

型号认可证数据单
THE VALIDATION DATA SHEET

编号/No.: VTC0298E

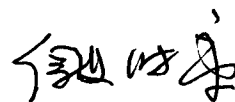
版次/Revision: 0

型号/Type:

IO-580-B1A,

AEIO-580-B1A

批准人/Approved by:



日期/Date: 2014 年 7 月 4 日

本数据单是型号认可证（编号：VTC0298E）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: VTC0298E), 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:

Lycoming Engines

An Operating Division of AVCO Corporation

Williamsport, Pennsylvania 17701

有效页清单/List of effective pages :

页数/ Pages	1	2	3	4	5	6	7	8
版次/Revision	0	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	No.VTC0298E, 版次 0, 2014 年 7 月 4 日颁发 No.VTC0298E; Revision 0; Date of Issue: 2014-07-04	No. E00004NY, 版本: 2, 2012 年 5 月 24 日颁发 No.E00004NY, Revision 2, Date of Issue: 2012-05-24
历史 History		

- | | |
|--------------------------------------|---|
| 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: | Lycoming Engines
An Operating Division of AVCO Corporation
Williamsport, Pennsylvania 17701 |
| 5. 制造厂/Manufacturer: | Lycoming Engines |
| 6. ETOPS: | 不适用/NA |
| 7. CAAC 专用要求/Special Requirements: | 无/NONE |

第2部分 数据单

SECTION 2 DATA SHEET

I. 型号/Models: IO-580	-B1A
类型 Type	6HOA 直驱 6HOA DIRECT DRIVE
额定值: 起飞和最大连续功率 hp., 转速 r.p.m., 全油门在:海平面压力高度 Rating: Takeoff and maximum continuous hp., rpm, full throttle at: Sea level pressure altitude	315 - 2700 315 - 2700
燃料 Fuel (最低等级航空汽油) (Minimum grade aviation gasoline)	100/100LL [♦] 100/100LL [♦]
喷射 Injection	见注释 5 SEE NOTE 5
燃油泵驱动 Fuel Pump Drive	见注释 3 SEE NOTE 3
润滑油 Oil Lubrication (润滑油应该符合列出的规范或之后改版列出的规范) (Lubricants should conform to the specification as listed or to subsequent revisions thereto.) 滑油箱容量, qt. Oil sump capacity, qt. 可用润滑油 qt. 正常运行机头朝上或朝下 20° Usable oil qt., Normal operation 20° nose up or down	1014 号服务指南 Service Instruction No. 1014 11 11 6 6
点火, 双 Ignition, dual	
磁电机 Magnetos	见注释 7 SEE NOTE 7
定时°BTC Timing °BTC	20 20
火花塞 Spark plugs	见注释 4 SEE NOTE 4
压缩 Compression 内径和冲程, 英寸 Bore and stroke, in. 排气量, 立方英寸 Displacement, cu. in.	5.319 X 4.375 5.319 X 4.375 583 583

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压缩比 Compression ratio	8.9:1 8.9:1
重量(干), 磅 Weight (dry), lb.	见注释 5 SEE NOTE 5
重心位置 C.G. location	见注释 7 SEE NOTE 7
螺旋桨轴- A.S.127 规范 Propeller shaft - Specification A.S. 127	改装的第 2 型法兰 Type 2 Flange Modified
注释 NOTES	1,2,3,4,5,6,7,8 1,2,3,4,5,6,7,8

♦ 参见 Lycoming 第 1070 号服务指南的最新版关于替代的燃料等级

♦ For alternate fuel grades, see the latest revision of Lycoming Service Instruction 1070

II. 型号/Models: AEIO-580	-B1A
类型 Type	6HOA 直驱 6HOA DIRECT DRIVE
额定值: 起飞最大连续功率 hp., 转速 r.p.m., 全油门在:海平面 压力高度 Rating: Takeoff and maximum continuous hp., rpm, full throttle at: Sea level pressure altitude	315 - 2700 315 - 2700
燃料 Fuel (最低等级航空汽油) (Minimum grade aviation gasoline)	100/100LL♦ 100/100LL♦
喷射 Injection	见注释 5 SEE NOTE 5
燃油泵驱动 Fuel Pump Drive	见注释 3 SEE NOTE 3
润滑油 Oil Lubrication (润滑油应符合列出的规范或之后改版列出的规范) (Lubricants should conform to the specification as listed or to subsequent revisions thereto.) 滑油箱容量, qt. Oil sump capacity, qt. 可用润滑油 qt., 正常运行机头朝上或朝下 20° Usable oil qt., Normal operation 20° nose up or down 最小安全润滑油 qt., 特技飞行机头朝上: 37°朝下 25° Minimum Safe oil qt., Aerobatic operation 37° nose up and 25° nose down	1014 号服务指南 Service Instruction No. 1014 16 16 6.2 (朝上) 5.6 (朝下) 6.2 (up) 5.6 (down) 9.0 9.0
点火, 双 Ignition, dual	

