



**TYPE CERTIFICATE DATA SHEET Nº EA-2015T08**

Type Certificate Holder:

**AIRBUS S. A. S.**  
1 Rond-point Maurice Bellonte  
BLAGNAC, 31707  
FRANCE

EA-2015T08  
Sheet 01

AIRBUS  
A350-941

14 August 2015

This data sheet, which is part of Type Certificate No. 2015T08, prescribes conditions and limitations under which the product, for which the Type Certificate was issued, meets the airworthiness requirements of the Brazilian Aeronautical Regulations.

**I - Model A350-941 (Transport Category), approved 14 August 2015.**

**ENGINE** Two (2) Rolls Royce Trent XWB-84 Turbofan

**FUEL** JET A; JET A1; JP5, JP8, N°3 JET FUEL, RT, TS-1

**ENGINE LIMITS** Net take-off (5 minutes) 374,5 kN (84,200 lbf)  
Net Maximum Continuous 317,6 kN (71.400 lbf)

**APU** One (1) APU, Honeywell HGT 1700

**APU LIMITS** Refer to the Auxiliary Power Unit operating instructions

**OIL** Refer to the engine operating instructions & Engine EM 2015T04

**AIRSPEED LIMITS (IAS)** Maximum operating ( $V_{MO}$ ): 340 kias  
Maximum operating ( $M_{MO}$ ): 0.89  
Maneuvering ( $V_A$ ) - sea level: Refer to AFM Limitation section

Flaps extended ( $V_{FE}$ )	Conf	Slat/Flaps/ Ailerons (°)	VFE
Intermediate Approach (Holding)	1	16/0/0	255 kt
Takeoff / Approach	1	16/16/10	220 kt
Takeoff / Approach	2	16/20/10	212 kt
Takeoff / Approach / Landing	3	21/26/0	195 kt
Landing	FULL	21/37/0	186 kt

Minimum control speed - Air ( $V_{MCA}$ ): Refer to AFM Performance section

Minimum control speed - Ground ( $V_{MCG}$ ): Refer to AFM Performance section

L. G. operation - extend ( $V_{LO}$ ): 250 kias/0.55

L. G. operation - retract ( $V_{LO}$ ): 250 kias/0.55

L. G. extended ( $V_{LE}$ ): 220 kias

**CG RANGE** Refer to EASA-Approved Brazilian Airplane Flight Manual Limitations Section for center of gravity envelope.

**DATUM** The airplane reference zero datum point is located 5.34 m (210.24 in.) forward of the nose section, 127 m (5 in.) above the floor reference.

**LEVELING MEANS** Quick leveling procedures are provided in the Aircraft Maintenance Manual (AMM) task A350-A-08-21.

**MEAN AERODYNAMIC CHORD** The MAC is 9.006 meters

**MAXIMUM WEIGHT**

	WV000 (Basic)	WV001 (Mod 104052)
Takeoff (MTOW)	268 t	275 t
Landing (MLW)	205 t	207 t
Zero Fuel (MZFW)	192 t	195,7 t

**MINIMUM CREW** Two (2) : Pilot and Co-pilot

**MAXIMUM PASSENGERS** 440 for the passenger doors configuration A-A-A-A,  
385 for the passenger doors configuration C-A-A-A,  
330 for the passenger doors configuration C-A-C-A.

**MAXIMUM BAGGAGE**

Cargo Compartment	kg	lb
Forward	22,000	48,501
Aft	19,000	41,888
Rear (bulk)	3,468	7,646

Baggage/ Cargo Compartment Limitation: No passenger cargo shall be carried in the cargo compartments.

