TYPE-CERTIFICATE DATA SHEET

No. IM.P.130

for
( )HC-C2Y series propellers

Type Certificate Holder

Hartzell Propeller Inc.
One Propeller Place
Piqua, OH 45356-2634
USA

For Models:
HC-C2YF-(1,2,4)
HC-C2YK-(1,2,4)
HC-C2YL-(1,2,4)
HC-C2YR-(1,2,4)
BHC-C2YF-(1,2,4)
BHC-C2YR-(1,4)
CHC-C2YF-(1,2)
DHC-C2YF-(1,2)
DHC-C2YR-(1,4)

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I. General

1. Type / Models

HC-C2Y / HC-C2YF-(1,2,4), HC-C2YK-(1,2,4), HC-C2YL-(1,2,4), HC-C2YR-(1,2,4)
BHC-C2Y / BHC-C2YF-(1,2,4), BHC-C2YR-(1,4)
CHC-C2Y / CHC-C2YF-(1,2)
DHC-C2Y / DHC-C2YF-(1,2), DHC-C2YR-(1,4)

2. Type Certificate Holder

Hartzell Propeller Inc.
One Propeller Place
Piqua, OH 45356-2634
USA

3. Manufacturer

Hartzell Propeller Inc.

4. Date of Application

HC-C2YF-(1,2):	Before 1963*	BHC-C2YF-4:	08 September 2014
HC-C2YF-4:	Before 1980*	BHC-C2YR-1:	08 September 2014
HC-C2YK-(1,2):	Before 1963*	BHC-C2YR-4:	12 November 2015
HC-C2YK-4:	Before 1980*	CHC-C2YF-(1,2):	Before 1963*
HC-C2YL-(1,2):	Before 1963*	DHC-C2YF-(1,2):	Before 1980*
HC-C2YL-4:	Before 1980*	DHC-C2YR-1:	08 September 2014
HC-C2YR-(1,2,4):	Before 1980*	DHC-C2YR-4:	12 November 2015
BHC-C2YF-(1,2):	Before 1963*		

*: The exact Date of Application was not recorded in individual EU Member States.

5. EASA Type Certification Date

HC-C2YF-(1,2):	16 July 1963*	BHC-C2YF-4:	23 December 2016
HC-C2YF-4:	18 April 1980*	BHC-C2YR-1:	23 December 2016
HC-C2YK-(1,2):	16 July 1963*	BHC-C2YR-4:	23 December 2016
HC-C2YK-4:	18 April 1980*	CHC-C2YF-(1,2):	16 July 1963*
HC-C2YL-(1,2):	16 July 1963*	DHC-C2YF-(1,2):	18 April 1980*
HC-C2YL-4:	18 April 1980*	DHC-C2YR-1:	23 December 2016
HC-C2YR-(1,2,4):	18 April 1980*	DHC-C2YR-4:	23 December 2016
BHC-C2YF-(1,2):	16 July 1963*		

*: The EASA Certification Date has been taken over from individual EU Member States.

II. Certification Basis

1. State of Design Authority Certification Basis

Refer to FAA TCDS no. P-920.

2. Reference Date for determining the applicable airworthiness requirements

24 March 1959.
23 December 2008 for BHC-C2YF-4.
19 March 2013 for BHC-C2YR-(1,-4) and DHC-C2YR-(1,-4).

3. EASA Certification Basis

3.1. Airworthiness Standards

HC-C2YK-1, HC-C2YL-1, CHC-C2YF-1 and DHC-C2YF-1:
14 CFR Part 35 with amendments 35-1 through 35-6 effective 18 August 1990.

HC-C2YF-(2,4), HC-C2YK-(2,4), HC-C2YL-(2,4),HC-C2YR-(2,4), BHC-C2YF-2, CHC-C2YF-2 and DHC-C2YF-2:
14 CFR Part 35 with amendments 35-1 through 35-8 effective 23 December 2008 for paragraphs 35.15, 35.35(c),35.36, 35.38, 35.41 und 35.43.

HC-C2YF-1, BHC-C2YF-1 and HC-C2YR-(1,4):
14 CFR Part 35 with amendments 35-1 through 35-9 effective 19 March 2013.

Note:
Application was made to EU Member States before EASA was established. Refer to Commission Regulation (EU) No 748/2012.
The above mentioned propeller models are EASA certified based on member states approvals prior to EASA existence. The original and updated FAA certification basis as indicated above had been taken over from the FAA TCDS.

HC-C2YR-1 with composite blade model N7605:
14 CFR Part 35 with amendments 35-1 through 35-6 effective 18 August 1990 plus
CS-P paragraphs 240, 360, 370 and 380 effective 24 October 2003.

BHC-C2YF-4, BHC-C2YR-(1,-4) and DHC-C2YR-(1,-4):
CS-P Amendment 1 dated 16 November 2006 as issued by EASA Decision No 2006/09/R, except the requirements of Subpart D as allowed by CS-P 10(b) (see Note 10a).

3.2. Special Conditions (SC)

None.

3.3. Equivalent Safety Findings (ESF)

None.

3.4. Deviations

None.

III. Technical Characteristics

1. Type Design Definition

The propeller type is defined by a propeller assembly drawing including a parts list. The earliest applicable drawing revision is shown below: (or later approved revisions).