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磁电机 Magnetos	见注释 7 SEE NOTE 7
定时°BTC Timing °BTC	20 20
火花塞 Spark plugs	见注释 4 SEE NOTE 4
压缩 Compression 内径和冲程, 英寸 Bore and stroke, in. 排气量, 立方英寸 Displacement, cu. in.	 5.319 X 4.375 5.319 X 4.375 583 583
压缩比 Compression ratio	8.9:1 8.9:1
重量(干), 磅 Weight (dry), lb.	见注释 5 SEE NOTE 5
重心位置 C.G. location	见注释 7 SEE NOTE 7
螺旋桨轴- A.S.127 规范 Propeller shaft - Specification A.S. 127	改装的第 2 型法兰 Type 2 Flange Modified
注释 NOTES	1,2,3,4,5,6,7,8 1,2,3,4,5,6,7,8

*参见 Lycoming 第 1070 号服务指南的最新版本关于替代的燃料等级

*For alternate fuel grades, see the latest revision of Lycoming Service Instruction 1070

审定基础/ CERTIFICATION BASIS

规章和修正案 /Regulations & Amendments	型号 /Models	申请日期 /Date of Application	E00004NY 型号合格证的颁发/修订日期 /Date T.C. E00004NY Issued/Revised
FAR 33, 1965 年 2 月 1 日生效, 修正案为 33-1 到 33-20 FAR 33 effective February 1, 1965 As Amended by 33-1 through 33-20	IO-580-B1A	1997 年 5 月 16 日 May 16, 1997	2001 年 3 月 23 日 March 23, 2001
	AEIO-580-B1A	2006 年 2 月 8 日 February 8, 2006	2007 年 8 月 13 日 August 13, 2007

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.

生产基础/PRODUCTION BASIS

生产许可证 No. 3/Production Certificate No. 3

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注释/NOTE

注释 1 温度限制(最大允许)

NOTE 1 Temperature Limits (Maximum permissible):

型号/Models: IO-580-B1A, AEIO-580-B1A

气缸头(井型热电偶) 465° F

Cylinder head (well type thermocouple)

主机油 235° F

Oil gallery

注释 2 压力限制

NOTE 2 Pressure Limits:

燃油 Fuel:

	<u>最大值</u> Maximum	<u>最小值</u> Minimum
燃油泵入口的 p.s.i. p.s.i. at inlet to fuel pump.	65	-2

燃油喷嘴入口的 p.s.i. p.s.i. at inlet to fuel injector		
<u>最大值</u> Maximum	<u>最小值</u> Minimum	<u>慢车最小值</u> Minimum Idle
65	29	12

润滑油 Oil:

	<u>最大值</u> Maximum	<u>最小值</u> Minimum
正常运行 Normal operation	95 p.s.i.	55 p.s.i.
慢车 Idling	#	25 p.s.i.
起动, 暖车, 滑行和起飞 Starting, warm-up, Taxi and Take off	115 p.s.i.	#

"#"表示“不适用”

"#" indicates does not apply

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注释 3 附件驱动装置: 参考 Lycoming 操作手册关于发动机驱动的另外信息。

NOTE 3 Accessory Drive Provisions: For additional information on engine drives, refer to Lycoming Operator's Manual.

