TYPE-CERTIFICATE DATA SHEET

No. EASA.P.110

for Propeller
HELICE EVRA propellers series

Type Certificate Holder
PRODUCTION EVRA

4 Avenue de la forêt d'Halatte
60100 Creil
France

For Models:

D 9 27	91.77.34
D 9 28	91.78.34 (F)
D 11 28	91.86.34 (F)
D 11 28 1	94.79.26
D 11 28 4	120.55.B7
D 11 28 6	130.38.29
D 11 28 7	133/78/906.4
D 11 28 8	160/81/11 ib
D 11 28 9	164/152/116
D 11 29	164/102/905
DH 5220	180-170H5
6006	182/133/1406
745	182/171/1005
88.75.34	192 121 23
90.55.C3	HL21.552

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I. General

1. Type / Models

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2. Type Certificate Holder

PRODUCTION EVRA
4 Avenue de la forêt d'Halatte
60100 Creil
France

Alternative Design Organisation Approval No.: EASA.AP173

3. Manufacturer

PRODUCTION EVRA
Same address

4. Date of Application

D 9 27	Before 1985 (*)	91.77.34	Before 1985 (*)
D 9 28	Before 1985 (*)	91.78.34 (F)	Before 1985 (*)
D 11 28	Before 1985 (*)	91.86.34 (F)	Before 1985 (*)
D 11 28 1	Before 1985 (*)	94.79.26	Before 1985 (*)
D 11 28 4	Before 1985 (*)	120.55.B7	Before 1985 (*)
D 11 28 6	Before 1985 (*)	130.38.29	Before 1985 (*)
D 11 28 7	Before 1985 (*)	133/78/906.4	29 January 2001 (*)
D 11 28 8	Before 1985 (*)	160/81/11 ib	24 July 1985 (*)
D 11 28 9	Before 1985 (*)	164/152/116	8 June 1999 (*)
D 11 29	Before 1985 (*)	164/102/905	3 January 2001 (*)
DH 5220	Before 1985 (*)	180-170H5	Before 1985 (*)
6006	Before 1985 (*)	182/133/1406	05/09/1998 (*)
745	Before 1985 (*)	182/171/1005	30 January 2006
88.75.34	Before 1985 (*)	192 121 23	Before 1985 (*)
90.55.C3	Before 1985 (*)	HL21.552	Before 1985 (*)

(*) Application was made to DGAC-France. Before 1985, the date of application was not recorded.

5. EASA Type Certification Date

D 9 27	Before 1968 (*)	Fournier RF3 aircraft FN 90
D 9 28	Before 1968 (*)	Fournier RF3 aircraft FN 90
D 11 28	27/03/1962 (*)	STAé 33.591
D 11 28 1	24/11/1959 (*)	STAé 44.744
D 11 28 4	16/02/1962 (*)	STAé 32.003
D 11 28 6	31/05/1966 (*)	STAé 35.884
D 11 28 7	13/07/1962 (*)	STAé 37.891
D 11 28 8	06/06/1963 (*)	STAé 36.257
D 11 28 9	17/06/1963 (*)	STAé 36.594
D 11 29	10/11/1959 (*)	STAé 44.087
DH 5220	Before 1985 (*)	
6006	Before May 1961 (*)	Stampe SV4 aircraft FN 6
745	Before May 1961 (*)	Stampe SV4 aircraft FN 6
88.75.34	Before 25 April 1967 (*)	Jodel DR221 aircraft FN 111
90.55.C3	24/09/1974 (*)	DGAC 5983
91.77.34	25/08/1970 (*)	STAé 38.519
91.78.34 (F) (**)	Before 09/09/1965 (*)	Jodel DR250 aircraft FN 100
91.86.34 (F) (**)	Before 09/09/1965 (*)	Jodel DR250 aircraft FN 100
94.79.26	03/07/1972 (*)	STAé 37.100
120.55.B7	12/02/1969 (*)	STAé 31.744
130.38.29	26/03/1965 (*)	STAé 33.433
133/78/906.4	29 January 2001 (*)	H3
160/81/11 ib	18 February 1986 (*)	STPA 032635
164/152/116	8 June 1999 (*)	H1
164/102/905	3 January 2001(*)	H2
180-170H5	05/12/1978(*)	CAP 10 aircraft FN 125
182/133/1406	05/11/2001(*)	H4
182/171/1005	20/04/2007	EASA.P.110
192 121 23	06/06/1986(*)	DGAC 53620
HL21.552	Before January 1968(*)	Morane 317 aircraft FN 66

