

型号认可证数据单

TYPE VALIDATION CERTIFICATE DATA SHEET

编号/No.: VTC0210E

版次/Revision: 1

型号/Type:

CF34-10E2A1, CF34-10E5, CF34-10E5A1,
CF34-10E6, CF34-10E6A1, CF34-10E7,
CF34-10E7-B

批准人/Approved by:

徐超群

日期/Date: 2011-7-18

本数据单是型号认可证（编号：VTC0210E）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: VTC0210E), 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:

General Electric Company,

1Neumann Way

Cincinnati, Ohio

45215-6310 USA

有效页清单/ List of Effective Page:

页数/ Pages	1	2	3	4	5	6	7	8	9	10	11
版次/Revision	1	1	1	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	VTC0210E; 版次: 1; 颁发日期: 2011年7月18日; No.VTC0210E; Revision 1; Date of Issue : 2011-7-18	FAA TCDS E00070NE; 第5版; 2008年6月16日颁发 No. E00070NE; Issue No.5; Issue Date: June. 16, 2008
历史 History	VTC0210E; 版次: 0; 颁发日期: 2008年4月24日; No.VTC0210E; Revision 0; Date of Issue : 2008-4-24	FAA TCDS E00070NE; 第4版; 2006年7月20日颁发 No. E00070NE; Issue No.4; Issue Date: July. 20, 2006

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: 美国联邦航空局/FAA
4. 型号合格证持有人/Type Certificate Holder: General Electric Company,
1Neumann Way, Cincinnati, Ohio, 45215-6310 USA
5. 制造厂/Manufacturer: General Electric Company
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) 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. 审定基础/Certification Basis

(1) CF34-10E (所有型号)

CF34-10E (All Models) -

联邦条例 14 章, 33 部, 生效日期: 1965 年 2 月 1 日。修订案: 33-1 至 33-20 (2000 年 12 月 13 日)

14 Code of Federal Regulations(CFR), Part 33, effective February 1, 1965, as amended by amendments 33-1 through 33-20 (December 13, 2000)

(2) 所有型号:

All Engine models-

联邦条例 14 章, 34 部, 生效日期: 1990 年 9 月 10 日。修订案: 34-1 至 34-3 (1999 年 2 月 3 日)。增加联邦条例 40 章, 87 部, 生效日期: 2005 年 12 月 19 日。

14 CFR Part 34, effective September 10, 1990, as amended by amendments 34-1 through 34-3 (February 3, 1999). In addition, 40 CFR Part 87, effective December 19, 2005.

(3) 等效安全 8040-ELOS-04-NE-01 §33.83(c)(1) 振动测试。

Equivalent level of safety 8040-ELOS-04-NE-01 §33.83(c)(1) Vibration Test

A. 型号合格证/ Type Certificate

型号 Model	申请日期/ Date of Application	证号 No. E00070EN 颁发日期 Issued/Amended
CF34-10E5	2001 年 2 月 9 日 February 9, 2001	2004 年 12 月 22 日 December 22, 2004
CF34-10E5A1	2001 年 2 月 9 日 February 9, 2001	2004 年 12 月 22 日 December 22, 2004
CF34-10E6	2001 年 2 月 9 日 February 9, 2001	2004 年 12 月 22 日 December 22, 2004
CF34-10E6A1	2001 年 2 月 9 日 February 9, 2001	2004 年 12 月 22 日 December 22, 2004
CF34-10E2A1	2006 年 1 月 2 日 January 2, 2006	2006 年 7 月 20 日 July 20, 2006
CF34-10E7	2006 年 1 月 2 日 January 2, 2006	2006 年 7 月 20 日 July 20, 2006
CF34-10E7-B	2007 年 6 月 4 日 June 4, 2007	2008 年 6 月 16 日 June 16, 2008

