Civil Aviation Authority United Kingdom



TYPE-CERTIFICATE DATA SHEET

UK.TC.A.00033

for

PC-24

Type Certificate Holder **PILATUS Aircraft Ltd.**

> Pilatusstrasse 1 6371 Stans Switzerland

Model(s): PC-24

Issue:

Date of issue: 26 February 2025

TCDS No.: UK.TC.A.00033 Date: 26 February 2025

AW-DAW-TP-004

Copies of this document are not controlled.

TABLE OF CONTENTS

Sectio	n 1 PC-24	3
I.	General	3
II.	Certification Basis	
III.	Technical Characteristics and Operating Limitations	6
IV.	Operating and Service Instructions	g
V.	Operational Suitability Data	11
VI.	Notes	11
Sectio	n 2 Administration	13
I.	Acronyms and Abbreviations	13
II.	Type Certificate Holder Record	14
Ш	Amendment Record	14

TCDS No.: UK.TC.A.00033 Date: 26 February 2025 AW-DAW-TP-004

Section 1 PC-24

I. General

This Type-Certificate Data Sheet (TCDS) is the concise definition of the type-certificated product accepted and or approved by the UK 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 UK CAA in the UK since 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.A.594 at Issue 5 dated 12 November 2017 and are therefore accepted by the UK under Article 15 of Annex 30 of the UK-EU Trade and Cooperation Agreement.

1. Type / Variant / Model

a) Type: PC-24b) Variant or Model: PC-24

2. Airworthiness Category

CS-23, Commuter category

3. Certifying Authority

European Union Aviation Safety Agency (EASA) Konrad-Adenauer-Ufer 3 50668 Cologne Germany

4. Type Certificate Holder

PILATUS Aircraft Ltd. Pilatusstrasse 1 6371 Stans Switzerland

5. Manufacturer

PILATUS Aircraft Ltd. Pilatusstrasse 1 6371 Stans Switzerland

6. State of Design Authority Certification Application Date

09 July 2012

7. UK CAA Certification Date

07 December 2017

TCDS No.: UK.TC.A.00033 Date: 26 February 2025

AW-DAW-TP-004

II. Certification Basis

1. Reference Date for determining the applicable requirements

07 December 2012

2. State of Design Authority Certification Basis

Refer to TCDS EASA.A.594.

3. (Reserved)

4. UK Certification Basis

EASA CRI A-01 and as detailed below (Refer further to Note 5)

5. Airworthiness Requirements

CS-23, Certification Specifications for Normal, Utility, Aerobatic and Commuter Category Aeroplanes, Amendment 3, Effective 20 July 2012.

6. Requirements elected to comply

Airborne Communications, Navigation and Surveillance (ACNS) (Refer further to Note 5)

7. Special Conditions

CRI B-01	Handling and Performance
CRI B-02	High Speed Characteristics
CRI B-03	Stall Speed Determination
CRI B-04	Contaminated Runways
CRI B-05	Stick Pusher
CRI B-152	Human Factors
CRI C-01	Sonic Fatigue
CRI C-02	Pressurisation into Non-Pressurized Areas
CRI C-05	Dynamic Response
CRI C-06	Out of Trim Conditions (Structures)
CRI C-07	Round-the-clock Gust
CRI D-01	Take-Off Warning System
CRI D-02	Extension and Retraction Systems
CRI D-03	Wheels
CRI D-04	Brakes and Braking Systems
CRI D-05	Doors
CRI D-06	Bird Strikes
CRI D-09	Operation above 41.000 ft (see note 4)
CRI E-01	Fuel Tank Crashworthiness
CRI E-04	Lines, Fittings and Components
CRI E-06	Powerplant Fire Extinguishing Systems
CRI E-10	Fuel Tank Ignition Prevention
CRI E-11	Induction System Ice Protection – Cold Soaked Fuel
CRI E-59	Engine Installation (Rain Conditions)
CRI E-102	Single point Defueling
CRI F-01	Battery Endurance Requirements
CRI F-03	Interaction of Systems and Structures
CRI F-07	Data Link Services Recording
CRI F15	Airworthiness Information Security Protection from effect of HIRF
CRI F-52 CRI F-54	Protection from the effects to lighting strike, indirect effects
CRI F-58	Lithium Battery Installations
CRI F-62	Flight instruments External Probes – Qualification in extended Icing conditions
CRI F-110	Auto-throttle
CRI G-02	Approval process of digital AFM
CRI O-01	Approval process of digital AFM
CRI O-04	Towbarless towing loads
CRI AWO-101	<u> </u>
3.47,440	2.1 104a

