

型号认可证数据单
THE VALIDATION DATA SHEET

编号/No.: VTC0335E

版次/Revision: 0

型号/Type:

T5317A-1

批准人/Approved by:

职务/Title: Director General of CAAC-AAD

日期/Date: 2017 年 6 月 22 日

本数据单是型号认可证（编号 VTC0335E）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 a part of Validation Type Certificate (No: VTC0335E), 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:

霍尼韦尔国际公司/ Honeywell International Inc.
第34街南111号/111 South 34th Street
亚利桑那州菲尼克斯（邮编：85034）/ Phoenix, AZ 85034

有效页清单/List of effective pages:

页数/ Pages	1	2	3	4	5	6	7							
版次/Revision	0	0	0	0	0	0	0							

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	VTC0335E, 版次0, 2017年6月22日 No. VTC0335E, Revision 0, Jun 22, 2017	FAA TCDS E17EA, 第 11 版, 2006 年 10 月 6 日 No. E17EA, Revision 11, October 6, 2006

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: 美国联邦航空管理局/FAA
4. 型号合格证持有人/Type Certificate Holder: 霍尼韦尔国际公司/ Honeywell International Inc.
第34街南111号/111 South 34th Street
亚利桑那州菲尼克斯 (邮编: 85034) / Phoenix, AZ
85034
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

I. 型号/ MODELS	T5317A-1
类型/ TYPE	轴流加离心压气机、自由涡轮式涡轴发动机：5级轴流加1级离心压气机、外部环形雾化燃烧室、2级燃气涡轮和2级动力涡轮。/
额定值/ RATINGS	Axial – centrifugal flow, free turbine turboshaft. Five stage axial and single stage centrifugal compressor. External annular atomizing combustion chamber. Two stage gas producer turbine. Two stage power turbine.
海平面最大连续功率（马力）/ Maximum continuous at sea level hp.	1350
最佳输出轴转速（最大连续功率状态）（转每分钟）/ Optimum output shaft r.p.m. (at maximum continous power)	6230
海平面起飞（5 分钟）功率（马力）/ Takeoff (5 min.) at sea level hp.	1500
最佳输出轴转速（起飞功率状态）（转每分钟）/ Optimum output shaft r.p.m. (at takeoff power)	6462
燃油控制/ FUEL CONTROL	装有整体双元泵的GPECS TA-7型燃调/ GPECS Model TA-7 with integral dual element pump
燃油/ FUEL	见注12/See NOTE 12
滑油/ OIL	MIL-PRF-7808或MIL-PRF-23699/ MIL-PRF-7808 or MIL-PRF-23699
主要尺寸/ PRINCIPAL DIMENSIONS	
名义长度（英寸）/ Length, in. nominal	47.602
最大直径（英寸）/ Maximum diameter, in.	24.50
干重（磅）/ Weight (DRY), lb. （包括发动机所必需的附件，不包括起动机、两个测速电机、滑油箱和滑油冷却器）/ (includes essential engine accessories but excludes starter, two tachometer generators, oil tank and oil cooler)	541
重心位置（干重）/ C.G. LOCATION (DRY WEIGHT)	
距前部安装座中心线之后的距离（英寸）/ Aft of front mount pad centerline, in.	14.38
距发动机水平中心线之下的距离（英寸）/ Below engine horizontal centerline, in.	.76

I. 型号 (续) / MODELS(Continued)	T5317A-1
点火系统 (28伏直流) / IGNITION SYSTEM (28 VOLTS D.C.)	装有点火分流器线圈和两个分流沿面间隙点火电嘴的 Bendix TGLN2125型或GLA 42416型点火系统。/ Bendix Type TGLN2125 or GLA Type 42416 with spark splitter coil and two shunted surface gap igniter plugs
点火电嘴/IGNITER PLUGS	AC5611304

审定基础/ CERTIFICATION BASIS

型号/ Model	申请日期/ Date of Application	型号合格证号 E17EA / Type Certificate No. E17EA	审定基础/Certification Basis
T5317A-1	06/24/92	1993年7月21日修订/ 07/21/93 Amended	联邦法规14章第33部第5修正案/ 14 CFR part 33, Amendment 5

生产基础/ PRODUCTION BASIS 2000年1月25日重新颁发给霍尼韦尔国际公司的生产合格证413NM。/ Production Certificate No. 413NM reissued to Honeywell International Inc. on January 25, 2000.