HC-C2YF-2, BHC-C2YF-2, CHC-C2YF-2, DHC-C2YF-2, HC-C2YK-2, HC-C2YL-2, HC-C2YR-2	Drawing D-2271 dated 8 November 1963
HC-C2YF-1, BHC-C2YF-1, CHC-C2YF-1, DHC-C2YF-1, HC-C2YK-1, HC-C2YL-1, HC-C2YR-1	Drawing D-2425 dated 26 August 1977
HC-C2YF-4, HC-C2YK-4, HC-C2YL-4, HC-C2YR-4	Drawing D-2265 dated 15 April 1989
HC-C2YF-2, BHC-C2YF-2, DHC-C2YF-2, HC-C2YK-2, HC-C2YL-2, HC-C2YR-2	Drawing D-2292 dated 28 July 1975
HC-C2YR-1, BHC-C2YR-1, DHC-C2YR-1	Drawing 101974 dated 11 December 2006
BHC-C2YF-4	Drawing D-2265 dated 04 August 1975
BHC-C2YR-4, DHC-C2YR-4	Drawing 105723 dated 24 April 2014

2. Description

The propeller is a 2-blade variable pitch propeller with a hydraulically operated blade pitch change mechanism providing the operation mode “Constant Speed”. The -1 and -4 models do not feather, the -2 model incorporate feathering and unfeathering features. Reversing is not applicable. Each blade is supported in the hub with a ball thrust bearing. The pitch change mechanism is contained entirely within the hub. (see Notes 3 and 4).
The hub is milled out of aluminium alloy. The blade materials are: Aluminium alloy or composite.
Optional equipment includes spinner and ice protection.

3. Equipment

Spinner: See Note 7
Governor: See Note 3
Ice Protection: See Note 7

4. Dimensions

Diameters from 241,3 cm to 152,4 cm. (See Table of Section IV)

5. Weight

Depending on Propeller-Design Configuration. (See Table of Section IV)

6. Hub / Blade Combinations

Details are mentioned within Table of Section IV.

7. Control System

Hartzell governors per drawings C-4770, C-4771 and C-4772 (see Note 3).

8. Adaptation to Engine (see Note 1)

Special flange. (See Note 1)

9. Direction of Rotation

The left-hand version of an approved propeller model is approved at the same rating and diameter as listed for the right-hand model (see Note 5).

IV. Operating Limitations

Blades (See Note 2)	Max. Continous kW - rpm (min^{-1})	Take Off kW - rpm (min^{-1})	Diameter Limits (cm) (See Note 2)	Approx. Max. Wt. Complete (kg) (See Notes 3,7)	Blade Construction (See Note 10)
	Non-Counterweighted Blades – Hub models: all -1 and -2				
7068-0 to 7068-10	223,7 2700	223,7 2700	177,8 to 152,4 (-0 to -10)	24,0	Aluminium Alloy
7280+ 1/2 to 7280-7	186,4 2700	186,4 2700	184,2 to 165,1 (+1/2 to -7)	23,1	Aluminium Alloy
7495-0 to 7495-6	186,4 2700	186,4 2700	188,0 to 172,7 (-0 to -6)	22,7	Aluminium Alloy
7496-0 to 7496-6	186,4 2700	186,4 2700	188,0 to 172,7 (-0 to -6)	22,7	Aluminium Alloy
7497-0 to 7497-6	186,4 2700	186,4 2700	188,0 to 172,7 (-0 to-6)	23,5	Aluminium Alloy
7663-0 to 7663-8	156,6 2800	156,6 2800	193,0 to 172,7 (-0 to -8)	20,9	Aluminium Alloy
7666-0 to 7666-8	134,2 2900 or 186,4 2700	134,2 2900 or 186,4 2700	193,0 to 172,7	23,1	Aluminium Alloy
7681-0 to 7681-8	186,4 2700	186,4 2700	193,0 to 172,7 (-0 to -8)	23,1	Aluminium Alloy
7692-0 to 7692-8	134,2 2900 or 186,4 2700	134,2 2900 or 186,4 2700	193,0 to 172,7	20,9	Aluminium Alloy
7694-0 to 7694-10	156.6 2800	156.6 2800	193.0 to 167.6 (-0 to -10)	22.5	Aluminium Alloy
7694-4 to 7694-10	231.2 2700	231.2 2700	182.9 to 167.6 (-0 to -10)	22.5	Aluminium Alloy
7894-4 to 7894-10	186.4 2700	186.4 2700	198.1 to 172.7 (-0 to -10)	21.8	Aluminium Alloy
8052-0 to 8052-8	231,2 2600	231,2 2600	203,2 to 182,9 (-0 to -8)	22,9	Aluminium Alloy
8068-0 to 8068-8	212,5 2700	212,5 2700	203,2 to 182,9 (-0 to -8)	22,7	Aluminium Alloy
8459-0 to 8459-18	193,9 2800	193,9 2800	213,4 to 167,6 (-0 to -18)	21,8	Aluminium Alloy
8465-0 to 8465-14	234,9 2575	234,9 2575	213,4 to 177,8 (-0 to -14)	22,7	Aluminium Alloy
8467-0 to 8467-12	212,5 2700	212,5 2700	213,4 to 182,9 (-0 to -12)	23,6	Aluminium Alloy
8468-0 to 8468-12	212,5 2700	212,5 2700	213,4 to 182,9 (-0 to -12)	22,7	Aluminium Alloy
8470-0 to 8470-8	193,9 2700	193,9 2700	213,4 to 193,0 (-0 to -8)	22,2	Aluminium Alloy
8475+2 to 8475-4	231,2 2700	231,2 2700	218,4 to 203,2 (+2 to -4)	23,6	Aluminium Alloy
8475-4 to 8475-6	261,0 2700	261,0 2700	203,2 to 198,1 (-4 to -6)	23,1	Aluminium Alloy

