# Civil Aviation Authority United Kingdom



# **TYPE-CERTIFICATE DATA SHEET**

# UK.TC.A.00047

for

P2002

Costruzioni Aeronautiche TECNAM S.P.A.

Via S. D'Acquisto, 62 80042, Boscotrecase (Naples) Italy

Model(s): P2002-JF

P2002-JR P-Mentor

Issue: 1

Date of issue: 24 November 2022

TCDS No.: UK.TC.A.00047 Date: 24 November 2022

AW-DAW-TP-004

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#### Section 1 P2002-JF

#### I. General

# 1. Type / Model / Variant

# 1.1 Type

P2002

# 1.2 Model

P2002-JF

#### 1.3 Variant

-

# 2. Airworthiness Category

**Normal Category** 

# 3. Type Certificate Holder

Costruzioni Aeronautiche Tecnam S.p.A.

Via Salvo D'acquisto 62

80042, Boscotrecase (Naples)

Italy

#### 4. Manufacturer

Costruzioni Aeronautiche Tecnam S.p.A.

Via Salvo D'acquisto 62

80042, Boscotrecase (Naples)

Italy

# 5. State of Design Authority

European Union Aviation Safety Agency (EASA)

# 6. JAA Certification Application Date

29 May 2002

# 7. JAA validation Date (JAA recommendation)

27 May 2004

# 8. EASA Type Certification Date

27 May 2004

#### II. Certification Basis

# 1. Reference date for determining the applicable requirements

29 May 2002

# 2. Airworthiness Requirements

 CS-VLA dated 14 November 2003 (Equivalent to JAR-VLA ed. 26 April 1990 including amendments VLA/91/1 dated 22 October 1991 and VLA/92/1 dated 01 January 1992)

# 3. Requirements elected to comply

None.

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# 4. Special Conditions

EASA CRI A-03 (SC VLA VFR Night) (see Section 1.V Note 2 and 3)

#### 5. Exemptions

None.

# 6. Equivalent Safety Findings

None.

#### 7. Environmental Standards

#### 7.1 Noise

Refer to TCDSN UK.TC.A.00047.

# 7.2 Emissions and Fuel Venting

Not applicable (N/A).

# III. Technical Characteristic and Operating Limitations

# 1. Type Design Definition (TDD)

Doc. 2002/04 ed.1 rev.0 "Type design definition" or later approved revisions.

# 2. Description

Single engine, two-seat cantilever low wing airplane, aluminium and steel construction, fixed tricycle landing gear.

# 3. Equipment

Equipment list, AFM, Doc. 2002/28, Section 6.

# 4. Dimensions

Span 8.6 m (28.2 ft)

Length 6.6 m (21.7 ft)

Height 2.4 m (7.9 ft)

Wing Area 11.5 m² (123.8 ft²)

#### 5. Engines

#### 5.1 Models

1. BRP-Rotax GmbH 912 S2 (see Section 1.V Note 1)

CAA Type Certificate No. UK.TC.E.00050

2. Aeroplanes with modification No. MOD2002/127 applied:

BRP-Rotax GmbH 912 S3

CAA Type Certificate No. UK.TC.E.00050

# 5.2 Engine Limits

Max rotational speed (5 min) 5800 rpm.

Max continuous rotational speed 5500 r.m (Engine shaft rpm)

Other engine limitations are listed in Doc. 2002/28 "Aircraft Flight Manual"

# 6. Propellers

1. One Hoffmann Propeller HO17GHM A 174 177C

Two blades, fixed pitch, made of wood.

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LBA TCDS 32.110/1.

Type Certificate No. SO/E 30 dated 10/12/1999

Diameter: 1740 mm

2. Aeroplanes with modification n. MOD2002/127 applied:

One Hoffmann Propeller HOV352F1/C170FQ+8

Two blades, variable pitch, made of wood.

LBA TCDS 32.130/88 dated 20/08/2003

Diameter: 1780 mm

#### 7. Fluids

#### 7.1 Fuel

Min. RON 95

EN 228 Premium

**EN228 Premium plus** 

AVGAS 100LL (see applicable Rotax Operators Manual)

#### 7.2 Oil

Lubrificant specifications and grade are detailed in the applicable "Rotax Operators Manual" and in its related documents.

#### 7.3 Coolant

Coolant specifications and detailed are detailed in the applicable "Rotax Operators Manual" and in its related documents Section 2.