注释/NOTES

注1/ NOTE 1: 包括起飞在内的所有工况下, 动力涡轮最大转速为21300 (转每分钟)。

Maximum power turbine speed is 21,300 r.p.m. at all conditions including takeoff.

注2/ NOTE 2: 动力涡轮输出轴扭矩限制/Power Turbine output shaft torque limits:

T5317A-1

起飞/Takeoff 1250英尺磅/1250 ft. lb.

最大连续/Maximum continuous 1160英尺磅/1160 ft. lb.

注3/ NOTE 3: 燃气涡轮最大允许转速为/Maximum permissible gas producer speeds are:

T5317A-1

起飞/Takeoff 26,400转每分钟/26,400 r.p.m.

最大连续/Maximum continuous 25,400转每分钟/25,400 r.p.m.

注4/ NOTE 4: 最大允许温度/ Maximum permissible temperatures:

对T5317A-1, 最大允许排气温度随环境温度改变而变化, 详见FAA批准的T5317A-1安装手册21-12573。

For model T5317A-1, maximum permissible exhaust gas temperature varies with ambient temperature as shown in the following FAA Approved documents: Model T5317A-1 Installation Instructions 21-12573.

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滑油进口温度/ Oil inlet temp. 200°F

滑油出口温度/ Oil outlet temp. 275°F

点火组件表面温度 Ignition unit surface temp. 250°F

燃油控制装置环境温度/ Fuel control ambient temp. 250°F

点火电磁阀表面温度/ Igniter solenoid valve surface temp.	300°F
引气控制装置环境温度/ Air bleed control ambient temp.	300°F
热电偶线束机身接口连接器 Thermocouple harness airframe interface connector	350°F

注5/ NOTE 5: 燃油和滑油压力限制/ Fuel and Oil Pressure Limits:

T5317A-1

燃油/Fuel:	0至50 p.s.i.g / 0 to 50 p.s.i.g
滑油/ Oil:	25,400转每分钟/25,400 r.p.m.
地面慢车/Ground idle	最小10 p.s.i./ 10 p.s.i. min.
工作范围/Operating range	20至100 p.s.i. / 20 to 100 p.s.i.
起飞&最大连续/ Takeoff & max. continuous	80至100 p.s.i. / 80 to 100 p.s.i.

注6/NOTE 6: 附件驱动规定/ Accessory Drive Provisions:

驱动装置/ Drive	型号/Type	需要的数量 Number Required	减速比 Gear Ratio	最大扭矩（英寸磅） Maximum Torque (in.-lb.)			旋转方向 Rotation
				连续/Continuous	短时(1)/Short Time (1)	静态/Static	
燃气涡轮转速计/ Gas producer tachometer	20005 XV-B 修改/Modified	1	.1670	7	7	50	C
起动-发电机/ Starter-Generator	20002 XII-D 修改/Modified	1	.2833	250	320(3)	1600(2)	C
功率提取/Power takeoff	20002 XII-D 修改/Modified	1	.5397	150	225	800(4)	C
动力涡轮转速计/ Power turbine tachometer	20005 XV-B 修改/Modified	1	.1993	7	7	50	C

C – 顺时针/ C – Clockwise

- (1) 最大允许扭矩持续时间为 5 分钟，不允许在少于 4 个小时的时间段内重复发生。

Maximum permissible torque 5-minute periods, recurring at not less than 4-hour intervals.

- (2) 起动过程中最大允许扭矩为 1296 英寸磅。

Maximum permissible torque during starts is 1296 in.-lb.

- (3) 允许发电机在扭矩为 320 至 625 英寸磅的范围内工作，但时间不超过 15 秒。

Generator torque in excess of 320 in.-lb. is permissible up to a maximum of 625 in.-lb. for a period of not more than 15 seconds.

- (4) 若安装起动机，则安装座扭矩限制为 680 英寸磅/680 in.-lb. on power takeoff pad when starter is installed.