Blades (See Note 2)	Max. Continous kW - rpm (min^{-1})	Take Off kW - rpm (min^{-1})	Diameter Limits (cm) (See Note 2)	Approx. Max. Wt. Complete (kg) (See Notes 3,7)	Blade Construction (See Note 10)
8475-6 to 8475-14	231,2 2700 or 223,7 2850	231,2 2700 or 223,7 2850	198,1 to 177,8 (-6 to -14)	22,7	Aluminium Alloy
8477-0 to 8477-4	231,2 2575 or 193,9 2700	231,2 2575 or 193,9 2700	213,4 to 203,2 (-0 to -4)	24,5	Aluminium Alloy
8477-4 to 8477-6	261,0 2700	261,0 2700	203,2 to 198,1 (-4 to -6)	24,0	Aluminium Alloy
8477-6 to 8477-14	231,2 2700 or 223,7 2850	231,2 2700 or 223,7 2850	198,1 to 177,8 (-6 to -14)	23,6	Aluminium Alloy
9587-0 to 9587-2	238,6 2200	238,6 2200	241,3 to 236,2 (-0 to -2)	22,5	Aluminium Alloy
9587-2 to 9587-20	238,6 2200 or 223,7 2400	238,6 2200 or 223,7 2400	236,2 to 190,5 (-2 to -20)	22,7	Aluminium Alloy
Non-Counterweighted Blades – Hub models: HC-C2YR-1, BHC-C2YR-1, DHC-C2YR-1					
N7605-0 to N7605-10	160,3 2700	160,3 2700	193,0 to 167,6 (-0 to -10)	19,5	Composite
Non-Counterweighted Blades – Hub models: HC-C2YF-1, BHC-C2YF-1, HC-C2YR-1, BHC-C2YR-1, DHC-C2YR-1					
NG8301-0 to NG8301-10	223.7 2700	223.7 2700	210.8 to 185.4 (-0 to -10)	19.5	Composite
Counterweighted Blades – Hub models: HC-C2YR-4, BHC-C2YR-4, DHC-C2YR-4					
NC8301-0 to NC8301-10	223.7 2700	223.7 2700	210.8 to 185.4 (-0 to -10)	21.3	Composite
Counterweighted Blades – Hub models: all -2 and -4					
C7068-0 to C7068-10	223.7 2700	223.7 2700	177.8 to 152.4 (-0 to -10)	25.9	Aluminium Alloy
C7495-0 to C7495-6	186,4 2700	186,4 2700	188,0 to 172,7 (-0 to -6)	24,5	Aluminium Alloy
C7496-0 to C7496-6	186,4 2700	186,4 2700	188,0 to 172,7 (-0 to -6)	24,5	Aluminium Alloy
C7663-0 to C7663-8	156,6 2800	156,6 2800	193,0 to 172,7 (-0 to -8)	22,7	Aluminium Alloy
C7666-0 to C7666-8	134,2 2850 or 186,4 2700	134,2 2850 or 186,4 2700	193,0 to 172,7 (-0 to -8)	24,9	Aluminium Alloy
C7681-0 to C7681-8	186,4 2700	186,4 2700	193,0 to 172,7 (-0 to -8)	24,9	Aluminium Alloy
C7692-0 to C7692-8	134,2 2900 or 186,4 2700	134,2 2900 or 186,4 2700	193,0 to 172,7 (-0 to -8)	22,7	Aluminium Alloy
C8052-0 to C8052-8	231,2 2600	231,2 2600	203,2 to 182,9 (-0 to -8)	24,7	Aluminium Alloy
C8459-0 to C8459-12	193,9 2800	193,9 2800	213,4 to 182,9 (-0 to -12)	23,6	Aluminium Alloy

Blades (See Note 2)	Max. Continous kW - rpm (min^{-1})	Take Off kW - rpm (min^{-1})	Diameter Limits (cm) (See Note 2)	Approx. Max. Wt. Complete (kg) (See Notes 3,7)	Blade Construction (See Note 10)
C8465-0 to C8465-14	234,9 2575	234,9 2575	213,4 to 177,8 (-0 to -14)	24,5	Aluminium Alloy
C8465-6 to C8465-14	193,9 2700	193,9 2700	198,1 to 177,8 (-6 to -14)	24,0	Aluminium Alloy
C8467-0 to C8467-12	212,5 2700	212,5 2700	213,4 to 182,9 (-0 to -12)	25,4	Aluminium Alloy
C8468-0 to C8468-12	193,9 2700	193,9 2700	213,4 to 182,9 (-0 to -12)	24,5	Aluminium Alloy
C8470-0 to C8470-8	193,9 2700	193,9 2700	213,4 to 193,0 (-0 to -8)	24,0	Aluminium Alloy
C8475+2 to C8475-4	231,2 2700	231,2 2700	218,4 to 203,2 (+2 to -4)	25,4	Aluminium Alloy
C8475-4 to C8475-6	261,0 2700	261,0 2700	203,2 to 198,1 (-4 to -6)	25,0	Aluminium Alloy
C8475-6 to C8475-14	261,0 2700	261,0 2700 or 223,7 2850	198,1 to 177,8 (-6 to -14)	24,5	Aluminium Alloy
C8477-0 to C8477-4	231,2 2575 or 193,9 2700	231,2 2575 or 193,9 2700	213,4 to 203,2 (-0 to -4)	26,3	Aluminium Alloy
C8477-4 to C8477-6	261,0 2700	261,0 2700	203,2 to 198,1 (-4 to -6)	25,9	Aluminium Alloy
C8477-6 to C8477-14	231,2 2700	231,2 2700 or 223,7 2850	198,1 to 177,8 (-6 to -14)	25,4	Aluminium Alloy
C9587-0 to C9587-2	238,6 2200	238,6 2200	241,3 to 236,2 (-0 to -2)	24,5	Aluminium Alloy
C9587-2 to C9587-20	238,6 2200 or 223,7 2400	238,6 2200 or 223,7 2400	236,2 to 190,5 (-2 to -20)	24,5	Aluminium Alloy

Note: Weights apply to -1 constant speed hub with “F” flange. Add 0,55 kg for “L”, “K” and “R” flanges, 1,36 kg for feathering -2 hubs, 2,49 kg for feathering -2R hubs, and 1,82 kg for -4 model.