#### 8. Fluid capacities

# 8.1 Fuel

Total: 100 litres Usable: 99 litres

#### 8.2 Oil

Total: 3.0 litres
Minimum: 2.0 litres

#### 9. Air Speeds

Design Manoeuvring Speed V<sub>A</sub> 96 KIAS 94 KCAS

For aeroplanes with modification MOD2002/29, or equivalent Service Bulletin n. SB010-CS, installed:

98 KIAS 96 KCAS

For aeroplanes with modification MOD2002/87, or equivalent Service Bulletin n. SB0105-CS, installed:

100 KIAS 97 KCAS

Flap Extended Speed V<sub>FE</sub> 67 KIAS Full 69 KCAS Full

97 KIAS Take-Off 95 KCAS Take-Off

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For aeroplanes with modification n. MOD2002/29, or equivalent Service Bulletin n. SB010-CS, installed:

68 KIAS Full 70 KCAS Full

99 KIAS Take-Off 97 KCAS Take-Off

For aeroplanes with modification n. MOD2002/87, or equivalent Service Bulletin n. SB0105-CS, installed:

69 KIAS Full 71 KCAS Full

101 KIAS Take-Off 98 KCAS Take-Off

Maximum structural cruising speed V<sub>NO</sub> 110 KIAS 106KCAS

For aeroplanes with modification n. MOD2002/29, or equivalent Service Bulletin n. SB010-CS, installed:

112 KIAS 108 KCAS

For aeroplanes with modification n. MOD2002/87, or equivalent Service Bulletin n. SB0105-CS, installed:

114 KIAS 110 KCAS

Never exceed speed V<sub>NE</sub> 138 KIAS 135 KCAS

For aeroplanes with modification n. MOD2002/29, or equivalent Service Bulletin n. SB010-CS, installed:

141 KIAS 138 KCAS

For aeroplanes with modification n. MOD2002/87, or equivalent Service Bulletin n. SB0105-CS, installed:

142 KIAS 140 KCAS

# 10. Allweather Operations Capability

Day VFR

Night VFR is allowed (see Section 1.V Note 2)

Flight into expected or actual icing conditions is prohibited.

# 11. Maximum Masses

Take-Off: 580 kg Zero Fuel: 580 kg Landing: 580 kg

For aeroplanes with modification n. MOD2002/29, or equivalent Service Bulletin n. SB010-CS, installed:

Take-off: 600 kg Zero Fuel: 600 kg

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Landing: 600 kg

For aeroplanes with modification n. MOD2002/87, or equivalent Service Bulletin n. SB0105-CS, installed:

Take-off: 620 kg Zero Fuel: 620 kg Landing: 620 kg

# 12. Centre of Gravity Range

Forward Limit: 1.693 m behind Datum Aft Limit: 1.782 m behind Datum

#### 13. Datum

Propeller support flange without spacer.

# 14. Levelling Means

Seat support trusses (see "P2002-JF Flight Manual" Sect.6 for the procedure).

# 15. Minimum Flight Crew

1 (Pilot)

# 16. Maximum Passenger Seating Capacity

1

#### 17. Baggage/Cargo Compartments

Maximum Allowable Load: 20 kg (44 lb)

Location: 2.26 m aft the datum

# 18. Wheels and Tyres

Nose Wheel Tyre Size: 4.00-6 Main Wheel Tyre Size: 5.00-5

# IV. Operating and Service Instructions

# 1. Aircraft Flight Manual (AFM)

Document No. 2002/28 Last edition.

# 2. Airplane Maintenance Manual (AMM)

Document No. 2002/30 Last edition (including Airworthiness Limitations)

#### 3. Service Information and Service Bulletins

None.

# V. Notes

- 1. When engine with designation extended with suffix "-01" (e.g. Rotax 912 S2-01) is installed (as per MOD2001/157, EASA approval 10053863), the engine temperature measurement methods have been amended from CHT (cylinder head temperature) and CT (coolant temperature) to only CT (coolant temperature).
- 2. Night VFR operations are allowed when MOD2002/050 "P2002 VFR Night for Digital configuration" (EASA approval No. 10033950) or MOD2002/084 "P2002 VFR Night for Analogue configuration" (EASA approval No. 10034907) is installed.
- 3. UK.TC.A.00047 Annex 1 contains public non-proprietary data in Special Conditions that are part of the applicable Certification Basis as recorded in this TCDS.

