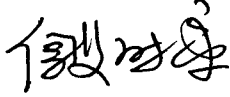


型号设计批准书数据单

TYPE DESIGN APPROVAL DATA SHEET

编号/No:TDA-LSA-0003A
版次/Revision: 0
型别/Model:
Ikarus C42E

批准人/Approved By:


日期/Date: 2012 年 4 月 28 日

本数据单是型号设计批准书（编号：TDA-LSA-0003A）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设计批准书的产品的状态和限制。

This data sheet, which is part of Type Design Approval (No: TDA-LSA-0003A), prescribes condition and limitation under which the product for which the type design approval was issued meets the airworthiness requirements of the Chinese Civil Aviation Regulation.

型号设计批准书持有人 / Type Design Approval Holder :

Comco Ikarus GmbH
Am Flugplatz 11
88367 Hohentengen
Germany

版次/Revision	0	0	0	0	0	0	0	0	0			
有效页/Effective Page	1	2	3	4	5	6	7	8	9			

第 1 部分 A: Ikarus C42E

SECTION 1.A: Ikarus C42E

A.I. 概述

1. a) 型号: Ikarus
 b) 衍生型: C42E
2. 适航类别: LSA
3. 型号设计批准书持有人: Comco Ikarus GmbH
Am Flugplatz 11
88367 Hohentengen
Germany
4. 制造人: Comco Ikarus GmbH
Am Flugplatz 11
88367 Hohentengen
Germany
5. 申请日期: 2010 年 5 月 5 日
6. CAAC 型号设计批准日期: 2012 年 4 月 28 日

A.I. General

1. a) Type: Ikarus
 b) Variant: C42E
2. Airworthiness Category: LSA
3. Type Design Approval Holder: Comco Ikarus GmbH
Am Flugplatz 11
88367 Hohentengen
Germany
4. Manufacturer: Comco Ikarus GmbH
Am Flugplatz 11
88367 Hohentengen
Germany
5. Application Date: 05-May-2010
6. CAAC Type Design Approval Date: 29-April-2012

A.II. 审定基础

- | | |
|---------------|------------------------------------|
| 1. CAAC 规章和政策 | CCAR -21-R3 第二十五条 AC-21-AA-2009-25 |
| 2. 相关的技术标准 | ASTM F2245-11、F2295-06、F2483-05 |
| 3. 专用条件: | 无 |
| 4. 等效安全判定: | 无 |
| 5. 环境要求: | 无 |

A.II. Certification Basis

- | | |
|--------------------------------|------------------------------------|
| 1. CAAC regulation and Policy | CCAR-21-R3 21.25, AC-21-AA-2009-25 |
| 2. Related Technical standards | ASTM F2245-11、F2295-06、F2483-05 |
| 3. Special Condition | None |
| 4. Equivalent Level of Safety | None |
| 5. Environmental Standards: | None |

A.III. 技术参数和操作限制

- | | |
|------------|--|
| 1. 型号设计定义: | 主图纸目录 Doc. No.: MDL C42 Series 2011-08 |
| 2. 描述: | 单发驱动、螺栓连接的机身框架、杆撑上单翼、后置十字形尾翼、前三点起落架, 双座。 |
| 3. 设备: | 设备清单参见 C42 系列的维护手册(C42 Series Maintenance Manual), 第 2 章(2.1 节) |
| 4. 尺寸: | 翼展 9.45m
全长 6.38 m
高度 2.20 m
机翼面积 12.50 m ² |
| 5. 操纵面偏度 | |
| 5.1 副翼 | 测量点至转动轴的距离 250mm
上偏 85mm±10mm Δ 20°±1°
下偏 65mm±10mm Δ 14°±1° |
| 5.2 升降舵 | 测量点至转动轴的距离 410mm
上偏 200mm±15mm Δ 28°±2°
下偏 140mm±15mm Δ 20°±2° |
| 5.3 方向舵 | 测量点至转动轴的距离 410mm
左偏 225mm±10mm Δ 32°±2° |