B. 生产许可证/ PRODUCTION CERTIFICATE

CF34-10E 生产许可证号 PC108

CF34-10E Production Certificate No. PC108

中国民用航空局
CIVIL AVIATION ADMINISTRATION OF CHINA

2. 技术特性/Technical Characteristics

型号/Models	CF34-10E2A1	CF34-10E5	CF34-10E5A1	CF34-10E6	CF34-10E6A1	CF34-10E7	CF34-10E7-B
类型/Type	双转子、轴流式、高涵道比、单级风扇、3 级低压压气机 9 级高压气机，环形燃烧室，单级高压涡轮，4 级低压涡轮，有反推，后部中心整流罩、尾喷口、起动机全数字控制的发动机。 Dual rotor, axial flow, high bypass ratio turbofan with single stage fan, 3-stage low pressure compressor, 9-stage high pressure compressor, annular combustion chamber, single stage high pressure turbine, 4-stage low pressure turbine, a thrust reverser, aft core cowl, exhaust nozzle, starter, and a full authority digital Engine						
额定值（见注 5）海平面静推力，磅/ Ratings (see NOTE 5) Sea level static thrust, lb							
最大起飞（5 分钟） （见注 15、16）/ Maximum takeoff (5min.) （See note 15,16）	16960	18820	18820	18820	18820	20360	20360
正常起飞（5 分钟） （见注 15、16）/ Normal takeoff (5min.) See note 15,16	16960	17390	18820	17390	18820	18820	18820
最大持续/ Maximum continuous 平速率环境温度/ Flat rate ambient temperature	15110	17040	17040	17040	17040	17040	17040
起飞/Takeoff	86F/30C	86F/30C	86F/30C	95F/35C	95F/35C	86F/30C	86F/30C
最大持续/max continues	77F/25C	77F/25C	77F/25C	77F/25C	77F/25C	77F/25C	77F/25C
控制系统部件 / Control system Components							
燃油计量组件/ Fuel Metering Unit	2043M10	2043M10	2043M10	2043M10	2043M10	2043M10	2043M10
全权限数字发动机控制单元 (FADEC)							
硬件 Hardware	2043M11	2043M11	2043M11	2043M11	2043M11	2043M11	2043M11
软件 Software	2043M65	2043M65	2043M65	2043M65	2043M65	2043M65	2043M65
配置插头/ Configuration Plug							
硬件 Hardware	2162M48	2162M48	2162M48	2162M48	2162M48	2162M48	2162M48
发动机推力/ Engine Rating	2041M41	2041M41	2041M41	2041M41	2041M41	2041M41	2041M41
发动机构型/ Engine Configuration	2041M42	2041M42	2041M42	2041M42	2041M42	2041M42	2041M42
N1 微调 N1 Trim Setting	2041M43	2041M43	2041M43	2041M43	2041M43	2041M43	2041M43

中国民用航空局
CIVIL AVIATION ADMINISTRATION OF CHINA

点火系统 Ignition System							
2 点火激励器 2 Ignition Exciters	9238M66	9238M66	9238M66	9238M66	9238M66	9238M66	9238M66
2 点火插头 2 Ignition Plugs	1374M12	1374M12	1374M12	1374M12	1374M12	1374M12	1374M12
燃油泵 Fuel Pump	2043M12	2043M12	2043M12	2043M12	2043M12	2043M12	2043M12
燃油/FUEL	-满足国标GB6537-2006要求的燃油。/The fuel compliance with requirement of GB6537-2006. -其余符合GE喷气燃油规范NO.D50TF2的燃油适用于所有型号。对每一批准的特殊燃油按照操作指南GEK112084执行。/The remaining fuel conforming to GE Jet Fuel Specification NO.D50TF2 is applicable for all models. See GEK 112084, Operating Instructions, for specific fuels approved per the subject specifications.						
滑油/OIL	符合 GE 规范 NO.D50TF1 的滑油适用于所有型号。对每一批准的特殊滑油按照操作指南 GEK 112084 执行。 Oil confirming to GE Specification NO.D50TF1is applicable for all models. See GEK 112084, Operating Instructions, for specific oils approved per the subject specifications.						
主要尺寸（FAR33 推力系统见安装手册 GEK112083） Principal Dimensions and Measurements (FAR 33Propulsion System see installation Manual GEK 112083							
长度，英寸 Length, inches	177.93	177.93	177.93	177.93	177.93	177.93	177.93
最大直径，英寸 Maximum diameter, inches	73.38x86.59	73.38x 6.59	73.38x86.59	73.38x86.59	73.38x 6.59	73.38x 6.59	73.38x86.59
重量，磅（包括剩余燃油和滑油） Weight, pounds (includes residual fuel and oil)	5100	5100	5100	5100	5100	5100	5100
重心位置，英寸 Center of Gravity Location, inches							
发动机站位 Engine Station	204.2	204.2	204.2	204.2	204.2	204.2	204.2
纵剖线 Butt Line	98.6	98.6	98.6	98.6	98.6	98.6	98.6
水平线 Water Line	104.4	104.4	104.4	104.4	104.4	104.4	104.4

