

型号认可证数据单

THE VALIDATION DATA SHEET

编号/No.: VTC0068E

版次/Revision: 3

型号/Type:

PW305	PW306A	PW306D
PW305A	PW306B	PW306D1
PW305B	PW306C	

批准人/Approved By: Xu Chaoqun



职务/Title: Director General of CAAC-AAD

日期/Date: 2017 年 8 月 14 日

本数据单是型号认可证（编号：VTC0068E）的组成部分，它规定了符合中国民用航空局的适航要求所颁发此型号认可证的产品状态和限制。

This data sheet, which is part of Validation of Type Certificate (No: VTC0068E), prescribes condition and limitation under which the product for which the type certificate was issued meets the airworthiness requirements of the Chinese Civil Aviation Regulation.

型号认可证持有人/Validation of Type Certificate Holder:

Pratt & Whitney Canada Corp.

1000 Marie-Victorin

Longueuil, Quebec

J4G 1A1

有效页清单/List of Effective Page

页数/Pages	1	2	3	4	5	6	7	8	9	10	11	12
版次/Revision	3	3	3	3	3	3	3	3	3	3	3	3

型号认可证数据单

THE VALIDATION DATA SHEET

编号/No.: VTC0068E

版次/Revision: 3

型号/Type:

PW305	PW306A	PW306D
PW305A	PW306B	PW306D1
PW305B	PW306C	

批准人/Approved By: Xu Chaoqun

职务/Title: Director General of CAAC-AAD

日期/Date: 2017 年 8 月 14 日

本数据单是型号认可证（编号：VTC0068E）的组成部分，它规定了符合中国民用航空局的适航要求所颁发此型号认可证的产品状态和限制。

This data sheet, which is part of Validation of Type Certificate (No: VTC0068E), prescribes condition and limitation under which the product for which the type certificate was issued meets the airworthiness requirements of the Chinese Civil Aviation Regulation.

型号认可证持有人/Validation of Type Certificate Holder:

Pratt & Whitney Canada Corp.
1000 Marie-Victorin
Longueuil, Quebec
J4G 1A1

有效页清单/List of Effective Page

页数/Pages	1	2	3	4	5	6	7	8	9	10	11	12
版次/Revision	3	3	3	3	3	3	3	3	3	3	3	3

第1部分 概述

Section 1 GENERAL

1. CAAC认可数据单和型号合格证数据单/CAAC Validation Data Sheet and Type Certificate Data Sheet

	中国民用航空局认可数据单号、版次和颁发日期 CAAC Validation Data Sheet Number, Revision and issuance date	型号合格证数据单号、版次和颁发日期 Type Certificate Data Sheet Number, Revision and issuance date
当前 Current	VTC0068E, 版次3, 2017年8月14日 VTC0068E, Revision 14, August 20, 2017	E-22, 版次15, 2015年1月28日 E-22, Revision 15, January 28, 2015
历史 History	VTC0068E, 版次2, 2014年2月10日 VTC0068E, Revision 3, February 10, 2014	E-22, 版次13, 2013年4月18日 E-22, Revision 13, April 18, 2013
	VTC0068E, 版次1, 2009年12月17日 VTC0068E, Revision 2, December 17, 2009	E-22, 版次11, 2006年9月26日 E-22, Revision 11, September 26, 2006
	VTC103E, 版次0, 2000年7月20日 VTC103E, Revision 1, July 20, 2000	E-22, 版次7, 1999年5月25日 E-22, Revision 7, May 25, 1999
	VTC068E, 版次0, 1997年3月18日 VTC068E, Revision 0, March 18, 1997	E-22, 版次5, 1995年11月22日 E-22, Revision 5, November 22, 1995

2. 类别/Category:

发动机/Engine

3. 认可当局/Validation Authority:

中国民用航空局/CAAC

审定当局/Certifying Authority:

加拿大交通运输部/Transport Canada

4. 型号合格证持有人/Type Certificate Holder:

Pratt & Whitney Canada Corp.
1000 Marie-Victorin
Longueuil, Quebec
J4G 1A1

5. 双发延程飞行/ETOPS:

不适用/NA

6. CAAC专用要求/CAAC Special Requirements:

满足中国3号燃油 (GB6537-2006) 的要求
Compliance with requirement of P.R. China JET Fuel
No.3 (GB6537-2006)