TCDS No.: UK.TC.A.00033 Date: 26 February 2025

8. **Exemptions**

None

9. **Equivalent safety Findings:**

CRI E-56	Powerplant System indications
CRI F-05	IMA Individual Circuit Protection
CRI F-90	ASI Flaps Marking on PFD
CRI F-108	ESIS 3rd ATT Indictor (ESIS) Compliance to CS 23. 1303
CRI F-111	Mechanical Magnetic Compass – Flight Deck without Whisky Compass
CRI F-112	Pressurization and Pneumatic systems – bleed air level compliance

10. **Environmental Protection Standards**

Noise:

ICAO Annex 16, Volume I, Chapter 4 (see TCDSN UK.TC.A.00033 for details)

Emissions:

Prevention of intentional fuel venting ICAO Annex 16, Volume II (Amendment 6), Part II, Chapter 2

11. **Operational Suitability Certification Basis**

MMEL: CS-MMEL, Initial Issue. Flight Crew Data: CS-FCD, Initial Issue. Simulator Validation Data: CS-SIMD, Initial Issue.

12. Eligible S/N

S/N P03, 101 and up.

TCDS No.: UK.TC.A.00033 Date: 26 February 2025

AW-DAW-TP-004

Copies of this document are not controlled.

III. **Technical Characteristics and Operating Limitations**

1. **Type Design Definition**

500.00.24.001

2. **Description**

The PC-24 is a low-wing Business aircraft, powered by two rear-mounted Williams FJ44-4A-QPM twin spool turbofan engines of 3,420 lbs take-off thrust rating, with a T-tail configuration and a retractable undercarriage.

The PC-24 is pressurised with an 8,000 ft cabin altitude at its maximum operating altitude of 45,000ft.

It has a maximum seating capacity of up to 10 passengers in the cabin and 1 or 2 pilots. Standard seating configuration is a 6-seat executive arrangement with forward lavatory and aft galley. The aircraft may be flown with one or two pilots.

A unique feature of the PC-24 shall be the capability of transporting a mixture of passengers and cargo, using the two doors. The PC-24 has a passenger door on the left-hand side behind the cockpit, a large cargo door at the back of the cabin on the left-hand side behind the wing and two over wing emergency exits, one on each side of the cabin.

The PC-24 aircraft is designed to be able to take-off and land in short airfields (<2,650ft)

3. **Dimensions**

Main Wing Span	17,000 mm	(55 ft 9in)
Length	16,800 mm	(55 ft 1 in)
Height	5,400 mm	(17 ft 4 in)
Total Wing Area	30.91 m ²	(332.7 ft ²)

4. **Engines**

Model

2 Williams International FJ44-4A-QPM Turbofan engines of 3,420 lbf normal take-off thrust each, situated in nacelles on each side of the rear fuselage.

Type Certificate

The FJ44-4-QPM is certified under Type Certificate number UK.TC.E.00013.

5. **Engine Limits**

Refer to latest revision TCDS No. UK.TC.E.00013 Williams International Engine FJ44-4A-QPM Oil Temperature

Refer to latest revision TCDS No. UK.TC.E.00013 Williams International Engine FJ44-4A-QPM

TCDS No.: UK.TC.A.00033 Date: 26 February 2025

AW-DAW-TP-004

6. Fluids

6.1. Fuel

Refer to the latest revision Williams International Engine Installation and Operating Instructions 110675-201 FJ-44-4A-QPM (73200-201) (including JET A, JET A-1, JP-8, TS-1).

