MINISTÉRIO DA AERONÁUTICA
DEPARTAMENTO DE PESQUISAS E DESENVOLVIMENTO
CENTRO TÉCNICO AEROESPACIAL

TYPE CERTIFICATE DATA SHEET Nº EH-8006-03

Type Certificate Holder:

HARTZELL PROPELLER INC.
One Propeller Place
Piqua, Ohio - OH 45356
USA

EH-8006-03
Sheet 01

HARTZELL

HC-B3T

June 1999

Propellers of models described herein conforming with this data sheet, which is part of Type Certificate No. 8006, 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 (See Notes 3 and 4)
ENGINE SHAFT	Special flange: See Note 1
HUB MATERIAL	Alloy Steel
BLADE MATERIAL	Alluminum Alloy
NUMBER OF BLADES	Three

HUB ELIGIBLE HC-B3TN-3, HC-B3TN-5, HC-B3TF-7

Blade Eligible (See Note 2)	Max.Continuous Power		Takeoff power		Diameter Limits (See Note 2)		Approx. Max. Weight Compl. (See Notes 3 and 7)	
	hp	rpm	hp	rpm	m	in	kg	lb
Hub Model HC-B3TN-3								
T10178 ( )-0 to T10178 ( )-21	750 or 840	2200 2000	800 or 1000	2200 2000	2.58 to 2.04 (-0 to –21)	101 3/8 80 3/8	57.61	127
Hub Model HC-B3TN-3, HC-B3TN-5								
T10282 ( )+6 to T10282 ( )-16	725	1591	776	1591	2.74 to 2.18 (+6 to -16)	108 86	57.83	127.5
T10282 ( )+6 to T10282 ( )+4	725 or 600	1591 2000	776 or 600	1591 2000	2.74 to 2.69 (+6 to +4)	108 106	57.83	127.5
T10282 ( )+4 to T10282 ( )+0	750 or 600	2200 2000	750 or 600	2200 2000	2.69 to 2.59 (+4 to -0)	106 102	57.83	127.5
T10282 ( )+0 to T10282 ( )-21	750 or 840	2200 2000	800 or 1000	2200 2000	2.59 to 2.06 (-0 to -21)	102 81	57.61	127
T10282 ( )-21 to T10282 ( )-30	750	2200	750	2200	2.06 to 1.83 (-21 to -30)	81 72	57.61	127
Hub Model HC-B3TF-7								
T9212( )-0 to T9212( )-10	450	2180	450	2180	2.34 to 2.08 (-0 to -10)	92 82	53.52	118
T10173( )+1 to T10173( )-31	450	2180	450	2180	2.06 to 1.79 (+1 to –31)	102 3/8 70 3/8	52.16	115

CERTIFICATION BASIS

HC-B3TN-3 and HC-B3TN-5 - CAR Part 14 effective December 15, 1956 with amendments 14-1 thereto

HC-B3TF-7 - RBHA (Brazilian Requirements for Aeronautical Certification), which endorses the FAR Part 35 with amendments 35-1 and 35-2 thereto

TYPE CERTIFICATION

	Application	Issued TC
HC-B3TN-3	07 Nov. 1979	08 Aug. 1980
HC-B3TF-7	06 Dec. 1995	08 Oct. 1998
HC-B3TN-5	16 Dec. 1995	08 Oct. 1998

PRODUCTION BASIS

Production Certificate no. 10

IMPORT REQUIREMENTS

Each propeller imported separately and/or spare parts must be accompanied by an export airworthiness approval issued by the primary authority, attesting that the particular propeller and/or parts were submitted to the governmental quality control before delivery and are in conformity with the CTA approved type design.

NOTES

NOTE 1 Hub model Designation - HC B 3 T N -3 A L, where:

HC Hartzell Controllable

B Identifies basic design

3 Number of blades

T Hartzell blade shank size

N N denotes special flange with 8-9/16" bolts and 2 dowels on a 4 3/4" B.C.
F denotes special flange with 6-1/2" bolts and 2 dowels on a 4" B.C.

-3 Denotes specific design features (See Note 4).

AL Denotes minor change not affecting eligibility.
L when used denotes left hand rotation.
X when used denotes non-reversing (See Note 4(2)(b))
Y when used denotes start locks.

NOTE 2 Blade Model Designation - L T 101 73 ( ) + or - 2Q , where:

L L when used denotes left-hand rotation

T Denotes needle bearing installation in blade shank

101 Basic diameter in inches

73 Basic blade model

( ) H denotes hard alloy (See Note 6).
B, E, or K denotes deicing boots.
S denotes shot peened blade surfaces.
N denotes shank modification
A,C,D, or F denotes blade dimensional modification

+ or - Number of inches cut off from basic diameter (or added to if preceded by "+")

2Q Q when used denotes special 1"-90 deg. factory-bent tip for cut-off diameter.
R when used denotes round blade tip shape

NOTE 3 Pitch Control

Approved with the following governors: Woodward model X210XXX or X210X-XXX series (weight of governor extra)

NOTE 4 (1) Feathering The -2, -3, -5, and -7 models incorporate feathering and unfeathering features.

(2) Reversing
(a) The -3, -5, and -7 models are approved for installation as reversing propellers reversing controls.
(b) The -2 and -3( )X models do not reverse.
(c) For the -7 model, compliance with FAR 35.21 must be established during type certific ation of the aircraft.

NOTE 5 Left-Hand Models .

The left-hand version of an approved model propeller is approved at the same rating and diameter as listed for the right-hand model. (See Notes 1 & 2)

NOTE 6 Interchangeable Blades. (See Note 2)

(a) Blades with "N" after the basic model number may replace those without an "N" either individually or as a set.
(b) Hard and soft alloy blades of the same model designation are interchangeable.

NOTE 7 Accessories.

(1) Propeller Spinner.
(a) Approved with Hartzell spinners (weight of spinners extra).

(2) Propeller Deicing.
(a) Approved with Goodrich electrical deicing kit 77-XXX, 67-XXX, or 65-XXX when installed in accordance with Goodrich report no. 59-728( ), Goodrich drawing no. 7E1284, or Beech installation drawing no. 50T-389045).
(b) Approved with Safeway 5735 deicing kit and 6848, 6860, and 6870 deicing boots when installed in accordance with manufacturer's instructions.

NOTE 8 Shank fairings.

Not applicable.

NOTE 9 Special Limits.

Life Limits and Mandatory Inspections. Airworthiness Limitations, if any, are specified in Hartzell Maintenance Manual 118( ).

NOTE 10 Special Notes.

Propeller installation must be approved as part of the aircraft Type Certificate and demonstrate compliance with the applicable aircraft airworthiness requirements.

LUIZ ALBERTO C. MUNARETTO – Ten.-Cel.-Av.

Chefe da Divisão de Homologação Aeronáutica
(Chief, Divisão de Homologação Aeronáutica)

SILOMAR CAVALCANTE GODINHO – Cel.-Av.

Diretor do Instituto de Fomento e Coordenação Industrial
(Director, Instituto de Fomento e Coordenação Industrial)