1. Approved Installations

Refer to Hartzell Manual no. 159. (See Note 9 and 10)

2. Maximum Take Off Power and Speed

Details are mentioned within Table of Section IV.

3. Maximum Continuous Power and Speed

Details are mentioned within Table of Section IV.

4. Propeller Pitch Angle

The propeller has variable pitch capability. Pitch control is provided by a governor.

V. Operating and Service Instructions

Overhaul Manual	Hartzell Manual 113B* for non-feathering models Hartzell Manual 117D* for feathering models
Standard Practice Manual	Hartzell Manual 202A*
Propeller Owner's Manual	Hartzell Manual 145* for composite blades Hartzell Manual 115N* for aluminium blades
Aluminum Blade Overhaul	Hartzell Manual 133C*
Composite Blade Maintenance Manual	Hartzell Manual 135F*
Service Bulletins	

*: or later approved revision

VI. Notes

1. Hub Model Designation: (See Notes 2, 4, 5 and 6)

B HC - C 2 Y F - 1 RAF

RAF:
- B denotes modified pitch change system
- C denotes spinner arrangement
- F denotes modified pitch change knob
- G denotes Hartzell damper system
- H denotes spinner mounting kit
- L when used denotes left hand rotation
- N indicates compatibility with N shank blades
- P when used denotes a hub unit with a "B" suffix serial number
- R when used denotes a large piston area
- U denotes feather assist spring assembly kit installed within cylinder
- Any other character denotes a minor change not affecting eligibility

1:
- Denotes specific design features as:
- -1: non-feathering, no counterweights, governor oil pressure increases pitch
- -2: feathering with or without counterweights, governor oil pressure decreases pitch
- -4: non-feathering, counterweights, governor oil pressure decreases pitch

F:
- F: special flange with six 1/2" bolts and two 1/2" dowels on a 4" bolt circle
- K: SAE # 2 flange with six 1/2" bolts and four 3/4" drive bushings on a 4-3/4" bolt circle
- L: SAE # 2 flange with six 7/16" bolts and four 5/8" drive bushings on a 4-3/4" bolt circle
- R: SAE # 2 flange with six 1/2" bolts and five 3/4" drive bushings on a 4-3/4" bolt circle

Y: Hartzell blade shank size

2: Number of blades

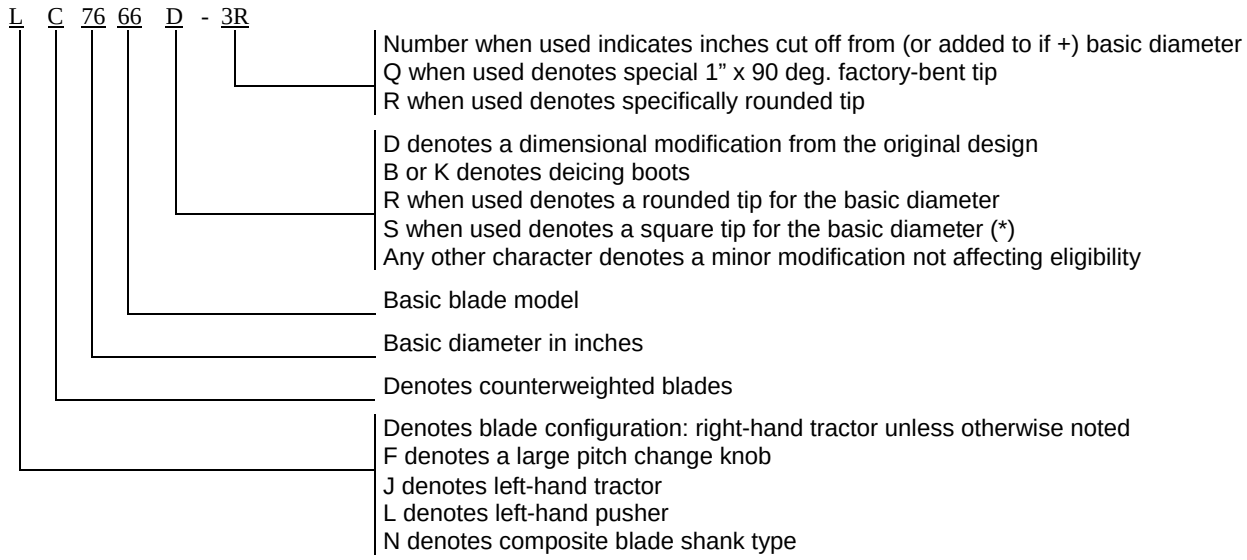
C: Identifies basic design - C denotes no integral shaft extension

HC: Hartzell Controllable

B: When used indicates Flange Angular Index with respect to #1 blade, viewed clockwise facing propeller flange

Prefix	Angular Index	Clocking Feature	Flange
Blank	90 and 270 degrees	Dowel Pins	F
Blank	0 and 180 degrees	Non counter bored hole	K,R,L
B	30 and 210 degrees	Dowel Pins	F
B	120 and 300 degrees	Non counter bored hole	K,R
C	150 and 330 degrees	Dowel Pins	F
D	60 and 240 degrees	Dowel Pins	F
D	60 and 240 degrees	Non counter bored hole	K,R