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#### Section 2 P2002-JR

# I. General

# 1. Type / Model / Variant

# **1.1 Type**

P2002

# 1.2 Model

P2002-JR

# 1.3 Variant

-

# 2. Airworthiness Category

**Normal Category** 

# 3. Type Certificate Holder

Costruzioni Aeronautiche Tecnam S.p.A.

Via Salvo D'acquisto 62

80042, Boscotrecase (Naples)

Italy

#### 4. Manufacturer

Costruzioni Aeronautiche Tecnam S.p.A.

Via Salvo D'acquisto 62

80042, Boscotrecase (Naples)

Italy

# 5. State of Design Authority

European Union Aviation Safety Agency (EASA)

# 6. JAA Certification Application Date

29 May 2002

# 7. JAA validation Date (JAA recommendation)

27 May 2004

# 8. EASA Type Certification Date

02 February 2007

# **II.** Certification Basis

# 1. Reference date for determining the applicable requirements

16 December 2004

# 2. Airworthiness Requirements

CS-VLA dated 14/11/2003

# 3. Requirements elected to comply

None.

# 4. Special Conditions

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Issue: 1 Page 8 of 17 EASA CRI A-03 (SC VLA VFR Night) (see Section 2.V Note 2 and 3)

# 5. Exemptions

None.

# 6. Equivalent Safety Findings

None.

#### 7. Environmental Standards

#### 7.1 Noise

Refer to TCDSN UK.TC.A.00047.

# 7.2 Emissions and Fuel Venting

N/A.

# III. Technical Characteristic and Operating Limitations

# 1. Type Design Definition (TDD)

Doc. 2002/04 ed.1 rev.0 "Type design definition" or later approved revisions.

# 2. Description

Single engine, two-seat cantilever low wing airplane, aluminum and steel construction, retractable tricycle landing gear.

#### 3. Equipment

Equipment list, AFM, Doc. 2002/91, Section 6.

#### 4. Dimensions

 Span
 8.6 m (28.2 ft)

 Length
 6.6 m (21.7 ft)

 Height
 2.4 m (7.9 ft)

Wing Area 11.5 m<sup>2</sup> (123.8 ft<sup>2</sup>)

# 5. Engine/s

BRP-Rotax GmbH 912 S3 (see Section 2.V Note 1)

CAA Type Certificate No. UK.TC.E.00050

# 5.1 Engine Limits

Max rotational speed (5 min) 5800 rpm

Max continuous rotational speed 5500 rpm (Engine shaft rpm)

Other engine limitations are listed in Doc. 2002/91 "Aircraft Flight Manual".

# 6. Propellers

One Hoffmann Propeller HOV352F1/C170FQ+8

Two blades, variable pitch, made of wood.

LBA TCDS 32.130/88 dated 20/08/2003

Diameter: 1780 mm

# 6.1 Settings

Low pitch setting: 13°

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#### 7. Fluids

#### 7.1 Fuel

Min. RON 95

EN 228 Premium

EN228 Premium plus

AVGAS 100LL (see Rotax Operators Manual)

#### 7.2 Oil

Lubrificant specifications and grade are detailed in the "Rotax Operators Manual" and in its related documents.

#### 7.3 Coolant

Coolant specifications and detailed are detailed in the "Rotax Operators Manual" and in its related documents Section 2.

# 8. Fluid capacities

#### 8.1 Fuel

100 litres Total: Usable: 99 litres

#### 8.2 Oil

Total: 3.0 litres Minimum: 2.0 litres

# 9. Air Speeds

Design Manoeuvring Speed V <sub>A</sub>	99 KIAS	96 KCAS
Flap Extended Speed V <sub>FE</sub>	68 KIAS	70 KCAS
Maximum landing gear operation speed VLO	68 KIAS	70 KCAS
Maximum structural cruising speed V <sub>NO</sub>	113 KIAS	108 KCAS
Never exceed speed V <sub>NE</sub>	144 KIAS	138 KCAS

# 10. Allweather Operations Capability

Day VFR

Night VFR is allowed (see Section 2.V Note 2)

Flight into expected or actual icing conditions is prohibited.

#### 11. Maximum Masses

Take-Off: 600 kg Zero Fuel: 600 kg Landing: 600 kg

# 12. Centre of Gravity Range

Forward Limit: 1.746 m behind Datum Aft Limit: 1.801 m behind Datum

#### 13. Datum

Propeller support flange without spacer.

# 14. Levelling Means

Seat support trusses (see "P2002-JF Flight Manual" Sect. 6 for the procedure).

