

型号合格证数据单

TYPE CERTIFICATE DATA SHEET

编号/No: TC0034A

版本/Revision: 1

型别/Model:

MTOsport

批准人/Approved By:

徐超群

职务/Title: Director General of
CAAC-AAD

日期/Date: 2018 年 10 月 16 日

本数据单是型号合格证（编号：TC0034A）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合格证的产品的状态和限制。

This data sheet, which is part of Type Certificate (No: TC0034A), prescribes the conditions and the limitations under which the product for which the type certificate was issued meets the airworthiness requirements of the Chinese Civil Aviation Regulations.

型号合格证持有人 / **Type Certificate Holder :**

AutoGyro GmbH

Dornierstraße 14

D-31137 Hildesheim

Germany

第 1 部分 A: MT0sport

SECTION 1. A: MT0sport

A.I. 概述

- | | | |
|----|----------------|---|
| 1. | a) 型号: | MT0sport |
| | b) 衍生型: | N/A |
| 2. | 适航类别: | LSA 轻型运动航空器 |
| 3. | 型号合格证持有人: | Auto Gyro GmbH
Dornierstraße 14
D-31137 Hildesheim
Germany |
| 4. | 制造人: | Auto Gyro GmbH
Dornierstraße 14
D-31137 Hildesheim
Germany |
| 5. | 申请日期: | 2010 年 9 月 8 日 |
| 6. | CAAC 型号设计批准日期: | 2012 年 8 月 6 日 |

A.I. General

- | | | |
|----|---------------------------------|--|
| 1. | a) Type: | MT0sport |
| | b) Variant: | N/A |
| 2. | Airworthiness Category: | LSA |
| 3. | Type Certificate Holder: | AutoGyro GmbH
Dornierstraße 14
D-31137 Hildesheim
Germany |
| 4. | Manufacturer: | AutoGyro GmbH
Dornierstraße 14
D-31137 Hildesheim
Germany |
| 5. | Application Date: | 08-September-2010 |
| 6. | CAAC Type Design Approval Date: | 06-August-2012 |

A.II. 审定基础和生产依据

1) 审定基础

- | | | |
|----|------------|---|
| 1. | CAAC 规章和政策 | CCAR 21.26(CCAR -21-R4), AC-21-AA-2009-25,
AP-21-AA-2015-37R1 |
|----|------------|---|

- | | | |
|----|---------|---|
| 2. | 相关的技术标准 | ASTM F2352-11, F2415-09, F2483-05,
* ASTM F2352-14,
* CAP643 (Section T Light Gyroplanes) Issue 5.
* German BUT NfLII89-01 with revisions to take-off
weight NfL 13_09. |
| 3. | 专用条件: | 无 |
| 4. | 等效安全判定: | 无 |
| 5. | 环境要求: | 无 |

2) 生产依据

生产许可证: LSA-0002A

A.II. Certification Basis and Production Basis

1) Basis of certification

- | | | |
|----|-----------------------------|--|
| 1. | CAAC regulation and Policy | CCAR21.26(CCAR-21-R4), AC-21-AA-2009-25
AP-21-AA-2015-37R1, |
| 2. | Related Technical standards | ASTM F2352-11/F2415-09/F2483-05
* ASTM F2352-14,
* CAP643 (Section T Light Gyroplanes) Issue 5.
* German BUT NfLII89-01 with revisions to take-off
weight NfL 13_09. |
| 3. | Special Condition | None |
| 4. | Equivalent Level of Safety | None |
| 5. | Environmental Standards: | None |

2) Production Basis

Production Certificate No. LSA-0002A

A.III. 技术参数和使用限制

- | | | |
|----|---------|---|
| 1. | 型号设计定义: | PRODUCT DEFINITION DOCUMENT (PDD004)
*PRODUCT DEFINITION DOCUMENT (PDD008) |
| 2. | 描述: | 单发动机, 不锈钢管骨架, 焊接处理, 复合材料的座舱,
两个座位。 |

