
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: 1

Date of issue: 19 September 2023

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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-24
- b) 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

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
CRI F-52	Protection from effect of HIRF
CRI F-54	Protection from the effects to lightning 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	CAT II requirements for CS 23 aeroplane

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 Indicator (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.

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 maximum 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

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)	290 KEAS
MMO	(maximum operating Mach number)	0.74
VD	(maximum diving speed)	360 KEAS
MD	(maximum diving Mach number)	0.81
VA	(manoeuvring speed) at MTOW	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
VLE	(maximum landing gear extended speed)	250 KEAS
VSO	(stall speed, ISA, sea level, max landing weight, landing configuration)	82 KCAS

9. Maximum Operating Altitude

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

10. Operational Capabilities

IFR Day/Night

VFR Day/Night

FIKI (see note 6)

11. Maximum Weight

For aircraft 101 - 130 Post SB 42-002, and 131 – Up

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)

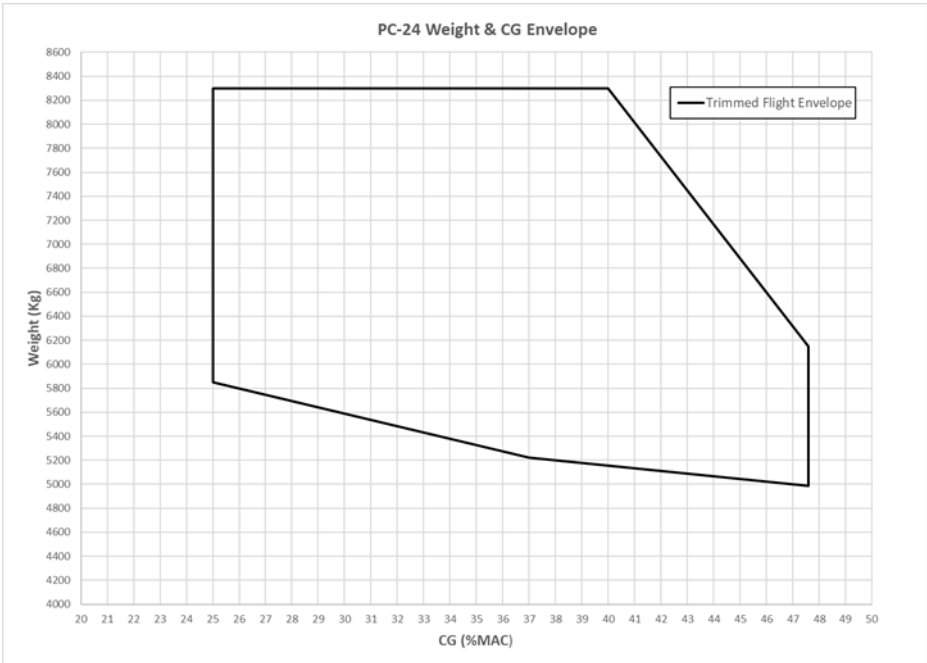
For aircraft 101 - 130 Pre SB 42-002 (see Note 13)

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)

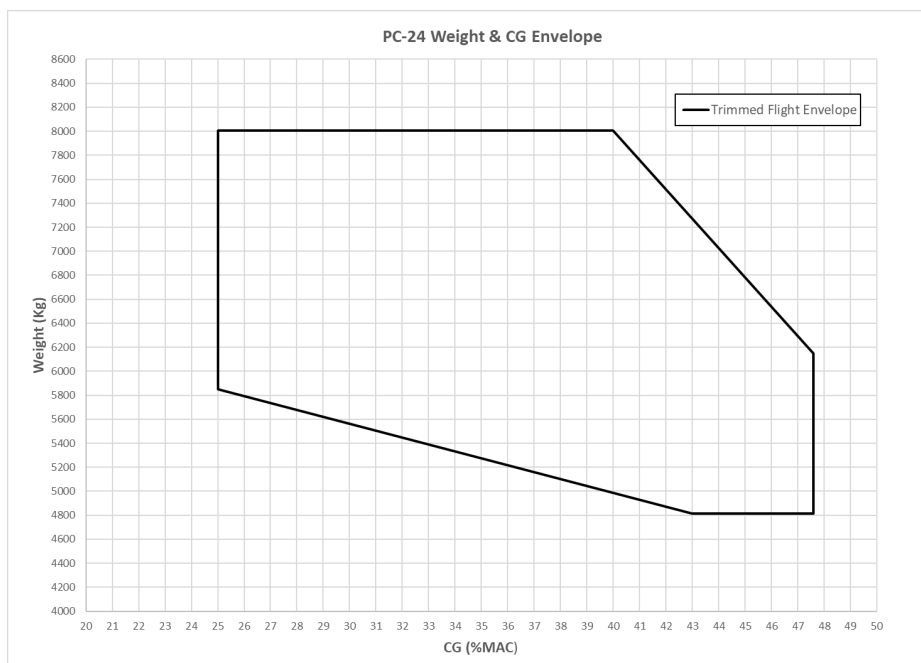
12. Centre of Gravity Range

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

For aircraft 101 - 130 Post SB 42-002, and 131 – Up



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



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

Nose landing Gear Parker 40-479

Main Landing Gear Parker 40-478

19.2. Tyres

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

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.

V. Operational Suitability Data**1. Master Minimum Equipment list (M MEL)**

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 available	Remarks
Pilatus Aircraft Ltd.	PC-24	PC-24	X	X	SP HPA	X	OSD FC PC-24
	PC-24 AYT						
	PC-24 TF						
	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.

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.

6. PC-24 is approved for flight into known or forecasted icing. Compliance has been shown i.a.w. CS-23.1419 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.
11. During single pilot operation, the pilot occupies the left-hand cockpit seat and an additional passenger may 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.

Section 2 Administration

I. Acronyms 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 Aviation 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

II. Type Certificate Holder Record

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

III. Amendment Record

TCDS Issue No.	TCDS Issue Date	Changes	TC Issue and Date
1	19 Sep 2023	<p>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.</p> <p>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.</p> <p>Changes introduced to align with the current issue of the EASA TCDS (issue 7):</p> <ul style="list-style-type: none"> • 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 	Issue 1 19 Sep 2023

– END –