3、注释/NOTE

注 1 至 22 适用于说明的型号/Notes 1 through 22 applicable to models as specified

注 1/NOTE 1、

发动机转子最大允许工作速度如下: /Maximum permissible engine operating speeds for the engine rotors are as follows:

	CF34-10E (所有型号) CF34-10E(all models)
低压转子 (N1) RPM Low pressure rotor (N1), rpm	
最大起飞 Maximum takeoff	6325
正常起飞 Normal takeoff	6325
最大持续 Maximum continuous	6325

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CIVIL AVIATION ADMINISTRATION OF CHINA

高压转子 (N2) RPM High pressure rotor (N2), rpm 最大起飞 Maximum takeoff 正常起飞 Normal takeoff 最大持续 Maximum continuous	18018 18018 18018
在发动机手册 GEK112081 和其它手册或检查要求中提到的限制为: 100%N1 转速为 5954.4RPM; 100%N2 转速为 17160RPM。 / Refer to GE Engine Manual GEK 112081 and other manual or inspection requirements when limits are exceeded. 100 percent N1 rotor speed is 5954.4 rpm, 100 percent N2 rotor speed is 17,160 rpm.	

注 2/NOTE 2、

(1) 最大允许指示温度如下表所列。另外, 风扇转速高于慢车时, CF34-10E2A1 型发动机的 EGT 有 30 度偏移, 因此指示 1801°F (983°C)EGT 时, 测量 EGT 为 1747°F (953°C)。所有的 CF34-10E 型发动机起飞 EGT 允许瞬时超温。可接受的正常和最大起飞 EGT 瞬时超出量为: 2 秒内到 5.5 °C , 5 秒内到 4.4 °C , 15 秒内到 3.6 °C , 30 秒内到 2.4 °C 。 /

Indicated maximum permissible temperatures are listed below. In addition, the CF34-10E2A1 model incorporates an EGT shunt of 30°C at fan speeds above idle. Thus, for an indicated EGT of 1801°F (983°C), the measured EGT is 1747°F (953°C). All CF34-10E series engines are certified with a takeoff EGT transient allowance. This allowance applies to normal and maximum takeoff EGT, up to 5.5 °C for 2 seconds, 4.4 °C for 5 seconds, 3.6 °C for 15 seconds and 2.4 °C for 30 seconds.

指示排气温度 (EGT) /Indicated Exhaust Gas Temperature (EGT*), °F (°C),							
	CF34-10E2A1	CF34-10E5	CF34-10E5A1	CF34-10E6	CF34-10E6A1	CF34-10E7	CF34-10E7-B
最大起飞 (5 分钟) / Maximum takeoff (5 min)	1801(983)	1801(983)	1801(983)	1801(983)	1801(983)	1801(983)	1801(983)
正常起飞 (5 分钟) / Normal takeoff (5 min)	1801(983)	1733(945)	1801(983)	1737(947)	1801(983)	1729(943)	1729(943)
最大持续/ Maximum continuous	1760(960)	1760(960)	1760(960)	1760(960)	1760(960)	1760(960)	1760(960)
地面起动/At start-up, ground	1364(740)	1364(740)	1364(740)	1364(740)	1364(740)	1364(740)	1364(740)
空中起动/At start-up, in flight	1607(875)	1607(875)	1607(875)	1607(875)	1607(875)	1607(875)	1607(875)

* 排气温度通过 9 个探头测量, 平均安装在第二级低压涡轮叶片上。

*The exhaust gas temperature is measured by 9 probes, which are equally spaced and mounted in the second-stage low-pressure turbine vanes.

(2) 当温度超过限制时要按照 GE 发动机手册 GEK112081 (所有 CF34-10E 型发动机) 的检查要求进行工作。/Refer to GE Engine Manual GEK 112081 (CF34-10E all models) for inspection requirements when limits are exceeded.