3. 设备: 有关下列性能的仪表: 飞行速度, 高度, 旋翼转速, 发动机转速, 油压, 油温, 气缸头温度, 飞行时数, 选装设备见 Design Configuration report (Dated 12.03.18 Issue 1) 或 *Design Configuration report (Dated 12.02.18 Issue 1)
4. 尺寸: 长度: 5.08 m 或 *5.10 m
宽度: 1.88 m
高度: 2.71 m
5. 操纵面偏度 : 右偏: $50^{\circ} \pm 2^{\circ}$ 或 $*32^{\circ} \pm 2^{\circ}$
方向舵: 左偏: $20^{\circ} \pm 2^{\circ}$ 或 $*27^{\circ} \pm 2^{\circ}$
参考平面: 纵轴
*纵轴偏右 7.5°
6. 发动机 Rotax 912 ULS, Rotax 914 UL 满足 ASTM F2339-06
6.1 发动机限制: 最大转速 5800 rpm (最多 5 分钟).
最大连续转速 5500 rpm
发动机其他使用限制参见 OM-912, OM-914
7. 螺旋桨: 三叶式 HTC 定距螺旋桨
参见飞行操作手册
8. 液体:
8.1 燃油: Rotax 发动机 912 ULS/914UL 的操作手册 (Operator's Manual) 及后续的升级, 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。同时参见飞行手册中对于燃油的限制。
8.2 滑油: Rotax 发动机 912 ULS/914UL 的操作手册 (Operator's Manual) 及后续的升级, 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。同时参见飞行手册中对于滑油的限制。
8.3 冷却液: Rotax 发动机 912 ULS/914UL 的操作手册 (Operator's Manual) 及后续的升级, 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。参见飞行手册中对于冷却液的限制。

9. 液体容量:
- 9.1 燃油: 总量: 34 / 68 升 或 * 95.3 升
可用: 32/ 64 升 或 * 95 升
- 9.2 滑油: 最大: 3.4 升
最小: 3.0 升
- 9.3 冷却液: 最大: 3.5 升
最小: 3.3 升
10. 空速限制 (IAS): 不可超越速度 V_{NE} 185 km/h 或 * 195km/h
设计机动速度 V_A 80 km/h
最大湍流速度 V_B 120 km/h
11. 旋翼系统: 两片桨叶旋翼和桨毂组件
见飞行操作手册
12. 运行条件: - 仅在白天目视飞行规则条件下飞行
- 禁止特技或在机动中超过 60 度坡度
- 禁止在已知结冰条件下飞行
- 禁止在强阵风条件下或超过 40 节风速的条件下飞行
13. 最大质量:
- 起飞 500 kg 或 *560kg (914 UL)/ *500kg (912ULS)
- 着陆 500 kg 或 *560kg (914 UL)/ *500kg (912ULS)
- 滑行 500 kg 或 *560kg (914 UL)/ *500kg (912ULS)
14. 重心范围 (基准点之前): 前限: 358 mm 或 *310mm
后限: 183 mm 或 *240mm
15. 基准点: 旋翼桅杆底部前端 或 *主轮轴
16. (保留)
17. 水平测量方法: 旋翼桅杆铅垂方向

*测量前后座间龙骨梁, 机头向下 5 度即为水平
18. 最小飞行机组: 1 人
19. 最大乘客座椅容量: 1 人
20. (保留)
21. 行李舱最大允许载荷 : 10 kg

