

型号认可证数据单
THE VALIDATION DATA SHEET

编号/No: VTC0064E

版次/Revision: 4

型号/Type:

CFM56-5B1, CFM56-5B1/P, CFM56-5B1/2P, CFM56-5B2, CFM56-5B1/3, CFM56-5B2/P, CFM56-5B4/3, CFM56-5B3/2P, CFM56-5B5/P, CFM56-5B7, CFM56-5B7/3, CFM56-5B2/3, CFM56-5B2/2P, CFM56-5B4/3B1, CFM56-5B4/2P, CFM56-5B6, CFM56-5B7/P, CFM56-5B8/3, CFM56-5B3/3, CFM56-5B3/P, CFM56-5B5/3, CFM56-5B4, CFM56-5B6/P, CFM56-5B8/P, CFM56-5B9/3, CFM56-5B3/3B1, CFM56-5B6/3, CFM56-5B4/P, CFM56-5B5, CFM56-5B6/2P, CFM56-5B9/P, CFM56-5B9/2P, CFM56-5C2/G, CFM56-5C3/G, CFM56-5C4

批准人/Approved By:



职务/Title: Deputy Director General

日期/date: 2024年02月05日

本数据单是型号认可证（编号：VTC0064E）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: VTC0064E), 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:

CFM International, S.A
2 Boulevard du General Martial Valin
75015 Paris, France

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	No.VTC0064E, 版次 4, 2024 年 02 月 05 日颁发 No.VTC0064E, Revision 3; Date of Issue: 2024-02-05	No. E37NE, 版本: 13, 2014 年 5 月 1 日颁发 No. E37NE, Revision 13, Date of Issue: 2014-5-1
历史 History	No.VTC0064E, 版次 3, 2014 年 12 月 24 日颁发 No.VTC0064E, Revision 3; Date of Issue: 2014-12-24	No. E37NE, 版本: 13, 2014 年 5 月 1 日颁发 No. E37NE, Revision 13, Date of Issue: 2014-5-1
	No.VTC0064E, 版次 2, 2007 年 10 月 16 日颁发 No.VTC0064E, Revision 2; Date of Issue: 2007-10-16	No. E37NE, 版本: 11, 2006 年 9 月 15 日颁发 No. E37NE, Revision 11, Date of Issue: 2006-9-15
	No.VTC0064E, 版次 1, 2005 年 8 月 17 日颁发 No.VTC0064E, Revision 1; Date of Issue: 2005-8-17	No. E37NE, 版本: 10, 2004 年 10 月 25 日颁发 No. E37NE, Revision 10, Date of Issue: 2004-10-25
	No.VTC0064E, 版次 0, 1996 年 10 月 17 日颁发 No.VTC0064E, Revision 0; Date of Issue: 1996-10-17	No. E37NE, 版本: 4, 1994 年 10 月 27 日颁发 No. E37NE, Revision 10, Date of Issue: 1994-10-27

注：上表中出口国局方型号合格证数据单信息仅供参考

Note: Above TCDS information of Certification Authority is only for reference

CAAC 认可数据单修订情况说明 / CAAC VTCDS Change Record

CAAC 认可数据单版次/ CAAC VTCDS Revision	相对上一版次的修订情况/ CAAC VTCDS Change Record	备注 Remark
版次 4/Rev 4	1. 增加 CAAC 专用要求：燃油排泄和排气排出物 CCAR-34-R1 Add CAAC Special Requirements: fuel venting and exhaust emissions requirements CCAR-34-R1 2.更改 CAAC 关于 3 号燃油专用要求表述 Changes of description of CAAC Special Requirements about “No.3 Jet Fuel”	本版本认可数据单对应的FAA 数据单版本与版次3对应的FAA 数据单版本一致 VTCDS Rev 4 corresponds to the same FAA TCDS as VTCDS Rev 3

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:

美国联邦航空局/FAA
4. 型号合格证持有人/Type Certificate Holder:

CFM International, S.A

2 Boulevard du General Martial Valin

75015 Paris, France

5.	ETOPS:	不适用/NA
6.	CAAC 专用要求/Special Requirements:	(1) 中华人民共和国国家标准 “3 号喷气燃料” (GB 6537) National Standard of the People’s Republic of China “No.3 Jet Fuel” (GB 6537) (2) 燃油排泄和排气排出物规定 CCAR-34-R1 Fuel venting and exhaust emissions requirements CCAR-34-R1

第2部分

SECTION 2

I. 型号 MODELS	CFM56-5B1	CFM56-5B1/P	CFM56-5B1/2P	CFM56-5B1/3
类型 TYPE	高涵道比涡轮风扇发动机；多级低压涡轮驱动同轴前置风扇/增压器，环形燃烧室和一级高压涡轮驱动多级压气机。 High bypass turbofan; coaxial front fan/booster driven by multi-stage low pressure turbine, multi-stage compressor with one-stage high pressure turbine and annular combustor. CFM56-5B/2P & -5B/2P1 系列：双环腔燃烧室 CFM56-5B/2P & -5B/2P1 SERIES ONLY: Double Annular Combustor			
额定值（见注 4） RATINGS (See NOTE 4)				
起飞（5 分钟，见注 16），海平面，静态推力，磅 Takeoff (5 min. see NOTE 16), sea level, static thrust, lb.	30,000/ 13,345 daN	-- --	-- --	-- --
最大连续，海平面，静态推力，磅 Maximum continuous, sea level static thrust, lb.	29,090/ 12,940 daN	-- --	-- --	-- --
平台功率 Flat rating	环境温度 AMBIENT TEMPERATURE			
起飞 Takeoff 最大连续 Maximum continuous	86°F / 30°C 77°F / 25°C	-- --	-- --	-- --
燃油系统 FUEL SYSTEM	经批准的燃油见注 7 See NOTE 7 for approved fuels			
燃油泵/ SNECMA 件号 （组合增压和单级齿轮泵） Fuel pump / SNECMA P/N (Combined boost and single element gear-type pump)	301-797-402-0 301-785-503-0	-- ---	-- ---	-- ---
液压机械组件/GE 件号 Hydromechnical unit (GE Part Number)	1348M79	--	--	--
电子控制组件/GE 件号 Electronic control unit (GE Part Number)	1820M36 1820M89 2042M13 2042M14 2123M55 2123M56	-- -- -- -- -- --	1820M87 1820M88 -- -- -- --	--- --- --- --- --- ---
识别插钉/SNECMA 件号 Identification plugs (SNECMA Part Number)	338-046-002-0 338-046-004-0 338-046-006-0	338-046-004-0 338-125-301-0 338-125-305-0	-- 338-046-090-0 338-046-095-0 338-122-801-0 338-122-805-0 338-125-301-0 338-125-305-0	-- --- --- --- --- --- ---

中国民用航空局
CIVIL AVIATION ADMINISTRATION OF CHINA

I. 型号 MODELS	CFM56-5B1	CFM56-5B1/P	CFM56-5B1/2P	CFM56-5B1/3
滑油 OIL	合成型, 符合 GE 规范 D50TF1, 类型 I 和类型 II CFMI 服务通告 CFM56-5B 79-001 列出经批准的滑油品牌 Synthetic type conforming to GE Specification D50TF1, Type I and Type II. CFM Service Bulletin CFM56-5B 79-001 list approved brand oils.			
点火系统 IGNITION SYSTEM	GE 件号 GE PART NUMBER			
点火组件 Ignition unit Unison	9238M66	--	--	--
双点火嘴 Two igniter plugs	1374M12	--	--	--
Unison	1374M13	--	--	--
Champion				
主要尺寸 PRINCIPAL DIMENSIONS	英寸/毫米 INCHES / MILLIMETERS			
长度 (风扇机匣前法兰到低压 涡轮后法兰) Length, (fan case forward flange to LPT frame aft flange)	102.3 / 2599.7	--	--	--
宽度 (风扇机匣前法兰直径) Width, (fan casing forward flange diameter)	75.12 / 1908	--	--	--
高度 (附件齿轮箱底部到风扇 机匣前法兰顶部) Height, (bottom of accessory gearbox to top of fan casing forward flange)	82.87 / 2105	--	--	--
重量 (干重) WEIGHT (dry)	包含厂家发动机规范中列出的基本发动机附件和选装设备, 包括安装的发动机状态监 控仪表的部分 Includes basic engine accessories and optional equipment as listed in manufacturers specification, and engine-mounted portions of the condition monitoring instrumentation			
磅 Pounds	5412.9	--	5512.9	5412.9
千克 Kilograms	2455.2	--	2500.6	2455.2
重心位置 CENTER OF GRAVITY LOCATIONS	站位, 仅发动机 (参考安装图纸) STATION, ENGINE ONLY (REFER TO INSTALLATION DRAWING)			
英寸 Inches	204.8 ± 1	--	--	--
毫米 Millimeters	5202 ± 25	--	--	--

图例 LEGEND: "--" 同前 INDICATES "SAME AS PRECEDING"

MODEL: "---" 不适用 NOT APPLICABLE

备注: 重大更改在左端黑线标注

NOTE: SIGNIFICANT CHANGES ARE BLACK-LINED IN THE LEFT MARGIN.

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CIVIL AVIATION ADMINISTRATION OF CHINA

II. 型号 MODELS	CFM56-5B2	CFM56-5B2/P	CFM56-5B2/2P	CFM56-5B2/3
类型 TYPE	高涵道比涡轮风扇发动机；多级低压涡轮驱动同轴前置风扇/增压器，环形燃烧室和一级高压涡轮驱动多级压气机 High bypass turbofan; coaxial front fan/booster driven by multi-stage low pressure turbine, multi-stage compressor with one-stage high pressure turbine and annular combustor. CFM56-5B/2P & -5B/2P1 系列：双环腔燃烧室 CFM56-5B/2P & -5B/2P1 SERIES ONLY: Double Annular Combustor			
额定值（见注 4） RATINGS (See NOTE 4)				
起飞（5 分钟，见注 16），海平面，静态推力，磅 Takeoff (5 min. see NOTE 16), sea level, static thrust, lb.	31,000/ 13,789 daN	-- --	-- --	-- --
最大连续，海平面，静态推力，磅 Maximum continuous, sea level static thrust, lb.	29,090/ 12,940 daN	-- --	-- --	-- --
平台功率 Flat rating	环境温度 AMBIENT TEMPERATURE			
起飞 Takeoff	86°F / 30°C	--	--	--
最大连续 Maximum continuous	77°F / 25°C	--	--	--
燃油系统 FUEL SYSTEM	经批准的燃油见注 7 See NOTE 7 for approved fuels			
燃油泵/ SNECMA 件号 （组合增压和单级齿轮泵） Fuel pump / SNECMA P/N (Combined boost and single element gear-type pump)	301-797-402-0 301-785-503-0	-- ---	-- ---	-- ---
液压机械组件/GE 件号 Hydromechanical unit (GE Part Number)	1348M79	--	--	--
电子控制组件/GE 件号 Electronic control unit (GE Part Number)	1820M36 1820M89 2042M13 2042M14	-- -- -- --	1820M87 1820M88 -- --	1820M36 1820M89 -- --
识别插钉/SNECMA 件号 Identification plugs (SNECMA Part Number)	338-046-021-0 338-046-023-0 338-046-026-0	338-046-023-0 338-122-720-0 338-122-725-0 338-128-660-0 338-128-665-0	-- 338-046-080-0 338-122-820-0 338-122-825-0 338-125-320-0 338-125-325-0 338-127-400-0 338-127-405-0	-- --- --- --- --- --- --- ---
滑油 OIL	合成型，符合 GE 规范 D50TF1，类型 I 和类型 II CFMI 服务通告 CFM56-5B 79-001 列出经批准的滑油品牌 Synthetic type conforming to GE Specification D50TF1, Type I and Type II. CFM Service Bulletin CFM56-5B 79-001 list approved brand oils.			
点火系统 IGNITION SYSTEM	GE 件号 GE PART NUMBER			
点火组件 Ignition unit Unison	9238M66	--	--	--
双点火嘴 Two igniter plugs Unison Champion	1374M12 1374M13	-- --	-- --	-- --

