in accordance with Commission Regulation (EU) 748/2012, as amended.

These instructions and any future revisions are either accepted under Article 13 of Annex 30 of the UK-EU Trade and Cooperation Agreement or subject to approval by Validation under Article 10 of Annex 30 of the UK-EU Trade and Cooperation Agreement, for use by UK operators.

The Type Certificate Holder should be contacted to verify the applicability of any Operational and Service Instructions within the UK.

**1. Flight Manual**

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

**2. Maintenance Manual**

- EC135 P1,P2,P3,T1,T2,T3 Aircraft Maintenance Manual (AMM)
- EC135 P1,P2,P3,T1,T2,T3 System Description Section (SDS)
- EC135 P1,P2,P3,T1,T2,T3 Wiring Diagram Manual (WDM)
- EC135 P1,P2,P3,T1,T2,T3 Corrosion and Erosion Control Guide (CECG)
- Standard Practices Manual
- EC135 P1,P2,P3,T1,T2,T3, limited to CDS, CPDS, P2+, T2+. Chapter 04. Airworthiness Limitation Section (ALS)
- EC135 P1,P2,P3,T1,T2,T3, limited to CDS, CPDS, P2+, T2+. Chapter 05. Master Servicing Manual (MSM)
- EC135 Avionic Manual (AVM)
- Engine documents as per Engine TCDS No. EASA.E.029

**3. Structural Repair Manual**

EC135 P1,P2,P3,T1,T2,T3 Structural Repair Manual (SRM)

**4. Weight and Balance Manual**

Refer to accepted / approved RFM

**5. Illustrated Parts Catalogue**

EC135 Illustrated Parts Catalogue. All EC135 variants, except T3H/P3H

**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 accepted or approved Flight Manual Supplements RFMS 9.2, are permissible.

**V. Operational Suitability Data**

The Operational Suitability Data elements as listed below are approved by the European Union Aviation Safety Agency under the EASA Type Certificate EASA.R.009 in accordance with Commission Regulation (EU) 748/2012, as amended.

These OSD elements and any future revisions are either accepted under Article 13 of Annex 30 of the UK-EU Trade and Cooperation Agreement or subject to approval by Validation under Article 10 of Annex 30 of the UK-EU Trade and Cooperation Agreement, for use by UK operators.

**1. Master Minimum Equipment List (MMEL)**

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

The Type Certificate Holder should be contacted to verify the applicability of any MMEL revision within the UK.

**2. Flight Crew Data**

Flight Crew Operational Suitability Data as per document OSD\_L0000M403901 first Issue, EASA approval date 15 October 2015, or later accepted or 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 accepted or 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 accepted or approved revisions.

The Type Certificate Holder should be contacted to verify the applicability of any FCD revision within the UK.

**3. SIM Data**

Reserved.

**4. Maintenance Certifying Staff Data**

Reserved

**VI. Notes**

1. Manufacturer's eligible serial numbers:

s/n 1155, and subsequent.

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 18 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

**8. UK CAA Type Validation Application Date**

Prior to 31 December 2020, application dates for type certification are covered by EASA type certification application dates, as per Para 5 above.

New applications for UK CAA type validation received after 01 January 2021 will be recorded in this section. At the current issue of this UK CAA TCDS, no new applications for type validation have been received since 01 January 2021.

**9. UK CAA Type Validation Date**

Prior to 31 December 2020, dates of type certification are covered by EASA type certification, as per Para 7 above.

UK CAA type validation dates after 01 January 2021 will be recorded in this section. At the current issue of this UK CAA TCDS, no UK CAA type validations have been completed since 01 January 2021.

UK CAA TCDS UK.TC.R.00064 Issue 1 issued 05 May 2023.

**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 EASA approval 10050866: Certification Basis for the original product amended by additional airworthiness requirements 27.773, 27.777, , 27.1357, , at CS-27 Amdt. 2 and 29.1431 at CS-29 Initial Issue
- 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 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

- 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.

TCDS No.: UK.TC.R.00064

Date: 25 March 2025

AW-DAW-TP-004

Copies of this document are not controlled.

Issue: 02

Page 142 of 171

### 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 accepted / approved RFM

## 6.2 Oil

Refer to accepted / approved RFM

## 6.3 Additives

Refer to accepted / 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 accepted / 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 accepted / 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 accepted / approved RFM

**10. Maximum Operating Altitude and Temperature**

## 10.1 Altitude

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

## 10.2 Temperature

Refer to accepted / 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 accepted / 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/m<sup>2</sup>

**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 accepted or approved Chapter 4, Airworthiness Limitation Section (ALS)

**IV. Operating and Service Instructions**

The Operating and Service Instructions as listed below are approved by the European Union Aviation Safety Agency under the EASA Type Certificate EASA.R.009 in accordance with Commission Regulation (EU) 748/2012, as amended.