5.4 襟翼	右偏 $225\text{mm} \pm 10\text{mm}$ Δ $32^\circ \pm 2^\circ$ 测量点至转动轴的距离 310mm 位置 1 $27\text{mm} \pm 15\text{mm}$ Δ $-5^\circ \pm 1^\circ$ 位置 2 $60\text{mm} \pm 15\text{mm}$ Δ $11^\circ \pm 1^\circ$ 位置 3 $170\text{mm} \pm 15\text{mm}$ Δ $32^\circ \pm 1^\circ$
6. 发动机:	ROTAX 912 ULS, 满足 ASTM F2339-06
6.1 发动机限制	最大转速 5800 r.p.m (最多 5 分钟). 最大连续转速 5500 r.p.m 发动机其他使用限制参见 Rotax OM-912, 第 2 章。
7. 螺旋桨:	Neuform CR3 3 桨叶 (直径 $1,75 \text{ m}$) 桨距 27° @ 310mm (离桨叶根部距离) 满油门地面静止条件下发动机转速 为 4700rpm -4800rpm 时, 螺旋桨转速约 1950 rpm
8. 液体:	
8.1 燃油:	参见 Rotax 发动机 912 ULS 的操作者手册 (Operator's Manual), 包括 Rotax 服务通告和服务信息对批准的燃油规格予以持续更新。
8.2 滑油	Rotax 发动机 912 ULS 的操作者手册 (Operator's Manual), 包括 Rotax 服务通告和服务信息对批准的滑油规格予以持续更新。
8.3 冷却液:	Rotax 发动机 912 ULS 的操作者手册 (Operator's Manual), 包括 Rotax 服务通告和服务信息对批准的冷却液规格予以持续更新。
9. 液体容量:	
9.1 燃油:	总量: 65 升 可用: 64.5 升
9.2 滑油:	最大: 3.05 升 最小: 2.6 升
9.3 冷却液:	最大: 2.3 升 最小: 2.2 升
10. 空速限制 (IAS):	
不可超越速度 V_{NE}	121 kts
设计机动速度 V_A	90 kts

襟翼可展开速度 V_{FE}

位置 2 和 3: 66 kts

11. (保留)
12. 运行条件
- 仅在白天目视飞行规则条件下飞行
 - 禁止在特技或机动中超过 60 度坡度
 - 禁止在已知结冰条件下飞行
 - 不得尝试在紊流条件下和超过 22 节风速的条件下飞行。
13. 最大质量
- | | |
|----|--------|
| 起飞 | 540 kg |
| 着陆 | 540 kg |
| 滑行 | 540 kg |
14. 重心范围 (基准点之后):
- 前限: 300 mm
- 后限: 523 mm
15. 基准点:
- 机翼前缘
16. (保留)
17. 水平测量方法:
- 水平安定面水平(0°),即水平安定面前缘和后缘之间的上表面为 0 度(水平),使用水平测量仪或电子测量器测量
18. 最小飞行机组:
- 1 (飞行员)
19. 最大乘客座椅容量:
- 1
20. (保留)
21. 行李舱
- 最大允许载荷
- 20 kg, 依重心和 MTOW (最大起飞重量) 而异

A.III. Technical Characteristics and Operational Limitations

1. Type Design Definition: Master Drawing List; Doc. No.:MDL C42 Series 2011-08.
2. Description: Single engine powered, bolted aluminium tubular frame, strutted high-wing, rear cruciform empennage, nose-wheel type, two seats.
3. Equipment: For Minimum Equipment list refer to C42 Series Maintenance Manual, Section 2 (Paragraph 2.1)