**FUEL CAPACITY**

Tanks	Liters	kg
Wing	29,963	23,520
Center	81,052	63,625
Total	140,978	110,665
Density: 0.785kg/l		

**OIL CAPACITY** 20.9 liters (22.1 US quarts)

**HYDRAULIC FLUID** TYPE IV LD and TYPE V LD, as per NSA 307-110, or any mixture of both.

**MAXIMUM OPERATING ALTITUDE** 43,100 feet

**TEMPERATURE OPERATING LIMITS** From -54°C to +55°C at -2,000 ft altitude  
From -80°C to -36°C at maximum flight level

**CONTROL SURFACE  
MOVEMENTS**

Elevator:	Up -30°	Down +20°
Rudder:	Right -35°	Left +35°
Stabilizers	-0.8° / -13.7°	
Aileron:	Up -30°	Down +20°
Aileron Droop	10°	
Inboard flaps:	Down 0 to 36.3°	
Outboard flaps:	Down 0 to 37.5°	
Slats	Down 0 to 23.7°	
#1,2 Spoilers	Roll Inhibited	GS IB Droop/ -35°
#3 to 7 Spoilers	Roll OB Droop / -45°	GS OB Droop / -50°

**SERIAL NUMBER ELIGIBLE**

A Certificate of Airworthiness for Export endorsed as noted under "Import Requirements" must be submitted for each individual aircraft for which application for a Brazilian Certificate of Airworthiness is made.

**IMPORT ELIGIBILITY**

A Brazilian Certificate of Airworthiness may be issued on the basis of on an EASA Export Certificate on Airworthiness (or a third country Export Certificate on Airworthiness, in case of used aircraft imported from such country), including the following statement:

"The aircraft covered by this certificate has been inspected, tested and found to be in conformity with the Brazilian approved type design as defined by the Brazilian Type Certificate no. 2015T08 and in condition of safe operation".

The ANAC Report H.10-2477-00, dated 05 August 2015 or further revisions, contains the Brazilian requirements for the acceptance of these airplanes. (See note 4)

**CERTIFICATION BASIS**

Brazilian Type Certificate No. 2015T08 issued on 05 August 2015 based on the RBAC 25 "Requisitos De Aeronavegabilidade: Aviões Categoria Transporte", which endorses the 14 CFR Part 25 effective 02 September 2015, as amended by 25-1 through 25-129 and RBAC 34 and RBAC 36 [corresponding to 14 CFR Part 36 – including amendments 1 to 28 effective on 03 Feb 2006]. The compliance was verified through equivalency finding to EASA Certification Specification 25, Amendment 7 – Large Aeroplanes including EASA issued Special Conditions, Equivalent Level of Safety accepted by ANAC and additional ANAC issued Equivalent Level of Safety and Exemptions as noted:

EASA Special Conditions:

- SC B-01 Stalling and Scheduled Operating Speeds
- SC B-02 Motion and effect of cockpit controls
- SC B-04 Static Directional, Lateral and Longitudinal Stability and Low Energy Awareness
- SC B-05 Flight envelope protection
- SC B-06 Normal Load Factor limiting System
- SC B-09 Flight in Icing Condition
- SC B-11 Soft Go Around Mode (post-TC)
- SC C-01 Crash Survivability for CFRP Fuselage
- SC C-02 Design dive speed
- SC C-05 Tyre Debris vs. Fuel Leakage for CFRP Fuel Tank
- SC C-06 Dynamic braking

**CERTIFICATION BASIS (CONT.)**

SC C-07 Limit pilot forces  
SC C-10 Design Maneuver Requirements  
SC C-14 Pivoting Loads  
SC D-04 Crew Rest Compartments (post-TC)  
SC D-05 Towbarless Towing  
SC D-07 Control Surface Position Awareness / Electronic Flight Control Systems  
SC D-14 Application of Heat Release and Smoke Density Requirements to Seat Materials  
SC D-16 In-Flight Fire - Composite Fuselage Construction  
SC D-20 Lateral Trim Function through Differential Flap Setting  
SC D-21 Type C Passenger Exits  
SC D-32 Use of Magnesium Alloys for Passenger Seat Components (post-TC)  
SC E-08 Fire withstanding Capability of CFRP Wing Fuel Tanks  
SC F-13 Lithium Battery Installations  
SC F-26 Flight Recorders including Data Link Recording  
SC F-38 Security Assurance Process to isolate or protect the Aircraft Systems and Networks from internal and external Security Threats  
SC G-01 ETOPS Approval  
SC G-06 Cancellation of AFM Engine Management Tables  
SC D-06 High Altitude Operation / High Cabin Heat Load  
SC E-12 Water / Ice in Fuel System  
SC F-12 HIRF Protection  
SC F-53 Fuel System low Level Indication / Fuel Exhaustion