A.III. Technical Characteristics and Operational Limitations

1. Type Design Definition: PRODUCT DEFINITION DOCUMENT (PDD004)
*PRODUCT DEFINITION DOCUMENT (PDD008)
2. Description: Single engine powered, Tubular steel frame, welded, composite cockpit, and two seats.
3. Equipment: instruments for: speed, rotor speed, engine speed, Oil pressure, oil temperature, cylinder head temperature, height, operation hours
4. Dimensions: Length: 5.08 m or *5.10 m
Width: 1.88 m
Height: 2.71 m
5. Control surface deflections:
Rudder: Right: $50^{\circ} \pm 2^{\circ}$ or $*32^{\circ} \pm 2^{\circ}$
Left: $20^{\circ} \pm 2^{\circ}$ or $*27^{\circ} \pm 2^{\circ}$
Reference level: longitudinal axis
*7.5° right of longitudinal axis
6. Engines: ROTAX 912 ULS, Rotax 914 UL compliant to ASTM F2339-06
 - 6.1 Engine Limits: Max rotational speed 5800 rpm (5 minutes, max.).
Max continuous rotational speed 5500 rpm
For power-plants limits refer to OM-912, OM-914
7. Propellers: HTC 3 Blade, ground adjustable
see Pilot and Operation Handbook
8. Fluids:
 - 8.1 Fuel: Rotax Operator's Manual for engine 912 ULS /914UL and subsequent updates, including Rotax SB's and SI's providing continuous update to approved fuel specifications. Also refer to the Pilot Operation Handbook for fuel limitations.
 - 8.2 Oil: Rotax Operator's Manual for engine 912 ULS/914UL and subsequent updates, including Rotax SB's and SI's providing continuous update to approved oil specifications. Also refer to the Pilot Operation Handbook for oil limitations.
 - 8.3 Coolant: Rotax Operator's Manual for engine 912 ULS /914UL and subsequent updates, including Rotax SB's and SI's

- providing continuous update to approved coolant specifications. Refer to the Pilot Operation Handbook for coolant limitations.
9. Fluid capacities:
- 9.1 Fuel: Total: 34/68 litres or * 95.3 litres
Usable: 32/64 litres or * 94 litres
- 9.2 Oil: Max: 3.4 litres
Min: 3.0 litres
- 9.3 Coolant: Max: 3.5 litres
Min : 3.3 litres
10. Airspeed Limits (IAS): Never exceed speed V_{NE} 185 km/h or *195km/h
Design Manoeuvring Speed V_A 80 km/h
Maximum rough-air speed V_B 120 km/h
11. ROTOR SYSTEM: AutoGyro rotor blade and hub assembly
see Pilot and Operation Handbook
12. Operation Conditions
- 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 strong gusty winds conditions or in winds exceeding 40 kts (74.1 km/h).
13. Maximum Masses:
- | | |
|----------|---|
| Take-off | 500 kg or
*560kg (914 UL)/ *500kg (912ULS) |
| Landing | 500 kg or
*560kg (914 UL)/ *500kg (912ULS) |
| Taxi | 500 kg or
*560kg (914 UL)/ *500kg (912ULS) |
14. Centre of Gravity Range
(in front of Datum): Forward limit : 358 mm or *310mm
Afterward limit: 183 mm or *240mm
15. Datum: Leading Edge of Rotor Mast (bottom section) or
* Main wheel axis
16. (Reserved)
17. Levelling Means: Rotor Mast, 90° to ground

*Keel tube 5deg nose down, measured on top of the keel tube between the front and rear seat.

18. Minimum Flight Crew: 1 (Pilot)
19. Maximum Passenger Seating Capacity: 1
20. (Reserved)
21. Baggage / Cargo Compartments: 10 kg

A.IV. 批准的技术资料

MTOsport 飞行操作手册: Pilot and Operation Handbook for Gyroplane
MTOsport (POH_MT 或 *POH-M17)

维护和检查程序手册: Aircraft Maintenance Manual for Gyroplane MTOsport
(MMM_MT, 或*AMM_M7)

A.IV. Approved technical Document

MTOsport Flight And Operation Manual: Pilot and Operation Handbook for Gyroplane
MTOsport (POH_MT or*POH-M17)

Maintenance and Inspection Procedures Manual: Aircraft Maintenance Manual for Gyroplane MTOsport
(MMM_MT, or *AMM_M7)

A.V. 注

- 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。
- 打“*”部分为加装 MC-392 型改装包后的数据, 加装 MC-392 改装包后的机型商业名为 MTOsport2017.

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.
2. The TDADS data specific to the MTOsport with modification kit MC-392 is identified with an *,
the MTOsport with the modification kit MC-392 is commercially named as MTOsport 2017.

第 2 部分: 修订记录

发布	日期	修订
1	2012 年 08 月 06 日	首次发布
2	2018 年 10 月 16 日	第一次修订

SECTION 2: Revision Record

Issue	Date	Change
1	2012.08.06	Initial issue
2	2018.10.16	1st revision