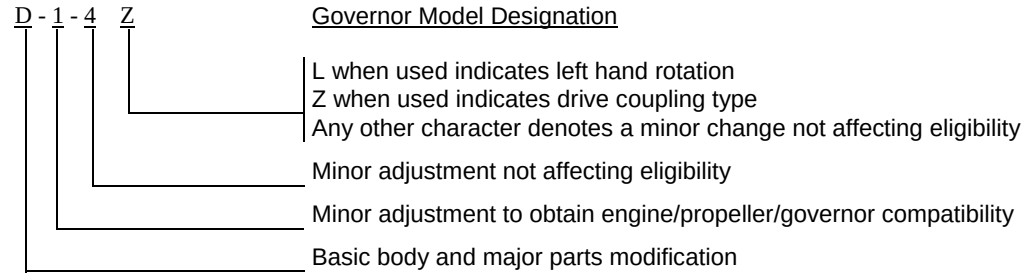
2. Blade Model Designation: (See Note 6)



(*) : Blades may incorporate either round or square tips, yet may not be marked with an "R" or "S" in their model designation. This character is used to distinguish between two or more tip shapes available at the same diameter. Certain blades use "S" to denote shot peening of the exterior surface.

3. Pitch Control: (See Notes 4, 6 and 10)

(a) Approved with Hartzell governors per drawings C-4770, C-4771 and C-4772. Wt.: 2,0 kg



(b) The -2 and -4 models have counterweighted blades and use oil to decrease pitch. The -1 models do not have counterweighted blades and use oil to increase pitch.

(c) Maximum governor output pressure: 2413,16 kPa for all propeller models

(d) All governors must be approved as part of the aircraft installation regardless of manufacturer.

4. (a) Feathering The -1 and -4 models do not feather. The -2 models incorporate feathering and unfeathering features.

(b) Reversing Not applicable.

(c) Piston size The -2R model differs from the -2 model in that the -2R model has a piston area of 130,32 cm^2 and the -2 has a piston area of 104,84 cm^2.

5. Left-Hand Models: (see Notes 1 and 2)

The left-hand version of an approved propeller model is approved at the same rating and diameter as listed for the right-hand model.

6. Interchangeability: (See Notes 1, 2 and 3)

(a) Blades

Blades with counterweights (having “C” prefix) can replace non-counterweighted blades on feathering propellers (hub model suffix -2 or -2R) only, provided the air charge is reduced to 551,58 kPa at 21,11°C. Attached decal specifying air charge must be changed accordingly.

Shot-peened blades may replace non shot-peened blades either individually or as a set.

(b) Propellers

“F” type propellers with large pitch change knobs are interchangeable with corresponding propellers with the standard pitch change system.

“B” type propellers with modified pitch change system are interchangeable with corresponding propellers with the standard pitch change system.

Propeller models containing a “P” suffix, for example HC-C2YR-1BFP, may replace corresponding models without the “P” suffix, for example HC-C2YR-1BF. Propeller models without the “P” suffix may not replace those containing the “P” suffix.

(c) Governors

Hartzell governors with a “Z” suffix in their model designation may be used interchangeably with corresponding governors without the “Z”. For example, the F-6-24Z is a replacement for the F-6-24 and the F-6-24 is a replacement for the F-6-24Z.

(d) Ice protection systems

Refer to Hartzell Service Letter HC-SL-30-260 for ice protection system component interchangeability.

7. Accessories (See Note 10)

(a) Propeller ice protection system (weight of ice protection equipment extra)

(1) Propeller models listed in this data sheet are approved for use with propeller ice protection equipment listed in Hartzell Manual no. 159( ) or in other Hartzell type design data.

(2) All propeller ice protection equipment must be approved as part of the aircraft installation regardless of manufacturer. (See Note 10)

(b) Propeller spinner (weight of spinner extra)

(1) Approved with Hartzell and other manufacturer's spinners when listed on Hartzell type design data.

(2) All propeller spinners must be approved as part of the aircraft installation regardless of manufacturer. (See Note 10)

(c) Propeller Damper C-1576

(1) Approved for use with Hartzell Propeller model HC-C2Y( ). Wt: 3,63 kg.

8. Shank Fairings: Not applicable.

9. Special Limits:

Table of Propeller - Engine Combinations
Approved Vibrationwise for Use on Normal Category 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 purposes.

The engine models listed below are the configurations on the engine type certificate unless specifically stated otherwise. Modifications to the engine or airframe that alter the power of the engine models listed below during any phase of operation have the potential to increase propeller stresses and are not approved by this list. Such modifications include, but are not limited to, the addition of a turbocharger or turbonormalizer, increased boost pressure, increased compression ratio, increased RPM, altered ignition timing, electronic ignition, full authority digital engine controls (FADEC), or tuned induction or exhaust. Also, any change to the mass or stiffness of the crankshaft/counterweight assembly is not approved by this list.

Hub Model	Blade Model	Engine Model	Max. Dia. (cm)	Min. Dia. (cm)	Placards
HC-C2YR	F7068-( )	LYC IO-360-B1A, -B1B, -B1C, -B1D, -B1E, -B1F, -E1A, -F1A, LYC O-360-A1A, -A1AD, -A1C, -A1D, -A1F, -A1G, -A1H, -A1LD	172,7	170,2	Stabilized operation is prohibited above 84,7 kPa manifold pressure between 2300-2350 RPM and below 50,8 kPa manifold pressure above 2600 RPM
HC-C2YR	F7068	LYC O-360-A1F6, -A1F6D, -A1G6, -A1G6D, -A1H6, -F1A6, -G1A6 LYC IO-360-A1B6, -A1B6D, -A1D6, -A1D6D, -B1F6, -C1C6, -C1D6, -C1E6, -C1E6D	172,7	167,6	none
HC-C2YR-1BFP	F7497	LYC O-360-A1A, -A1C, -A1D, -A1F, -A1G, -A1H, -A1P	188,0	182,9	none
HC-C2YR-1BFP	F7497	LYC IO-360-B1A, -B1B, -B1D, -B1E, -B1F, -E1A, -M1A	188,0	182,9	none
HC-C2YR-1BFP	F7497	LYC IO-360-A1A, -A1B, -A1C, -A1D, -C1A, -C1B, -C1C, -C1F, -D1A	188,0	182,9	Continuous operation is prohibited above 81,3 kPa manifold pressure between 2350 and 2550 RPM
HC-C2YR-1BFP	F7497	LYC IO-360-A1B6, -A1B6D, -A1D6, -A1D6D, -C1C6, -C1D6, -C1E6, -C1E6D LYC O-360-A1F6, -A1F6D	188,0	182,9	none
BHC-C2YF	7663	TCM O-300-A, -B, -C, -D, -E	182,9	177,8	none
HC-C2YF	7663	TCM IO-346-B	193,0	193,0	none
BHC-C2YF	7663	TCM IO-360-A, -B, -C, -D, -E	193,0	182,9	none