These instructions and any future revisions are either accepted under Article 13 of Annex 30 of the UK-EU Trade and Cooperation Agreement or subject to approval by Validation under Article 10 of Annex 30 of the UK-EU Trade and Cooperation Agreement, for use by UK operators.

The Type Certificate Holder should be contacted to verify the applicability of any Operational and Service Instructions within the UK.

**1. Flight Manual**

EC635 T3(CPDS), initially EASA-approved, dated 17 October 2014, or later accepted or approved revisions, including the supplements for Special Operations RFMS 9.1 and Optional Equipment RFMS 9.2.

**2. Maintenance Manual**

- EC135 P1,P2,P3,T1,T2,T3 Aircraft Maintenance Manual (AMM)
- EC135 P1,P2,P3,T1,T2,T3 System Description Section (SDS)
- EC135 P1,P2,P3,T1,T2,T3 Wiring Diagram Manual (WDM)
- EC135 P1,P2,P3,T1,T2,T3 Corrosion and Erosion Control Guide (CECG)
- Standard Practices Manual
- EC135 P1,P2,P3,T1,T2,T3, limited to CDS, CPDS, P2+, T2+. Chapter 04. Airworthiness Limitation Section (ALS)
- EC135 P1,P2,P3,T1,T2,T3, limited to CDS, CPDS, P2+, T2+. Chapter 05. Master Servicing Manual (MSM)
- EC135 Avionic Manual (AVM)
- Engine documents as per Engine TCDS No. EASA.E.029

**3. Structural Repair Manual**

EC135 P1,P2,P3,T1,T2,T3 Structural Repair Manual (SRM)

**4. Weight and Balance Manual**

Refer to accepted / approved RFM

**5. Illustrated Parts Catalogue**

EC635 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 accepted or approved Flight Manual Supplements RFMS 9.2, are permissible.

**V. Operational Suitability Data**

The Operational Suitability Data elements as listed below are approved by the European Union Aviation Safety Agency under the EASA Type Certificate EASA.R.009 in accordance with Commission Regulation (EU) 748/2012, as amended.

These OSD elements and any future revisions are either accepted under Article 13 of Annex 30 of the UK-EU Trade and Cooperation Agreement or subject to approval by Validation under Article 10 of Annex 30 of the UK-EU Trade and Cooperation Agreement, for use by UK operators.

**1. Master Minimum Equipment List (MMEL)**

MMEL document Revision 0, approved on 15 October 2014, or later accepted or approved revision.

The Type Certificate Holder should be contacted to verify the applicability of any MMEL revision within the UK.

**2. Flight Crew Data**

Flight Crew Operational Suitability Data as per document OSD\_L0000M403901 first Issue, EASA approval date 15 October 2015, or later accepted or 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 accepted or 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 accepted or approved revisions.

The Type Certificate Holder should be contacted to verify the applicability of any FCD revision within the UK.

**3. SIM Data**

Reserved.

**4. Maintenance Certifying Staff Data**

Reserved.

**VI. Notes**

1. Manufacturer's eligible serial numbers:

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 19 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

**8. UK CAA Type Validation Application Date**

Prior to 31 December 2020, application dates for type certification are covered by EASA type certification application dates, as per Para 5 above.

New applications for UK CAA type validation received after 01 January 2021 will be recorded in this section. At the current issue of this UK CAA TCDS, no new applications for type validation have been received since 01 January 2021.

**9. UK CAA Type Validation Date**

Prior to 31 December 2020, dates of type certification are covered by EASA type certification, as per Para 7 above.

UK CAA type validation dates after 01 January 2021 will be recorded in this section. At the current issue of this UK CAA TCDS, no UK CAA type validations have been completed since 01 January 2021.

UK CAA TCDS UK.TC.R.00064 Issue 1 issued 05 May 2023.

