

European Aviation Safety Agency

EASA

TYPE-CERTIFICATE DATA SHEET

Number : P.110

Issue : 01

Date : 20 April 2007

Type : PRODUCTION EVRA
HELICE EVRA series propellers

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I. General

1. Propeller models:

The following models of “HELICE EVRA” type are addressed in this TCDS.

D 9 27	91.86.34
D 9 28	94.79.26
D 11 28	120.55.B7
D 11 28 1	130.38.29
D 11 28 4	133/78/906.4
D 11 28 6	160/81/11 ib
D 11 28 7	164/152/116
D 11 28 8	164/102/905
D 11 28 9	180-170H5
D 11 29	182/133/1406
DH 5520	182/171/1005
6006	192 121 23
745	HL21.552
88.75.34	
90.55.C3	
91.77.34	
91.78.34	

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
4 Avenue de la forêt d’Halatte
60100 CREIL
FRANCE

4. EASA Certification Application Date:

Model	Certification application date
D 9 27	Before 1985(*)
D 9 28	Before 1985(*)
D 11 28	Before 1985(*)
D 11 28 1	Before 1985(*)
D 11 28 4	Before 1985(*)
D 11 28 6	Before 1985(*)
D 11 28 7	Before 1985(*)
D 11 28 8	Before 1985(*)
D 11 28 9	Before 1985(*)
D 11 29	Before 1985(*)
DH 5520	Before 1985(*)
6006	Before 1985(*)
745	Before 1985(*)
88.75.34	Before 1985(*)
90.55.C3	Before 1985(*)
91.77.34	Before 1985(*)
91.78.34	Before 1985(*)
91.86.34	Before 1985(*)
94.79.26	Before 1985(*)
120.55.B7	Before 1985(*)
130.38.29	Before 1985(*)
133/78/906.4	29 January 2001(*)
160/81/11 ib	24 July 1985(*)
164/152/116	8 June 1999(*)
164/102/905	3 January 2001(*)
180-170H5	Before 1985(*)
182/133/1406	05/09/1998(*)
182/171/1005	30 January 2006
192 121 23	Before 1985(*)
HL21.552	Before 1985(*)

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

5. EASA Certification Date:

Model	Certification date	Reference of former DGAC-F certificate
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 5520	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	Before 09/09/1965(*)	Jodel DR250 aircraft FN 100
91.86.34	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

Notes :

- (1) "FN" means "fiche de navigabilité", equivalent to TCDS.
- (2) Records are not sufficient to retrieve some propeller certification dates : the oldest reference found in aircraft TCDS is used as proof of certification.

II. Certification Basis

1. Airworthiness Standard

Model	Certification basis : airworthiness code
D 9 27	NORME AIR 4510 by document air 2051
D 9 28	NORME AIR 4510 by document air 2051
D 11 28	NORME AIR 4510 by document air 2051
D 11 28 1	NORME AIR 4510 by document air 2051
D 11 28 4	NORME AIR 4510 by document air 2051
D 11 28 6	NORME AIR 4510 by document air 2051
D 11 28 7	NORME AIR 4510 by document air 2051
D 11 28 8	NORME AIR 4510 by document air 2051
D 11 28 9	NORME AIR 4510 by document air 2051
D 11 29	NORME AIR 4510 by document air 2051
DH 5520	NORME AIR 4510 by document air 2051
6006	NORME AIR 4510 by document air 2051
745	NORME AIR 4510 by document air 2051
88.75.34	NORME AIR 4510 by document air 2051
90.55.C3	NORME AIR 4510 by document air 2051
91.77.34	NORME AIR 4510 by document air 2051
91.78.34	NORME AIR 4510 by document air 2051
91.86.34	NORME AIR 4510 by document air 2051
94.79.26	NORME AIR 4510 by document air 2051
120.55.B7	NORME AIR 4510 by document air 2051

130.38.29	NORME AIR 4510 by document air 2051
133/78/906.4	JAR-P Change 7 and orange paper P 96/1
160/81/11 ib	JAR-22, issue n° 5
164/152/116	JAR-22, issue n° 5
164/102/905	JAR-P Change 7 and orange paper P 96/1
180-170H5	NORME AIR 4510 by document air 2051
182/133/1406	JAR-P Change 7 and orange paper P 96/1
182/171/1005	CS-P initial issue
192 121 23	NORME AIR 4510 by document air 2051
HL21.552	NORME AIR 4510 by document air 2051

2. **Special Conditions (SC):** None
3. **Deviations:** None
4. **Equivalent Safety Findings (ESF):** None
5. **Environmental standards :** not applicable

III. Technical Characteristics

1.Type Design Definition:

1.1 Drawing « helice bois à pas fixe »

Model	Reference of documents defining the type design
D 9 27	D 9 27
D 9 28	D 9 28
D 11 28	D 11 28
D 11 28 1	D 11 28 1
D 11 28 4	D 11 28 4
D 11 28 6	D 11 28 6
D 11 28 7	D 11 28 7
D 11 28 8	D 11 28 8
D 11 28 9	D 11 28 9
D 11 29	D 11 29
DH 5520	DH 5520
6006	6006