Hub Model	Blade Model	Engine Model	Max. Dia. (cm)	Min. Dia. (cm)	Placards
BHC-C2YF	F7663( )	TCM IO-360-H, -HB	193,0	182,9	none
HC-C2YL	7663	LYC O-290-D2A	182,9	177,8	none
HC-C2YL	7663	LYC O-320-A3A, -A3B, -A3C, -B3A, -B3B, -B3C, -C3A, -C3B, -C3C, -D1A, -D1B, -D1D, -D1F, -E1A, -E1B, -E1C, -E1F, -E1J	182,9	177,8	none
HC-C2YL	7663	LYC IO-320-A1A, -B1A, -B1B, -B1C, -B1D, -B1E, -C1A, -C1B, -D1A, -D1B, -D1C, -E1A, -E1B, -F1A	182,9	177,8	none
HC-C2YK HC-C2YR	7666 F7666	LYC O-360-A1A, -A1AD, -A1C, -A1D, -A1F, -A1G, -A1LD, -B1A, -B1B, -C1A, -C1C, -C1F, -C1G, -D1A	193,0	182,9	Avoid continuous operation between 2000 and 2250 RPM
HC-C2YK HC-C2YR	7666 F7666A	LYC O-360-C1E, -C1F	193,0	182,9	Avoid continuous operation between 2000 and 2350 RPM
HC-C2YK HC-C2YR	F7666A-2Q	LYC O-360-A1A, -A1C, -A1D, -A1F, -A1G, -B1A, -B1B, -C1A, -C1C, -C1F, -D1A	188,0	188,0	Avoid continuous operation between 2000 and 2250 RPM
HC-C2YK	7666	LYC IO-360-A1A, -A1B, -A1C, -C1A, -C1B, -C1C, -D1A	188,0	182,9	Avoid continuous operation between 2000 and 2350 RPM
HC-C2YK	7666	LYC IO-360-B1A, -B1C	188,0	182,9	Avoid continuous operation between 2000 and 2250 RPM
HC-C2YK HC-C2YR	F7666( )-3Q	LYC IO-360-A3B6D	185,4	185,4	none
HC-C2YK HC-C2YR	F7666 F7666A	LYC O-360-E1A6D	188,0	182,9	none
HC-C2YK HC-C2YR	F7666A-2	LYC O-360-A1F6D	188,0	182,9	none
HC-C2YR	F7666A-( )R	LYC TO-360-E1A6D	188,0	182,9	none
( )HC-C2YK ( )HC-C2YR	( )7666( )-4Q	LYC IO-360-B1A, -B1B, -B1D, -B1E, -B1F, -E1A, -F1A	182,9	182,9	Avoid continuous operation between 2000 and 2250 RPM
HC-C2YK HC-C2YR	F7666A-4Q	LYC O-360-A1A, -A1C, -A1D, -A1F, -A1G, -B1A, -B1B, -C1A, -C1C, -D1A	182,9	182,9	Avoid continuous operation between 2000 and 2250 RPM
HC-C2YK	F7666A-4Q	LYC IO-360-A1B6	182,9	182,9	none

Hub Model	Blade Model	Engine Model	Max. Dia. (cm)	Min. Dia. (cm)	Placards
HC-C2YK HC-C2YR	7666-4Q	LYC IO-360-A1A, -A1B, -A1C, -C1A, -C1B, -C1C, -D1A	182,9	182,9	Avoid continuous operation between 2000 and 2350 RPM
HC-C2YK	7666	LYC IO-360-B1A, -B1B, -B1C, -B1D, -B1E, -B1F, -E1A, -F1A	188,0	182,9	Avoid continuous operation between 2000 and 2250 RPM
HC-C2YK	7666	LYC IO-360-B1A, -B1B, -B1C, -B1D, -B1E, -B1F, -E1A, -F1A	193,0	189,2	Avoid continuous operation between 2000 and 2250 RPM
HC-C2YK HC-C2YR	7666	LYC IO-360-A1B6, -A1D6, -C1C6, -C1E6	193,0	193,0	None when used with Hartzell C-1576 damper
HC-C2YK HC-C2YR	7666	LYC IO-360-A1B6, -A1D6, -C1C6, -C1E6	193,0	193,0	Avoid continuous operation between 2000 and 2400 RPM
HC-C2YK HC-C2YR	7666	LYC O-360-F1A6	188,0	182,9	none
HC-C2YK HC-C2YR	( )7666	LYC IO-360-A1B6D	188,0	182,9	none
HC-C2YK HC-C2YR	7666A F7666A	LYC IO-360-C1C	188,0	184,2	Avoid continuous operation between 2000 and 2350 RPM
HC-C2YK HC-C2YR	F7666A	LYC TIO-360-C1A6D LYC TO-360-C1A6D	193,0	190,5	Do not operate above 121,9 kPa manifold pressure at engine speeds below 2400 RPM
HC-C2YR	F7666A	LYC IO-360-M1A, -M1B	193,0	188,0	Avoid continuous operation between 2000 and 2350 RPM
HC-C2YK HC-C2YR	F7666	LYC IO-360-A1B6, -A1D6, -C1C6, -C1E6	188,0	182,9	none
BHC-C2YF	8052	TCM TSIO-520-BE	203,2	198,1	none
HC-C2YR-1BFP	F8068	LYC IO-540-D4A5, -D4B5, -D4C5, -T4A5D, -T4B5, -T4B5D, -T4C5D LYC O-540-E4A5, -E5B5, -E4C5	203,2	198,1	none