中国民用航空局
CIVIL AVIATION ADMINISTRATION OF CHINA

II. 型号 MODELS	CFM56-5B2	CFM56-5B2/P	CFM56-5B2/2P	CFM56-5B2/3
主要尺寸 PRINCIPAL DIMENSIONS	英寸/毫米 INCHES / MILLIMETERS			
长度（风扇机匣前法兰到低压涡轮后法兰） Length, (fan case forward flange to LPT frame aft flange)	102.3 / 2599.7	--	--	--
宽度（风扇机匣前法兰直径） Width, (fan casing forward flange diameter)	75.12 / 1908	--	--	--
高度（附件齿轮箱底部到风扇机匣前法兰顶部） Height, (bottom of accessory gearbox to top of fan casing forward flange)	82.8 / 2105	--	--	--
重量（干重） WEIGHT (dry)	包含厂家发动机规范中列出的基本发动机附件和选装设备，包括安装的发动机状态监控仪表的部分 Includes basic engine accessories and optional equipment as listed in manufacturers specification, and engine-mounted portions of the condition monitoring instrumentation.			
磅 Pounds 千克 Kilograms	5412.9 2455.2	-- --	5512.9 2500.6	5412.9 2455.2
重心位置 CENTER OF GRAVITY LOCATIONS	站位，仅发动机（参考安装图纸） STATION, ENGINE ONLY (REFER TO INSTALLATION DRAWING)			
英寸 Inches	204.8 ± 1	--	--	--
毫米 Millimeters	5202 ± 25	--	--	--

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III. 型号 MODELS	CFM56-5B3/P	CFM56-5B3/2P		
类型 TYPE	高涵道比涡轮风扇发动机：多级低压涡轮驱动同轴前置风扇/增压器，环形燃烧室和一级高压涡轮驱动多级压气机。 High bypass turbofan; coaxial front fan/booster driven by multi-stage low pressure turbine, multi-stage compressor with one-stage high pressure turbine and annular combustor. CFM56-5B/2P & -5B/2P1 系列：双环腔燃烧室 CFM56-5B/2P & -5B/2P1 SERIES ONLY: Double Annular Combustor			
额定值（见注 4） RATINGS (See NOTE 4)				
起飞（5 分钟，见注 16），海平面，静态推力，磅 Takeoff (5 min. see NOTE 16), sea level, static thrust, lb.	32,000/ 14,234 daN	-- --		
最大连续，海平面，静态推力，磅 Maximum continuous, sea level static thrust, lb.	29,090/ 12,940 daN	-- --		
平台功率 Flat rating	环境温度 AMBIENT TEMPERATURE			
起飞 Takeoff	86°F / 30°C	--		
最大连续 Maximum continuous	77°F / 25°C	--		
燃油系统 FUEL SYSTEM	经批准的燃油见注 7 See NOTE 7 for approved fuels			
燃油泵/ SNECMA 件号 （组合增压和单级齿轮泵） Fuel pump / SNECMA P/N (Combined boost and single element gear-type pump)	301-797-402-0	--		
液压机械组件/GE 件号 Hydromechnical unit (GE Part Number)	1348M79	--		
电子控制组件/GE 件号 Electronic control unit (GE Part Number)	1820M36 1820M89 2042M13 2042M14 2123M55 2123M56	1820M87 1820M88 -- -- -- --		
识别插钉/SNECMA 件号 Identification plugs (SNECMA Part Number)	338-122-730-0 338-122-732-0 338-122-735-0 338-128-670-0 338-128-675-0	338-122-732-0 338-122-830-0 338-122-835-0 338-128-300-0 338-128-305-0 338-128-310-0 338-128-315-0 338-128-320-0 338-128-325-0		
滑油 OIL	合成型，符合 GE 规范 D50TF1，类型 I 和类型 II CFMI 服务通告 CFM56-5B 79-001 列出经批准的滑油品牌 Synthetic type conforming to GE Specification D50TF1, Type I and Type II. CFM Service Bulletin CFM56-5B 79-001 list approved brand oils.			
点火系统 IGNITION SYSTEM	GE 件号 GE PART NUMBER			
点火组件 Ignition unit Unison 双点火嘴 Two igniter plugs Unison Champion	9238M66	--		
	1374M12 1374M13	-- --		

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III. 型号 MODELS	CFM56-5B3/P	CFM56-5B3/2P		
主要尺寸 PRINCIPAL DIMENSIONS	英寸/毫米 INCHES / MILLIMETERS			
长度（风扇机匣前法兰到低压 涡轮后法兰） Length, (fan case forward flange to LPT frame aft flange)	102.3 / 2599.7	--		
宽度（风扇机匣前法兰直径） Width, (fan casing forward flange diameter)	75.12 / 1908	--		
高度（附件齿轮箱底部到风扇 机匣前法兰顶部） Height, (bottom of accessory gearbox to top of fan casing forward flange)	82.87 / 2105	--		
重量（干重） WEIGHT (dry)	包含厂家发动机规范中列出的基本发动机附件和选装设备，包括安装的发动机状态监 控仪表的部分 Includes basic engine accessories and optional equipment as listed in manufacturers specification, and engine-mounted portions of the condition monitoring instrumentation			
磅 Pounds 千克 Kilograms	5412.9 2455.2	5512.9 2500.6		
重心位置 CENTER OF GRAVITY LOCATIONS	站位，仅发动机（参考安装图纸） STATION, ENGINE ONLY (REFER TO INSTALLATION DRAWING)			
英寸 Inches 毫米 Millimeters	204.8 ± 1 5202 ± 25	-- --		

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IV. 型号 MODELS	CFM56-5B4	CFM56-5B4/P	CFM56-5B4/2P	
类型 TYPE	高涵道比涡轮风扇发动机；多级低压涡轮驱动同轴前置风扇/增压器，环形燃烧室和一级高压涡轮驱动多级压气机 High bypass turbofan; coaxial front fan/booster driven by multi-stage low pressure turbine, multi-stage compressor with one-stage high pressure turbine and annular combustor. CFM56-5B/2P & -5B/2P1 系列：双环腔燃烧室 CFM56-5B/2P & -5B/2P1 SERIES ONLY: Double Annular Combustor			
额定值（见注 4） RATINGS (See NOTE 4)				
起飞（5 分钟，见注 16），海平面，静态推力，磅 Takeoff (5 min. see NOTE 16), sea level, static thrust, lb.	27,000/ 12,010 daN	-- --	-- --	
最大连续，海平面静态推力，磅 Maximum continuous, sea level static thrust, lb.	24,370/ 10,840 daN	-- --	-- --	
平台功率 Flat rating	环境温度 AMBIENT TEMPERATURE			
起飞 Takeoff	113°F / 45°C	--	113°F / 45°C	
最大连续 Maximum continuous	77°F / 25°C	--	--	
燃油系统 FUEL SYSTEM	经批准的燃油见注 7 See NOTE 7 for approved fuels			
燃油泵/ SNECMA 件号 （组合增压和单级齿轮泵） Fuel pump / SNECMA P/N (Combined boost and single element gear-type pump)	301-797-402-0 301-785-503-0	-- ---	-- ---	
液压机械组件/GE 件号 Hydromechanical unit (GE Part Number)	1348M79	--	--	
电子控制组件/GE 件号 Electronic control unit (GE Part Number)	1820M36 1820M89 2042M13 2042M14 2123M55 2123M56	-- -- -- -- -- --	1820M87 1820M88 -- -- -- --	
识别插钉/SNECMA 件号 Identification plugs (SNECMA Part Number)	338-046-041-0 338-046-043-0 338-046-046-0	338-046-043-0 338-122-740-0 338-122-745-0 338-128-680-0 338-128-685-0	338-046-043-0 338-122-840-0 338-122-845-0 338-125-340-0 338-125-345-0 338-128-410-0 338-128-415-0	
滑油 OIL	合成型，符合 GE 规范 D50TF1，类型 I 和类型 II CFMI 服务通告 CFM56-5B 79-001 列出经批准的滑油品牌 Synthetic type conforming to GE Specification D50TF1, Type I and Type II. CFM Service Bulletin CFM56-5B 79-001 list approved brand oils.			
点火系统 IGNITION SYSTEM	GE 件号 GE PART NUMBER			
点火组件 Ignition unit Unison	9238M66	--	--	
双点火嘴 Two igniter plugs Unison Champion	1374M12 1374M13	-- --	-- --	

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IV. 型号 MODELS	CFM56-5B4	CFM56-5B4/P	CFM56-5B4/2P	
主要尺寸 PRINCIPAL DIMENSIONS	英寸/毫米 INCHES / MILLIMETERS			
长度（风扇机匣前法兰到低压 涡轮后法兰） Length, (fan case forward flange to LPT frame aft flange)	102.3 / 2599.7	--	--	
宽度（风扇机匣前法兰直径） Width, (fan casing forward flange diameter)	75.12 / 1908	--	--	
高度（附件齿轮箱底部到风扇 机匣前法兰顶部） Height, (bottom of accessory gearbox to top of fan casing forward flange)	82.87 / 2105	--	--	
重量（干重） WEIGHT (dry)	包含厂家发动机规范中列出的基本发动机附件和选装设备，包括安装的发动机状态监控仪 表的部分 Includes basic engine accessories and optional equipment as listed in manufacturers specification, and engine-mounted portions of the condition monitoring instrumentation			
磅 Pounds	5412.9	--	5512.9	
千克 Kilograms	2455.2	--	2500.6	
重心位置 CENTER OF GRAVITY LOCATIONS	站位，仅发动机（参考安装图纸） STATION, ENGINE ONLY (REFER TO INSTALLATION DRAWING)			
英寸 Inches	204.8 ± 1	--	--	
毫米 Millimeters	5202 ± 25	--	--	

