

型号认可证数据单
THE VALIDATION DATA SHEET

编号/No.: VTC0182E

版次/Revision: 2

型号/Type:

PW308A

PW308C

批准人/Approved by: Yang Zhenmei

职务/Title: Deputy Director General of CAAC-AAD



日期/Date: 2017 年 7 月 6 日

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的状态和限制。

This data sheet, which is a part of Validation Type Certificate (No: VTC182E), prescribes conditions and limitations 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:

加拿大普惠公司/ Pratt & Whitney Canada Corp.

玛利-维克多汉 1000/1000 Marie-Victorin

加拿大魁北克省朗基尔市/ Longueuil, Quebec, Canada

有效页清单/List of effective pages :

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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 2, 2017 年 7 月 6 日 No. VTC0182E, Revision 2, July 6, 2017	TCCA TCDS E-31, 第 7 版, 2013 年 1 月 9 日 No. E-31, Issue No.7, January 9, 2013
历史 History	VTC0182E, 版次 0, 2006 年 11 月 23 日颁发 No. VTC0182E, Revision 0, November 23, 2006	TCCA TCDS E-31, 第 2 版, 2001 年 11 月 29 日 No. E-31; Issue No.2; November 29, 2001
	VTC0182E, 版次 1, 2012 年 5 月 22 日颁发 No. VTC0182E, Revision 1, May 22, 2012	TCCA TCDS E-31; 第 6 版; 2011 年 5 月 26 日 No. E-31, Issue No.6, May 26, 2011

2. 类别/Category: 航空发动机/Aeroengine
3. 认可当局/Validation Authority: 中国民用航空局/CAAC
审定当局/Certifying Authority: 加拿大运输部民航局/TCCA
4. 型号合格证持有人/Type Certificate Holder: 加拿大普惠公司/Pratt & Whitney Canada Corp.
玛利-维克多汉 1000/1000 Marie-Victorin
魁北克省朗基尔市/ Longueuil, Quebec
5. ETOPS: 不适用/NA
6. CAAC 专用要求/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

PW308A 型发动机/MODEL PW308A

2000 年 11 月 29 日批准/ Approved November 29, 2000

额定值 (见 注 1 和 11) Ratings(See Notes 1&11)		喷气推力/Jet Thrust daN lb		环境限制/Ambient Limit °C °F		测量的涡轮间温度 /Measured Interturbine Temperature °C °F	
	起飞/Take-off	3071	6904	37	98.6	875	1607
	最大连续/ Maximum Continuous	3071	6904	28	82.4	860	1580
	起动/Starting					950	1742

PW308C 型发动机/MODEL PW308C

2001 年 11 月 29 日批准/ Approved November 29, 2001

额定值 (见 注 1、10 和 11) Ratings(See Notes 1, 10 & 11)		喷气推力/Jet Thrust daN lb		环境限制/Ambient Limit °C °F		测量的涡轮间温度 /Measured Interturbine Temperature °C °F	
	起飞/Take-off	3115	7002	38	100.4	875	1607
	正常起飞 /Normal Take-off	3113	6998	32	89.6	875	1607
	最大连续/ Maximum Continuous	3113	6998	32	89.6	860	1580
	起动/Starting					950	1742

所有型别发动机的数据 (除另有说明外) / Data pertinent to all models except as indicated

发动机类型/Engine Type:

双转子前风扇, 喷气推进涡轮发动机/Twin spool front fan, jet propulsion gas turbine

发动机速度/Engine Speed:

	N ₁	N ₂
最大转速/Maximum RPM	10660(102.5%)	27316(102%)
最小飞行慢车转速(换算值)/ Minimum Flight Idle RPM(Corrected)		16657(62%)

引气/Air Bleed: 参见安装手册的第二部分/Refer to Section 2 of Installation Manual.

燃油压力/Fuel Pressure: 参见安装手册的第六部分/Refer to Section 6 of Installation Manual.

燃油温度/Fuel Temperature: 参见安装手册的第六部分/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

PW308A

总量/Total	9.6	2.1	2.5
可用/Useable	2.32	0.51	0.61

PW308C

总量/Total	9.1	2.0	2.4
可用/Useable	1.85	0.41	0.49

设备/Equipment

(见注 7/See Note 7)

PW308A

燃油泵、生态阀、燃油滤和电子旁通指示器,控制系统(双通道 FADEC),和用于飞机指示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碎屑探测器或别的金属碎屑探测器,滑油压力传感器、滑油温度传感器,电子旁通指示器和振动传感器。关于其余信息,参见安装手册。关于输出驱动规范、附件驱动、主要尺寸、重量、惯性和重心位置,参见安装手册。/

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.

PW308C

1047 构型/Build Spec 1047

除使用生态箱和排泄阀代替生态阀门之外,其余设备与 PW308A 相同。/
As per PW308A, with the exception of the ecology valve, which is replaced by an ecology tank and dump valve.

1289 构型/Build Spec 1289

除去掉生态系统之外,其余设备与 PW308A 相同。/

As per PW308A, with the exception of elimination of ecology system.