(*) by DGAC-France

(**) “F” with an optional 20mm glued hub spacer

Notes:

(1) “FN” means “Fiche de Navigabilité”, equivalent to a TCDS.

(2) Records are not sufficient to retrieve some propeller certification dates. The oldest reference found in an aircraft TCDS is used as proof of certification.

II. Certification Basis

1. Reference Date for determining the applicable airworthiness requirements
See date of application.

2. EASA Certification Basis

2.1. Airworthiness Standards

D 9 27	NORME AIR 4510 by document air 2051	91.77.34	NORME AIR 4510 by document air 2051
D 9 28	NORME AIR 4510 by document air 2051	91.78.34 (F)	NORME AIR 4510 by document air 2051
D 11 28	NORME AIR 4510 by document air 2051	91.86.34 (F)	NORME AIR 4510 by document air 2051
D 11 28 1	NORME AIR 4510 by document air 2051	94.79.26	NORME AIR 4510 by document air 2051
D 11 28 4	NORME AIR 4510 by document air 2051	120.55.B7	NORME AIR 4510 by document air 2051
D 11 28 6	NORME AIR 4510 by document air 2051	130.38.29	NORME AIR 4510 by document air 2051
D 11 28 7	NORME AIR 4510 by document air 2051	133/78/906.4	JAR-P Change 7 and orange paper P 96/1
D 11 28 8	NORME AIR 4510 by document air 2051	160/81/11 ib	JAR-22, issue n° 5
D 11 28 9	NORME AIR 4510 by document air 2051	164/152/116	JAR-22, issue n° 5
D 11 29	NORME AIR 4510 by document air 2051	164/102/905	JAR-P Change 7 and orange paper P 96/1
DH 5220	NORME AIR 4510 by document air 2051	180-170H5	NORME AIR 4510 by document air 2051
6006	NORME AIR 4510 by document air 2051	182/133/1406	JAR-P Change 7 and orange paper P 96/1
745	NORME AIR 4510 by document air 2051	182/171/1005	CS-P initial issue
88.75.34	NORME AIR 4510 by document air 2051	192 121 23	NORME AIR 4510 by document air 2051
90.55.C3	NORME AIR 4510 by document air 2051	HL21.552	NORME AIR 4510 by document air 2051

2.2. Special Conditions (SC)
None

2.3. Equivalent Safety Findings (ESF)
None

2.4. Deviations
None

III. Technical Characteristics

1. Type Design Definition

Reference of drawing documents defining the type design:

D 9 27	D 9 27	91.77.34	91.77.34
D 9 28	D 9 28	91.78.34 (F)	91.78.34
D 11 28	D 11 28	91.86.34 (F)	91.86.34
D 11 28 1	D 11 28 1	94.79.26	94.79.26
D 11 28 4	D 11 28 4	120.55.B7	120.55.B7
D 11 28 6	D 11 28 6	130.38.29	130.38.29
D 11 28 7	D 11 28 7	133/78/906.4	133/78/906.4, change 01, dated 29/01/01
D 11 28 8	D 11 28 8	160/81/11 ib	160/81/11 ib, change 01, dated 18/02/86
D 11 28 9	D 11 28 9	164/152/116	164/152/116, change 01, dated 02/1999
D 11 29	D 11 29	164/102/905	164/102/116, change 01, dated 03/01/01
DH 5220	DH 5220	180-170H5	180/170/H5
6006	6006	182/133/1406	182/133/1406, change 01
745	745	182/171/1005	182/171/1005, change 01, dated August 2006
88.75.34	88.75.34	192 121 23	192 121 23
90.55.C3	90.55.C3	HL21.552	HL21.552

2. Description

2-blade fixed pitch propeller made in one piece cut in bonded beech planks.