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# 15. Minimum Flight Crew

1 (Pilot)

#### 16. Maximum Passenger Seating Capacity

1

# **Baggage/Cargo Compartments**

Max Allowable Load: 20 kg (44 lb) Location: 2.3 m aft the datum.

# 17. Wheels and Tyres

Nose Wheel Tyre Size: 4.00-5
Main Wheel Tyre Size: 5.00-5

#### IV. Operating and Service Instructions

# 1. Aircraft Flight Manual (AFM)

Document No. 2002/091 last edition.

# 2. Airplane Maintenance Manual (AMM)

Document No. 2002/93 last edition (including Airworthiness Limitations)

#### 3. Service Information and Service Bulletins

None

#### V. Notes

- 1. When engine with designation extended with suffix "-01" (e.g. Rotax 912 S2-01) is installed (as per MOD2001/157, EASA approval 10053863), the engine temperature measurement methods have been amended from CHT (cylinder head temperature) and CT (coolant temperature) to only CT (coolant temperature).
- Night VFR operations are allowed when MOD2002/050 "P2002 VFR Night for Digital configuration" (EASA approval No. 10033950) or MOD2002/084 "P2002 VFR Night for Analogue configuration" (EASA approval No. 10034907) is installed.
- 3. UK.TC.A.00047 Annex 1 contains public non-proprietary data in Special Conditions that are part of the applicable Certification Basis as recorded in this TCDS.

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#### Section 3 P-Mentor

# I. General

# 1. Type / Model / Variant

# **1.1 Type**

P2002

# 1.2 Model

P-Mentor

#### 1.3 Variant

-

# 2. Airworthiness Category

**Normal Category** 

# 3. Type Certificate Holder

Costruzioni Aeronautiche Tecnam S.p.A.

Via Salvo D'acquisto 62

80042, Boscotrecase (Naples)

Italy

# 4. Manufacturer

Costruzioni Aeronautiche Tecnam S.p.A.

Via Salvo D'acquisto 62

80042, Boscotrecase (Naples)

Italy

# 5. State of Design Authority

European Union Aviation Safety Agency (EASA)

# 6. EASA Type Certification Application Date

19 February 2020

# 7. EASA Type Certification Date

06 April 2022

# II. Certification Basis

# 1. Reference date for determining the applicable requirements

19 February 2020

# 2. Airworthiness Requirements

- CS-23 amdt. 5 dated 29 March 2017
- CS-ACNS issue 2 dated 26 April 2019

# 3. Requirements elected to comply

None.

# 4. Special Conditions

None.

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# 5. Exemptions

None.

# 6. Equivalent Safety Findings

None.

#### 7. Environmental Standards

Refer to TCDSN UK.TC.A.00047.

#### 7.1 Emissions and Fuel Venting

N/A

# III. Technical Characteristic and Operating Limitations

# 1. Type Design Definition (TDD)

Doc. 2002/1000 ed.1 rev.0 "P-Mentor type design definition" or later approved revisions.

# 2. Description

Single engine, two-seat cantilever low wing airplane, aluminum and steel construction, fixed tricycle landing gear.

# 3. Equipment

Equipment list, AFM, Doc. 2002/1032, Section 6.

#### 4. Dimensions

 Span
 9.00 m (29.5 ft)

 Length
 6.74 m (22.1 ft)

 Height
 2.50 m (8.2 ft)

 Wing Area
 11.9 m² (128.1 ft²)

# 5. Engine/s

BRP-Rotax GmbH 912 iSc3 Sport

CAA Type Certificate No. UK.TC.E.00050

# 5.1 Engine Limits

Max rotational speed (5 min) 5800 rpm.

Max continuous rotational speed 5500 rpm (Engine shaft rpm)

Other engine limitations are listed in Doc. 2002/1032 "Aircraft Flight Manual".

#### 6. Propellers

One MT Propeller MTV-21-A/180-51

Two blades, variable pitch constant speed.

CAA Type Certificate No. EASA.P.101

Diameter: 1800 mm

# 7. Fluids

# 7.1 Fuel

Min. RON 95 EN 228 super

EN228 super plus

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AVGAS 100LL (see Rotax Operators Manual)

#### 7.2 Oil

Lubricant specifications and grade are detailed in the "Rotax Operators Manual" and in its related documents.

# 7.3 Coolant

Coolant specifications and details are detailed in the "Rotax Operators Manual" and in its related documents Section 2.