第2部分 数据单

Section 2 DATA SHEET

1. 型号/Models PW305 1990 年 8 月 30 日批准/ Approved August 30, 1990

额定值(见注 1 & 5)/ Ratings (See NOTE 1 & 5)	推力/Jet Thrust		环境限制/ Ambient Limit		测量的涡轮间温度/ Measured Interturbine Temperature
	daN	lb	℃	℉	℃
最大起飞/ Maximum Take-off	2,324	5,225	22	71.6	785
正常起飞/ Normal Take-off	2,324	5,225	15	59	760
最大连续/ Maximum Continuous 起动/Starting	2,112	4,750	19.4	66.9	785 680

2. 型号/Models PW305A 1992 年 11 月 23 日批准/ Approved November 23, 1992

额定值(见注 1 & 5)/ Ratings (See NOTES 1 & 5)	推力/Jet Thrust		环境限制/ Ambient Limit		测量的涡轮间温度/ Measured Interturbine Temperature
	daN	lb	℃	℉	℃
最大起飞/ Maximum Take-off	2,081	4,679	33.9	93	785
正常起飞/ Normal Take-off	2,081	4,679	26.6	79.8	760
最大连续/ Maximum Continuous 起动/Starting	2,081	4,679	20.8	69.4	785 950

3. 型号/Models PW305B 1993 年 1 月 8 日批准/ Approved January 8, 1993

额定值(见注 1 & 5)/ Ratings (See NOTES 1 & 5)	推力/Jet Thrust		环境限制/ Ambient Limit		测量的涡轮间温度/ Measured Interturbine Temperature
	daN	lb	℃	℉	℃
最大起飞/ Maximum Take-off	2,342	5,266	23.5	74.3	785
正常起飞/ Normal Take-off	2,315	5,204	15	59	760

最大连续/ Maximum Continuous	1,994	4,483	27.5	81.5	785
起动/Starting					680

4. 型号/Models PW306A 1995 年 11 月 22 日批准/ Approved November 22, 1995

额定值(见注1& 5)/ Ratings (See NOTES 1& 5)	推力/Jet Thrust		环境限制/ Ambient Limit		测量的涡轮间温度/ Measured Interturbine Temperature
	daN	lb	℃	℉	℃
最大起飞/ Maximum Take-off	2,687	6,040	31.7	89	920
正常起飞/ Normal Take-off	2,687	6,040	26.7	80	890
最大连续/ Maximum Continuous	2,687	6,040	26.7	80	920
起动/Starting					950

5. 型号/Models PW306B 1998 年 12 月 2 日批准/ Approved December 2, 1998

额定值(见注1)/ Ratings (See NOTES 1)	推力/Jet Thrust		环境限制/ Ambient Limit		测量的涡轮间温度/ Measured Interturbine Temperature
	daN	lb	℃	℉	℃
起飞/Take-off	2,691	6,050	35	95	920
最大连续/ Maximum Continuous	2,691	6,050	35	95	920
起动/Starting					950

6. 型号/Models PW306C 2002 年 6 月 21 日批准/ Approved June 21, 2002

额定值(见注1)/ Ratings (See NOTE 1)	推力/Jet Thrust		环境限制/ Ambient Limit		测量的涡轮间温度/ Measured Interturbine Temperature
	daN	lb	℃	℉	℃
起飞/Take-off	2,567	5,770	33	91.4	920
最大连续/ Maximum Continuous	2,567	5,770	32	89.6	920
起动/Starting					950

7. 型号/Models PW306D 2013 年 4 月 18 日批准/ Approved April 18, 2013

8. 型号/Models PW306D1 2014 年 12 月 18 日批准/ Approved April 18, 2013

额定值(见注1)/ Ratings (See Note 1)			环境限制/ Ambient Limit		测量的涡轮间温度/ Measured Interturbine Temperature
	推力/Jet Thrust				
	daN	lb	°C	°F	°C
起飞/Take-off	2,627	5,907	32	89.6	920
最大连续/ Maximum Continuous	2,627	5,907	30	86.0	920
起动/Starting					950

与所有发动机型号相关的数据(另有说明除外)