中国民用航空局
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V. 型号 MODELS	CFM56-5B3/3	CFM56-5B3/3B1	CFM56-5B4/3B1	CFM56-5B4/3
类型 TYPE	高涵道比涡轮风扇发动机；多级低压涡轮驱动同轴前置风扇/增压器，环形燃烧室和一级高压涡轮驱动多级压气机 High bypass turbofan; coaxial front fan/booster driven by multi-stage low pressure turbine, multi-stage compressor with one-stage high pressure turbine and annular combustor. CFM56-5B/2P & -5B/2P1 系列：双环腔燃烧室 CFM56-5B/2P & -5B/2P1 SERIES ONLY: Double Annular Combustor			
额定值（见注 4） RATINGS (See NOTE 4)				
起飞（5 分钟，见注 16），海平面，静态推力，磅 Takeoff (5 min. see NOTE 16), sea level, static thrust, lb.	32,000/ 14,234 daN	-- --	27,000/ 12,010 daN	-- --
最大连续，海平面静态推力，磅 Maximum continuous, sea level static thrust, lb.	29,090/ 12,940 daN	-- --	24,370/ 10,840 daN	-- --
平台功率 Flat rating	环境温度 AMBIENT TEMPERATURE			
起飞 Takeoff	86°F / 30°C	--	122°F / 50°C	113°F / 45°C
最大连续 Maximum continuous	77°F / 25°C	--	--	--
FUEL SYSTEM 燃油系统	经批准的燃油见注 7 See NOTE 7 for approved fuels			
燃油泵/ SNECMA 件号 （组合增压和单级齿轮泵） Fuel pump / SNECMA P/N (Combined boost and single element gear-type pump)	301-797-402-0	--	--	--
液压机械组件/GE 件号 Hydromechnical unit (GE Part Number)	1348M79	--	--	--
电子控制组件/GE 件号 Electronic control unit (GE Part Number)	2123M55 2123M56	-- --	-- --	-- --
识别插钉/SNECMA 件号 Identification plugs (SNECMA Part Number)	338-122-732-0	338-122-733-0	338-046-044-0	338-046-043-0
滑油 OIL	合成型，符合 GE 规范 D50TF1，类型 I 和类型 II CFMI 服务通告 CFM56-5B 79-001 列出经批准的滑油品牌 Synthetic type conforming to GE Specification D50TF1, Type I and Type II. CFM Service Bulletin CFM56-5B 79-001 list approved brand oils.			
点火系统 IGNITION SYSTEM	GE 件号 GE PART NUMBER			
点火组件 Ignition unit Unison	9238M66	--	--	--
双点火嘴 Two igniter plugs Unison Champion	1374M12 1374M13	-- --	-- --	-- --

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V. 型号 MODELS	CFM56-5B3/3	CFM56-5B3/3B1	CFM56-5B4/3B1	CFM56-5B4/3
主要尺寸 PRINCIPAL DIMENSIONS	英寸/毫米 INCHES / MILLIMETERS			
长度（风扇机匣前法兰到低压 涡轮后法兰） Length, (fan case forward flange to LPT frame aft flange)	102.3 / 2599.7	--	--	--
宽度（风扇机匣前法兰直径） Width, (fan casing forward flange diameter)	75.12 / 1908	--	--	--
高度（附件齿轮箱底部到风扇 机匣前法兰顶部） Height, (bottom of accessory gearbox to top of fan casing forward flange)	82.87 / 2105	--	--	--
重量（干重） WEIGHT (dry)	包含厂家发动机规范中列出的基本发动机附件和选装设备, 包括安装的发动机状态监控仪表 的部分 Includes basic engine accessories and optional equipment as listed in manufacturers specification, and engine-mounted portions of the condition monitoring instrumentation			
磅 Pounds	5412.9	--	--	--
千克 Kilograms	2455.2	--	--	--
重心位置 CENTER OF GRAVITY LOCATIONS	站位, 仅发动机（参考安装图纸） STATION, ENGINE ONLY (REFER TO INSTALLATION DRAWING)			
英寸 Inches	204.8 ± 1	--	--	--
毫米 Millimeters	5202 ± 25	--	--	--

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VI. 型号 MODELS	CFM56-5B5/P	CFM56-5B5	CFM56-5B5/3	
类型 TYPE	高涵道比涡轮风扇发动机；多级低压涡轮驱动同轴前置风扇/增压器，环形燃烧室和一级高压涡轮驱动多级压气机 High bypass turbofan; coaxial front fan/booster driven by multi-stage low pressure turbine, multi-stage compressor with one-stage high pressure turbine and annular combustor. CFM56-5B/2P & -5B/2P1 系列：双环腔燃烧室 CFM56-5B/2P & -5B/2P1 SERIES ONLY: Double Annular Combustor			
额定值（见注 4） RATINGS (See NOTE 4)				
起飞（5 分钟，见注 16）， 海平面，静态推力，磅 Takeoff (5 min. see NOTE 16), sea level, static thrust, lb.	27,000/ 12,010 daN	22,000/ 9,786 daN	-- --	
最大连续，海平面静态推 力，磅 Maximum continuous, sea level static thrust, lb.	24,370/ 10,840 daN	20,250/ 9,008 daN	-- --	
平台功率 Flat rating	环境温度 AMBIENT TEMPERATURE			
起飞 Takeoff	122°F / 50°C	113°F / 45°C	--	
最大连续 Maximum continuous	77°F / 25°C	--	--	
燃油系统 FUEL SYSTEM	经批准的燃油见注 7 See NOTE 7 for approved fuels			
燃油泵/ SNECMA 件号 （组合增压和单级齿轮泵） Fuel pump / SNECMA P/N (Combined boost and single element gear-type pump)	301-797-402-0	-- 301-785-503-0	-- ---	
液压机械组件/GE 件号 Hydromechanical unit (GE Part Number)	1348M79	--	--	
电子控制组件/GE 件号 Electronic control unit (GE Part Number)	1820M87 1820M88 2042M13 2042M14 2123M55 2123M56	1820M36 1820M89 -- -- -- --	--- --- --- --- --- ---	
识别插钉/SNECMA 件号 Identification plugs (SNECMA Part Number)	338-046-052-0 338-122-750-0 338-122-755-0 338-128-690-0 338-128-695-0	338-046-050-0 338-046-052-0 338-046-055-0 ---	-- --- --- --- ---	
滑油 OIL	合成型，符合 GE 规范 D50TF1，类型 I 和类型 II CFMI 服务通告 CFM56-5B 79-001 列出经批准的滑油品牌 Synthetic type conforming to GE Specification D50TF1, Type I and Type II. CFM Service Bulletin CFM56-5B 79-001 list approved brand oils.			
点火系统 IGNITION SYSTEM	GE 件号 GE PART NUMBER			
点火组件 Ignition unit Unison	9238M66	--	--	
双点火嘴 Two igniter plugs Unison Champion	1374M12 1374M13	-- --	-- --	

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VI. 型号 MODELS	CFM56-5B5/P	CFM56-5B5	CFM56-5B5/3	
主要尺寸 PRINCIPAL DIMENSIONS	INCHES / MILLIMETERS 英寸/毫米			
长度（风扇机匣前法兰到低压 涡轮后法兰） Length, (fan case forward flange to LPT frame aft flange)	102.3 / 2599.7	--	--	
宽度（风扇机匣前法兰直径） Width, (fan casing forward flange diameter)	75.12 / 1908	--	--	
高度（附件齿轮箱底部到风扇 机匣前法兰顶部） Height, (bottom of accessory gearbox to top of fan casing forward flange)	82.87 / 2105	--	--	
重量（干重） WEIGHT (dry)	包含厂家发动机规范中列出的基本发动机附件和选装设备, 包括安装的发动机状态监控仪表 的部分 Includes basic engine accessories and optional equipment as listed in manufacturers specification, and engine-mounted portions of the condition monitoring instrumentation			
磅 Pounds 千克 Kilograms	5512.9 2500.6	5412.9 2455.2	-- --	
重心位置 CENTER OF GRAVITY LOCATIONS	站位, 仅发动机 (参考安装图纸) STATION, ENGINE ONLY (REFER TO INSTALLATION DRAWING)			
英寸 Inches 毫米 Millimeters	204.8 ± 1 5202 ± 25	-- --	-- --	

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VII. 型号 MODELS	CFM56-5B6	CFM56-5B6/P	CFM56-5B6/3	CFM56-5B6/2P
类型 TYPE	高涵道比涡轮风扇发动机；多级低压涡轮驱动同轴前置风扇/增压器，环形燃烧室和一级高压涡轮驱动多级压气机 High bypass turbofan; coaxial front fan/booster driven by multi-stage low pressure turbine, multi-stage compressor with one-stage high pressure turbine and annular combustor. CFM56-5B/2P & -5B/2P1 系列：双环腔燃烧室 CFM56-5B/2P & -5B/2P1 SERIES ONLY: Double Annular Combustor			
额定值（见注 4） RATINGS (See NOTE 4)				
起飞（5 分钟，见注 16），海平面，静态推力，磅 Takeoff (5 min. see NOTE 16), sea level, static thrust, lb.	23,500/ 10,453 daN	-- --	-- --	-- --
最大连续，海平面静态推力，磅 Maximum continuous, sea level static thrust, lb.	20,250/ 9,008 daN	-- --	-- --	-- --
平台功率 Flat rating	环境温度 AMBIENT TEMPERATURE			
起飞 Takeoff	113°F / 45°C	--	--	--
最大连续 Maximum continuous	77°F / 25°C	--	--	--
燃油系统 FUEL SYSTEM	经批准的燃油见注 7 See NOTE 7 for approved fuels			
燃油泵/ SNECMA 件号 （组合增压和单级齿轮泵） Fuel pump / SNECMA P/N (Combined boost and single element gear-type pump)	301-797-402-0 301-785-503-0	-- ---	-- ---	-- ---
液压机械组件/GE 件号 Hydromechanical unit (GE Part Number)	1348M79	--	--	--
电子控制组件/GE 件号 Electronic control unit (GE Part Number)	1820M36 1820M89 2042M13 2042M14 2123M55 2123M56	-- -- -- -- -- --	--- --- --- --- -- --	1820M87 1820M88 2042M13 2042M14 -- --
识别插钉/SNECMA 件号 Identification plugs (SNECMA Part Number)	338-046-060-0 338-046-062-0 338-046-065-0	338-046-062-0 338-122-760-0 338-122-765-0 338-129-700-0 338-129-705-0	-- --- --- --- ---	-- 338-122-860-0 338-122-865-0 338-125-360-0 338-125-365-0 338-128-430-0 338-128-435-0
滑油 OIL	合成型，符合 GE 规范 D50TF1，类型 I 和类型 II CFMI 服务通告 CFM56-5B 79-001 列出经批准的滑油品牌 Synthetic type conforming to GE Specification D50TF1, Type I and Type II. CFM Service Bulletin CFM56-5B 79-001 list approved brand oils.			
点火系统 IGNITION SYSTEM	GE 件号 GE PART NUMBER			
点火组件 Ignition unit Unison	9238M66	--	--	--
双点火嘴 Two igniter plugs Unison Champion	1374M12 1374M13	-- --	-- --	-- --