**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).

CS27.0021	CS27.0231	CS27.0501	CS27.0671	CS27.0931	CS27.1323	CS27.1503
CS27.0025	CS27.0241	CS27.0521	CS27.0672	CS27.0939	CS27.1325	CS27.1505
CS27.0027	CS27.0251	CS27.0547	CS27.0674	CS27.1019	CS27.1327	CS27.1509
CS27.0029	CS27.0301	CS27.0549	CS27.0681	CS27.1041	CS27.1329	CS27.1519
CS27.0031	CS27.0303	CS27.0561	CS27.0683	CS27.1043	CS27.1337	CS27.1521
CS27.0033	CS27.0305	CS27.0562	CS27.0685	CS27.1045	CS27.1351	CS27.1523
CS27.0045	CS27.0307	CS27.0571	CS27.0687	CS27.1091	CS27.1353	CS27.1525
CS27.0049	CS27.0309	CS27.0601	CS27.0691	CS27.1093	CS27.1357	CS27.1527
CS27.0051	CS27.0321	CS27.0602	CS27.0695	CS27.1141	CS27.1361	CS27.1529
CS27.0065	CS27.0337	CS27.0603	CS27.0771	CS27.1143	CS27.1365	CS27.1541
CS27.0067	CS27.0339	CS27.0605	CS27.0773	CS27.1145	CS27.1367	CS27.1543
CS27.0075	CS27.0341	CS27.0607	CS27.0777	CS27.1151	CS27.1381	CS27.1545
CS27.0079	CS27.0351	CS27.0609	CS27.0785	CS27.1187	CS27.1383	CS27.1547
CS27.0141	CS27.0361	CS27.0610	CS27.0831	CS27.1193	CS27.1385	CS27.1549
CS27.0143	CS27.0391	CS27.0611	CS27.0853	CS27.1301	CS27.1387	CS27.1555
CS27.0151	CS27.0395	CS27.0613	CS27.0855	CS27.1303	CS27.1401	CS27.1559
CS27.0161	CS27.0397	CS27.0629	CS27.0863	CS27.1305	CS27.1411	CS27.1581
CS27.0171	CS27.0399	CS27.0653	CS27.0865	CS27.1307	CS27.1435	CS27.1583
CS27.0173	CS27.0427	CS27.0659	CS27.0901	CS27.1309	CS27.1457	CS27.1585
CS27.0175	CS27.0471	CS27.0661	CS27.0903	CS27.1321	CS27.1459	CS27.1587
CS27.0177	CS27.0473	CS27.0663	CS27.0907	CS27.1322	CS27.1501	CS27.1589

- 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, both at revision 1: Certification Basis for the original product amended by additional airworthiness requirements 27.1319 and A27.5 at CS-27 Amdt. 7

- For EASA Approval 10084418: Certification Basis for the original product amended by additional airworthiness requirement 27.1458 at CS-27 Amdt. 10
- For EASA Approval 10078010 see §V, Note 4.
- For EASA Approval 10080963 Rev.1 see §V, Note 5.

### 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

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 accepted / approved RFM

#### 6.2 Oil

Refer to accepted / approved RFM

#### 6.3 Additives

Refer to accepted / approved RFM

TCDS No.: UK.TC.R.00064

Date: 25 March 2025

AW-DAW-TP-004

Copies of this document are not controlled.

Issue: 02

Page 152 of 171



**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 accepted / 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 accepted / 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 accepted / approved RFM

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

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

**10.2 Temperature**

Refer to accepted / 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 accepted / 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/m<sup>2</sup>

## 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 accepted or approved Chapter 4, Airworthiness Limitation Section (ALS)

**IV. Operating and Service Instructions**

The Operating and Service Instructions as listed below are approved by the European Union Aviation Safety Agency under the EASA Type Certificate EASA.R.009 in accordance with Commission Regulation (EU) 748/2012, as amended.

These instructions and any future revisions are either accepted under Article 13 of Annex 30 of the UK-EU Trade and Cooperation Agreement or subject to approval by Validation under Article 10 of Annex 30 of the UK-EU Trade and Cooperation Agreement, for use by UK operators.

The Type Certificate Holder should be contacted to verify the applicability of any Operational and Service Instructions within the UK.

**1. Flight Manual**

EC135 T3H, initially EASA-approved, dated 15 November 2016, or later accepted or approved revisions, including the supplements for Special Operations RFMS 9.1 and Optional Equipment RFMS 9.2.

**2. Maintenance Manual**

- EC135 P3H, T3H Aircraft Maintenance Manual (AMM)
- EC135 P3H, T3H System Description Section (SDS)
- EC135 P3H, T3H Wiring Diagram Manual (WDM)
- EC135 P3H, T3H Corrosion and Erosion Control Guide (CECG)
- Standard Practices Manual
- EC135 P3H, T3H. Chapter 04. Airworthiness Limitation Section (ALS)
- EC135 P3H, T3H. Chapter 05. Master Servicing Manual (MSM)
- e-Dynamic Troubleshooting (eDTS)
- EC135 Avionic Manual (AVM)
- Engine documents as per Engine TCDS No. EASA.E.029

**3. Structural Repair Manual**

EC135 P3H, T3H Structural Repair Manual (SRM)

**4. Weight and Balance Manual**

Refer to accepted / approved RFM

**5. Illustrated Parts Catalogue**

EC135 P3H, T3H 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 accepted or approved Flight Manual Supplements RFMS 9.2, are permissible.

**V. Operational Suitability Data**

The Operational Suitability Data elements as listed below are approved by the European Union Aviation Safety Agency under the EASA Type Certificate EASA.R.009 in accordance with Commission Regulation (EU) 748/2012, as amended.

TCDS No.: UK.TC.R.00064

Date: 25 March 2025

AW-DAW-TP-004

Copies of this document are not controlled.