3. Equipment

None for all, except spinner for model 182/133/1406.

4. Dimensions

Diameter (cm):

D 9 27	136	91.77.34	182
D 9 28	136	91.78.34 (F)	182
D 11 28	176	91.86.34 (F)	182
D 11 28 1	176	94.79.26	188
D 11 28 4	176	120.55.B7	240
D 11 28 6	176	130.38.29	260
D 11 28 7	176	133/78/906.4	133
D 11 28 8	176	160/81/11 ib	160
D 11 28 9	176	164/152/116	164
D 11 29	174	164/102/905	164
DH 5220	198	180-170H5	180
6006	198	182/133/1406	182
745	198	182/171/1005	182
88.75.34	176	192 121 23	192
90.55.C3	180	HL21.552	240

5. Weight (Kg)

D 9 27	3	91.77.34	7
D 9 28	3	91.78.34 (F)	7
D 11 28	5	91.86.34 (F)	7
D 11 28 1	5	94.79.26	7
D 11 28 4	5	120.55.B7	14
D 11 28 6	5	130.38.29	18
D 11 28 7	5	133/78/906.4	3
D 11 28 8	5	160/81/11 ib	4
D 11 28 9	5	164/152/116	4
D 11 29	5	164/102/905	4
DH 5220	8	180-170H5	7
6006	8	182/133/1406	7
745	8	182/171/1005	6
88.75.34	5	192 121 23	8
90.55.C3	5	HL21.552	14

6. Hub / Blade Combinations

N/A

7. Control System

N/A

8. Adaptation to Engine

The propeller is attached to the engine with 6 or 8 bolts. These bolts are not part of the definition of propeller.

9. Direction of Rotation

Clockwise viewed in flight direction for all, except anticlockwise for D 9 27, D 9 28, 133/78/906.4, 160/81/11 ib and 164/102/905

IV. Operating Limitations

1. Approved Installations

	Engine	Aircraft
D 9 27	RECTIMO engine AR 1200 45 hp	FOURNIER - B.B Standard
D 9 28	RECTIMO engine AR 1200 45 hp	RF 3.4 - Jodel B.B caréné
D 11 28	CONTINETAL O 200 engine 100 hp	Jodel D 117 - 119
D 11 28 1	CONTINENTAL C 90 engine 90 hp	Jodel 117 - 119 - 120 DR 100 - Emeraude CP 301
D 11 28 4	CONTINETAL O 200 engine 100 hp	CP 1310; DR 105 - 1050
D 11 28 6	Lycoming 0235 115 hp	Not used
D 11 28 7	CONTINETAL O 200 engine 100 hp	DR105-1050, DR 1051, DR 220
D 11 28 8	POTEZ 4E20 engine 105 hp	DR 1051- DR150
D 11 28 9	POTEZ 4E20 engine 105 hp	SUPER EMERAUDE CP 1315
D 11 29	CONTINENTAL engine 65 hp	JODEL 112 - MINICABGYRO - PIPER J.3
DH 5220	GYPSY engine 145 hp	TIGER MOTH
6006	RENAULT engine 140 hp	STAMPE SV4
745	RENAULT engine 140 hp	STAMPE SV4
88.75.34	LYCOMING 0235 engine 115/118 hp	JODEL DR 221
90.55.C3	CONTINETAL O 200 engine 100 hp	MORANE 880 - PYRANA WASSMER
91.77.34	Lycoming 0320 engine 160 hp	STAMPE SV4
91.78.34 (F)	Lycoming 0320 engine 160 hp	JODEL DR 250 - PIEL CP 605 A1
91.86.34 (F)	Lycoming 0320 engine 160 hp	JODEL DR 250
94.79.26	Lycoming 0360 engine 180 hp	MOUSQUETAIRE ABCDE ABEILLE
120.55.B7	Continental W 670 220 HP	MORANE 317
130.38.29	JACOB engine 300 hp	MORANE 505
133/78/906.4	RECTIMO AR 1200	FOURNIER RF 4
160/81/11 ib	JPX 4TX 60	ROBIN ATL
164/152/116	Rotax 912	Issoire Aviation APM 20 Lionceau
164/102/905	JPX 4TX 75	JODEL D 112
180-170H5	Lycoming 0360 engine 180 hp	CAP 10
182/133/1406	Lycoming 0320 engine 160 hp	
182/171/1005	Rotax 912S	Issoire Aviation APM 30 Lion
192 121 23	Lycoming 0360 engine 180 hp	JODEL D140
HL21.552	Continental W 670 220 HP	MORANE 317