Fuel Anti-Ice Additives are not required

6.2. Oil

Refer to the latest revision Williams International Engine Installation and Operating Instructions 110675-201 FJ-44-4A-QPM (73200-201) (including Mobil Jet II, Mobil 254)

7. Fluid capacities

7.1. Fuel

Total: 3,389 L (894 US Gal) 2,721 kg (6,000 lb)
Usable: 3,369 L (890 US Gal) 2,705 kg (5,964 lb)
Unusable: 20 L (5.3 US Gal) 16 kg (35 lb)

7.2. Oil

Total: 5.5 L (5.85 US qt)
Usable: 4.3 L (4.63 US qt)

8. Air Speeds

VMO (maximum operating speed)

MMO (maximum operating Mach number)

VD (maximum diving speed)

MD (maximum diving Mach number)

VA (manoeuvring speed) at MTOW

290 KEAS

0.74

0.81

- For aircraft with Design Weight Increase MSN 501 and up 187 KEAS

For aircraft MSN P03, MSN 101 through 130 – Post SB 42-002, and MSN 131 through 500

185 KEAS VC (design cruising speed) **290 KEAS VFE** (max. flap extended speed) 8° (Take-Off) Flap 200 KEAS 15° (Approach) Flap 200 KEAS 33° (Landing) Flap **175 KEAS VLO** (maximum landing gear operating speed) Extension **250 KEAS** Retraction **200 KEAS**

VSO (stall speed, ISA, sea level, max landing weight, landing configuration)

(maximum landing gear extended speed)

- For aircraft with Design Weight Increase MSN 501 and up 83 KCAS

- For aircraft MSN P03, MSN 101 through - 130 Post SB 42-002, and MSN 131 through 500

82 KCAS

250 KEAS

9. Maximum Operating Altitude

13,716 m / 45,000 ft (see note 4)

TCDS No.: UK.TC.A.00033 Date: 26 February 2025 AW-DAW-TP-004

VLE

10. **Operational Capabilities**

IFR Day/Night

VFR Day/Night

FIKI (see note 6)

11. **Maximum Weight**

For aircraft with Design Weight Increase MSN 501 and up

Taxi and ramp	8,545 kg	(18,840 lbs)
Take-off	8,500 kg	(18,740 lbs)
Landing	7,865 kg	(17,340 lbs)
Zero fuel	6,650 kg	(14,660 lbs)

For aircraft 101 - 130 Post SB 42-002, and 131 through 500

Taxi and ramp	8,345 kg	(18,400 lbs)
Take-off	8,300 kg	(18,300 lbs)
Landing	7,665 kg	(16,900 lbs)
Zero fuel	6,450 kg	(14,220 lbs)

For aircraft 101 - 130 Pre SB 42-002 (see Note 13)

Taxi and ramp	8,050 kg	(17,750 lbs)
Take-off	8,005 kg	(17,650 lbs)
Landing	7,370 kg	(16,250 lbs)
Zero fuel	6,100 kg	(13,450 lbs)

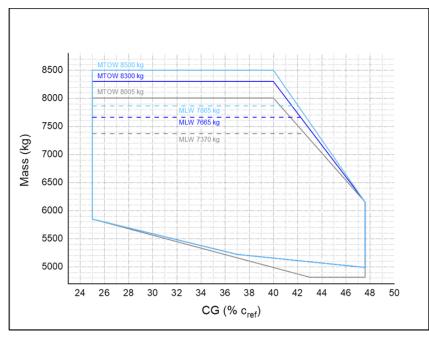
Centre of Gravity Range 12.

Figure shows the PC-24 Centre of Gravity (CG) limits, which accommodate all of the foreseen passenger and cargo loadings.