Issue: 02

Page 155 of 171

These OSD elements and any future revisions are either accepted under Article 13 of Annex 30 of the UK-EU Trade and Cooperation Agreement or subject to approval by Validation under Article 10 of Annex 30 of the UK-EU Trade and Cooperation Agreement, for use by UK operators.

### 1. Master Minimum Equipment List (MMEL)

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

The Type Certificate Holder should be contacted to verify the applicability of any MMEL revision within the UK.

### 2. Flight Crew Data

Flight Crew Operational Suitability Data as per document OSD\_L0000M403901 first Issue, EASA approval date 15 October 2015, or later accepted or 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 accepted or 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 accepted or approved revisions.

The Type Certificate Holder should be contacted to verify the applicability of any FCD revision within the UK.

### 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.

4. For EASA Approval 10078010: The TCH has shown compliance with CS-ACNS Issue 3, as applicable to helicopter communications, navigation, and surveillance equipage criteria in reference to the associated paragraphs detailed below:

CS ACNS.A.GEN.010	CS ACNS.D.ELS.010 -c	CS ACNS.D.ADSB.010
CS ACNS.A.GEN.015-a	CS ACNS.D.ELS.010-a	CS ACNS.D.ADSB.020-a
CS ACNS.A.GEN.015-b	CS ACNS.D.ELS.010-d	CS ACNS.D.ADSB.020-b
CS ACNS.A.GEN.020	CS ACNS.D.ELS.015-a	CS ACNS.D.ADSB.025-a
CS ACNS.D.AC.010-a	CS ACNS.D.ELS.015-b1	CS ACNS.D.ADSB.025-b
CS ACNS.D.AC.010-b	CS ACNS.D.ELS.015-b2	CS ACNS.D.ADSB.025-c
CS ACNS.D.AC.010-c	CS ACNS.D.ELS.020-a	CS ACNS.D.ADSB.030
CS ACNS.D.AC.010-d	CS ACNS.D.ELS.020-b	CS ACNS.D.ADSB.035
CS ACNS.D.AC.015-a	CS ACNS.D.ELS.025-a	CS ACNS.D.ADSB.040

CS ACNS.D.AC.015-b	CS ACNS.D.ELS.025-b	CS ACNS.D.ADSB.045
CS ACNS.D.AC.015-c	CS ACNS.D.ELS.025-c	CS ACNS.D.ADSB.050
CS ACNS.D.AC.020 -a	CS ACNS.D.ELS.030-a	CS ACNS.D.ADSB.060-a
CS ACNS.D.AC.020 -b	CS ACNS.D.ELS.030-b	CS ACNS.D.ADSB.060-b
CS ACNS.D.AC.020 -c	CS ACNS.D.ELS.040	CS ACNS.D.ADSB.070-a
CS ACNS.D.AC.025-a	CS ACNS.D.ELS.045	CS ACNS.D.ADSB.070-b
CS ACNS.D.AC.025-b	CS ACNS.D.ELS.055	CS ACNS.D.ADSB.070-c
CS ACNS.D.AC.025-c	CS ACNS.D.ELS.060-a	CS ACNS.D.ADSB.080
CS ACNS.D.AC.025-d	CS ACNS.D.ELS.060-b	CS ACNS.D.ADSB.085-a
CS ACNS.D.AC.025-e	CS ACNS.D.ELS.065	CS ACNS.D.ADSB.085-b
CS ACNS.D.AC.025-f		CS ACNS.D.ADSB.090-a
CS ACNS.D.AC.025-g		CS ACNS.D.ADSB.090-b
CS ACNS.D.AC.030		CS ACNS.D.ADSB.100-a
CS ACNS.D.AC.035		CS ACNS.D.ADSB.100-b
CS ACNS.D.AC.045		CS ACNS.D.ADSB.105-a
		CS ACNS.D.ADSB.110
		CS ACNS.D.ADSB.115
		CS ACNS.D.ADSB.120

5. For EASA Approval 10080963 REV. 1: The TCH has shown compliance with CS-ACNS Issue 3, as applicable to helicopter communications, navigation, and surveillance equipage criteria in reference to the associated paragraphs detailed below:

