

型号认可证数据单

TYPE VALIDATION CERTIFICATE DATA SHEET

编号/No.: VTC0182E

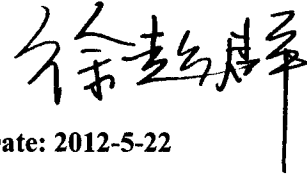
版次/Revision: 1

型号/Type:

PW308A

PW308C

批准人/Approved by:



日期/Date: 2012-5-22

本数据单是型号认可证(编号: VTC0182E)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: VTC0235E), 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 Canada J4G 1A1

有效页清单/List of effective pages :

页数/ Pages	1	2	3	4	5	6	7	8
版次/Revision	1	1	1	1	1	1	1	1

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	VTC0182E; 版次: 1; 颁发日期: 2012年5月22日; No.VTC101E; Revision 1; Date of Issue : 2011-5-22	TCCA TCDS E-31; 第6版; 2011年5月26日颁发 No. E-31; Issue No.6; Issue Date:May 26, 2011
历史 History	VTC0182E; 版次:0; 颁发日期: 2006年11月23日; No.VTC0182E; Revision 0; Date of Issue : 2006-11-23	TCCA TCDS E-31; 第2版; 2001年11月29日颁发 No. E-31; Issue No.2; Issue Date: November 29, 2001

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 Canada J4G 1A1
5. 制造厂/Manufacturer: Pratt & Whitney Canada Corp.
6. ETOPS: 不适用/NA
7. CAAC专用要求/CAAC Special Requirements: 满足中国3号燃油（GB6537-2006）牌号的要求。
/Compliance with requirement of P.R.China JET Fuel No.3 (GB6537-2006).

第2部分 数据单

SECTION 2 DATA SHEET

PW308A型发动机

型号PW308A/MODEL PW308A						
类型/Type	双转子前风扇涡轮发动机/Twin spool front fan, jet propulsion gas turbine					
额定值 (见注1) Ratings (See Note 1)		喷气推力/Jet Thrust		环境限制/Ambient Limit		测量的涡轮间温度/Measured Interturbine Temperature(°C)
		daN	lb	°C	°F	
	起飞/Take-off	3071	6904	37	98.6	875
	最大连续/ Maximum Continuous	3071	6904	28	82.4	860
	启动/Starting					950
发动机转速 /Engine Speed	最大转速/ Maximum RPM	N ₁ 10660 (102.5%) N ₂ 27316 (102%)				
	最小飞行慢车 转速/Minimum Flight Idle RPM	N ₂ 16657 (62%)				

PW308C型发动机

型号PW308C/MODEL PW308C						
类型/Type	双转子前风扇涡轮发动机/Twin spool front fan, jet propulsion gas turbine					
额定值 (见注1) Ratings (See Note 1)		喷气推力/Jet Thrust		环境限制/Ambient Limit		测量的涡轮间温度/Measured Interturbine Temperature(°C)
		daN	lb	°C	°F	
	起飞/Take-off	3115	7002	38	100.4	875
	正常起飞 /Normal Take-off	3113	6998	32	89.6	875
	最大连续/ Maximum Continuous	3113	6998	32	89.6	860
	启动/Starting					950
发动机转速 /Engine Speed	最大转速/ Maximum RPM	N ₁ 10660 (102.5%) N ₂ 27316 (102%)				
	最小飞行慢车 转速/Minimum Flight Idle RPM	N ₂ 16657 (62%)				

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与各发动机相关数据（另有说明除外）/Data pertinent to all models except as indicated

引气/Air Bleed	参见安装手册第二章/Refer to Section 2 of Installation Manual.
燃油压力/Fuel Pressure	参见安装手册第六章/Refer to Section 6 of Installation Manual.
燃油温度/Fuel Temperature	参见安装手册第六章/Refer to Section 6 of Installation Manual.
滑油压力/Oil Pressure	参见安装手册表格2-1/Refer to Installation Manual Table 2-1.
滑油温度/Oil Temperature	参见安装手册表格2-1/Refer to Installation Manual Table 2-1.
燃油牌号/Fuel Type	-满足国标GB6537-2006燃油牌号的要求 /Compliance with requirement of GB6537-2006 -其余参见维修手册/The remaining fuel types refer to Maintenance Manual.

滑油牌号/Oil Type 参见维修手册/Refer to Maintenance Manual.

