



AGÊNCIA NACIONAL DE AVIAÇÃO CIVIL - BRASIL

TYPE CERTIFICATE DATA SHEET Nº EH-9812

Type Certificate Holder:

MCCAULEY PROPELLER SYSTEMS

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USA

EH-9812-02

Sheet 01

McCauley

D3A34C(4- -)

3A32C(4- -)

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Propellers of models described herein conforming with this data sheet, which is part of Type Certificate No. 9812, meet the minimum standards for use in certificated aircraft in accordance with pertinent aircraft data sheets and applicable portions of the Brazilian Aeronautical Regulations provided they are installed, operated, and maintained as prescribed by the approved manufacturer's manuals and other instructions.

TYPE Constant speed, hydraulic

ENGINE SHAFT Special flange 4 in. B.C.

HUB MATERIAL Aluminum Alloy

BLADE MATERIAL Aluminum Alloy

NUMBER OF BLADES 3 (three)

HUB ELIGIBLE 3A32C418, D3A34C401, D3A34C402, D3A34C420, D3A34C444 and **D3A34C447**.

Blade Eligible (See Notes 2)	Max. Continuous Power		Takeoff power		Diameter Limits See NOTE 2		Approx. Max. Weight Compl.	
	HP	RPM	HP	RPM	m	(in)	Kg	(lb)
<u>Hub Model D3A34C401 and D3A34C402</u>								
90DF[X]-0 to 90DF[X]-16	325	2 700	325	2 850	2.28 (90) to 1.88 (74) (-0 to -16)		30.62	(67.5) 32.57 (71.8) ⁽¹⁾
<u>Hub Model 3A32C418</u>								
82NR[X]-2 to 82NR[X]-12	280	2 500	280	2 500	2.03 (80) to 1.78 (70) (-2 to -12)		30.39	(67.0)
<u>Hub Model D3A34C420</u>								
90DF[X]-0 to 90DF[X]-16	325	2 700	325	2 850	2.28 (90) to 1.88 (74) (-0 to -16)		30.62	(67.5)
<u>Hub Model D3A34C444</u>								
78ML[X]-0 to 78ML[X]-4	325	2 700	325	2 850	1.98 (78) to 1.88 (74) (-0 to -4)		32.69	(72.0)
<u>Hub Model D3A34C447</u>								
78ML[X]-0 to 78ML[X]-4	325	2 700	325	2 850	1.98 (78) to 1.88 (74) (-0 to -4)		33.38	(73.6)

(1) Higher weight applies to D3A34C402

CERTIFICATION BASIS For model D3A34C420:
Brazilian Type Certificate No.9812 based on the RBHA 35, which endorses the 14 CFR Part 35 effective 14 October 1980, including amendments 35-1 thru 35-5.

For model D3A34C401, D3A34C402, 3A32C418, D3A34C444 and **D3A34C447** Brazilian Type Certificate No.9812 based on the RBHA 35, which endorses the 14 CFR Part 35 effective 18 August 1990, including amendments 35-1 thru 35-6.

TYPE CERTIFICATION	<u>Model</u>	<u>Application</u>	<u>Issued TC</u>
	D3A34C(4 - -)	26 June 1993	13 December 1998
	3A32C(4 - -)	26 March 1996	13 December 1998

PRODUCTION BASIS FAA Production Certificate No. 3

IMPORT REQUIREMENTS Each propeller imported separately and/or spare parts must be accompanied by an Airworthiness Certificate for Export and/or an Airworthiness Approval Tag, respectively, issued by FAA, attesting that the particular propeller and/or parts were submitted to the governmental quality control before delivery and are in conformity with the ANAC approved type design.

NOTES:

- NOTE 1** Hub model Designation X 3 A 34 C 401 -A
X Indicates dowel location with respect to centerline through blade sockets, viewing hub from flange mounting face.
 Blank - 60° and 240° clockwise with No. 1 blade vertical and up
 D - 90° and 270° clockwise with No. 1 blade vertical and up
- 3 Number of blades
- A A – denotes special flange 10.16 cm (4") B.C.
- 34 McCauley blade shank size.
- C C – denotes constant shank speed model.
- 401 Any change affecting eligibility.
- A Minor change not affecting interchangeability or eligibility.
- NOTE 2** Blade Model Designation X - 90 DF[X] -0
X Minor change not affecting interchangeability or eligibility.
- 90 Basic diameter in inches.
- DF[X] Characteristics of blade design (planform, etc). Suffix [X] indicates blade butt staking dimensions for actuating pin attachment.
- 0 Reduction in inches from basic design diameter (as -4, diameter reduced 4 inches to 86 inches).
- NOTE 3** Pitch Control
 With McCauley governor Model C290D[X]/T[X] Wt 1.27 kg (2.8 lb)
- NOTE 4** Not Applicable.
- NOTE 5** Not Applicable.
- NOTE 6** Not Applicable.

NOTE 7

Accessories.

(a) Propeller deicing

- (1) Model 90DF[X] blades with Safeway 6199 Deicer installed per Cessna Installation Drawing 1201072 or 1201188.
- (2) Model 82NR[X] blade installed per McCauley Installation Drawing E-40623.
- (3) Model 78ML[X] blades with McCauley B-40245-XX Deicer installed per McCauley Specification MC-2611.

(b) Spinners

- (1) Model D3A34C402/90DF[X] with plain or electric deicer spinner: Reference 1250419-10/-15 Dome, 1250414-6/-8 Bulkhead, and 1250419-9/-14 Installation.
- (2) Model 3A32C418/82NR[X] with McCauley spinner installation D-7192.
- (3) Model D3A34C444/78ML[X] with McCauley spinner installation E-7819.
- (4) Model D3A34C447/78ML[X] with McCauley spinner installation E-7839.

NOTE 8

Not Applicable.

NOTE 9

Table of propeller-engine Combinations Approved Vibration wise for use on normal Single-Engine Tractor Aircraft.

The Maximum and minimum propeller diameters that can be used from a vibration standpoint are shown below. No reduction below the minimum diameter listed is permissible since this figure includes the diameter reduction allowable for repair purpose.

Hub Model	Blade Model	Engine Model	Crankshaft damper configuration	Max. Dia. m (in)	Min Dia. m (in)	Placards
D3A34C401 D3A34C402	90DFA	ContinentalTSIO-520 series (up to 310 hp & 2 700 propeller rpm rating at takeoff and 285 hp & 2 600 propeller rpm max. continuous)	Two 6 th order, one 5 th order, and one 4 th order	2.03 (80)	1.98 (78)	Avoid continuous operation between 1 850 and 2 150 propeller rpm for power settings above 24" manifold pressure
D3A34C401 D3A34C402	90DFA	ContinentalTSIO-520 series (up to 310 hp & 2 700 propeller rpm rating at takeoff and 285 hp & 2600 propeller rpm max. continuous)	Two 6 th order, one 5 th order, and one 4 th order	1.98 (78)	1.93 (76)	Avoid continuous operation between 1 850 and 2 150 propeller rpm for power settings above 24" manifold pressure

- NOTE 10** Special Note
Aircraft installation must be approved as part of the aircraft type certificate upon with the applicable aircraft airworthiness requirements.
- NOTE 11** The D3A34C444/78ML[X]-0 and D3A34C447/78ML[X]-0 propeller was added in compliance with FAR part 21-101.


for **CLÁUDIO PASSOS SIMÃO**
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