CS ACNS.A.GEN.010	CS ACNS.D.EHS.010	CS ACNS.D.ADSB.010
CS ACNS.A.GEN.015-a	CS ACNS.D.EHS.015-a	CS ACNS.D.ADSB.020-a
CS ACNS.A.GEN.015-b	CS ACNS.D.EHS.015-b	CS ACNS.D.ADSB.020-b
CS ACNS.A.GEN.020	CS ACNS.D.EHS.015-c	CS ACNS.D.ADSB.025-a
CS ACNS.D.AC.010-a	CS ACNS.D.EHS.020	CS ACNS.D.ADSB.025-b
CS ACNS.D.AC.010-b	CS ACNS.D.EHS.025	CS ACNS.D.ADSB.025-c
CS ACNS.D.AC.010-c	CS ACNS.D.ELS.010-a	CS ACNS.D.ADSB.030
CS ACNS.D.AC.010-d	CS ACNS.D.ELS.010-c	CS ACNS.D.ADSB.035
CS ACNS.D.AC.015-a	CS ACNS.D.ELS.010-d	CS ACNS.D.ADSB.040
CS ACNS.D.AC.015-b	CS ACNS.D.ELS.015-a	CS ACNS.D.ADSB.045
CS ACNS.D.AC.015-c	CS ACNS.D.ELS.015-b1	CS ACNS.D.ADSB.050
CS ACNS.D.AC.020 -a	CS ACNS.D.ELS.015-b2	CS ACNS.D.ADSB.060-a
CS ACNS.D.AC.020 -b	CS ACNS.D.ELS.020-a	CS ACNS.D.ADSB.060-b
CS ACNS.D.AC.020 -c	CS ACNS.D.ELS.020-b	CS ACNS.D.ADSB.070-a
CS ACNS.D.AC.025-a	CS ACNS.D.ELS.025-a	CS ACNS.D.ADSB.070-b
CS ACNS.D.AC.025-b	CS ACNS.D.ELS.025-b	CS ACNS.D.ADSB.070-c
CS ACNS.D.AC.025-c	CS ACNS.D.ELS.025-c	CS ACNS.D.ADSB.080
CS ACNS.D.AC.025-d	CS ACNS.D.ELS.030-a	CS ACNS.D.ADSB.085-a
CS ACNS.D.AC.025-e	CS ACNS.D.ELS.030-b	CS ACNS.D.ADSB.085-b
CS ACNS.D.AC.025-f	CS ACNS.D.ELS.040	CS ACNS.D.ADSB.090-a
CS ACNS.D.AC.025-g	CS ACNS.D.ELS.045	CS ACNS.D.ADSB.090-b
CS ACNS.D.AC.030	CS ACNS.D.ELS.055	CS ACNS.D.ADSB.100-a
CS ACNS.D.AC.035	CS ACNS.D.ELS.060-a	CS ACNS.D.ADSB.100-b
CS ACNS.D.AC.045	CS ACNS.D.ELS.060-b	CS ACNS.D.ADSB.105-a
	CS ACNS.D.ELS.065	CS ACNS.D.ADSB.110
		CS ACNS.D.ADSB.115

**Section 20 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

**8. UK CAA Type Validation Application Date**

Prior to 31 December 2020, application dates for type certification are covered by EASA type certification application dates, as per Para 5 above.

New applications for UK CAA type validation received after 01 January 2021 will be recorded in this section. At the current issue of this UK CAA TCDS, no new applications for type validation have been received since 01 January 2021.

**9. UK CAA Type Validation Date**

Prior to 31 December 2020, dates of type certification are covered by EASA type certification, as per Para 7 above.

UK CAA type validation dates after 01 January 2021 will be recorded in this section. At the current issue of this UK CAA TCDS, no UK CAA type validations have been completed since 01 January 2021.

UK CAA TCDS UK.TC.R.00064 Issue 1 issued 05 May 2023.

**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).

CS27.0021	CS27.0231	CS27.0501	CS27.0671	CS27.0931	CS27.1323	CS27.1503
CS27.0025	CS27.0241	CS27.0521	CS27.0672	CS27.0939	CS27.1325	CS27.1505
CS27.0027	CS27.0251	CS27.0547	CS27.0674	CS27.1019	CS27.1327	CS27.1509
CS27.0029	CS27.0301	CS27.0549	CS27.0681	CS27.1041	CS27.1329	CS27.1519
CS27.0031	CS27.0303	CS27.0561	CS27.0683	CS27.1043	CS27.1337	CS27.1521
CS27.0033	CS27.0305	CS27.0562	CS27.0685	CS27.1045	CS27.1351	CS27.1523
CS27.0045	CS27.0307	CS27.0571	CS27.0687	CS27.1091	CS27.1353	CS27.1525
CS27.0049	CS27.0309	CS27.0601	CS27.0691	CS27.1093	CS27.1357	CS27.1527
CS27.0051	CS27.0321	CS27.0602	CS27.0695	CS27.1141	CS27.1361	CS27.1529
CS27.0065	CS27.0337	CS27.0603	CS27.0771	CS27.1143	CS27.1365	CS27.1541
CS27.0067	CS27.0339	CS27.0605	CS27.0773	CS27.1145	CS27.1367	CS27.1543
CS27.0075	CS27.0341	CS27.0607	CS27.0777	CS27.1151	CS27.1381	CS27.1545
CS27.0079	CS27.0351	CS27.0609	CS27.0785	CS27.1187	CS27.1383	CS27.1547
CS27.0141	CS27.0361	CS27.0610	CS27.0831	CS27.1193	CS27.1385	CS27.1549
CS27.0143	CS27.0391	CS27.0611	CS27.0853	CS27.1301	CS27.1387	CS27.1555
CS27.0151	CS27.0395	CS27.0613	CS27.0855	CS27.1303	CS27.1401	CS27.1559
CS27.0161	CS27.0397	CS27.0629	CS27.0863	CS27.1305	CS27.1411	CS27.1581
CS27.0171	CS27.0399	CS27.0653	CS27.0865	CS27.1307	CS27.1435	CS27.1583
CS27.0173	CS27.0427	CS27.0659	CS27.0901	CS27.1309	CS27.1457	CS27.1585
CS27.0175	CS27.0471	CS27.0661	CS27.0903	CS27.1321	CS27.1459	CS27.1587
CS27.0177	CS27.0473	CS27.0663	CS27.0907	CS27.1322	CS27.1501	CS27.1589