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VII. 型号 MODELS	CFM56-5B6	CFM56-5B6/P	CFM56-5B6/3	CFM56-5B6/2P
主要尺寸 PRINCIPAL DIMENSIONS	英寸/毫米 INCHES / MILLIMETERS			
长度（风扇机匣前法兰到低压 涡轮后法兰） Length, (fan case forward flange to LPT frame aft flange)	102.3 / 2599.7	--	--	--
宽度（风扇机匣前法兰直径） Width, (fan casing forward flange diameter)	75.12 / 1908	--	--	--
高度（附件齿轮箱底部到风扇 机匣前法兰顶部） Height, (bottom of accessory gearbox to top of fan casing forward flange)	82.87 / 2105	--	--	--
重量（干重） WEIGHT (dry)	包含厂家发动机规范中列出的基本发动机附件和选装设备，包括安装的发动机状态监控仪 表的部分 Includes basic engine accessories and optional equipment as listed in manufacturers specification, and engine-mounted portions of the condition monitoring instrumentation			
磅 Pounds 千克 Kilograms	5412.9 2455.2	-- --	-- --	5512.9 2500.6
重心位置 CENTER OF GRAVITY LOCATIONS	站位，仅发动机（参考安装图纸） STATION, ENGINE ONLY (REFER TO INSTALLATION DRAWING)			
英寸 Inches 毫米 Millimeters	204.8 ± 1 5202 ± 25	-- --	-- --	-- --

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VIII. 型号 MODELS	CFM56-5B7	CFM56-5B7/P	CFM56-5B7/3	CFM56-5B8/P
类型 TYPE	高涵道比涡轮风扇发动机；多级低压涡轮驱动同轴前置风扇/增压器，环形燃烧室和一级高压涡轮驱动多级压气机 High bypass turbofan; coaxial front fan/booster driven by multi-stage low pressure turbine, multi-stage compressor with one-stage high pressure turbine and annular combustor. CFM56-5B/2P & -5B/2P1 系列：双环腔燃烧室 CFM56-5B/2P & -5B/2P1 SERIES ONLY: Double Annular Combustor			
额定值（见注 4） RATINGS (See NOTE 4)				
起飞（5 分钟，见注 16），海平面，静态推力，磅 Takeoff (5 min. see NOTE 16), sea level, static thrust, lb.	27,000/ 12,010 daN	-- --	-- --	21,600/ 9,608 daN
最大连续，海平面静态推力，磅 Maximum continuous, sea level static thrust, lb.	24,370/ 10,840 daN	-- --	-- --	19,060/ 8,478 daN
平台功率 Flat rating	环境温度 AMBIENT TEMPERATURE			
起飞 Takeoff	113°F / 45°C	--	--	--
最大连续 Maximum continuous	77°F / 25°C	--	--	--
FUEL SYSTEM 燃油系统	经批准的燃油见注 7 See NOTE 7 for approved fuels			
燃油泵/ SNECMA 件号 （组合增压和单级齿轮泵） Fuel pump / SNECMA P/N (Combined boost and single element gear-type pump)	301-797-402-0	--	--	--
液压机械组件/GE 件号 Hydromechanical unit (GE Part Number)	1348M79	--	--	--
电子控制组件/GE 件号 Electronic control unit (GE Part Number)	1820M36 1820M89 2042M13 2042M14 2123M55 2123M56	-- -- -- -- -- --	--- --- --- --- --- ---	1820M36 1820M89 2042M13 2042M14 -- --
识别插钉/SNECMA 件号 Identification plugs (SNECMA Part Number)	338-126-941-0 338-128-440-0 338-128-445-0	-- 338-128-450-0 338-128-470-0 338-128-475-0	-- --- --- ---	338-130-001-0 --- --- ---
滑油 OIL	合成型，符合 GE 规范 D50TF1，类型 I 和类型 II CFMI 服务通告 CFM56-5B 79-001 列出经批准的滑油品牌 Synthetic type conforming to GE Specification D50TF1, Type I and Type II. CFM Service Bulletin CFM56-5B 79-001 list approved brand oils.			
点火系统 IGNITION SYSTEM	GE 件号 GE PART NUMBER			
点火组件 Ignition unit Unison 双点火嘴 Two igniter plugs Unison Champion	9238M66 1374M12 1374M13	-- -- --	-- -- --	-- -- --

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VIII. 型号 MODELS	CFM56-5B7	CFM56-5B7/P	CFM56-5B7/3	CFM56-5B8/P
主要尺寸 PRINCIPAL DIMENSIONS	英寸/毫米 INCHES / MILLIMETERS			
长度（风扇机匣前法兰到低压 涡轮后法兰） Length, (fan case forward flange to LPT frame aft flange)	102.3 / 2599.7	--	--	--
宽度（附件齿轮箱底部到风扇 机匣前法兰顶部） Width, (fan casing forward flange diameter)	75.12 / 1908	--	--	--
高度（风扇机匣前法兰外径） Height, (bottom of accessory gearbox to top of fan casing forward flange)	82.87 / 2105	--	--	--
重量（干重） WEIGHT (dry)	包含厂家发动机规范中列出的基本发动机附件和选装设备，包括安装的发动机状态监控仪 表的部分 Includes basic engine accessories and optional equipment as listed in manufacturers specification, and engine-mounted portions of the condition monitoring instrumentation			
磅 Pounds	5412.9	--	--	--
千克 Kilograms	2455.2	--	--	--
重心位置 CENTER OF GRAVITY LOCATIONS	站位，仅发动机（参考安装图纸） STATION, ENGINE ONLY (REFER TO INSTALLATION DRAWING)			
英寸 Inches	204.8 ± 1	--	--	--
毫米 Millimeters	5202 ± 25	--	--	--

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IX. 型号 MODELS	CFM56-5B8/3	CFM56-5B9/P	CFM56-5B9/2P	CFM56-5B9/3
类型 TYPE	高涵道比涡轮风扇发动机；多级低压涡轮驱动同轴前置风扇/增压器，环形燃烧室和一级高压涡轮驱动多级压气机 High bypass turbofan; coaxial front fan/booster driven by multi-stage low pressure turbine, multi-stage compressor with one-stage high pressure turbine and annular combustor. CFM56-5B/2P & -5B/2P1 系列：双环腔燃烧室 CFM56-5B/2P & -5B/2P1 SERIES ONLY: Double Annular Combustor			
额定值（见注 4） RATINGS (See NOTE 4)				
起飞（5 分钟，见注 16），海平面，静态推力，磅 Takeoff (5 min. see NOTE 16), sea level, static thrust, lb.	21,600/ 9,608 daN	23,300/ 10,364 daN	-- --	-- --
最大连续，海平面静态推力，磅 Maximum continuous, sea level static thrust, lb.	19,060/ 8,478 daN	20,250/ 9,008 daN	-- --	-- --
平台功率 Flat rating	环境温度 AMBIENT TEMPERATURE			
起飞 Takeoff	113°F / 45°C	--	--	--
最大连续 Maximum continuous	77°F / 25°C	--	--	--
燃油系统 FUEL SYSTEM	经批准的燃油见注 7 See NOTE 7 for approved fuels			
燃油泵/ SNECMA 件号 （组合增压和单级齿轮泵） Fuel pump / SNECMA P/N (Combined boost and single element gear-type pump)	301-797-402-0	--	--	--
液压机械组件/GE 件号 Hydromechanical unit (GE Part Number)	1348M79	--	--	--
电子控制组件/GE 件号 Electronic control unit (GE Part Number)	2123M55 2123M56	2042M13 2042M14 2123M55 2123M56	-- -- -- --	--- --- -- --
识别插钉/SNECMA 件号 Identification plugs (SNECMA Part Number)	338-130-001-0	338-130-010-0	--	--
滑油 OIL	合成型，符合 GE 规范 D50TF1，类型 I 和类型 II CFMI 服务通告 CFM56-5B 79-001 列出经批准的滑油品牌 Synthetic type conforming to GE Specification D50TF1, Type I and Type II. CFM Service Bulletin CFM56-5B 79-001 list approved brand oils.			
点火系统 IGNITION SYSTEM	GE 件号 GE PART NUMBER			
点火组件 Ignition unit Unison	9238M66	--	--	--
双点火嘴 Two igniter plugs Unison Champion	1374M12 1374M13	-- --	-- --	-- --

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IX. 型号 MODELS	CFM56-5B8/3	CFM56-5B9/P	CFM56-5B9/2P	CFM56-5B9/3
主要尺寸 PRINCIPAL DIMENSIONS	英寸/毫米 INCHES / MILLIMETERS			
长度（风扇机匣前法兰到低压 涡轮后法兰） Length, (fan case forward flange to LPT frame aft flange)	102.3 / 2599.7	--	--	--
宽度（风扇机匣前法兰直径） Width, (fan casing forward flange diameter)	75.12 / 1908	--	--	--
高度（附件齿轮箱底部到风扇 机匣前法兰顶部） Height, (bottom of accessory gearbox to top of fan casing forward flange)	82.87 / 2105	--	--	--
重量（干重） WEIGHT (dry)	包含厂家发动机规范中列出的基本发动机附件和选装设备，包括安装的发动机状态监控仪 表的部分 Includes basic engine accessories and optional equipment as listed in manufacturers specification, and engine-mounted portions of the condition monitoring instrumentation			
磅 Pounds	5412.9	--	5512.9	5412.9
千克 Kilograms	2455.2	--	2500.6	2455.2
重心位置 CENTER OF GRAVITY LOCATIONS	站位，仅发动机（参考安装图纸） STATION, ENGINE ONLY (REFER TO INSTALLATION DRAWING)			
英寸 Inches	204.8 ± 1	--	--	--
毫米 Millimeters	5202 ± 25	--	--	--