In Cyan: Aircraft MSN 501 and up (MTOW of 8500 kg, MLW 7865 kg)

In Blue: Aircraft MSN P03, 101 through 130 - Post SB 42-002, and 131 through 500 (MTOW 8300 kg, MLW 7665 kg)

In Gray: Aircraft MSN 101 through 130 Pre SB 42-002 (see Note 13) (MTOW 8005 kg, MLW 7370 kg)



TCDS No.: UK.TC.A.00033 Date: 26 February 2025

AW-DAW-TP-004

Issue: 2 Page 8 of 14

13. Mean Aerodynamic Chord (MAC)

1.997 m (6ft 6in)

14. **Levelling Means**

Refer to the PC-24 Airplane Flight Manual, Section 6

15. Minimum Flight Crew:

1 Pilot (see Note 8)

16. **Maximum Passenger Seating Capacity**

Executive Interiors Configuration: 8 PAX excluding pilot seats (see Notes 9, 10 and 11). An optional fit allows two additional infants to be carried at the first seating row on the left and right sides.

Commuter Interior Configuration: 10 PAX excluding pilot seats (see Notes 9, 10 and 11).

Refer to the PC-24 Airplane Flight manual, Section 6, for passengers and flight crew loading instructions and approved configurations.

17. **Exit Number and Type**

3 exits (fwd cabin LH passenger door and two over wing emergency exits, one on each side of the cabin) and 1 cargo door (LH rear cabin)

18. Baggage / Cargo Loading

Refer to the PC-24 Airplane Flight Manual, Section 6.

19. Wheels and Tyres:

19.1. Wheels

Parker 40-479 Nose landing Gear Main Landing Gear Parker 40-478

19.2. **Tyres**

Dimensions Ply Rating Speed Rating Nose Landing Gear 450x190-5 8 (PR) 190 (MPH) 10 (PR) Main Landing Gear 24x7.7 190 (MPH)

IV. **Operating and Service Instructions**

1. Airplane Flight Manual (AFM)

Airplane operation must be in accordance with the EASA approved PC-24 Airplane Flight Manual and AFM supplements as defined below:

S/N P03, 101 and up Pilatus Report No. 02371

2. Aircraft Maintenance Manual (AMM)

Airplane maintenance must be in accordance with the document as defined below:

S/N P03, 101 and up Pilatus Report No. 02378

3. Structural Repair manual (SRM)

Airplane Repairs must be in accordance with the document as defined below:

S/N P03, 101 and up Pilatus Report No. 02379

4. Flight Crew Operating manual (FCOM)

S/N P03, 101 and up Pilatus Report PC-24 No. 02383

TCDS No.: UK.TC.A.00033 Date: 26 February 2025 AW-DAW-TP-004

Issue: 2

5. Service Bulletins (SBs):

All Pilatus PC-24 Bulletins are listed in the following document:

S/N P03, 101 and up Pilatus Report No. 02430

6. **Service Letters**

All Pilatus PC-24 Service Letters are listed in the following document:

S/N P03, 101 and up Pilatus Report. 02431

7. **RVSM** capability

RVSM capability for PC-24 S/N P03, 101 and subsequent:

All airplanes equipped with Honeywell APEX system are RVSM capable provided the operator follows the AFM Issue 003 Revision 1 (or later revisions) and the AMM Issue 005 Revision 00 or later UK CAA approved revisions.

TCDS No.: UK.TC.A.00033 Date: 26 February 2025

V. Operational Suitability Data

1. Master Minimum Equipment list (MMEL)

Pilatus Report PC-24 No 02384, latest Approved revision

2. Flight Crew Data

Pilatus Report PC-24 No 02423, latest Approved revision, as per the table below.

Manufacturer	Aircraft Model/name	License Endorsement	Variants	Complex	SP/ SP HPA/ MP	OE GM/ OEB/ OSD FC	Remarks
						available	
	PC-24						
Pilatus	PC-24 AYT	PC-24	PC-24 X	Х	SP HPA	Х	OSD FC PC-24
Aircraft Ltd.	PC-24 TF						03D FC FC-24
	PC-24 AYT/TF						

3. Simulator Data

Validation Data Roadmap (VDR) report ER-24-001168, latest Approved revision.

VI. Notes

- 1. Requirements for the issue of the C of A.
 - The minimum required equipment as prescribed in the applicable airworthiness regulations must be installed on the individual aircraft for certification.
 - Current weight and balance data, a list of equipment included in the certification empty weight and loading information, when necessary, must be provided for each aircraft when the C of A will be issued.
 - The certification empty weight and balance data shall include the unusable fuel and the total engine oil as specified
 - Airplane Flight Manual is required.