滑油量/Oil Capacity	升/Litres	英加仑/Imp.gallons	美加仑/U.S. gallons
<u>PW308A</u>			
总共/Total:	6.9	2.1	2.5
可用/Useable:	2.32	0.51	0.61
<u>PW308C</u>			
总共/Total:	9.1	2.0	2.4
可用/Useable:	1.85	0.41	0.49

设备/Equipment PW308A

（见注7/See Note 7）燃油泵、阀、油滤和电子旁通指示器、控制系统（双通道FADEC）、和用于飞机的燃油流量计是发动机组装零部件清单中的标准设备。要求的设备也包括加拿大运输部批准的金属屑探测器、滑油压力传感器、滑油温度传感器、电子旁通活门和振动传感器。关于附加的信息参照安装手册。关于输出驱动规范、附件驱动、主要尺寸、重量、惯性和重心，参照安装手册。

/Fuel pump, ecology valve, fuel filter and electrical impending bypass indicator, control system (dual channel FADEC with dedicated power source), and fuel flowmeter for aircraft indication are standard equipment as shown in the Engine Assembly Parts List. Required equipment also includes a chip detector, or other metallic debris - detecting device to be approved by Transport Canada, oil pressure sensor, oil temperature sensor and electrical impending bypass indicator, and vibration sensor. For additional information refer to the Installation Manual. For output drive specification, accessory drives, principal dimensions, weights, inertias and centre of gravity locations, refer to the Installation Manual.

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PW308C

每一台PW308A发动机，均衡系统活门由均衡系统箱和积余油活门替代。

/As per PW308A, with the exception of the ecology valve, which is replaced by an ecology tank and dump valve.

审定基础/

PW308A

Basis of Certification

a) 1999年12月1日版生效的加拿大适航手册533章第5次更改。

(见注3, 4, 5, 6/ See Notes

/Canadian Airworthiness Manual, Chapter 533 change 5.

3, 4, 5 and 6)

b) 鸟的吸入要求，在NPRM 98-19（参照FAR 33.76 b 和 c）和NPA-E20中详述。

/Bird Ingestion Requirements detailed in NPRM 98-19 (reference proposed FAR 33.76 b and c) and NPA-E20.

c) 适航手册516章B分部“飞机发动机污染”加上ICAO附件16第二卷，第四次修订。符合FAR 34修正案34-3，1999年2月3日。

/Airworthiness Manual, Chapter 516 subchapter B “Aircraft Engine Emissions” plus ICAO Annex 16 Volume II, amendment 4. Compliance with FAR 34 up to amendment 34-3, February 3, 1999 has also been demonstrated.

d) 发动机符合JAR E要求，第9次更改，1994年10月21日加OP's E/96/1和E/97/1。

/In addition, the engine has been found to comply with the Joint Aviation Requirements, JAR E, Change 9, dated October 21, 1994 plus OP's E/96/1 and E/97/1.

PW308C

a) 加拿大适航手册，533章第5次更改，1999年12月1日。由NPA-2000-265,修订，2001年3月5日采用，相当于1965年2月生效FAR 33第33-1 至33-20修正案。

NPA-2000-265与NPRM 98-19（参照FAR 33.76 b and和c)和NPA-E20的要求合并）。

/Canadian Airworthiness Manual, Chapter 533 change 5, dated 01 December, 1999 as amended by NPA-2000-265, adopted March 5, 2001 which is equivalent to FAR 33 effective February 1, 1965, with amendments 33-1 through 33-20.

NPA-2000-265 incorporates the requirements of NPRM 98-19 (reference proposed FAR 33.76 b and c) and NPA-E20.

b) 适航手册516章B分部“飞机发动机污染”加上ICAO附件16第二卷，第四次修订。符合FAR 34修正案34-3，1999年2月3日。

/Airworthiness Manual, Chapter 516 subchapter B “Aircraft Engine Emissions” plus ICAO Annex 16

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Volume II, amendment 4. Compliance with FAR 34 up to amendment 34-3, February 3, 1999 has also been demonstrated.

c) 发动机符合JAR-E要求, 第9次更改, 1994年10月21日加OP's E/96/1 和E/97/1。

/In addition, the engine has been found to comply with the Joint Aviation Requirements, JAR-E, Change 9, dated October 21, 1994 plus OP's E/96/1 and E/97/1.