# 8. Fluid capacities

#### 8.1 Fuel

Total: 140 litres
Usable: 131.6 litres

# 8.2 Oil

Total: 3.0 litres
Minimum: 2.5 litres

# 9. Air Speeds

Design Manoeuvring Speed V <sub>A</sub>	102 KIAS	103 KCAS
Flap Extended Speed (Take-Off) V <sub>FE_TO</sub> :	106 KIAS	105 KCAS
Flap Extended Speed (Land) $V_{\text{FE\_LAND}}$ :	96 KIAS	95 KCAS
Maximum structural cruising speed $V_{\text{NO}}$ :	107 KIAS	108 KCAS
Never exceed speed V <sub>NE</sub> :	135 KIAS	136 KCAS

# 10. All weather Operations Capability

Day/Night VFR

**IFR** 

Flight into expected or actual icing conditions is prohibited.

#### 11. Maximum Masses

Take-Off: 720 kg Landing: 720 kg

# 12. Centre of Gravity Range

Forward Limit: 1.753m behind Datum up to 550 kg

1.780 m behind Datum at 720 kg (MTOM)

Aft Limit: 1.889 m behind Datum

#### 13. Datum

Propeller support flange

# 14. Levelling Means

Seat support trusses (see "P-Mentor Flight Manual" Section 6 for the procedure).

# 15. Minimum Flight Crew

1 (Pilot)

# 16. Maximum Passenger Seating Capacity

1

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# 17. Baggage/Cargo Compartments

Max Allowable Load: 30 kg (66 lb) Location: 2.26 m aft the datum

# 18. Wheels and Tyres

Nose Wheel Tyre Size: 5.00-5 Main Wheel Tyre Size: 5.00-5

# IV. Operating and Service Instructions

# 1. Aircraft Flight Manual (AFM)

Doc. No 2002/1032 "Aircraft Flight Manual" Issue. 1 or latest issue.

# 2. Airplane Maintenance Manual (AMM)

Doc. No 2002/1033 "Aircraft Maintenance Manual" Issue. 1 or latest issue.

# 3. Illustrated Parts Catalogue (IPC)

Doc. No 2002/1234 "Aircraft Illustrated Parts Catalogue" Issue. 1 or latest issue.

# V. Notes

None.

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# Section 4 Administrative Section

# I. Acronyms and Abbreviations

Acronym / Abbreviation	Definition
a/c	Aircraft
AFM	Aircraft Flight Manual
AMM	Aircraft Maintenance Manual
ASTM	American Society for Testing and Materials
CAA	Civil Aviation Authority
CRI	Certification Review Item
CS	Certification Specification
ft	Feet
ICAO	International Civil Aviation Organization
IFR	Instrument Flight Rules
IPC	Illustrated Part Catalogue
JAA	Joint Aviation Authorities
KCAS	Knots Calibrated Air Speed
kg	Kilogram(s)
KOEL	Kind of Operations Equipment List
lb	Pound(s)
LND	Landing
m	Metre(s)
MAC	Mean Aerodynamic Chord
MTOM	Maximum Take-Off Mass
S/N	Serial Number
TC	Type Certificate
TCDS	Type Certificate Data Sheet
TCDSN	Type Certificate Data Sheet for Noise
TCH	Type Certificate Holder
ТО	Take-Off
UK	United Kingdom
VFR	Visual Flight Rules
VLA	Very Light Aircraft

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# II. Type Certificate Holder Record

TCH Record	Period
Costruzioni Aeronautiche TECNAM S.p.A.	Present. No changes.
Via Salvo D'Acquisto, 62	
80042, Boscotrecase (Naples)	
Italy	

# **III. Amendment Record**

TCDS Issue No.	TCDS Issue Date	Changes	TC Issue and Date
1	24 Nov 2022	The content of the initial issue of UK CAA TCDS was taken from EASA TCDS No. EASA.A.006 Issue 10 dated 20 December 2019 which was the current EASA version at 31 December 2020 and therefore the version of the TCDS for the P2002 accepted by the UK under Article 15 of Annex 30 of the UK-EU Trade and Cooperation Agreement.Section 1 II.2  The following changes have been made:  Section 1.III.8.1: added reference to UK TCDSN.  Section 1.III.5.1: added reference to UK TCDS for the engine.  Section 2.III.8.1: added reference to UK TCDS for the engine.  Section 3: created new section for the addition of the P-Mentor model, MOD2002/217 (EASA approval No. 10078966) (CAA ref. UK.MAJ.00164)	Issue 1 24 Nov 2022

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