2. Placards

All required placards as listed in the Pilatus Aircraft Flight Manual, and subsequent approved revisions, must be installed in the appropriate locations

3. Continued Airworthiness

- Airworthiness Limitations are contained in Chapter 4 of the Pilatus AMM. These Limitations may not be changed without UK CAA approval.
- Current weight and balance data together with a list of equipment included in the certificated empty weight, and loading instructions, when necessary, must be provided for each airplane at the time of original certification.
- Only interior configurations described in the official Pilatus AFM are approved for installation in the PC-24 aircraft.

4. High altitude operations

PC-24 airplanes have been approved for high altitude operations (altitudes above 41,000 feet), by Special Conditions. Any modifications to the pressure vessel must be approved in accordance with the requirements as shown in the certification basis. This includes modifications which could result in a pressure vessel opening, either through crack-growth or antenna loss, greater than 2.65 sq.in.

TCDS No.: UK.TC.A.00033 Date: 26 February 2025 Issue: 2

5. To support European operators and ensure that the PC-24 aircraft complies to the airspace rules, at initial TC, Pilatus elected to comply with Airborne Communications, Navigation and Surveillance (ACNS), reference CS ACNS initial issue dated 17 December 2013.

For the Major Change project EASA n°60077318 introducing RNP AR, Pilatus elected to comply with the following sections of CS-ACNS issue 2 dated 26 April 2019, Subpart C — Navigation (NAV):

- Subsection 6 Supplementary specifications for RNP authorisation required (RNP AR)
- Subsection 7 Supplementary specifications for applications for advanced RNP (A-RNP)
- Subsection 8 Supplementary specifications supporting radius to fix (RF)
- Subsection 10 Supplementary specifications supporting parallel offset

As CS-ACNS is continuously developed and updated, Pilatus may choose in the future to elect to comply with new sections or amendments.

For Thermal/acoustic insulation materials the standards of US 14 CFR Part 23 Amdt. 1 thru 62, §23.856 [23-62] are met.

For Ice protection beside the CS23.1419 and Special Condition F-62 requirements the standards of US 14 CFR Part 23 Amdt. 1 thru 62, §23.1419 [23-43] are met.

For Special Conditions (SC) and Equivalent Safety Findings (ESF), which are stated to be included in EASA CRI A-01 and are listed in Section II Paragraphs 7 and 9, and are part of the applicable certification basis refer further to the Annex to EASA.A.594.

- PC-24 is approved for flight into known or forecasted icing. Compliance has been shown i.a.w. CS-23.1419 6. and SC F-62.
- 7. The PC-24 S/N P03, 101 and subsequent equipped with Honeywell APEX system are RVSM capable. The commercial designation of the Honeywell APEX system as installed on the PC-24 is the PC-24 Advanced Cockpit Environment (ACE™).
- 8. Approval for operation with a minimum crew of one pilot is based upon the cockpit equipment installation and arrangement evaluated during certification testing. No significant changes may be made to the installed cockpit equipment or arrangement (EFIS, autopilot, avionics, etc.), except as permitted by the approved MMEL, without prior approval.
- 9. All replacement seats (crew and passenger), although they may comply with TSO C127, must also be demonstrated to comply with CS 23.321, 23.395, 23.561, 23.562, and 23.785.
- 10. The foam cushion build-up of all seats (crew and passenger) may not be altered. Any deviations in the foam construction or stiffness must be demonstrated by test to comply with the listed CS 23 paragraphs.
- During single pilot operation, the pilot occupies the left-hand cockpit seat and an additional passenger may 11. occupy the right hand cockpit seat.
- 12. Aircraft Classification

In accordance with the Regulation (EC) 216/2008 definitions, the PC-24 is a "complex motor-powered aircraft".

In accordance with the "Air Ops" Regulation (EC) 965/2012 definitions, the PC-24 is a "Performance Class A aeroplane".