Hub Model	Blade Model	Engine Model	Max. Dia. (cm)	Min. Dia. (cm)	Placards
BHC-C2YF	F8459	TCM TSIO-360-E, -EB, -KB	193,0	190,5	Avoid continuous operation between 2000 and 2200 RPM with engine manifold pressure above 108,4 kPa. Avoid continuous ground operation in cross and tail winds of over 10 knots between 1700 and 2100 RPM.
BHC-C2YF	F8459-( )R	TCM TSIO-360-F, -FB, -G	193,0	190,5	Avoid continuous operation between 2000 and 2200 RPM with engine manifold pressure above 108,4 kPa. Avoid continuous ground operation in cross and tail winds of over 10 knots between 1700 and 2100 RPM.
BHC-C2YF	F8459( )-( )R	TCM IO-360-ES	193,0	190,5	Avoid continuous ground operation between 1700 and 2100 RPM in cross and tail winds of over 10 knots.
HC-C2YF	8459	Franklin 6A-350-C1, -C2	203,2	193,0	none
HC-C2YL	8459	LYC O-320-A3A, -A3B, -A3C, -B3A, -B3B, -B3C, -C3A, -C3B, -C3C, -D1A, -D1B, -E1A, -E1B, -E1C, -E1F	167,6	167,6	none
HC-C2YL	8459	LYC IO-320-A1A, -B1A, -B1B, -B1C, -B1D, -B1E, -C1A, -C1B, -D1A, -D1B, -E1A, -E1B, -F1A	167,6	167,6	none
BHC-C2YF CHC-C2YF DHC-C2YF	8465	TCM IO-470-L, -LO	198,1	193,0	none
HC-C2YK HC-C2YR	8467	LYC IO-540-D4A5	195,6	190,5	Avoid continuous operation between 2500 and 2600 RPM above 84,7 kPa manifold pressure.

Hub Model	Blade Model	Engine Model	Max. Dia. (cm)	Min. Dia. (cm)	Placards
HC-C2YK HC-C2YR	F8467R	LYC IO-540-T4A5D, -T4B5D	195,6	190,5	none
HC-C2YK HC-C2YR	F8467-8R	LYC IO-540-E4A5	193,0	193,0	Avoid continuous operation between 2500 and 2600 RPM above 84,7 kPa manifold pressure.
HC-C2YK HC-C2YR	F8467	LYC IO-540-R1A5 with RayJay turbocharger (up to 73,7 cm MP absolute)	195,6	190,5	none
HC-C2YK HC-C2YR	8467-( )R	LYC O-540-B4A5, -B4B5, -E4A5, -E4B5, -E4C5	195,6	190,5	Avoid continuous operation between 2500 and 2600 RPM above 84,7 kPa manifold pressure.
HC-C2YK HC-C2YR	8467-( )R	LYC IO-540-T4A5D	195,6	190,5	none
HC-C2YF BHC-C2YF	8468	TCM O-470-R	213,4	203,2	none
HC-C2YF	8468	TCM IO-470-D, -E, -F, -G, -H, -M, -N, -R, -S	213,4	213,4	Avoid continuous operation between 2100 and 2225 RPM.
HC-C2YF	8468	TCM IO-470-D, -E, -F, -G, -H, -M ,-N, -R, -S	208,3	203,2	none
HC-C2YF	8468	TCM IO-470-D, -E, -F, -G, -H, -M ,-N, -R, -S	198,1	198,1	Do not exceed 77,9 kPa manifold pressure below 2300 RPM.
BHC-C2YF	8468R	TCM IO-520-BA	213,4	213,4	none
BHC-C2YF	F8468R F8468AR	TCM IO-520-BB	213,4	213,4	none
HC-C2YL	8468 F8468 F8468R F8468AR	LYC O-320-A3A, -A3B, -A3C, -B3A, -B3B, -B3C, -C3A, -C3B, -C3C, -D1A, -D1B, -E1A, -E1B, -E1C, -E1F	203,2	188,0	none
HC-C2YL	8468-6Q	LYC O-320-A3A, -A3B, -A3C, -B3A, -B3B, -B3C, -C3A, -C3C, -D1A, -D1B, -E1A, -E1B, -E1C, -E1F	198,1	198,1	none
HC-C2YK	8468-10R	LYC TIO-360-A1A, -A1B	188,0	188,0	Avoid continuous operation between 1975 and 2200 RPM.
HC-C2YK HC-C2YR	8468	LYC O-540-B4A5, -B4B5	213,4	195,6	none
HC-C2YR	F8468AR	LYC O-540-B4B5, -J1A5D, -J3A5 LYC IO-540-W1A5, -W1A5D	205,7	195,6	none

Hub	Blade	Max. Dia.	Min. Dia.