DATA PERTINENT TO ALL MODELS EXCEPT AS INDICATED

类型/Type	双转子前部风扇, 燃气涡轮喷气式推进/Twin spool front fan, jet propulsion gas turbine.			
发动机转速/ Engine Speed	<u>PW305系列/PW305 Series</u>			
	最大转速/Maximum RPM:	N ₁ 10,820 (102%)	N ₂ 27,469 (102%)	
	最小飞行慢车转速/Minimum Flight Idle RPM:		N ₂ 17,500 (65%)	
	<u>PW306系列/PW306 Series</u>			
	最大转速/Maximum RPM:	N ₁ 11,138 (105%)	N ₂ 28,277(105%)	
	最小飞行慢车转速/Minimum Flight Idle RPM:		N ₂ 17,500 (65%)	
引气/Air Bleed	参见安装手册/Refer to Installation Manual.			
燃油压力/ Fuel Pressure	参见安装手册/Refer to Installation Manual.			
燃油温度/ Fuel Temperature	参见安装手册/Refer to Installation Manual.			
滑油压力/ Oil Pressure	参见安装手册/Refer to Installation Manual.			
滑油温度/ Oil Temperature	参见安装手册/Refer to Installation Manual.			
燃油类型/Fuel Type	<u>PW305系列/PW305 Series</u>			
	参见服务通告 24004 或 维修手册 30B1402/Refer to Service Bulletin 24004 or Maintenance Manual 30B1402.			
	<u>PW306A</u>			

参见维修手册30B1412/Refer to Maintenance Manual 30B1412.

PW306B

参见原始数据手册 30B2972或维修手册 30B4132/Refer to Source Data Manual 30B2972 or Maintenance Manual 30B4132.

PW306C

参见维修手册30B4422/Refer to Maintenance Manual 30B4422.

PW306D和PW306D1

参见维修手册30B7302/Refer to Maintenance Manual 30B7302.

滑油类型/Oil Type PW305系列/PW305 Series

参见服务通告 24001 或维修手册 30B1402/Refer to Service Bulletin24001 or Maintenance Manual 30B1402.

PW306A

参见维修手册30B1412/Refer to Maintenance Manual 30B1412.

PW306B

参见原始数据手册 30B2972或维修手册 30B4132/ Refer to Source Data Manual 30B2972 or Maintenance Manual 30B4132.

PW306C

参见维修手册30B4422/Refer to Maintenance Manual 30B4422.

PW306D和PW306D1

参见维修手册30B7302/Refer to Maintenance Manual 30B7302.

滑油容量/PW305系列/PW305 Series

Oil Capacity	升/Litres	英制加仑/Imp.gallons	美制加仑/U.S. gallons
总共/Total:	7.57	1.67	2.0
可用/Useable:	4.73	1.04	1.25
<u>PW306系列/PW306 Series</u>			
总共/Total:	8.0	1.76	2.11
可用/Useable:	5.0	1.10	1.32

设备/Equipment (见 经批准的零部件清单中的标准设备: 燃油泵、燃油箱、燃油滤、电气旁通指示器、
注8/See NOTE 8) 带专用电源的双通道全权限数字电子控制系统、燃油流量计。所要求的设备还包括

碎片探测器，或者其它的被加拿大交通运输部批准的金属碎片探测装置。其他信息参见安装手册。输出驱动说明、附件传动、主要尺寸、重量、惯性和重心等信息，参见安装手册。

Fuel pump, ecology tank, fuel filter and electrical impending bypass indicator, control system-dual channel FADEC with dedicated power source, and provision for fuel flowmeter, are standard equipment as shown in the Approved Parts List. Required equipment also includes a chip detector, or other metallic debris - detecting device to be approved by Transport Canada. For additional information refer to Installation Manual. For output drive specification, accessory drives, principal dimensions, weights, inertias and C.G. locations, refer to Installation Manual.

审定基础（见注3, 4, 6, 7和10） / a) 1987年1月1日生效的加拿大适航规章533部第1次更改(等效于1986年3月25日生效的美国联邦航空规章33部第11修正案)。

Certification Basis Canadian Airworthiness Manual, Chapter 533 change 1, dated 1 January, 1987.
(See NOTES 3, 4, 6, This is equivalent to FAR Part 33, Amendment 11, dated 25 March 1986.

7 & 10) b) 附加适航要求533.101 “电子发动机控制系统”。
/Additional Airworthiness Requirements 533.101 “Electronic Engine Control Systems”.

c) PW305和PW306系列发动机满足JAR-E第7次更改的要求，作为上述条款的附加要求，属于审定基础的一部分。

The PW305 and PW306 series engines have been shown to meet the requirements of JAR-E. Change 7, to the extent that they differ from or are additional to the above and form part of the Certification Basis.

d) PW306系列发动机除了符合加拿大适航规章533.77部之外（见上述a）），还符合CSR 533.76吸鸟条款、CSR 533.77吸冰条款和CSR 533.78吸雨和吸雹条款。

The PW306 series engines in addition to complying with 533.77 of the Canadian Airworthiness Manual (See a) above) also comply with CSR 533.76 for Bird Ingestion, CSR 533.77 for Ice Ingestion, and CSR 533.78 for Water and Hail Ingestion.

e) 对于发动机燃气排放，符合加拿大适航规章516部的B章节第516-05次更改。

For engine gaseous emissions: Canadian Airworthiness Manual 516 subchapter B
at change 516-05.