- 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, both at revision 1: Certification Basis for the original product amended by additional airworthiness requirements 27.1319 and A27.5 at CS-27 Amdt. 7
- For EASA Approval 10084418: Certification Basis for the original product amended by additional airworthiness requirement 27.1458 at CS-27 Amdt. 10
- For EASA Approval 10078010 see §V, Note 4.
- For EASA Approval 10080963 Rev.1 see §V, Note 5.

### 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 accepted / approved RFM

## 6.2 Oil

Refer to accepted / approved RFM

## 6.3 Additives

Refer to accepted / 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 accepted / 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 accepted / 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 accepted / approved RFM

**10. Maximum Operating Altitude and Temperature**

## 10.1 Altitude

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

## 10.2 Temperature

Refer to accepted / 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 accepted / approved RFMS

**12. 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/m<sup>2</sup>

**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 accepted or approved Chapter 4, Airworthiness Limitation Section (ALS)

**IV. Operating and Service Instructions**

The Operating and Service Instructions as listed below are approved by the European Union Aviation Safety Agency under the EASA Type Certificate EASA.R.009 in accordance with Commission Regulation (EU) 748/2012, as amended.

These instructions and any future revisions are either accepted under Article 13 of Annex 30 of the UK-EU Trade and Cooperation Agreement or subject to approval by Validation under Article 10 of Annex 30 of the UK-EU Trade and Cooperation Agreement, for use by UK operators.

The Type Certificate Holder should be contacted to verify the applicability of any Operational and Service Instructions within the UK.

**1. Flight Manual**

EC635 T3H initially EASA-approved, dated 15 November 2016, or later accepted or approved revisions, including the supplements for Special Operations RFMS 9.1 and Optional Equipment RFMS 9.2.

**2. Maintenance Manual**

- EC135 P3H, T3H Aircraft Maintenance Manual (AMM)
- EC135 P3H, T3H System Description Section (SDS)
- EC135 P3H, T3H Wiring Diagram Manual (WDM)
- EC135 P3H, T3H Corrosion and Erosion Control Guide (CECG)
- Standard Practices Manual
- EC135 P3H, T3H. Chapter 04. Airworthiness Limitation Section (ALS)
- EC135 P3H, T3H. Chapter 05. Master Servicing Manual (MSM)
- e-Dynamic Troubleshooting (eDTS)
- EC135 Avionic Manual (AVM)
- Engine documents as per Engine TCDS No. EASA.E.029

**3. Structural Repair Manual**

EC135 P3H, T3H Structural Repair Manual (SRM)

**4. Weight and Balance Manual**

Refer to accepted / approved RFM

**5. Illustrated Parts Catalogue**

EC635 P3H, T3H 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 accepted or approved Flight Manual Supplements RFMS 9.2, are permissible.

**V. Operational Suitability Data**

The Operational Suitability Data elements as listed below are approved by the European Union Aviation Safety Agency under the EASA Type Certificate EASA.R.009 in accordance with Commission Regulation (EU) 748/2012, as amended.

These OSD elements and any future revisions are either accepted under Article 13 of Annex 30 of the UK-EU Trade and Cooperation Agreement or subject to approval by Validation under Article 10 of Annex 30 of the UK-EU Trade and Cooperation Agreement, for use by UK operators.

**1. Master Minimum Equipment List (MMEL)**

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

The Type Certificate Holder should be contacted to verify the applicability of any MMEL revision within the UK.

**2. Flight Crew Data**

Flight Crew Operational Suitability Data as per document OSD\_L0000M403901 first Issue, EASA approval date 15 October 2015, or later accepted or accepted or 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 accepted or accepted or 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 accepted or accepted or approved revisions.

The Type Certificate Holder should be contacted to verify the applicability of any FCD revision within the UK.