Model	Model	Engine Model	(cm)	(cm)	Placards
HC-C2YF	8475	TCM IO-520-A, -J, TCM TSIO-520-A, -C, -G, -H	203,2	195,6	none
HC-C2YF	8475	TCM IO-520-D, -E, -F, -K, -L	198,1	195,6	none
BHC-C2YF	8475	TCM IO-520-B, -C, -CB, TCM TSIO-520-B, -D	203,2	195,6	none
BHC-C2YF	8475	TCM TSIO-520-E	198,1	195,6	none
HC-C2YK HC-C2YR	8475R	LYC IO-540-K1B5, -K1C5, -L1A5, -M1A5	213,4	213,4	none
HC-C2YK HC-C2YR	8475R	LYC IO-540-K1A5, -K1D5, -K1G5	213,4	198,1	none
HC-C2YK HC-C2YR	8475D	LYC IO-540-K1A5, -K1G5, -K1A5D, -K1G5D	210,8	198,1	none
HC-C2YK HC-C2YR	8475	LYC IO-540-K1A5, -K1B5, -K1C5, -L1A5, -M1A5	210,8	198,1	none
HC-C2YK HC-C2YR	8475	LYC TIO-540-A1A	203,2	203,2	none
HC-C2YK HC-C2YR	8475+2	LYC IO-540-K1A5, -K1B5, -K1C5, -K1D5, -L1A5, -M1A5	218,4	218,4	Do not exceed 81,3 kPa manifold pressure between 2300 and 2475 RPM.
HC-C2YR	F8477( )	LYC O-360-A1F6, -A1F6D, -A1G6, -A1G6D, -A1H6, -F1A6, -G1A6 LYC IO-360-A1B6, -A1B6D, -A1D6, -A1D6D, -B1F6, -C1C6, -C1D6, -C1E6, -C1E6D	213,4	198,1	none
HC-C2YR	F8477	LYC IO-360-A1A, -A1B, -A1C, -A1D, -B1A, -B1B, -B1D, -B1E, -B1F, -C1A, -C1B, -C1C, -C1F, -D1A, -M1A, -M1B LYC O-360-A1A, -A1C, -A1D, -A1F, -A1G, -A1H, -A1P, -C1A, -C1C, -C1E, -C1F, -C1G	203,2	198,1	Propeller must be equipped with Hartzell model C-1576 damper assembly.
HC-C2YK HC-C2YR	F8477-6Q	LYC IO-540-D4A5, -D4B5, -D4C5	198,1	198,1	none
HC-C2YK HC-C2YR	8477	LYC O-540-A4A5, -A4B5, -A4C5, -A4D5, -E4A5, -E4B5, -E4C5	213,4	193,0	none
HC-C2YK HC-C2YR	8477-8R	LYC O-540-A4A5, -A4B5, -A4C5, -A4D5, -E4A5, -E4B5, -E4C5	193,0	193,0	none
HC-C2YK HC-C2YR	8477	LYC O-540-G1A5	213,4	210,8	none

Hub Model	Blade Model	Engine Model	Max. Dia. (cm)	Min. Dia. (cm)	Placards
HC-C2YK HC-C2YR	8477	LYC IO-540-C4B5, -C4C5, -D4A5, -D4B5	213,4	193,0	none
HC-C2YK HC-C2YR	F8477D-( )R	LYC O-540-A4A5, -A4B5, -A4C5, -A4D5, -E4A5 LYC IO-540-C4B5, -D4A5	213,4	193,0	none
HC-C2YK HC-C2YR	8477	LYC IO-540-V4A5, -V4A5D, -T4A5D, T4B5D, -T4C5D	213,4	193,0	none
HC-C2YK HC-C2YR	8477	LYC IO-540-K1A5, -K1B5, -K1C5, -K1D5, -L1A5, -M1A5	203,2	203,2	Do not exceed 77,9 kPa manifold pressure below 2200 RPM.
HC-C2YK HC-C2YR	F8477A	LYC IO-540-K1D5	203,2	198,1	Do not exceed 77,9 kPa manifold pressure below 2200 RPM.
HC-C2YR	F8477-4	LYC TIO-540-AB1AD	203,2	198,1	none
HC-C2YF	9587A	TCM 6-285-B, -C	241,3	236,2	Avoid continuous operation on the ground between 1900 and 2300 engine RPM in winds above 24,1 km/h.

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

Propeller models listed herein consist of basic hub and blade models. Most propeller models include additional characters to denote minor changes and specific features as explained in Notes 1 and 2.

The suitability of a propeller for a certain aircraft/engine combination must be demonstrated within the scope of the type certification of the aircraft.

10a. These propellers have been certificated in accordance with CS-P subparts A, B and C. Compliance with the requirements of Subpart D, which is specific to each aircraft installation, has not yet been demonstrated.

11. Retirement Time:

(a) Life Limits and Mandatory Inspections.

(1) Airworthiness limitations, if any, are specified in Hartzell Manuals 115( ) or 145( ).

12. Special Notes:

(a) Refer to Hartzell Manual no. 202( ) for overspeed and overtorque limits.

(b) Refer to Hartzell Service Letter HC-SL-61-61( ) for overhaul periods.

13. The EASA approved Airworthiness Limitations Section of the Instructions for Continued Airworthiness is published in the applicable Hartzell Manuals 115( ) or 145( ), chapter 5 "Airworthiness Limitations".

14. EASA Type Certificate and Type Certificate Data Sheet No. IM.P.130 replace the associated Type Certificates and Type Certificate Data Sheets of the EU Member States.

SECTION: ADMINISTRATIVE

I. Acronyms and Abbreviations

None.

II. Type Certificate Holder Record

N/A.

III. Change Record

Issue	Date	Changes	TC issue
Issue 01	26 April 2010	Initial Issue	25 October 2011
Issue 02	23 December 2016	Add BHC-C2YF-4, BHC-C2YR-(1,4,) and DHC-C2YR-(1,4) hub models and 7894, NG8301 and NC8301 blades.	23 December 2016

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