4. Dimensions: Span 9.45m
Length 6.38m
Height 2.20m
Wing area 12.50m²
5. Control surface deflections
- Aileron Distance between measuring point and rotation axis is 250mm
Up 85mm±10mm Δ 20°±1°
Down 65mm±10mm Δ 14°±1°
- Elevator Distance between measuring point and rotation axis is 410mm
Up 200mm ± 15mm Δ 28°±2°
Down 140mm ± 15mm Δ 20°±2°
- Rudder Distance between measuring point and rotation axis is 410mm
Left 225mm ± 10mm Δ 32°±2°
Right 225mm ± 10mm Δ 32°±2°
- Wing Flap Distance between measuring point and rotation axis is 310mm
Position 1 27mm ± 15mm Δ -5°±1°
Position 2 60mm ± 15mm Δ 11°±1°
Position 3 170mm ± 15mm Δ 32°±1°
6. Engines: ROTAX 912 ULS compliant to ASTM F2339-06
- 6.1 Engine Limits: Max rotational speed 5800 rpm(5 minutes,Max.).
Max continuous rotational speed 5500 r.p.m
For power-plants limits refer to OM-912, Section 2
7. Propellers: Neuform CR3 3 blade (1,75 m Ø)
Pitch 27° @ 310mm from hub edge
Full throttle ground static RPM 4700rpm –
4800rpm (prop ≈ 1950 rpm)
8. Fluids:
- 8.1 Fuel: Rotax Operator's Manual for engine 912 ULS, including Rotax SB's and SI's providing continuous update to approved fuel specifications.

- | | |
|---|--|
| 8.2 Oil: | Rotax Operator's Manual for engine 912 ULS, including Rotax SB's and SI's providing continuous update to approved oil specifications. |
| 8.3 Coolant: | Rotax Operator's Manual for engine 912 ULS, including Rotax SB's and SI's providing continuous update to approved coolant specifications. |
| 9. Fluid capacities: | |
| 9.1 Fuel: | Total: 65 litres
Usable: 64.5 litres |
| 9.2 Oil: | Max: 3.05 litres
Min: 2.6 litres |
| 9.3 Coolant: | Max: 2.3 litres
Min: 2.2 litres |
| 10. Airspeed Limits (IAS): | |
| Never exceed speed V_{NE} | 121 kts |
| Design Manoeuvring Speed V_A | 90 kts |
| Flap Extended Speed V_{FE} | For position 2 and 3 66 kts |
| 11. (reserved) | |
| 12. Operation Conditions | <ul style="list-style-type: none">- Day light, VFR conditions only- Aerobatics and manoeuvres with more than 60° bank are prohibited- No flight in known icing conditions,- Do not attempt flight in turbulent conditions or in winds exceeding 22 kts (40 km/h). |
| 13. Maximum Masses: | |
| Take-off | 540 kg |
| Landing | 540 kg |
| Taxi | 540 kg |
| 14. Centre of Gravity Range (aft of Datum): | Forward limit 300 mm
Afterward limit: 523 mm |
| 15. Datum: | Wing leading edge |
| 16. (Reserved) | |

- 17 Levelling Means: Stabilizer horizontal, i.e., upper surface 0°(horizontal)
between leading edge and trailing edge of stabilizer,
with spirit level or electronic measuring gauge
18. Minimum Flight Crew: 1 (Pilot)
19. Maximum Passenger Seating Capacity: 1
20. (Reserved)
21. Baggage / Cargo Compartments
max. allowable Load 20 kg, depending on COG and MTOW

A.IV. 操作和服务指导

- C42E 飞行和用户手册 Doc. No. POH C42E 540kg LSA Issue 1 ,
2011 年 07 月 06 日或后续批准版次
- 维护和检查程序手册: Doc No.Maintenance Manual C42 Series Issue V, 2011
年 8 月 8 日或后续批准的版次
- 主图纸目录 MDL C42 Series 2011-08 及其后续修订

A.IV. Operating and Service Instructions

- C42E Flight And Operators Manual: Doc. No. POH C42E 540kg LSA Issue 1, 06-07-2011 or
later approved revisions
- Maintenance and Inspection Procedures Manual:
Doc No.Maintenance Manual C42 Series Issue V, ,
08-08-2011 or later approved revisions
- Master Drawing List MDL C42 Series 2011-08 and later approved revisions

A.V. 注

1. 下列项目必须至少以中文给出:
供乘客使用的标记和标牌;
供营救人员在应急撤离情况下使用的标记和标牌。

A.V. Notes

1. the following items should be in Chinese language at least:
Markings and placards for passenger usage;
Markings and placards for rescue personnel usage in case of emergency evacuation.

第 2 部分: 修订记录

发布	日期	修订
1	2012 年 04 月 28 日	首次发布

SECTION 2: CHANGE RECORD

Issue	Date	Change
1	28-April-2012	Initial issue