(3) 滑油温度限制/Oil temperature limit (滑油温度在滑油箱内测量/oil supply temperature measured in the oil tank), °F (°C)
所有型号/ ALL MODELS

中国民用航空局
CIVIL AVIATION ADMINISTRATION OF CHINA

持续运行/Continuous operation 311°F (155°C)

(4)燃油进口温度 Fuel inlet temperature (at pylon interface), °F (°C)

所有型号/ALL MODELS

持续运行/Continuous operation 155°F (68.3°C)

注 3/NOTE 3、燃油和滑油压力限制/ FUEL AND OIL PRESSURE LIMITS

(1) 燃油/Fuel: 在发动机泵进口处: 最小压力为 5PSID, 高于飞机推进时零气液比的燃油真实蒸汽压; 工作范围是 5PSIG 至 50PSIG。在发动机动力流出口处: 在慢车或以上速度时, 最小压力为 150PSIG, 工作范围为 150PSIG 至 1209PSIG。其它限制见 GE 安装手册 GEK112083。/

At engine pump inlet: minimum pressure of 5 PSID above the true vapor pressure of the fuel with a vapor/liquid ratio of zero with aircraft boost operative. Operating range 5 PSIG to 50 PSIG. At engine motive flow discharge: minimum pressure of 150 PSIG at idle or above. Operating range is 150 PSIG to 1209 PSIG. See GE Installation Manual GEK 112083 for additional limits.

(2) 滑油/Oil: 最小滑油压力限制是 25psid。滑油温度低于-20C 时, 发动机起动后最初 2 分钟内最小滑油压力为 5psid。慢车 2 分钟后或发动机功率增加超过慢车时, 最小滑油压力是 25psid。其它限制见 GE 安装手册 GEK112083。/

Minimum oil pressure limit is 25 psid. For oil temperatures less than -20C, the minimum oil pressure is 5 psid for the first two minutes following an engine start. After two minutes at idle or if the engine power is increased above idle, the minimum oil pressure is 25 psid. See GE Installation Manual GEK 112083 for additional limits.

注 4/NOTE 4、附件驱动设备 (所有型号) / ACCESSORY DRIVE PROVISIONS (ALL MODELS)

附件 Accessory	附件齿轮箱 AGB 轴线 位置 Location on AGB Axis	转速 Speed (RPM)	功率 (额定 值) HP (Rated)	旋转方向 面向 AGB Direction of Rotation facing AGB	静态扭矩/持续 /过载 Torque (lb-in) Static / Continuous / Overload	最大附件重 量 Max Acc. Wt. (lb)	瞬间悬垂 力矩 Overhung Moment (lb-in)	剪切力矩 Shear Torque (lb-in)
润滑油和轴承 回油泵 Lube & Scavenge Oil Pump	J 轴后 Axis-J Aft	8575	7	CCW	300 (1) / 48 / NA	10.3	33	750-850
起动机 IDG	G 轴前 Axis-G Fwd	7928	74.8 (2)	CW	675 (1) / 595 / 1129 (5 min) (4) 1605 (5 sec) (4)	81.2 (6)	720 最大 Maximum	3144-3648
涡轮起动机 Air Turbine Starter	D 轴后 Axis-D Fwd	12281	NA	CW	2112, 4200 (3) / NA / NA	27.7	113	6300-7500
液压泵 Hydraulic Pump	F 轴后 Axis-F Fwd	5567	35	CW	573 (1) (5) / 392 / 670	13.9 dry	38.4	2004 最大 maximum
交流发电机 Alternator	J 轴后 Axis-J Fwd	8575	4	CW	NA / NA / NA	3.0	2.6	NA
燃油泵 Fuel Pump	E 轴前 Axis-E Aft	7928	55	CW	150/240/NA	28.6	142	1400-1540

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CW—顺时针方向 CCW—逆时针方向

CW – Clockwise CCW - Counter Clockwise

附件速度是基于核心速度：17160RPM。

Accessory Speeds are based on Core Speed: 17160 rpm

(1) -40°F SLS

(2) 由于在工作范围内对功率的改变很微小，可以认为 HP（马力）是基本不变的。在 7898RPM（场地速度）时是 74.8 马力，4618RPM（场地速度）时是 73.5 马力。5 分钟过载推力是 82.7 马力，5 秒钟过载推力是 137.37 马力。/

HP is constant over the operating range with slight variations due to changes in efficiency. HP extraction is 74.8 HP at 7898 rpm (pad speed) and 73.5 HP at 4618 rpm (pad speed). The 5 minute overload rating is 82.7 HP and the 5 second overload rating is 137.37