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X. 型号 MODELS	CFM56-5C2/G	CFM56-5C3/G	CFM56-5C4	
类型 TYPE	高涵道比涡轮风扇发动机；多级低压涡轮驱动同轴前置风扇/增压器，环形燃烧室和一级高压涡轮驱动多级压气机。长涵道混流排气系统，反推 High bypass turbofan; coaxial front fan/booster driven by multi-stage low pressure turbine, multi-stage compressor with one-stage high pressure turbine and annular combustor. Long duct mixed flow exhaust system. Thrust reverser.			
额定值（见注 4） RATINGS (See NOTE 4)				
起飞（5 分钟，见注 16），海平面，静态推力，磅 Takeoff (5 min. see NOTE 16), sea level, static thrust, lb.	31,200/ 13,878 daN	32,500/ 14,457 daN	34,000/ 15,124 daN	
最大连续，海平面静态推力，磅 Maximum continuous, sea level static thrust, lb.	28,300/ 12,588 daN	29,400/ 13,078daN	30,060/ 13,371 daN	
平台功率 Flat rating	环境温度 AMBIENT TEMPERATURE			
起飞 Takeoff	86°F / 30°C	--	--	
最大连续 Maximum continuous	77°F / 25°C	--	--	
燃油系统 FUEL SYSTEM	经批准的燃油见注 7 See NOTE 7 for approved fuels			
燃油泵/ SNECMA 件号 （组合增压和单级齿轮泵） Fuel pump / SNECMA P/N (Combined boost and single element gear-type pump)	301-785-503-0 301-797-402-0	-- --	--- --	
液压机械组件/GE 件号 Hydromechanical unit (GE Part Number)	1348M79	--	--	
电子控制组件/GE 件号 Electronic control unit (GE Part Number)	1754M93 1799M97 1799M98 1851M41 1851M42 1851M43 1960M55 1960M56 1960M82 1960M83	-- -- -- -- -- -- -- -- -- --	-- -- -- -- -- -- -- -- -- --	
识别插钉/SNECMA 件号 Identification plugs (SNECMA Part Number)	337-183-601-0 337-183-611-0	337-183-621-0 337-183-631-0	337-183-801-0 337-183-811-0	
滑油 OIL	合成型，符合 GE 规范 D50TF1，类型 I 和类型 II CFMI 服务通告 CFM56-5B 79-001 列出经批准的滑油品牌 Synthetic type conforming to GE Specification D50TF1, Type I and Type II. CFM Service Bulletin CFM56-5B 79-001 list approved brand oils.			
点火系统 IGNITION SYSTEM	GE 件号 GE PART NUMBER			
点火组件 Ignition unit Unison	9238M66	--	--	
双点火嘴 Two igniter plugs Unison Champion	1374M12 1374M13	-- --	-- --	

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X. 型号 MODELS	CFM56-5C2/G	CFM56-5C3/G	CFM56-5C4	
主要尺寸 PRINCIPAL DIMENSIONS	英寸/毫米 INCHES / MILLIMETERS			
长度（风扇机匣前法兰到低压 涡轮后法兰） Length, (fan case forward flange to LPT frame aft flange)	103.2 / 2622	--	--	
宽度（风扇机匣前法兰直径） Width, (fan casing forward flange diameter)	76.61 / 1946	--	--	
高度（附件齿轮箱底部到风扇 机匣前法兰顶部） Height, (bottom of accessory gearbox to top of fan casing forward flange)	88.58 / 2250	--	--	
重量（干重） WEIGHT (dry)	包含厂家发动机规范中列出的基本发动机附件和选装设备，包括安装的发动机状态监控仪 表的部分 Includes basic engine accessories and optional equipment as listed in manufacturers specification, and engine-mounted portions of the condition monitoring instrumentation			
磅 Pounds	5830	--	--	
千克 Kilograms	2644.4	--	--	
重心位置 CENTER OF GRAVITY LOCATIONS	站位，仅发动机（参考安装图纸） STATION, ENGINE ONLY (REFER TO INSTALLATION DRAWING)			
英寸 Inches	206.0 ± 1.0	--	--	
毫米 Millimeters	5232.4 ± 25.4	--	--	

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审定基础

CERTIFICATION BASIS

1. 1965 年 2 月 1 日生效的 14 CFR 第 33 部, 第 1 到 11 修正案。
1. 14 CFR Part 33, effective February 1, 1965, with Amendments 33-1 through 33-11 thereto.
2. 以下型号符合 14 CFR 第 34 部, 第 5 修正案, 2012 年 12 月 31 日生效
2. The following models comply with 14 CFR part 34, amendment 5, effective December 31, 2012:

CFM56-5B1/3	CFM56-5B2/3	CFM56-5B3/3	CFM56-5B3/3B1
CFM56-5B4/3	CFM56-5B4/3B1	CFM56-5B5/3	CFM56-5B6/3
CFM56-5B7/3	CFM56-5B8/3	CFM56-5B9/3	

燃油排泄和排放审定基础的详细总结见注 21,

See NOTE 21 for detailed summary of the certification basis for fuel venting and exhaust emissions. j

注: CFM56-5B1/2, -5B2/2, -5B4/2, -5B6/2 已经转换至其他 CFM56 型号, 或停止服务, 因此已从此型号数据单中去除。

NOTE: CFM56-5B1/2, -5B2/2, -5B4/2, and -5B6/2 have been removed from this type data sheet since they have been either converted to another CFM56 model rating or are out of service.

型号	申请日期	型号合格证颁布日期	型号合格证撤销日期
MODEL	APPLICATION DATE	TYPE CERTIFICATE ISSUED/AMENDED	TYPE CERTIFICATE WITHDRAWN
CFM56-5B2	08/30/90	05/28/93	
CFM56-5B1	08/30/90	02/02/94	
CFM56-5B4	06/08/92	02/02/94	
CFM56-5C2/G	02/26/93	10/27/94	
CFM56-5C3/G	02/26/93	10/27/94	
CFM56-5C4	02/26/93	10/27/94	
CFM56-5B5	04/19/94	03/11/96	
CFM56-5B6	04/19/94	03/11/96	
CFM56-5B1/P	02/21/95	06/20/96	
CFM56-5B1/2P	02/21/95	06/20/96	
CFM56-5B2/P	02/21/95	06/20/96	
CFM56-5B2/2P	02/21/95	06/20/96	
CFM56-5B3/2P	02/21/95	06/20/96	
CFM56-5B4/P	02/21/95	06/20/96	
CFM56-5B4/2P	02/21/95	06/20/96	
CFM56-5B5/P	02/21/95	06/20/96	
CFM56-5B6/P	02/21/95	06/20/96	
CFM56-5B6/2P	02/21/95	06/20/96	
CFM56-5B3/P	02/21/95	09/10/96	
CFM56-5B7	12/03/97	06/07/99	
CFM56-5B7/P	12/03/97	11/03/99	
CFM56-5B8/P	04/23/01	07/25/02	
CFM56-5B9/P	04/23/01	07/25/02	
CFM56-5B9/2P	04/23/01	07/25/02	
CFM56-5B1/3	04/23/05	09/15/06	
CFM56-5B2/3	04/23/05	09/15/06	
CFM56-5B3/3	04/23/05	09/15/06	
CFM56-5B3/3B1	04/23/05	09/15/06	
CFM56-5B4/3	04/23/05	09/15/06	
CFM56-5B4/3B1	04/23/05	09/15/06	
CFM56-5B5/3	04/23/05	09/15/06	
CFM56-5B6/3	04/23/05	09/15/06	
CFM56-5B7/3	04/23/05	09/15/06	
CFM56-5B8/3	04/23/05	09/15/06	
CFM56-5B9/3	04/23/05	09/15/06	

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CAAC 认可审定基础/ CAAC VALIDATION BASIS	接受 FAA 的审定基础作为认可审定基础。 Accept FAA certification basis as validation basis. CAAC 专用要求/Special Requirements: (1) 中华人民共和国国家标准 “3 号喷气燃料” (GB 6537) National Standard of the People’s Republic of China “No.3 Jet Fuel” (GB 6537) (2) 燃油排泄和排气排出物规定 CCAR-34-R1 Fuel venting and exhaust emissions requirements CCAR-34-R1
生产基础/ PRODUCTION BASIS	生产合格证 No. 108, GE 根据 CFMI S.A 的许可证在美国生产 (见注 10)。 Production Certification No. 108 for engines produced in the United States by General Electric under license from CFM International, S.A. (See NOTE 10).
进口要求 IMPORT REQUIREMENTS	见注 10 See NOTE 10.

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注释/ NOTE

注 1./NOTE 1.

最大许用温度 MAXIMUM PERMISSIBLE TEMPERATURES			
	CFM56-5B SAC COMBUSTOR SERIES	CFM56-5B/2P AND - 5B/2P1 SERIES	ALL CFM56-5C ENGINE MODELS
涡轮排气温度 (T495) (见注 17) TURBINE EXHAUST GAS (T495) (See NOTE 17)	由位于第二级低压涡轮静子叶片处的 9 个热电偶测量: As measured by a harness of nine thermocouples located at the second stage low pressure turbine vane:		
起飞 (5 分钟) Takeoff (5 min.)	950°C	--	--
最大连续 Maximum continuous	915°C	--	--
起动 Starting	725°C	--	--
CFM56-5B/2 空中时间温度包线 CFM56-5B/2 In-flight Time temperature envelope	---	850°C	---
参考型号 S.O.I. Refer to model's S.O.I.	CFM-TP.OI.13	--	CFM-TP.OI.12
燃油泵进口 FUEL PUMP INLET	参考适当的安装手册 REFER TO THE APPROPRIATE INSTALLATION MANUAL		
滑油供应 OIL SUPPLY	140°C/284°F	--	--
连续运行 Continuous operation 瞬时 (15 分钟) Transient (15 minutes)	155°C/311°F	--	--

注 2./NOTE 2.

燃油限制 Fuel limit

燃油和滑油压力限制 FUEL AND OIL PRESSURE LIMITS

飞机增压泵运行条件下工作及空中/地面起动时燃油压力限制要求扩展, 从高于真实燃油蒸气压力至少 5.5psia (37.9kPa 绝对压力) 到相对于大气且所有条件下气液比为零的最大 50 psia (344.8kPa 表压) 燃油压力。见安装手册 A 章, 第 5 节, 图 A2 和 A4。对于增压泵不工作时的限制见安装手册 A 章, 第 5 节, 图 A3 和 A5。

Operation and air/ground starting pressure limits with the aircraft boost pump operative extend from a minimum fuel pressure of not less than 5.5 psia (37.9 kPa absolute) above the true fuel vapor pressure to a maximum of 50 psig (344.8 kPa gauge), relative to atmosphere, with vapor/liquid ratio of zero at all conditions. See Installation Manual, Part A, Section 5, Figures A2 and A4. For limits with the aircraft boost pump inoperative, see Installation Manual, Part A, Section 5, Figures A3 and A5.

滑油限制 Oil limits

慢车最小压力限制为 13psid (89.6kPa 压差), 巡航推力时可变动至 45psid (310.2kPa 压差)。冷起动时最大压力限制为 300psid (2069kPa 压差), 受卸压活门限制。见注 13。

The minimum pressure limit at idle is 13 psid (89.6 kPa differential) and varies up to 45 psid (310.2 kPa differential) at cruise thrust. The maximum pressure limit during cold starts is 300 psid (2069 kPa differential), limited by a pressure-relief valve. See NOTE 13.