型号合格证申请日期/Application date for Type Certificate:

PW305	1988年1月13日/January 13, 1988
PW305A	1992年10月8日/October 8, 1992
PW305B	1992年11月10日/November 10, 1992
PW306A	1994年2月14日/February 14, 1994
PW306B	1997年3月14日/March 14, 1997
PW306C	2000年8月29日/August 29, 2000
PW306D	2011年11月21日/November 21, 2011
PW306D1	2014年1月20日/January 20, 2014

批准的发布文件/

Approved

Publications

a) 加拿大交通运输部批准的PW305系列安装手册。

Transport Canada approved PW305 Series Installation Manual.

加拿大交通运输部批准的PW306A安装手册。

Transport Canada approved PW306A Installation Manual.

加拿大交通运输部批准的PW306B安装手册。

Transport Canada approved PW306B Installation Manual.

加拿大交通运输部批准的PW306C、PW306D和PW306D1安装手册。

Transport Canada approved PW306C, PW306D and PW306D1 Installation Manual.

b) 加拿大交通运输部批准的零件清单/Transport Canada approved Parts List No:

PW305: 30B1042/30B1042 for PW305

PW305A: 31B4067/31B4067 for PW305A

PW305B: 31B4892/31B4892 for PW305B

PW306A: 31B5180/31B5180 for PW306A

PW306B: 30B3100/30B3100 for PW306B

PW306C: 30B4258/30B4258 for PW306C

PW306D: 30B7118/30B7118 for PW306D

PW306D1: 30B7450/30B7450 for PW306D1

c) 加拿大交通运输部批准的维修手册

Transport Canada approved Maintenance Manual

PW305系列: P/N 30B1402/P/N 30B1402 for PW305 Series

PW306A: P/N 30B1412/P/N 30B1412 for PW306A

PW306B: P/N 30B4132/P/N 30B4132 for PW306B*

PW306C: P/N 30B4422/P/N 30B4422 for PW306C

PW306D和PW306D1: P/N 30B7302/P/N 30B7302 for PW306D and PW306D1

PW306B的维修原始数据P/N 30B2972只对航空器制造商发布, 且合并到航空器维修手册中, 现在被PW306B维修手册取代。

Maintenance Source Data P/N 30B2972 for the PW306B was issued only to aircraft manufacture to be incorporated into the aircraft maintenance manual, and is now superseded by PW306B Maintenance Manual.

- d) 加拿大交通运输部批准的翻修手册/Transport Canada approved Overhaul Manual

PW305系列: P/N 30B1401/P/N 30B1401 for PW305 Series

PW306A: P/N 30B1413/P/N 30B1413 for PW306A

PW306B: P/N 30B2973/P/N 30B2973 for PW306B

PW306C: P/N 30B4423/P/N 30B4423 for PW306C

PW306D和PW306D1: P/N 30B7303/P/N 30B7303 for PW306D and PW306D1

- e) 加拿大交通运输部批准的寿命限制转子部件的使用寿命定义在每个维修手册的适航限制章节 (见注11)。

Transport Canada approved service life values for life limited rotor components are defined in the airworthiness limitations section of each Maintenance Manual (See Note 11).

- f) 加拿大交通运输部批准的翻修和热端部件检查间隔的发动机工作时间在维修手册的第5章定义/ Transport Canada approved engine operating times between overhaul (TBO) and Hot Section Inspection (HSI) intervals are defined in Chapter 5 of the Maintenance Manual.

- g) 加拿大交通运输部批准的FADEC接口控制文档

Transport Canada Approved FADEC Interface Control Document:

PW305: P/N 30B1951/P/N 30B1951 for PW305

PW305A: P/N 30B2251/P/N 30B2251 for PW305A

PW305B: P/N 30B2418/P/N 30B2418 for PW305B

PW306A: ER 4307/ER 4307 for PW306A

PW306B: ER 4607/ER 4607 for PW306B

PW306C、PW306D和PW306D1: ER 5286/ER 5286 for PW306C, PW306D and PW306D1

h) 加拿大交通运输部批准的发动机更改服务通告

Transport Canada Approved Engine Conversion Service Bulletins:

PW305 to PW305A SB24229

PW305 to PW305B SB24224

PW305A to PW305B SB24320

注1/Note 1 发动机额定值是在基于干燥海平面国际民航组织标准大气条件，且没有外部附件载荷和引气条件下确定的。获得额定值的试验台采用规定的燃油和滑油，使用安装手册中规定的直线排气管和钟形进气道。

The engine ratings are based on dry sea level static ICAO standard atmospheric conditions, with no external accessory loads and no airbleed. The quoted ratings are obtainable on a test stand with the specified fuel and oil, and using the straight exhaust duct and intake bellmouth specified in the Installation Manual.