**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.

4. For EASA Approval 10078010: The TCH has shown compliance with CS-ACNS Issue 3, as applicable to helicopter communications, navigation, and surveillance equipage criteria in reference to the associated paragraphs detailed below:

CS ACNS.A.GEN.010	CS ACNS.D.ELS.010 -c	CS ACNS.D.ADSB.010
CS ACNS.A.GEN.015-a	CS ACNS.D.ELS.010-a	CS ACNS.D.ADSB.020-a
CS ACNS.A.GEN.015-b	CS ACNS.D.ELS.010-d	CS ACNS.D.ADSB.020-b
CS ACNS.A.GEN.020	CS ACNS.D.ELS.015-a	CS ACNS.D.ADSB.025-a
CS ACNS.D.AC.010-a	CS ACNS.D.ELS.015-b1	CS ACNS.D.ADSB.025-b
CS ACNS.D.AC.010-b	CS ACNS.D.ELS.015-b2	CS ACNS.D.ADSB.025-c
CS ACNS.D.AC.010-c	CS ACNS.D.ELS.020-a	CS ACNS.D.ADSB.030
CS ACNS.D.AC.010-d	CS ACNS.D.ELS.020-b	CS ACNS.D.ADSB.035
CS ACNS.D.AC.015-a	CS ACNS.D.ELS.025-a	CS ACNS.D.ADSB.040
CS ACNS.D.AC.015-b	CS ACNS.D.ELS.025-b	CS ACNS.D.ADSB.045
CS ACNS.D.AC.015-c	CS ACNS.D.ELS.025-c	CS ACNS.D.ADSB.050
CS ACNS.D.AC.020 -a	CS ACNS.D.ELS.030-a	CS ACNS.D.ADSB.060-a
CS ACNS.D.AC.020 -b	CS ACNS.D.ELS.030-b	CS ACNS.D.ADSB.060-b
CS ACNS.D.AC.020 -c	CS ACNS.D.ELS.040	CS ACNS.D.ADSB.070-a
CS ACNS.D.AC.025-a	CS ACNS.D.ELS.045	CS ACNS.D.ADSB.070-b
CS ACNS.D.AC.025-b	CS ACNS.D.ELS.055	CS ACNS.D.ADSB.070-c
CS ACNS.D.AC.025-c	CS ACNS.D.ELS.060-a	CS ACNS.D.ADSB.080
CS ACNS.D.AC.025-d	CS ACNS.D.ELS.060-b	CS ACNS.D.ADSB.085-a
CS ACNS.D.AC.025-e	CS ACNS.D.ELS.065	CS ACNS.D.ADSB.085-b
CS ACNS.D.AC.025-f		CS ACNS.D.ADSB.090-a
CS ACNS.D.AC.025-g		CS ACNS.D.ADSB.090-b
CS ACNS.D.AC.030		CS ACNS.D.ADSB.100-a
CS ACNS.D.AC.035		CS ACNS.D.ADSB.100-b
CS ACNS.D.AC.045		CS ACNS.D.ADSB.105-a
		CS ACNS.D.ADSB.110
		CS ACNS.D.ADSB.115
		CS ACNS.D.ADSB.120

5. For EASA Approval 10080963 REV. 1: The TCH has shown compliance with CS-ACNS Issue 3, as applicable to helicopter communications, navigation, and surveillance equipage criteria in reference to the associated paragraphs detailed below:

CS ACNS.A.GEN.010	CS ACNS.D.EHS.010	CS ACNS.D.ADSB.010
CS ACNS.A.GEN.015-a	CS ACNS.D.EHS.015-a	CS ACNS.D.ADSB.020-a
CS ACNS.A.GEN.015-b	CS ACNS.D.EHS.015-b	CS ACNS.D.ADSB.020-b
CS ACNS.A.GEN.020	CS ACNS.D.EHS.015-c	CS ACNS.D.ADSB.025-a
CS ACNS.D.AC.010-a	CS ACNS.D.EHS.020	CS ACNS.D.ADSB.025-b
CS ACNS.D.AC.010-b	CS ACNS.D.EHS.025	CS ACNS.D.ADSB.025-c
CS ACNS.D.AC.010-c	CS ACNS.D.ELS.010-a	CS ACNS.D.ADSB.030
CS ACNS.D.AC.010-d	CS ACNS.D.ELS.010-c	CS ACNS.D.ADSB.035
CS ACNS.D.AC.015-a	CS ACNS.D.ELS.010-d	CS ACNS.D.ADSB.040
CS ACNS.D.AC.015-b	CS ACNS.D.ELS.015-a	CS ACNS.D.ADSB.045
CS ACNS.D.AC.015-c	CS ACNS.D.ELS.015-b1	CS ACNS.D.ADSB.050
CS ACNS.D.AC.020 -a	CS ACNS.D.ELS.015-b2	CS ACNS.D.ADSB.060-a
CS ACNS.D.AC.020 -b	CS ACNS.D.ELS.020-a	CS ACNS.D.ADSB.060-b
CS ACNS.D.AC.020 -c	CS ACNS.D.ELS.020-b	CS ACNS.D.ADSB.070-a
CS ACNS.D.AC.025-a	CS ACNS.D.ELS.025-a	CS ACNS.D.ADSB.070-b
CS ACNS.D.AC.025-b	CS ACNS.D.ELS.025-b	CS ACNS.D.ADSB.070-c
CS ACNS.D.AC.025-c	CS ACNS.D.ELS.025-c	CS ACNS.D.ADSB.080
CS ACNS.D.AC.025-d	CS ACNS.D.ELS.030-a	CS ACNS.D.ADSB.085-a