In addition, the type certification basis of the baseline PC-24 product is CS-23 Amdt. 3 in the commuter category. However, considering the new definitions introduced in CS-23 Amdt. 5 §23.2005, the PC-24 is considered as equivalent to an aeroplane in the new normal category with:

- Aeroplane certification level: "Level 4"
- Aeroplane performance level "High speed"
- 13. All aircraft MSN 101-130 have been retrofitted with SB 42-002.

TCDS No.: UK.TC.A.00033 Date: 26 February 2025 AW-DAW-TP-004

Issue: 2

Section 2 Administration

I. Acronyms and Abbreviations

Actoriyins and Abbreviations					
Acronym / Abbreviation	Definition				
ACE	Advanced Cockpit Environment				
ACNS	Airborne Communications, Navigation and Surveillance				
AMM	Aircraft Maintenance Manual				
C of A	Certificate of Airworthiness				
CAA	(United Kingdom) Civil Aviaiton Authority				
CRI	Certification Review Item				
CS	Certification Specification				
EASA	European Union Aviation Safety Agency				
EFIS	Electronic Flight Information System				
FADEC	Full Authority Digital Engine Control				
FIKI	Flight Into Known Icing				
FOCA	Swiss Federal Office of Civil Aviation				
Gal	(US) Gallon				
IAS	Indicated Airspeed				
ICAO	International Civil Aviation Organization				
IFR	Instrument Flight Rules				
KCAS	Calibrated Airspeed [Knots]				
KEAS	Equivalent Airspeed [Knots]				
KIAS	Indicated Airspeed [Knots]				
L	Litres				
MAC	Mean Aerodynamic Chord				
MMEL	Master Minimum Equipment List				
OSD	Operational Suitability Data				
qt	(US) quart				
RVSM	Reduced Vertical Separation Minimum				
TC	Type Certificate				
TCDS	Type Certificate Data Sheet				
TCH	Type Certificate Holder				
UK	United Kingdom of Great Britain and Northern Ireland				
VFR	Visual Flight Rules				
· · · · · · · · · · · · · · · · · · ·					

TCDS No.: UK.TC.A.00033 Date: 26 February 2025

AW-DAW-TP-004

Copies of this document are not controlled.

II. Type Certificate Holder Record

TCH Record	Period
PILATUS Aircraft Ltd	Present. No changes.
Pilatusstrasse 1	
6371 Stan	
Switzerland	

III. Amendment Record

TCDS Issue No.	TCDS Issue Date	Changes	TC Issue and Date
1	19 Sep 2023	The content of the initial issue of this UK CAA TCDS was taken from EASA TCDS No. EASA.A.594 Issue 5 dated 12 November 2020 which was the current EASA version at 31 December 2020 and therefore the version of the TCDS for the Pilatus PC-24 accepted by the UK under Article 15 of Annex 30 of the UK-EU Trade and Cooperation Agreement.	Issue 1 19 Sep 2023
		Changes to reflect EU Exit and status of UK CAA and EASA TCDS.	
		General editorial corrections.	
		Changes to Section II Para 4 and Note 5 to reflect location of certification basis and content of SC and ESF CRIs within EASA TCDS Annex.	
		Changes introduced to align with the current issue of the EASA TCDS (issue 7): OSD FCD table added Update of the Pilatus address.	
		 Addition of CRI F-58 (special condition for Lithium Battery Installations) and CRI AWO-101 (special condition for CAT II requirements for CS 23 aeroplanes). 	
		 OSD FCD table amended to add new training variant in line with latest issue of the OSD-FC report document reference 02423. 	
		 Missing reference to CS-ACNS added to Note 5. 	
		 Addition of new Note 12 on Aircraft Classification. 	
		 Addition of new Note 13 on status of aircraft retrofitted by SB 42-002 	
2	26 Feb 2025	Correction of engine model description (3,420 lbf maximum normal take-off thrust).	Issue 1 19 Sep 2023
		Updated VA and VSO values for the Design Weight Increase major change.	
		Addition of weights table for the Design Weight Increase major change.	
		Updated CG range table to include the Design Weight Increase values.	

- END -

TCDS No.: UK.TC.A.00033 Date: 26 February 2025 AW-DAW-TP-004