- 审定基础
(见注 3,4,5 和 6)
Certification Basis
(See Notes 3, 4, 5 and 6)
- PW308A
- a) 1999 年 12 月 1 日生效的加拿大适航手册, 533 章第 5 次修改。/
Canadian Airworthiness Manual, Chapter 533 change 5, dated December 1, 1999
- b) 在 NPRM 98-19(参照 FAR 33.76 b)和 c)提出)和 NPA-E20 中详述了吸鸟要求。/
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“飞机发动机排出物”加上 ICAO 附件 16 第二卷, 第四次修订。
符合 1999 年 2 月 3 日生效的 FAR 34 修正案 34-3。/
Airworthiness Manual, Chapter 516 subchapter B “Aircraft Engine Emissions” plus ICAO Annex 16 Volume II, Amendment 4.
Compliance with FAR 34 up to Amdt 34-3, February 3, 1999 has also been demonstrated.
- d) 发动机还符合 1994 年 10 月 21 日生效的 JAR-E, 第九次修改, 以及 OP's E/96/1 and 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) 1999 年 12 月 1 日生效的加拿大适航手册, 533 章第 5 次修改, 后经过 NPA-2000-265 的修订, 于 2001 年 3 月 5 日被采用, 相当于 1965 年 2 月 1 日生效的 FAR 33 部第 33-1 至 33-20 修正案。
Canadian Airworthiness Manual, Chapter 533 change 5, dated December 1, 1999 as amended by NPA-2000-265, adopted March 5, 2001 which is equivalent to FAR 33 effective February 1, 1965, with Amdts 33-1 through 33-20.
NPA-2000-265 包含了 NPRM 98-19(参照 FAR 33.76 b)和 c)提出)和 NPA-20 的要求。
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“飞机发动机排出物”加上 ICAO 附件 16 第二卷, 第四次修订。
符合 1999 年 2 月 3 日生效的 FAR 34 修正案 34-3。
Airworthiness Manual, Chapter 516 subchapter B “Aircraft Engine Emissions” plus ICAO Annex 16 Volume II, Amendment 4.
Compliance with FAR 34 up to Amdt 34-3, February 3, 1999 has also been demonstrated.

- c) 发动机还符合 1994 年 10 月 21 日生效的 JAR-E, 第九次修改, 以及 OP's E/96/1 and 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:

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/
Approved Publications

a) PW308A 安装手册 ER3973./ PW308A Installation Manual ER3973.

PW308C 安装手册 ER5074./ PW308C Installation Manual ER5074.

b) PW308A FADEC 接口控制文件 ER 3971。

PW308A FADEC Interface Control Document ER 3971.

PW308C FADEC 接口控制文件 ER 5072。

PW308C FADEC Interface Control Document ER 5072.

c) PW308A 首台发动机组装零部件清单, 编号 30C2000。

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

PW308C 首台发动机组装零部件清单, 编号 30C3205。

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

d) PW308A 维修手册 (件号 3043622) 中的适航限制部分。

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

PW308C 维修手册 (件号 30C3822) 中的适航限制部分。

PW308C Airworthiness Limitation Section of Maintenance Manual P/N 30C3822.

持续适航文件/
Instructions for
Continuing
Airworthiness

a) PW308A 维修手册 (件号 3043622)

PW308A Maintenance Manual P/N 3043622

PW308C 维修手册 (件号 30C3882)

PW308C Maintenance Manual P/N 30C3882

b) PW308A 大修手册 (件号 3043623)

PW308A Overhaul Manual P/N 3043623

PW308C 大修手册 (件号 30C3883)

PW308C Overhaul Manual P/N 30C3883

注 1/ NOTE 1

发动机额定值在下列状态确定: ICAO 标准大气条件下干海平面静态, 无外部附件载荷和引气。引用的额定值在试车台上在具体的燃油和滑油条件下得到, 并使用安装手册中指定的排气管和进气喇叭口。

The engine ratings are based on dry sea level static ICAO standard atmospheric conditions, no external accessory loads and no air bleed. 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 系列发动机型号仅被批准进行多发安装。 The PW308 series engine model 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运行的要求。这些发动机也满足适航手册 533.27 的要求，故不需要外部防护罩。 PW308 series engine meet Transport Canada and FAA requirements for operation in icing conditions. These models also meet the requirements of Airworthiness Manual 533.27 and therefore do not require external armouring.
注 5/ NOTE 5	高能辐射场、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	电子发动机控制器内的软件的设计、开发、测试和说明符合 RTCA/DO 178B 中 A 级、关键类别的条款要求。 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/DO 178B.
注 7/ NOTE 7	发动机材料清单中不包括反推装置。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	依据限时派遣规定，发动机可以在 FADEC 具有某些可探测的故障时运行。安装手册中包括了对于飞机方面的考虑，维修手册中的适航限制部分包括了时限。 The 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 具有自动功率增加的规定。声明的正常起飞下的限制旨在确保自动功率增加到最大起飞功率时，不会超出最大起飞限制。参见安装手册中表格 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	名义上限制使用 5 分钟的起飞功率状态可以在单发失效情形下允许使用 10 分钟，并且对发动机适航性不会产生有害影响。这种情形很少发生，因为

起飞过程中的发动机失效事件不常发生。关于随后的维护措施，参见发动机维修手册 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-