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注 3.NOTE 3.

电气 ELECTRICAL

转向

Rotation (1)

与核心机的速比

Speed ratio to core

额定值

Pad Rating (kW)

剪切力矩(英寸-磅)

Shear Torque (in-lb)

最大悬臂力矩(英寸-磅)

Maximum overhung moment
(in-lb)

液压油泵

HYDRAULIC PUMP

转向

Rotation (1)

与核心机的速比

Speed ratio to core

额定值

Pad Rating (kW)

剪切力矩 英寸-磅

Shear Torque (in-lb)

最大悬臂力矩(英寸-磅)

Maximum overhung moment
(in-lb)

附件驱动规定 ACCESSORY DRIVE PROVISIONS		
	CFM56-5B ENGINE MODELS	CFM56-5C ENGINE MODELS
	CCW	--
	0.5947	--
	135	--
	9,492	--
	1,000	--
	CCW	--
	0.256	--
	1,500	--
	4,400	--
	160	183
(1)	CW = 顺时针 CLOCKWISE / CCW = 逆时 COUNTERCLOCKWISE	

注 4./NOTE 4.

发动机额定值是基于下列条件下的校准台架性能:

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

起飞推力名义上与环境温度(平台额定值)无关,直到以下环境温度:

Takeoff thrust is nominally independent of ambient temperature (flat rated) up to ambient temperature of:

Std + 15°C (30°C, 86°F): CFM56-5B1, -5B1/P, -5B1/2P, -5B1/3, -5B2, -5B2/P, -5B2/2P, -5B2/3, -5B3/3, -5B3/3B1, -5B3/P, -5B3/2P, -5C2/G, -5C3/G, -5C4.

Std + 30°C (45°C, 113°F): CFM56-5B4, -5B4/P, -5B4/2P, -5B4/3, -5B5, -5B5/P, -5B5/3, -5B6, -5B6/P, -5B6/2P, -5B6/3, -5B7, -5B7/P, -5B7/3, -5B8/P, -5B8/3, -5B9/P, -5B9/2P,

Std + 35°C (50°C, 122°F): CFM56-5B4/3B1.

对于所有型号,最大连续推力名义上与环境温度(平台额定值)无关,直到环境温度为标准+10°C (25°C, 77°F)。

Maximum continuous is nominally independent of ambient temperature (flat rated) up to ambient temperature of Std. + 10°C (25°C, 77°F) for all models.

零消耗引气和功率提取。

Zero customer bleed and horsepower extraction.

无擦刷阻力。

No scrubbing drags.

100%进口压力恢复。

100% inlet recovery.

所有 CFM56-5B 发动机型号基于 CFMI 配置的核心机排气喷口和风扇喷口组成的单独排气系统。

Based on CFM International referee separate flow exhaust system with primary (core) exhaust nozzle and fan nozzle for all CFM56-5B engine models.

所有 CFM56-5C 发动机型号基于 CFMI 长涵道混合排气系统。

Based on CFM International long duct mixed flow flight exhaust system for all CFM56-5C engine models.

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注 5./NOTE 5.

低压转子
Low pressure rotor (N1)

高压转子
High pressure rotor (N2)

最大允许发动机转子转速 (见注 18) MAXIMUM PERMISSIBLE ENGINE ROTOR SPEEDS (See NOTE 18)					
CFM56-5C2/G, -5C3/G,		ALL CFM56-5B ENGINE MODELS		CFM56-5C4	
RPM	%	RPM	%	RPM	%
4,800	100.3	5,200	104.0	4,985	104.2
15,183	105.0	--	--	--	--

注 6./NOTE 6.

位置 LOCATION

风扇出口
Fan Discharge

5 级高压压气机
HPC Stage 5 only

压气机出口
Compressor discharge only

5 级 HPC 和压气机出口组合
HPC Stage 5 and
compressor discharge
combined

最大允许引气 (所有型号) MAXIMUM PERMISSIBLE AIR BLEED EXTRACTION (ALL MODELS)	
风扇修正转速 FAN CORRECTED SPEED	流量限制 FLOW LIMIT
高于最小慢车的所有转速 All speeds above minimum idle	2%风扇气流/ 2% fan airflow
高于最小慢车的所有转速 All speeds above minimum idle	10%核心气流 10% core airflow
最小慢车到 61%N1K Minimum idle to 61% N1K 61%到 82.5% N1K 61% to 82.5% N1K 高于 82.5% N1K Above 82.5% N1K	14%核心气流 14% core airflow 从 14%到 7%核心气流线性变化 Linear variation from 14% to 7% core airflow 7%核心气流 7% core airflow
最小慢车到 61%N1K Minimum idle to 61% N1K 61%到 82.5% N1K 61% to 82.5% N1K 高于 82.5% N1K Above 82.5% N1K	14%核心气流 14% core airflow 从 14%到 10%核心气流线性变化 Linear variation from 14% to 10% core airflow 10%核心气流 10% core airflow

注 7./NOTE 7.

批准的燃油型号符合 GE 的规范 D50TF2, MIL-T-5624, JP-4 或 JP-5 级, ASTM D 1655, Jet A、A1 和 B 与 GE 的规范一致。主要的燃油是 Jet A, 其他列出的燃油作为可接受的备选。当由主要燃油换成备选燃油时, 无需进行燃油控制调整。航空汽油的使用未经授权。添加剂的使用参考特殊运行说明。

Approved fuel conforming to GE Specification D50TF2. MIL-T-5624, Grades JP-4 or JP-5, ASTM D 1655, Jet A, A1 and B are consistent with this General Electric Specification. Primary fuel is Jet A, with other fuels listed being acceptable alternates. No fuel control adjustment is required when changing from primary to alternate fuels. Use of aviation gasoline is not authorized. Consult Specific Operating Instructions for additive usage.

注 8./NOTE 8.

关键转动和静止部件的寿命限制在 CFM56-5B 发动机车间修理手册第 5 章中发布, CFM56-5B 发动机型号参考 CFM-TP.SM.9, CFM56-5C 发动机型号参考 CFM-TP.SM.8。Life limits established for critical rotating and static components are published in Chapter 5 of the CFM56-5B Shop Manual, CFMI-TP.SM.9, for the CFM56-5B engine models, and the CFM56-5C Shop Manual, CFMI-TP.SM.8, for the CFM56-5C engine models.

注 9./NOTE 9.

发动机所有运行状况下推力输出的功率设定、功率检查和控制基于相对于风扇转速的 CFM 发动机参数。因此, 风扇转速传感器包含在发动机组件中。

Power setting, power checks and control of engine thrust output in all operations are to be based on CFM International engine charts referring to fan speed. Fan speed sensors are included in the engine assembly for this purpose.

注 10./NOTE 10.

型号合格证持有人—CFMI, S.A., 是由法国国营发动机生产联合体 (SNECMA) 和通用电气 (GE) 公司共同建立并拥有的公司, 负责 CFM56 系列发动机的认证、销售和支援。关于用于生产的型号合格证利益, GE 和 SNECMA 根据 CFMI S.A. 的协议共同行使。The type certificate holder, CFM International, S.A., is a company established and jointly owned by Snecma of France and the General Electric Company for the certification, sale, and support of CFM56 series engines. With respect to the benefits of type certification for production, General Electric and Snecma function as licensees of CFM International, S.A.

本型号合格证仅用于在美国根据型号合格证 No. E37NE 生产的发动机, 与在法国按照 TC No. E38NE 生产的相同命名的发动机完全相同并可互换。

This type certificate applies only to engines produced in the United States to Type Certification No. E37NE. Engines of the same model designation produced in France to Type Certificate No. E38NE are identical to and fully interchangeable with engines produced to this type certificate.

只要 SNECMA 在 EASA 生产合格证 No. FR.21G.0007 授权下颁发的适航批准挂签 (EASA 表 1—授权放行许可或 JAA 表 1) 附于每个产品上或产品运输的发票上 (参见 14 CFR § 21.502), 法国生产的模块、组件或零件适用于按本型号合格证生产的发动机。

Modules, assemblies, or parts produced in France are eligible for use in engines produced to this type certificate provided an airworthiness approval certificate (EASA Form 1 – Authorized Release Certificate or JAA Form 1) issued by Snecma under authority of European Aviation Safety Agency (EASA) Production Certificate

No. FR.21G.0007 is attached to the item or invoice covering shipment of items (Ref. 14 CFR § 21.502).

CFM56-5B 发动机型号 CFM56-5B Engine Models:

由 GE 生产的发动机, 通过“778”, “574”, “576”, “696”, “698”, “644” 或 “646” 序列号前缀来识别。

These engines, when produced by General Electric, are identified by serial number prefix “778”, “574”, “576”, “696”, “698”, “644” or “646”. CFM56-5B engines produced by

由 Snecma 生产的发动机, 通过“779”, “575”, “577”, “697”, “699”, “643” or “645” 序列号前缀来识别。自初期产品的序列号前缀顺序在此列出。

Snecma are identified by the prefix “779”, “575”, “577”, “697”, “699”, “643” or “645”. The sequence of serial number prefixes since initial production is as listed here.

CFM56-5C 发动机型号 CFM56-5C Engine Models:

由 GE 生产的发动机, 通过“740”, “566” 序列号前缀来识别。由 Snecma 生产的发动机, 通过“741”, “567” 序列号前缀来识别。自初期产品的序列号前缀顺序在此列出。

These engines, when produced by General Electric, are identified by serial number prefix “740” and “566”. CFM56-5C engines produced by Snecma are identified by the prefix “741” and “567”. The sequence of serial number prefixes since initial production is as listed here.

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注 11./ NOTE 11. 发动机制造商提供短舱系统, 附件配件 NS-CFM56-5G01, 总排气系统 ES-CFM56-5G01 和发动机装配 EBU 736L699, 这些根据 14CFR § 33 批准安装在 CFM56-5C 发动机型号上。
The engine manufacturer supplies the nacelle system and attachment fittings NS-CFM56-5G01, the total exhaust system ES-CFM56-5G01, and the engine-assembled EBU 736L699, which have been approved for installation on all CFM56-5C engine models in accordance with 14 CFR § 33.

注 12./ NOTE 12. 最小允许空中慢车 $N_2=58.8\%$ (8,500 rpm) 预先配置入 ECU 控制规律, 限制不可调整。
The minimum permissible idle in flight corresponds to $N_2=58.8\%$ (8,500 rpm) which is a non-adjustable limit, preset into the ECU Control schedule.

注 13./ NOTE 13. 仅在负加速度运行情况下, 允许低于 13psid 的最低滑油压力运行最多 10 秒钟。参见特殊运行说明 CFMI-TP.01.14 第 6 节。
During negative -g operation only, it is permissible to operate below minimum oil pressure (13 psid) for a maximum of 10 seconds. See Specific Operating Instruction, Section 6.