客户选取附件的功率提取限制见 FAA 批准的 T5317A-1 安装手册 21-12573

The customer accessory horsepower extraction limits are presented in the following FAA approved documents:
Model T5317A-1 Installation Instructions 21-12573.

客户选取附件的功率提取限制见FAA批准的霍尼韦尔国际公司手册。

The customer accessory horsepower extraction limits are presented in the Honeywell International Inc. Manual of FAA Approved Data.

注7/ NOTE 7: 发动机额定值基于校准的车台并在以下条件测得:

Engine ratings are based on calibrated stand performance under the following conditions:

静态海平面标准大气: 59华氏度、29.92英寸水银汞柱气压。

Static sea level standard conditions of 59°F and 29.92 in. Hg.

无进气损失, 无附件驱动加载, 最小允许引气。

No inlet duct losses, no loading of the accessory drives and minimum permissible bleed airflow.

排气系统构型见霍尼韦尔国际公司图纸1-000-031-01。

Exhaust configuration as defined by Honeywell International Inc. drawing 1-000-031-01.

注8/ NOTE 8: 最大允许引气提取限制见FAA批准的T5317A-1安装手册21-12573中图1-5。

The maximum permissible air bleed extraction limits are in the following FAA approved documents: Model T5317A-1 Installation Instructions 21-12573 - Figure 1-5.

注9/ NOTE 9: 结冰运行情况下, 燃气涡轮应维持的最低转速见FAA批准的T5317A-1安装手册21-12573中图1-7。

These engines meet the FAA requirements for operation in icing conditions provided a minimum gas producer speed is maintained in accordance with the following FAA approved documents: Model T5317A-1 Installation Instructions 21-12573 - Figure 1-7.

注10/ NOTE 10: 该型发动机满足FAA关于涡轮盘完整性和转子叶片包容性的要求, 装机时机身不需安装防护措施。机体应提供航前对超转控制器进行检测的措施。T5317A-1型发动机不需要电子式动力涡轮超转系统。

These engines meet FAA requirements for adequate turbine disc integrity and rotor blade containment and do not require airframe mounted armoring. An airframe provided switch is required to test the overspeed governor prior to flight. Model T5317A-1 does not require an electronic power turbine overspeed system.

注11/ NOTE 11: 未对发动机进行试验以评估吸鸟和冰雹的影响。应在批准发动机安装前, 对机体进气道和发动机组合的吸鸟和冰雹特性进行评估。

These engines have not been tested to evaluate the effects of bird and ice ball ingestion. The bird and ice ball ingestion characteristics of the airframe air inlet and engine combination are to be evaluated prior to the approval of the engine installation.

注12/ NOTE 12: MIL-DTL-5624, Grades JP-4 and JP-5. MIL-DTL-83133, Grade JP-8. ASTM D1655 Jet A, Jet A-1和Jet B. 等效燃油和添加剂见霍尼韦尔国际公司维护手册330.2。

MIL-DTL-5624, Grades JP-4 and JP-5. MIL-DTL-83133, Grade JP-8. ASTM D1655 Jet A, Jet A-1 and Jet B. Refer to Honeywell International Inc. Maintenance Manual 330.2 for equivalent fuels and additives.

注13/ NOTE 13: 保留/reserved

注14/ NOTE 14: 限寿件清单见FAA批准的霍尼韦尔国际公司服务通告T5313B/17-0020。大修间隔和检查间隔时间见服务通告T5313B/17-0001 (发动机-总则-建立大修的时间间隔和检查的时间间隔)和T5313B/17-0024 (发动机-燃油调节器和超转控制器-大修计划)。

Certain engine parts are life limited as listed in FAA approved Honeywell International Inc. Service Bulletin No. T5313B/17-0020. Time Between Overhaul and Time Between Inspection criteria are contained in the following Service Bulletins: T5313B/17-0001 Engine - General - Establishing a Time Between Overhaul (TBO) and Time Between Inspections (TBI) and SB T5313B/17-0024 Engine-Fuel Regulator and Overspeed Governor - Overhaul Schedule.

注15/ NOTE 15: 保留/Reserved

注16/ NOTE 16: 保留/Reserved

...结束.../ ...END...