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

PW308A 1996年11月12日/November 12, 1996

PW308C 2000年8月17日/August 17, 2000

批准的出版物

a) PW308A安装手册 ER3973。

/Approved

PW308C安装手册 ER5074。

Publications

/PW308A Installation Manual ER3973.

PW308C Installation Manual ER5074.

b) PW308A FADEC接口控制文件 ER 3971。

PW308C FADEC接口控制文件 ER 5072/

/PW308A FADEC Interface Control Document ER 3971.

PW308C FADEC Interface Control Document ER 5072.

c) PW308A首台发动机组件清单 30C2000。

PW308C首台发动机组件清单 30C3205。

/PW308A Engine Assembly Parts List No. 30C2000 for the first production engine.

PW308C Engine Assembly Parts List No. 30C3205 for the first production engine.

d) PW308A维护手册适航限制部分 P/N 3043622。

PW308C维护手册适航限制部分 P/N 30C3822。

/PW308A Airworthiness Limitation Section of Maintenance Manual P/N 3043622.

PW308C Airworthiness Limitation Section of Maintenance Manual P/N 30C3882.

持续适航文件

a) PW308A维修手册 P/N 3043622。

/Instructions for

PW308C维修手册 P/N 30C3822。

Continuing Airworthiness

/PW308A Maintenance Manual P/N 3043622.

PW308C Maintenance Manual P/N 30C3882.

b) PW308A大修手册 PIN 3043623。

PW308C大修手册 P/N 30C3883。

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	/PW308A Overhaul Manual PIN 3043623. PW308C Overhaul Manual P/N 30C3883.
注1/Note 1	发动机额定值基于干海平面静态 ICAO标准的大气环境，没有外部附加载荷和引气。引用的额定值在试车台上通过指定的滑油和燃油条件下试验得到，同时试验中进气和排气管道在安装手册中也有明确规定。 /The engine ratings are based on dry sea level static ICAO standard atmospheric conditions, 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 exhaust duct and intake bellmouth specified in the Installation Manual.
注2/Note 2	保留 Reserved
注3/Note 3	PW308型系列发动机仅被批准作为多发动机安装。 /The PW308 series engine models are approved for multiple engine installations only.
注4/ Note 4	PW308系列发动机满足加拿大运输部和美国联邦航空局对于结冰条件下的运行规定。这些发动机也满足适航手册533.27的规定，因此不需要外部防护罩。 /The PW307 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	<u>PW308A, PW308C发动机/Model PW308A, PW308C</u> 高强度辐射场、闪电防护和安装要求在安装手册中提供。 /HIRF and Lightning conformance and installation requirements are provided in the Installation Manual.
注6/Note 6	<u>PW308A, PW308C发动机/Model PW308A, PW308C</u> 电子发动机控制软件的设计、研发、测试和说明符合关键类别RTCA/DO178B中A级的条款要求。 /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 A of RTCA/DO178B.
注7/Note 7	发动机材料单中并不包含反推装置。关于反推装置的安装要求见安装手册。 /The engine bill of material does not include a thrust reverser. Considerations for the installation of

a thrust reverser are contained in the Installation manual.

注8/Note 8

保留

Reserved

注9/Note 9

FADEC的某个故障与TLD规定一致时PW308C和PW308A发动机可以运行。安装手册里考虑了航空器，维修手册里的适航限制中含时限。

/The PW308C and PW308A engines can be operated with certain detected FADEC faults in accordance with TLD policy. Aircraft considerations are contained in the Installation Manual, and time limits are contained in the Airworthiness Limitations section of the Maintenance Manual.

注10/Note 10

PW308C可以提供自动功率增加。正常起飞规定的限制是保证最大起飞限制不超出一旦自动功率增加到最大起飞功率时。参照安装手册，表2-1。

/The PW308C includes 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11/Note 11

当单发失效运行时，通常持续时间限制为5分钟的起飞额定值可能延长使用到10分钟，并且对发动机的适航性没有不利的影响。

这样的运行

（起飞过程中发动机失效是非正常的）。随后进行的任何工作参照发动机维修手册05-10-00章。

/The take-off ratings that are nominally limited to 5 minutes duration may be used for up to 10 minutes for one engine inoperative operations without adverse effects upon engine airworthiness. Such operations are anticipated on an infrequent basis (as engine failure events during take-off are uncommon). Refer to the Engine Maintenance Manual Chapter 05-10-00 for any subsequent maintenance actions.

结束

END