附件 Accessory	IO-580-B1A	旋转平面传动装置安装座 Rotation Facing Drive pad	曲轴的转速比 Speed Ratio to Crankshaft	最大扭矩(英寸-磅) Maximum Torque (in.-lb.)		最大悬臂力矩 (英寸-磅) Maximum Overhung Moment(in.-lb.)
				连续 Cont.	静止 Static	
起动机 Starter	*	CC	16.556:1	#	450	150
交流发电机 Alternator	*	C	3.20:1	60	120	175
#1 附件 Accessory # 1	*	CC	1.300:1	70	450	25
液压泵 Hydraulic Pump	*	C	1.385:1	100	800	40
转速计 Tachometer	*	C	0.500:1	7	50	5
螺旋桨调速器 Prop governor	*	C	0.947:1	125	2200	25
燃料泵 Fuel Pump		柱塞 Plunger	0.500:1	#	#	10
燃料泵 Fuel pump	*	CC	1.000:1	25	450	25

"#"表示“不适用”

"#" indicates: Does not apply.

"C"顺时针, "CC"逆时针

"C" Clockwise, "CC" Counter-Clockwise

附件 Accessory	AEIO-580-B1A	旋转平面传动装置安装座 Rotation Facing Drive pad	曲轴的转速比 Speed Ratio to Crankshaft	最大扭矩(英寸-磅) Maximum Torque (in.-lb.)		最大悬臂力矩 (英寸-磅) Maximum Overhung Moment (in.-lb.)
				连续 Cont.	静止 Static	
起动机 Starter	*	CC	16.556:1	#	450	150
交流发电机 Alternator	*	C	3.20:1	60	120	175
#1 附件 Accessory # 1	*	CC	1.300:1	70	450	25
液压泵 Hydraulic Pump	*	C	1.385:1	100	800	40
转速计 Tachometer	*	C	0.500:1	7	50	5
螺旋桨调速器 Prop governor	*	C	0.947:1	125	2200	25
燃料泵 Fuel Pump		柱塞 Plunger	0.500:1	#	#	10
燃料泵 Fuel pump	*	CC	1.000:1	25	450	25

"#"表示“不适用”

"#" indicates: Does not apply.

"C"顺时针, "CC"逆时针

"C" Clockwise, "CC" Counter-Clockwise

注释 4 火花塞: 参见 Lycoming 第 1042 号服务指南的最新版本关于已被认可的设备。

NOTE 4 Spark Plugs: See latest revision of Lycoming Service Instruction No. 1042 for approved equipment

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注释 5 型号相似性和不同之处

NOTE 5 Model similarities and differences:

<u>型号</u> Model		<u>重量(干), 磅*</u> Weight (dry) lbs.*	<u>燃油喷射</u> Fuel Injection #	<u>特性</u> Characteristics
IO-580	-B1A	434	RSA-10ED1	基本型-六缸, 水平对置, 空气冷却, 直驱, 燃油喷射, 带下进气的下吸式冷却和底侧排气口 Basic model - 6 cylinder, horizontally opposed air-cooled direct drive, with fuel injection, down draft cooling with down intake and bottom side exhaust ports.
AEIO-580	-B1A	446	RSA-10ED1 或 or Lycoming FM-250	带特技飞行燃油和润滑油系统, 和 B1A 相似 Similar to B1A with aerobatic fuel and oil system.

* 去掉起动机和交流发电机

* Less Starter and Alternator

Precision Airmotive 公司 (PAC)

Precision Airmotive Corp. (PAC)

注释 6 附件和装置:

经认可用于这些发动机的起动机和交流发电机列在最新版的 Lycoming 第 1154 号服务指南中。

NOTE 6 Accessories and Equipment:

Starters and alternators approved for use on this engine are listed in the latest revisions of Lycoming Service Instruction No. 1154.

注释 7 点火和重心

NOTE 7 Ignition and center of gravity:

<u>型号</u> Model		<u>点火, 双</u> Ignition, dual	<u>重心位置(干状, 只装有起动机)</u> C.G. location (dry with starter installed)		
			<u>从螺旋桨安装法兰盘的前端</u> <u>算起(英寸)</u> From front face of propeller mounting flange (in.)	<u>离螺旋桨轴中心线的距离(英寸)</u> Off prop. shaft C.L. (in.)	
				<u>垂直</u> Vertical	<u>横向</u> Lateral
IO-580	-B1A	Slick 6393 (左 left) 6350 (右 Right)	18.13	0.50 低 below	0.94 偏左 left
AEIO-580	-B1A	Slick 6393 (左 left) 6350 (右 Right)	18.13	0.50 低 below	0.94 偏左 left

注释 8 在牵引式和推进式安装中, 该发动机包含了吸收螺旋桨推力的设备。

NOTE 8 This engine incorporates provisions for absorbing propeller thrust in both tractor and pusher type installations.

结束

END