CS ACNS.D.AC.025-e  
CS ACNS.D.AC.025-f  
CS ACNS.D.AC.025-g  
CS ACNS.D.AC.030  
CS ACNS.D.AC.035  
CS ACNS.D.AC.045

CS ACNS.D.ELS.030-b  
CS ACNS.D.ELS.040  
CS ACNS.D.ELS.045  
CS ACNS.D.ELS.055  
CS ACNS.D.ELS.060-a  
CS ACNS.D.ELS.060-b  
CS ACNS.D.ELS.065

CS ACNS.D.ADSB.085-b  
CS ACNS.D.ADSB.090-a  
CS ACNS.D.ADSB.090-b  
CS ACNS.D.ADSB.100-a  
CS ACNS.D.ADSB.100-b  
CS ACNS.D.ADSB.105-a  
CS ACNS.D.ADSB.110  
CS ACNS.D.ADSB.115

**Section 21 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)



Acronym / Abbreviation	Definition
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
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

Acronym / Abbreviation	Definition
TR	Tail Rotor
UK	United Kingdom
VFR	Visual Flight Rules
V <sub>NE</sub>	Never Exceed Speed
V <sub>NE PWR OFF</sub>	Power-off Speed (Autorotation)
V <sub>NE PWR ON</sub>	Power-on speed

## II. Type Certification Holder Record

II.1 Type Certificate Holder	Period
<b>Eurocopter Deutschland GmbH</b> <b>Postfach 13 53,</b> <b>W-8850 Donauwörth, or,</b> <b>86603 Donauwörth, or,</b> <b>86607 Donauwörth, Germany</b>	until 6 January 2014
<b>Airbus Helicopters Deutschland GmbH</b> <b>Industriestrasse 4, 86609 Donauwörth, Germany</b>	Since 7 January 2014
II.2 Contracted DOA Holder (21.A.2)	Period
<b>DOA Certificate No. EASA.21J.700 held by:</b> <b>Airbus Helicopters</b> <b>Aéroport International Marseille-Provence</b> <b>13725 Marignane CEDEX, France</b>	Since 21 June 2016
II.3 Production Organisation Approval Holder (21.A.135)	Period
II.3.1 Manufacturer for all types and models	
<b>Eurocopter Deutschland GmbH Postfach 13 53,</b> <b>W-8850 Donauwörth, or,</b> <b>86603 Donauwörth, or,</b> <b>86607 Donauwörth, Germany</b>	Until 6 January 2014
<b>Airbus Helicopters Deutschland GmbH</b> <b>Industriestrasse 4, 86609 Donauwörth, Germany</b>	Until 31 December 2017

**Airbus Helicopters**  
**Aéroport International Marseille Provence,**  
**13725 Marignane, France**

since 1 January  
2018

**II.3.2 Manufacturer for EC135 P2+ (Section 4): EC135 T2+ (Section 14) and EC635 T2+ (Section 15)**

**Alternative location:**

**Eurocopter España S.A., Polígono de los Llanos, Carretera de las Penas (CM3203), Km 5.3, 02006 Albacete, España**

Until 31  
December 2017

**III. Amendment Record**

<b>TCDS Issue No.</b>	<b>TCDS Issue Date</b>	<b>Changes</b>	<b>TC issue and Date</b>
<b>Issue 1</b>	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
<b>Issue 2</b>	12 February 2025	<p>Section 1 General added and for all Sections: I.8 and I.9 added in accordance with CAA TCDS Policy.</p> <p>All Sections IV and V updated in accordance with CAA TCDS Policy.</p> <p>“Approved RFM” is now “accepted / approved RFM” and References to “approved” changed to “accepted or approved”.</p> <p>For all Sections: III.22 reviewed. IV.2, IV.3, IV.5 reviewed.</p> <p>Section 5, 6, 15, 16: II.2 updated.</p> <p>Section 7, 8, 17, 18: II.3 added Special Conditions SC2 and SC4</p> <p>Section 9, 10, 19, 20: II.2: Certification basis updated. Added approvals 10078010 and 10080963; V. Notes: added notes 4 and 5.</p> <p>Section 9: II.3 added EASA Approval 10082775</p> <p>Section 9, 10, 19, 20: II.2 added approval 10084418</p> <p>Section 16: V. Note 1.2 deleted.</p> <p>Section 17, 18: II.2 added EASA approval 10050866.</p> <p>Administrative 21.II amended.</p>	Issue 1 05 May 2023

– END –