2. Maximum Take Off Power and Maximum Continuous Power

Refer to approved installations.

3. Speed (rpm)

D 9 27	None	91.77.34	None
D 9 28	None	91.78.34 (F)	None
D 11 28	None	91.86.34 (F)	None
D 11 28 1	None	94.79.26	None
D 11 28 4	None	120.55.B7	None
D 11 28 6	None	130.38.29	None
D 11 28 7	None	133/78/906.4	3600
D 11 28 8	None	160/81/11 ib	3600
D 11 28 9	None	164/152/116	2552
D 11 29	None	164/102/905	3000
DH 5220	None	180-170H5	None
6006	None	182/133/1406	2750
745	None	182/171/1005	2386
88.75.34	None	192 121 23	None
90.55.C3	None	HL21.552	None

4. Propeller Pitch Angle

D 9 27	63	91.77.34	120
D 9 28	69	91.78.34 (F)	139
D 11 28	141	91.86.34 (F)	156
D 11 28 1	133	94.79.26	138
D 11 28 4	112	120.55.B7	110
D 11 28 6	120	130.38.29	101
D 11 28 7	126	133/78/906.4	78
D 11 28 8	141	160/81/11 ib	81
D 11 28 9	141	164/152/116	152
D 11 29	136	164/102/905	102
DH 5220	139	180-170H5	170
6006	141	182/133/1406	133
745	143	182/171/1005	171
88.75.34	130	192 121 23	121
90.55.C3	100	HL21.552	110

V. Operating and Service Instructions

Manuals and Instructions for Continued Airworthiness (ICA): For all propellers, document “CONSEILS PRATIQUES DE MONTAGE ET D’ENTRETIEN DE VOTRE HELICE”, CMM 61/10/01 Issue 2 dated 02/99, or later approved issue.

VI. Notes

1. The EASA approved Airworthiness Limitations Section of the Instructions for Continued Airworthiness is published in the applicable “CONSEILS PRATIQUES DE MONTAGE ET D’ENTRETIEN DE VOTRE HELICE” document, chapter 11.0 "Airworthiness Limitations Section". This ALS section is empty because no life limit is necessary for these models.

SECTION: ADMINISTRATIVE

I. Acronyms and Abbreviations

N/A Not Applicable
Rpm Revolutions per minute

II. Type Certificate Holder Record

N/A

III. Change Record

TCDS Issue	Date	Changes	TC Issue Date
Issue 01	20 April 2007	Initial Issue	Initial Issue, 20 April 2007
Issue 02	07 December 2021	Correction of model designation DH 5520 to DH 5220. Record of optional (F) 20mm glued hub spacer for 91.78.34 and 91.86.34 models. Other changes are editorial to match the current TCDS template.	Re-issued, 07 December 2021

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