(3) 59 华氏度时是 2112 磅每英寸，-40 华氏度时是 4200 磅每英寸。/2112 in-lbs at 59 °F SLS, 4200 in-lbs at -40°F SLS

(4) 4618RPM（场地速度）时过载。/Overload at 4618 rpm (pad speed)

(5) 626RPPM 时（场地速度）是 573 磅每英寸。/573 in-lbs at 626 rpm (pad speed)

(6) 包括滑油和 V 波段耦合。/ Includes oil and V band coupling

注 5/NOTE 5、

发动机功率是基于台架试验，功率计算是利用生产数据资料里可接受的修正参数方法。计算是基于以下条件：/

Engine ratings are based on calibrated test stand performance, and performance calculations are based on accepted parameter correction methods documented in the production data folder. These calculations assume the following conditions:

1. 59 华氏度，29.92 英寸汞柱的标准大气压。/Static sea level standard conditions of 59° F and 29.92 inches Hg.

2. 没有飞机附件负载或排风机。/No aircraft accessory loads or air extraction.

3. 没有防冰；没有进气道变形；没有进气滤网损失；100%转速恢复。/No anti-icing; no inlet distortion; no inlet screen losses; and 100% ram recovery.

4. 成品发动机进气道和成品飞行排气系统。/Production engine inlet and production flight exhaust system

注 6/NOTE 6、

引气输出一最大乘客引气输出如下：在达到或高于慢车的所有工作条件下，5 级或 9 级压气机的引气输出可用（不允许压气机叶片低于慢车）。旅客所用引气在低功率时取自第 5 级，高功率时取自第 9 级。GE 安装手册 GEK112083（CF34-10E 系列）中有相关说明。/

Air Bleed Extraction - maximum customer air bleed extraction is as follows: Customer bleed air is available from either stage 5 or 9 (compressor discharge) of the compressor at all operating conditions at or above idle (No compressor bleed is permitted below idle). Customer bleed is scheduled to switch from stage 9 bleed at low power operation to stage 5 bleed at high power operation as described in GE Installation Manual GEK 112083 (CF34-10E all models).

位置/ Location	最大示范引气（整个压气机流量百分比）/ Maximum Demonstrated Bleed Air (% of Total Compressor Airflow) CF34-10E（所有型号）(all models)
5 级压气机 Compressor Stage 5	8.0
9 级压气机（压气机排出）Compressor Stage 9 (Compressor Discharge)	12.0
最大允许引气 Maximum Allowable Bleed	12.0

注 7/NOTE 7、 保留/ Reserved

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注 8/NOTE 8、

最大可允许的进气道变形在发动机手册 GEK112083 中有注明。侧风情况下地面操作限制和程序在 GE 特殊操作指南 GEK 112084 中有说明。/

The maximum permissible inlet distortion for these engines is specified in GE Installation Manual GEK 112083. Ground operational limits and procedures for operation in crosswind are specified in GE Specific Operating Instructions GEK 112084.

注 9/NOTE 9、

对于 CF34-10E 系列发动机，反推系统作为短舱系统的一部分，包含在 14CFR33 部发动机设计定义中，件号如下表所列：
/For the CF34-10E model series, the 14CFR Part 33 engine type design definition includes thrust reverser system, which is part of the nacelle system, and is identified as follows:

发动机部件列表/Engine Parts List	反推部件列表/Thrust Reverser Parts List
CF34-10E2A1GXX	601E0001-5XX
CF34-10E5GXX	601E0001-5XX
CF34-10E5A1GXX	601E0001-5XX
CF34-10E6GXX	601E0001-5XX
CF34-10E6A1GXX	601E0001-5XX
CF34-10E7 GXX	601E0001-5XX
CF34-10E7-B GXX	601E0001-5XX
发动机手册 GEK1122081 详细说明了 GXX 或-5XX 的安装要求，例如 G01、G02、-501、-502 等等。 The Engine Manual, GEK 112081, defines the installation requirements for the engine GXX or -5XX indicates all parts list designations, for example G01, G02, -501, -502, etc.	

注 10/NOTE 10、

关键件的寿命确定和强制检查项目在发动机手册 GEK112081 的适航限制部分有详细说明。推荐的维修检查间隔公布在 GE 发动机手册 GEK112081 中。/

Life limits established for critical components and mandatory inspection requirements are specified in the Airworthiness Limitation Section of GE Engine Manual GEK 112081. Recommended maintenance inspection intervals are published in GE Engine Manual GEK 112081.