注 14./ NOTE 14. 型号认可证数据单中以下型号的一般特性:
The models shown on this TCDS have the following general characteristics:

型号 MODEL	特性 CHARACTERISTICS
CFM56-5B1	除新型风扇, 增压器, CFM56-5 低压涡轮和反推额定推力, 与 CFM56-5C2 相似。 Similar to CFM56-5C2, except for new fan and booster and CFM56-5 LP turbine and revised thrust ratings.
CFM56-5B1/P	除新设计的高压压气机, 高压涡轮, 低压涡轮, 与 CFM56-5B1 相同。 Same as CFM56-5B1, except for redesigned high pressure compressor, high pressure turbine, and low pressure turbine.
CFM56-5B1/3	除新设计的高压压气机, 高压涡轮和燃烧室, 与 CFM56-5B1/P 相同。 Same as CFM56-5B1/P, except for redesigned high pressure compressor, high pressure turbine, and combustor.
CFM56-5B1/2P	除新设计的高压压气机, 高压涡轮和低压涡轮, 与 CFM56-5B1/2 相同。 注, CFM56-5B1/2 与 CFM56-5B1 相似, 除了 CFM56-5B1/2 是双环燃烧室。 Same as CFM56-5B1/2, except for redesigned high pressure compressor, high pressure turbine, and low pressure turbine. Note, the CFM56-5B1/2 was similar to the CFM56-5B1 except the CFM56-5B1/2 had a dual annual combustor.
CFM56-5B2	除提高推力额定值外, 与 CFM56-5B1 相同。 Same as CFM56-5B1, except for increased thrust ratings.
CFM56-5B2/P	除新设计的高压压气机, 高压涡轮和低压涡轮, 与 CFM56-5B2 相同。 Same as CFM56-5B2, except for redesigned high pressure compressor, high pressure turbine, and low pressure turbine.
CFM56-5B2/3	除新设计的高压压气机, 高压涡轮和燃烧室, 与 CFM56-5B2/P 相同。 Same as CFM56-5B2/P, except for redesigned high pressure compressor, high pressure turbine, and combustor.
CFM56-5B2/2P	除新设计的高压压气机, 高压涡轮和低压涡轮, 与 CFM56-5B1/2 相同。 注, CFM56-5B2/2 与 CFM56-5B1 相似, 除了 CFM56-5B2/2 是双环燃烧室, 并提高推力额定值。 Same as CFM56-5B2/2, except for redesigned high pressure compressor, high pressure turbine, and low pressure turbine. Note, the CFM56-5B2/2 was similar to the CFM56-5B1 but with a dual annual combustor and increased thrust rating.
CFM56-5B3/P	除提高推力额定值, 新设计的高压压气机, 高压涡轮和低压涡轮外, 与 CFM56-5B1 相同。 Same as CFM56-5B1, except for increased thrust rating and redesigned high pressure compressor, high pressure turbine, and low pressure turbine.
CFM56-5B3/3	除新设计的高压压气机, 高压涡轮和燃烧室, 与 CFM56-5B3/P 相同。 Same as CFM56-5B3/P, except for redesigned high pressure compressor,

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	high pressure turbine, and combustor.
CFM56-5B3/3B1	除新设计的高压压气机, 高压涡轮和燃烧室, 与 CFM56-5B3/3P1 相同。 Same as CFM56-5B3/3P1, except for redesigned high pressure compressor, high pressure turbine, and combustor.
CFM56-5B3/2P	除提高推力额定值, 新设计的高压压气机, 高压涡轮和低压涡轮外, 与 CFM56-5B1 相同。CFM56-5B3/2P 是双环燃烧室。 Same as CFM56-5B1, except for increased thrust rating and redesigned high pressure compressor, high pressure turbine, and low pressure turbine. CFM56-5B3/2P has a dual annular combustor.
CFM56-5B4	除减小额定推力, 与 CFM56-5B1 相同。 Same as CFM56-5B1, except for decreased thrust ratings.
CFM56-5B4/P	除新设计的高压压气机, 高压涡轮和低压涡轮外, 与 CFM56-5B4 相同。 Same as CFM56-5B4, except for redesigned high pressure compressor, high pressure turbine, and low pressure turbine.
CFM56-5B4/3	除新设计的高压压气机, 高压涡轮和燃烧室外, 与 CFM56-5B4/P 相同。 Same as CFM56-5B4/P, except for redesigned high pressure compressor, high pressure turbine, and combustor.
CFM56-5B4/3B1	除新设计的高压压气机, 高压涡轮和燃烧室外, 与 CFM56-5B4/P1 相同。 Same as CFM56-5B4/P1, except for redesigned high pressure compressor, high pressure turbine, and combustor.
CFM56-5B4/2P	除新设计的高压压气机, 高压涡轮和低压涡轮外, 与 CFM56-5B4/2 相同。注, CFM56-5B4/2 与 CFM56-5B1 相似, 除了 CFM56-5B4/2 是双环燃烧室, 并减小推力额定值。 Same as CFM56-5B4/2, except for redesigned high pressure compressor, high pressure turbine, and low pressure turbine. Note, the CFM56-5B4/2 was similar to the CFM56-5B1 but with a dual annular combustor and decreased thrust rating.
CFM56-5B5	除减小额定推力, 与 CFM56-5B1 相同。 Same as CFM56-5B1, except for decreased thrust ratings.
CFM56-5B5/P	除新设计的高压压气机, 高压涡轮和低压涡轮外, 与 CFM56-5B5 相同。 Same as CFM56-5B5, except for redesigned high pressure compressor, high pressure turbine, and low pressure turbine.
CFM56-5B5/3	除新设计的高压压气机, 高压涡轮和燃烧室外, 与 CFM56-5B5/P 相同。 Same as CFM56-5B5/P, except for redesigned high pressure compressor, high pressure turbine, and combustor.
CFM56-5B6	除减小额定推力, 与 CFM56-5B1 相同。 Same as CFM56-5B1, except for decreased thrust ratings.
CFM56-5B6/P	除新设计的高压压气机, 高压涡轮和低压涡轮外, 与 CFM56-5B6 相同。 Same as CFM56-5B6, except for redesigned high pressure compressor, high pressure turbine, and low pressure turbine.
CFM56-5B6/3	除新设计的高压压气机, 高压涡轮和燃烧室外, 与 CFM56-5B6/P 相同。 Same as CFM56-5B6/P, except for redesigned high pressure compressor, high pressure turbine, and combustor.
CFM56-5B6/2P	除新设计的高压压气机, 高压涡轮和低压涡轮外, 与 CFM56-5B6/2 相同。注, CFM56-5B6/2 与 CFM56-5B1 相似, 除了 CFM56-5B6/2 是双环燃烧室, 并减小推力额定值。 Same as CFM56-5B6/2, except for redesigned high pressure compressor, high pressure turbine, and low pressure turbine. Note, the CFM56-5B6/2 was similar to the CFM56-5B1 but with a dual annular combustor and decreased thrust rating.

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CFM56-5B7	除减小额定推力, 与 CFM56-5B1 相同。 Same as CFM56-5B1, except for decreased thrust ratings.
CFM56-5B7/P	除新设计的高压压气机, 高压涡轮和低压涡轮外, 与 CFM56-5B7 相同。 Same as CFM56-5B7, except for redesigned high pressure compressor, high pressure turbine, and low pressure turbine.
CFM56-5B7/3	除新设计的高压压气机, 高压涡轮和燃烧室外, 与 CFM56-5B7/P 相同。 Same as CFM56-5B7/P, except for redesigned high pressure compressor, high pressure turbine, and combustor.
CFM56-5B8/P	除减小额定推力, 与 CFM56-5B1/P 相同。 Same as CFM56-5B1/P, except for reduced thrust rating.
CFM56-5B8/3	除新设计的高压压气机, 高压涡轮和燃烧室外, 与 CFM56-5B8/P 相同。 Same as CFM56-5B8/P, except for redesigned high pressure compressor, high pressure turbine, and combustor.
CFM56-5B9/P	除减小额定推力, 与 CFM56-5B1/P 相同。 Same as CFM56-5B1/P, except for reduced thrust rating.
CFM56-5B9/3	除新设计的高压压气机, 高压涡轮和燃烧室外, 与 CFM56-5B9/P 相同。 Same as CFM56-5B9/P, except for redesigned high pressure compressor, high pressure turbine, and combustor.
CFM56-5B9/2P	除减小额定推力, 与 CFM56-5B1/2P 相同。 Same as CFM56-5B1/2P, except for reduced thrust rating.
CFM56-5C2/G	除通过引入高温区更改提高了 EGT 限制, 和 CFM56-5C2 相似。 Similar to CFM56-5C2, except EGT limit increase through introduction of hot section modifications.
CFM56-5C3/G	除提高额定推力, 与 CFM56-5C2/G 相同。 Same as CFM56-5C2/G, except for increased thrust ratings
CFM56-5C4	除通过引入 CFM56-5C4 新设计风扇翼型提高了 N1 限制外, 和 CFM56-5C2/G 类似。 Same as CFM56-5C2/G, except for redesigned fan stage airfoils and increased thrust ratings.

注 15./NOTE 15.

所有 CFM56-5B 和 CFM56-5C FADEC 系列发动机经过批准, 基于满足 14 CFR § 33 和发动机控制系统可靠性要求下, 可带某些控制系统故障运行。FAA 批准了发动机控制系统有关放行和维护要求标准, 列入 GE 文件 No. GEK 103085 (-5B 系列) and GEK 100741 (-5C 系列)。这些文件定义了故障放行构型和最大运行间隔。

All CFM56-5B and CFM56-5C FADEC series engines have been approved to operate with certain faults present in the control system based on satisfaction of 14 CFR § 33 requirements and appropriate engine control system reliability requirements. FAA approved criteria pertaining to dispatch and maintenance requirements for the engine control system are specified in General Electric Document No. GEK 103085 (-5B family) and GEK 100741 (-5C family). These documents define the dispatchable configurations and maximum operating intervals.

CFM 已经设立了发动机控制系统可靠性监控方案, 以批准意外放行标准, 以确保所有发动机控制系统和特定部件失效率不超过可靠性分析的最大允许值。A control system reliability monitoring program has been established with CFM, as a contingency of the dispatch criteria approval, to ensure that overall engine control system and specific component failure rates do not exceed the maximum values permitted by the reliability analysis.

注 16./NOTE 16.

发动机意外情况下正常 5 分钟起飞额定值可以延长至 10 分钟。

The normal 5 minute takeoff rating may be extended to 10 minutes for engine out contingency.

注 17./NOTE 17.