745	745
88.75.34	88.75.34
90.55.C3	90.55.C3
91.77.34	91.77.34
91.78.34	91.78.34
91.86.34	91.86.34
94.79.26	94.79.26
120.55.B7	120.55.B7
130.38.29	130.38.29
133/78/906.4	133/78/906.4, change 01, dated 29/01/01
160/81/11 ib	160/81/11 ib, change 01, dated 18/02/86
164/152/116	164/152/116, change 01, dated 02/1999
164/102/905	164/102/116, change 01, dated 03/01/01
180-170H5	180/170/H5
182/133/1406	182/133/1406, change 01
182/171/1005	182/171/1005, change 01, dated August 2006
192 121 23	192 121 23
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 182/133/1406

4. Dimensions:

Model	Diameter (cm)
D 9 27	136
D 9 28	136
D 11 28	176

D 11 28 1	176
D 11 28 4	176
D 11 28 6	176
D 11 28 7	176
D 11 28 8	176
D 11 28 9	176
D 11 29	174
DH 5520	198
6006	198
745	198
88.75.34	176
90.55.C3	180
91.77.34	182
91.78.34	182
91.86.34	182
94.79.26	188
120.55.B7	240
130.38.29	260
133/78/906.4	133
160/81/11 ib	160
164/152/116	164
164/102/905	164
180-170H5	180
182/133/1406	182
182/171/1005	182
192 121 23	192
HL21.552	240

5. Mass

Model	Mass (kg)
D 9 27	3
D 9 28	3
D 11 28	5
D 11 28 1	5

D 11 28 4	5
D 11 28 6	5
D 11 28 7	5
D 11 28 8	5
D 11 28 9	5
D 11 29	5
DH 5520	8
6006	8
745	8
88.75.34	5
90.55.C3	5
91.77.34	7
91.78.34	7
91.86.34	7
94.79.26	7
120.55.B7	14
130.38.29	18
133/78/906.4	3
160/81/11 ib	4
164/152/116	4
164/102/905	4
180-170H5	7
182/133/1406	7
182/171/1005	6
192 121 23	8
HL21.552	14

6. Hub/Blade-Combinations:

The propeller is made in one piece. No other blade/hub combination is possible.

7. Control System: Not applicable

8. Interface with the engine:

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

9. Direction of Rotation:

Clockwise viewed from the pilot place for all except :

Anticlockwise for D 9 27, D 9 28, 133/78/906.4, 160/81/11 ib and 164/102/905.

IV. Operational Limitations

1. Propeller Speed:

Model	Propeller speed limit (rpm)
D 9 27	None
D 9 28	None
D 11 28	None
D 11 28 1	None
D 11 28 4	None
D 11 28 6	None
D 11 28 7	None
D 11 28 8	None
D 11 28 9	None
D 11 29	None
DH 5520	None
6006	None
745	None
88.75.34	None
90.55.C3	None
91.77.34	None
91.78.34	None
91.86.34	None
94.79.26	None
120.55.B7	None
130.38.29	None
133/78/906.4	3600
160/81/11 ib	3600
164/152/116	2552
164/102/905	3000
180-170H5	None
182/133/1406	2750

182/171/1005	2386
192 121 23	None
HL21.552	None

2. Approved installation

Model	Approved installation	
	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	CONTINENTAL 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	CONTINENTAL O 200 engine 100 hp	CP 1310; DR 105 - 1050
D 11 28 6	Lycoming 0235 115 hp	Not used
D 11 28 7	CONTINENTAL 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 5520	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	CONTINENTAL O 200 engine 100 hp	MORANE 880 - PYRANA WASSMER
91.77.34	Lycoming 0320 engine 160 hp	STAMPE SV4
91.78.34	Lycoming 0320 engine 160 hp	JODEL - DR 250 - PIEL CP 605 A
91.86.34	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

3. Propeller Pitch Angle:

Model	Pitch angle
D 9 27	63
D 9 28	69
D 11 28	141
D 11 28 1	133
D 11 28 4	112
D 11 28 6	120
D 11 28 7	126
D 11 28 8	141
D 11 28 9	141
D 11 29	136
DH 5520	139
6006	141
745	143
88.75.34	130
90.55.C3	100
91.77.34	120
91.78.34	139
91.86.34	156
94.79.26	138
120.55.B7	110
130.38.29	101
133/78/906.4	78
160/81/11 ib	81
164/152/116	152

164/102/905	102
180-170H5	170
182/133/1406	133
182/171/1005	171
192 121 23	121
HL21.552	110

V. Operating and Service Instructions

Operating and Maintenance Manual : for all propellers, document CMM 61/10/01 Issue 2 dated 02/99