注2/Note 2 保留/Reserved

注3/Note 3 PW305和PW306系列发动机仅被批准安装在多发飞机上。

The PW305 and PW306 series engine models are approved for multiple engine installations only.

注4/Note 4 PW305和PW306系列发动机符合加拿大交通运输部和美国联邦航空局的结冰条件运行要求，也符合适航规章533.27的要求，因此不需要外部防护罩。

The PW305 and PW306 series engine meet Transport Canada and FAA requirements for operation in icing conditions. These models also meet requirements of Airworthiness Manual 533.27 and therefore do not require external armouring.

注5/Note 5 PW305系列和PW306A发动机包含自动功率增加功能。声明正常起飞限制是为了确保自动功率增加到最大起飞功率时不会超过最大起飞限制值。参见安装手册中表

2-1。

The PW305 Series and PW306A include provision for automatic power increase. The limitations stated for Normal Take-off are to ensure that the Maximum Take-off limitations are not exceeded in the event of an automatic power increase to Maximum Take-off Power. Refer to Installation Manual, Table 2-1.

注6/Note 6

PW305系列

发动机电子控制系统符合SAE AE4L委员会的AE4L-87-3报告中定义的闪电试验，试验使用4级波形。安装要求参见安装手册。

The Electronic Engine Control system conforms to the lightning test defined by the SAE AE4L committee report, AE4L-87-3, using Level 4 Waveforms. For installation requirements refer to Installation Manual.

PW306系列

高强度辐射场和闪电防护的符合性和安装要求参见安装手册。

For HIRF and Lightning conformance and installation requirements refer to the Installation Manual.

注7/Note 7

PW305系列

发动机电子控制软件的设计、开发、测试和文档符合RTCA/DO178A（1985年3月颁布）中的1级要求。

The software contained in the Electronic Engine Control has been designed, developed, tested and documented in accordance with the provisions of the Critical Category, Level 1 of RTCA/DO178A, March 1985.

PW306系列

发动机电子控制软件的设计、开发、测试和文档符合RTCA/DO178B中的A级要求。

The software contained in the Electronic Engine Control has been designed, developed, tested and certified in accordance with the provisions for Critical Category, Level A, of RTCA/DO178B.

注8/Note 8

发动机的定义未包括反推。反推的安装考虑包含在在安装手册中。

The engine definition does not include a thrust reverser. Considerations for the installation of a thrust reverser are contained in the Installation Manual.

注9/Note 9 PW306B、PW306C、PW306D和PW306D1发动机可以按照限时派遣中规定的带探测到的FADEC故障工作。飞机的考虑包含在安装手册中，时间限制包含在维修手册的适航限制章节（见注11）。

The PW306B, PW306C, PW306D and PW306D1 engines can be operated with certain detected FADEC faults in accordance with TLD policy. Aircraft considerations are contained in the Installation Manual, and the time limits are contained in the Airworthiness Limitations Section of the Maintenance Manual (See Note 11).

注10/Note 10 国际民航组织附件16第II卷第3部分说明了每台发动机在其制造日期须满足的燃气排放限制。PW306A和PW306B发动机表明已符合美国联邦航空规章第34部第34-3修正案（1997年7月生效），以及之后适用于超过26.7千牛（6000磅）额定输出推力的TF类型发动机的修正案。

ICAO Annex 16 Volume II Part III prescribes the engine gaseous emissions limits at the date of manufacture of each engine. PW306A and PW306B engines were also shown to comply with FAR 34 at Amendment 34-3 (July 1997) and later amendments as applicable to engines of class TF over 26.7 kN (6,000 lb) rated output.

注11/Note 11 PW306B发动机寿命限制件和限时派遣的限制最初包含在适航限制手册P/N 30B2978中。这些被批准的限制现在包含在维修手册P/N 30B4132中的适航限制章节。

The PW306B life limited parts and time limited dispatch limits were originally contained in P/N 30B2978 Airworthiness Limitations Manual. These approved limits are now contained in the Airworthiness Limitation Section of the Maintenance Manual P/N 30B4132.

--结束--

-- END--