对于 CFM56-5B/P, -5B/P1, -5B/2P, -5B/2P1, -5B/3 and -5B/3B1 系列发动机, 实际最大允许 EGT 比指示 EGT 低 10°C。950°C 指示 EGT 相应于实际 EGT 940°C, 915°C 指示 EGT 相应于实际 EGT 905°C。

For the CFM56-5B/P, -5B/P1, -5B/2P, -5B/2P1, -5B/3 and -5B/3B1 series engines, the actual maximum permissible turbine exhaust gas temperature (EGT) is 10°C lower than the indicated EGT. An indicated EGT of 950°C corresponds to an actual EGT of 940°C, and an indicated EGT of 915°C corresponds to an actual EGT of 905°C.

对于 CFM56-5C2/F, -5C2/F4, -5C3/F, and -5C3/F4 发动机, 实际最大允许 EGT 比指示 EGT 高 15°C。950°C 指示 EGT 相应于实际 EGT 965°C, 915°C 指示 EGT 相应于实际 EGT 930°C。

For CFM56-5C2/F, -5C2/F4, -5C3/F, and -5C3/F4 engines, the actual maximum permissible turbine EGT is 15°C higher than the indicated EGT. An indicated EGT of 950°C corresponds to an actual EGT of 965°C, and an indicated EGT of 915°C corresponds to an actual EGT of 930°C.

对于 CFM56-5C2/G, -5C2/G4, -5C2/P, -5C3/G, -5C3/G4, -5C3/P, -5C4, -5C4/P, -5C4/1, and -5C4/1P 发动机, 实际最大允许 EGT 比指示 EGT 高 25°C。950°C 指示 EGT 相应于实际 EGT 975°C, 915°C 指示 EGT 相应于实际 EGT 940°C。

For CFM56-5C2/G, -5C2/G4, -5C2/P, -5C3/G, -5C3/G4, -5C3/P, -5C4, -5C4/P, -5C4/1, and -5C4/1P engines, the actual permissible EGT is 25°C higher than the indicated EGT. An indicated EGT of 950°C corresponds to an actual EGT of 975°C, and an indicated EGT of 915°C corresponds to an actual EGT of 940°C.

注 18./NOTE 18.

对于 CFM56-5C2/4, -5C2/F4, -5C2/G4, -5C2/P, -5C3/F4, -5C3/G4 and -5C3/P 发动机, 实际最大允许 N1 比指示 N1 高。N1 指示 4,800 RPM (100.3%)相应于实际 N1 4,985 RPM (104.2%)。

For CFM56-5C2/4, -5C2/F4, -5C2/G4, -5C2/P, -5C3/F4, -5C3/G4 and -5C3/P engines, the actual maximum permissible N1 rotor speed is higher than the indicated N1. An indicated N1 of 4,800 RPM (100.3%) corresponds to an actual N1 of 4,985 RPM (104.2%).

注 19./NOTE 19.

CFM56-5B 系列包括

CFM56-5B series includes:

CFM56-5B1, -5B2, -5B4, -5B5, -5B6, -5B7

CFM56-5B/P 系列包括

CFM56-5B/P series includes:

CFM56-5B1/P, -5B2/P, -5B3/P, -5B4/P, -5B5/P,
-5B6/P, -5B7/P, -5B8/P, -5B9/P

CFM56-5B/3 系列包括

CFM56-5B/3 series includes:

CFM56-5B1/3, -5B2/3, -5B3/3, -5B4/3, -5B5/3,
-5B6/3, -5B7/3, -5B8/3, -5B9/3

CFM56-5B/2P 系列包括

CFM56-5B/2P series includes:

CFM56-5B1/2P, -5B2/2P, -5B3/2P, -5B4/2P, -5B6/2P,
-5B9/2P

CFM56-5B/3B1 系列包括

CFM56-5B/3B1 series includes:

CFM56-5B3/3B1, -5B4/3B1

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注 20./NOTE 20.

声明经 EASA 批准, 或按 DOA No. EASA.21J.086 授权, 或在 2003 年 9 月 28 日以前经 DGAC 批准的安装手册、特殊运行说明、服务通告、大修和维护手册、修理手册、供应商手册和设计更改, 被 FAA 所接受, 并认为经过 FAA 的批准。修理数据和相关说明被认为经 FAA 按适用性批准或接受。这些批准仅针对型号设计。
Installation Manuals, Specific Operating Instructions, Service Bulletins, Overhaul and Maintenance Manuals, Repair Manuals, Vendor Manuals, and Design Changes which contain a statement that the document is EASA approved or approved under authority of DOA No. EASA.21J.086 or for approvals made before September 28, 2003 by DGAC are accepted by the FAA and considered FAA approved. Repair data and related instructions are considered FAA approved or accepted as applicable. These approvals pertain to the type design only.

注 21./NOTE 21.

CFM56-5C2 符合专用联邦航空规章 No. 27-5。所有其他发动机型号符合 1990 年 9 月 10 日生效的 34-1 到 34-3 修正案的 14 CFR 34 部的排放要求, 除了如下情况: CFM56-5C2 is in compliance with the emissions requirements of Special Federal Aviation Regulations No. 27-5. All other engine models are in compliance with the emissions requirements in 14 CFR Part 34, effective September 10, 1990, as amended by 34-1 through 34-3, with the exception of the following:

如下发动机型号符合 2012 年 12 月 31 日生效的 14 CFR 34 部第 5 修正案和 2012 年 7 月 18 日生效的 40 CFR 87 部发布的排放标准:

The following emissions standards promulgated in 14 CFR Part 34, Amendment 5, effective December 31, 2012, and 40 CFR Part 87, effective July 18, 2012, have been complied with for:

CFM56-5B1/3	CFM56-5B2/3	CFM56-5B3/3	CFM56-5B3/3B1
CFM56-5B4/3	CFM56-5B4/3B1	CFM56-5B5/3	CFM56-5B6/3
CFM56-5B7/3	CFM56-5B8/3	CFM56-5B9/3	

燃油排泄排放标准: 14CFR § 34.10(a) 和 34.11; 此外, 40 CFR§ 87.10(a) 和 87.11。
Fuel Venting Emission Standards: 14 CFR § 34.10(a) and 34.11; in addition, 40 CFR § 87.10(a) and 87.11.

烟度(SN)排放标准: 14 CFR § 34.21(e)(2); 此外, 40 CFR § 87.23(c)(1)。
Smoke Number (SN) Emission Standards: 14 CFR § 34.21(e)(2); in addition, 40 CFR § 87.23(c)(1).

一氧化碳排放标准: 14 CFR § 34.21(d)(1)(ii); 此外, 40 CFR § 87.23(c)(1)。
Carbon Monoxide (CO) Emission Standards: 14 CFR § 34.21(d)(1)(ii); in addition, 40 CFR § 87.23(c)(1).

碳氢化合物排放标准: 14 CFR § 34.21(d)(1)(i); 此外, 40 CFR § 87.23(c)(1)。
Hydrocarbons (HC) Emission Standards: 14 CFR § 34.21(d)(1)(i); in addition, 40 CFR § 87.23(c)(1).

氮氧化物排放标准: 14 CFR §§ 34.23(a)(2) 和 34.23(b)(1); 此外, 40 CFR §§ 87.23(c)(2)和 87.23(c)(3)。
Oxides of Nitrogen (NOx) Emission Standards: 14 CFR §§ 34.23(a)(2) and 34.23(b)(1); in addition, 40 CFR §§ 87.23(c)(2) and 87.23(c)(3).

除基于型号合格证数据单中定义的审查要求得到的 FAA 符合性证据, 发动机制造商公开宣布符合 ICAO 排放标准附件 16, 第 II 册, 第 3 版中: 第 3 部, 第 2 章, 2.2.2 节, 烟度; 2.3.2 节, 一氧化碳和碳氢化物; 2.3.2.d.3 和 2.3.2.e.3, 氮氧化物 (又名 CAEP/6 and CAEP/8); 第 2 部, 第 2 章, 燃油排泄。

In addition to the FAA's finding of compliance based on the certification requirements defined in this TCDS, the engine manufacturer has declared that the ICAO emissions standards identified in Annex 16, Volume II, Third Edition, Part III, Chapter 2, Section 2.2.2 for SN, Section 2.3.2 for CO and HC, Sections 2.3.2.d.3 and 2.3.2.e.3 for NOx (also known as CAEP/6 and CAEP/8, respectively), and Part II Chapter 2 for fuel venting have also been demonstrated.

以下发动机型别 (CFM56-5B1, CFM56-5B1/P, CFM56-5B1/2P, CFM56-5B2, CFM56-5B1/3, CFM56-5B2/P, CFM56-5B4/3, CFM56-5B3/2P, CFM56-5B5/P, CFM56-5B7, CFM56-5B7/3, CFM56-5B2/3, CFM56-5B2/2P, FM56-5B4/3B1, CFM56-5B4/2P, CFM56-5B6, CFM56-5B7/P, CFM56-5B8/3, CFM56-5B3/3, CFM56-5B3/P, CFM56-5B5/3, CFM56-5B4, CFM56-5B6/P, CFM56-5B8/P, CFM56-5B9/3, CFM56-5B3/3B1, CFM56-5B6/3, CFM56-5B4/P, CFM56-5B5,

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CFM56-5B6/2P, CFM56-5B9/P, CFM56-5B9/2P, CFM56-5C2/G, CFM56-5C3/G, CFM56-5C4) 满足中国民航规章《涡轮发动机飞机燃油排泄和排气排出物规定》(CCAR-34-R1) (2023 年 1 月 1 日生效) 的下列标准:

- 非挥发性颗粒物排放标准: CCAR 34.21(e)款 (CAEP/10 与 CAEP/11)

The following emissions standards promulgated in CAAC regulation CCAR-34-R1, effective January 1st, 2023, have been complied with for CFM56-5B1, CFM56-5B1/P, CFM56-5B1/2P, CFM56-5B2, CFM56-5B1/3, CFM56-5B2/P, CFM56-5B4/3, CFM56-5B3/2P, CFM56-5B5/P, CFM56-5B7, CFM56-5B7/3, CFM56-5B2/3, CFM56-5B2/2P, FM56-5B4/3B1, CFM56-5B4/2P, CFM56-5B6, CFM56-5B7/P, CFM56-5B8/3, CFM56-5B3/3, CFM56-5B3/P, CFM56-5B5/3, CFM56-5B4, CFM56-5B6/P, CFM56-5B8/P, CFM56-5B9/3, CFM56-5B3/3B1, CFM56-5B6/3, CFM56-5B4/P, CFM56-5B5, CFM56-5B6/2P, CFM56-5B9/P, CFM56-5B9/2P, CFM56-5C2/G, CFM56-5C3/G, CFM56-5C4:

- Non-volatile Particulate Matter emission standards: CCAR 34.21(e) (CAEP/10 and CAEP/11)

-结束-

-END-