注 11/NOTE 11、保留。/“Reserved”

注 12/NOTE 12、

在发动机安装的时候，必需注意 GE 安装手册 GEK112083 中列出的特殊零部件的操作温度限制。/

The operating temperature limits for specific components and accessories specified in GE Installation Manual GEK 112083 must be observed when installing the engine.

注 13/NOTE 13、保留。/“Reserved”

注 14/NOTE 14、

对于 CF34-10E 系列发动机，以下手册是被批准或接受的。/

The following manuals are approved or accepted for the CF34-10E model series:

中国民用航空局
CIVIL AVIATION ADMINISTRATION OF CHINA

	CF34-10E 所有型号(all models)
操作指南 Operating Instructions	GEK 112084
安装手册 Installation Manual	GEK 112083
发动机手册 Engine Manual	GEK 112081

注 15/NOTE 15、

本发动机具有在起飞时一发不工作的情况下的自动推力储存功能。在起飞期间，当自动推力储存功能被激活，不工作的发动机控制器会发一个信号给工作中的发动机控制系统。根据收到的信号，工作中的发动机会自动的由正常起飞（NTO）时相应的低推力提高到最大起飞推力（MTO）。全最大起飞推力可以通过飞行员在任何时间的手柄操作来实现。/

This engine is equipped with an automatic power reserve function for takeoff operation with one engine inoperative. During takeoff, when the automatic power reserve function is activated, the engine control of the inoperative engine sends an input signal to the engine control of the operating engine. Upon receiving this signal, the engine thrust of the operating engine automatically increases from normal takeoff (NTO) or lower thrust to the corresponding, pre-determined maximum takeoff (MTO) thrust. Full MTO thrust is available to the pilot at any time by throttle selection.

在自动推力储存功能被激活的情况下，发动机控制系统也合并程序，以保证一台完全功能退化的发动机在正常起飞的低推力情况下达到规定的最大起飞推力，而且不超出发动机操作限制。/

The engine control system also incorporates schedules that assure a fully degraded engine, during operation at the NTO of lower thrust, will achieve the specified MTO thrust without exceeding the engine operating limits when the automatic power reserve function is activated.

注 16/NOTE 16、

正常起飞功率情况下的时间限制是 5 分钟，包括起飞期间超过正常起飞功率的任何时间。对于多发飞机的单发不工作时，5 分钟的起飞限制时间可以延长到 10 分钟。/

The time limit at the normal takeoff rating is five minutes and shall include any time accumulated above the normal takeoff rating for that takeoff. The 5-minute takeoff time limit may be extended to 10 minutes for one engine inoperative operation in multi-engine aircraft.

注 17/NOTE 17、放行时间限制标准。/TIME LIMITED DISPATCH CRITERIA

关于发动机控制系统的放行和维护要求在发动机手册 GEK 112081 的适航部分中有详细说明，手册中定义了多种构型的最大工作间隔。/

Criteria pertaining to the dispatch and maintenance requirements for the engine control systems are specified in the airworthiness section of the Engine Manual, GEK 112081, which defines the various configurations and maximum operating intervals.

注 18/NOTE 18、

发动机的部件翻修只能根据批准的发动机手册。没有批准的或可接受的手册的发动机部件只能用更换新件或可用件。/

Overhaul of Engine Components is only authorized via approved Manuals. Engine components for which no approved or accepted Manual is available must be replaced with new ones or serviceable parts.

注 19/NOTE 19、

发动机热车程序要根据操作指南 GEK112084 进行。/

Refer to Operating Instructions GEK 112084 for engine warm-up procedure.

注 20/NOTE 20、

发动机反推操作要根据操作指南 GEK112084 进行。/Refer to Operating Instructions GEK 112084 for thrust reverser operation.

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CIVIL AVIATION ADMINISTRATION OF CHINA

注 21/NOTE 21、

以上型号发动机合并成以下典型特性：The above models incorporate the following characteristics:

型号/Model	特性/Characteristics
CF34-10E2A1	基本型号/Basic Model
CF34-10E5	基本型号/Basic Model
CF34-10E5A1	基本型号/Basic Model
CF34-10E6	基本型号/Basic Model
CF34-10E6A1	基本型号/Basic Model
CF34-10E7	基本型号/Basic Model
CF34-10E7-B	基本型号/Basic Model

--结束--

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