**Equivalent levels of safety findings:**

*ANAC Equivalent Level of Safety issued:*

ANAC Ordinance 1097/SAR dated 08/May/2015 to RBAC 25 §25.831 (G),

Governmental Decree 1098/SAR dated 08/May/2015 to RBAC 25 §25.1193 (E)(3),

ANAC Ordinance 1099/SAR dated 08/05/2015 to RBAC 25 §§25.841 (A) E 25.841 (B)(6),

ANAC Ordinance 1100/SAR dated 08/May/2015 to RBAC 25 §25.779 (B)(1),

ANAC Ordinance 1149/SAR dated 15/May/2015 to RBAC 25 §25.1549,

ANAC Ordinance 1150/SAR dated 15/May/2015 to RBAC 25 §25.671(C)(1),

ANAC Ordinance 1936/SAR dated 21/July/2015 to RBAC 25 §25.811(E)(4),

**CERTIFICATION BASIS (CONT.)**

ANAC Ordinance 1937/SAR dated 21/July/2015 to RBAC 25 §25.811(G) E 25.812(B)(1), e

ANAC Ordinance 1935/SAR dated 21/July/2015 to RBAC 25 §25.981

*EASA ELoS accepted by ANAC:*

ESF C-11 Ground Loads Conditions

ESF C-12 Undercarriage Lateral Turning Loads

ESF D-11 Packs off operations

ESF D-15 Post Crash Fire - Composite Fuselage Construction

ESF D-19 Overpressure Relief Valves and Outflow Valves

ESF D-23 Indication of the Passenger Door from outside Position if the Door is not fully Closed, Latched and Locked

ESF D-28 Green Arrow and "Open" Placard for Emergency Exit Marking

ESF D-30 Installation of Angled Seats (post-TC)

ESF D-31 Application of reduced Intrusion Loads in certain Areas of the Flight Deck Boundaries

ESF D-34 APU Doors Compliance to CS 25.783(a)

ESF E-04 Thrust Reverser Testing

ESF E-07 Warning Means for Rolls Royce Engine Fuel Filters

ESF E-09 Rolls Royce Engine Turbine Overheat Detection

ESF E-13 Fire Extinguishing Agent Concentration

ESF E-14 Pressure fuelling system shut-off operation check

ESF F-22 Minimum Mass Flow of Supplemental Oxygen

ESF F-23 Landing Light Switch

ESF F-33 Pneumatic Systems – harmonized 25.1438

ESF F-52 Crew Determination of Quantity of Oxygen in Passenger Oxygen System

ESF F-63 Improved Passenger Oxygen Mask Deployment System

ESF F-69 Pitot Heat Indication Systems

ESF G-05 Engine Oil Temperature Indication

ESF K-03 Localizer Excessive Deviation Alerts (post-TC)

ESF K-04 Limit Risk (post-TC)

ESF K-08 CAT 3 Operations - Super Fail Passive Anomalies (post-TC)

**Exemptions:**

ANAC Decisions grants A350 Exemptions as follows to:

RBAC 25.562(b)(2) Decision n° 91.

RBAC 25.809(a) Decision n° 90.

RBAC 25.841 (a)(2) and (a)(3). Decision n° 92.

**REQUIRED EQUIPMENT**

The basic required equipment, as prescribed in the applicable airworthiness regulations (see Certification Basis) must be installed in the airplane.

**DATA PERTINENT TO ALL MODELS:****NOTES:**

- NOTE 1** Weight and balance. A current weight and balance report including list of the equipment included in the certificated empty weight, and loading instructions, when necessary, must be provided for each aircraft at the time of original airworthiness certification and at all times thereafter.
- NOTE 2** Markings and placards. Airplane operation must be in accordance with the Brazilian Airplane Flight Manual. All placards required by either the Brazilian AFM, the applicable operating rules, or the certification basis must be installed in the airplane. All Markings and Placards required to be translated or bilingual is described in Airbus A350-900 Passenger and Crew Bilingual Placards Booklet Reference V11D15001311 Original, dated March 2015.
- NOTE 3** Continuing Airworthiness.
- Limitations applicable to Safe Life Airworthiness Limitation Items are provided in the A350 Airworthiness Limitations Section (ALS) Part 1 (Document 00 V 050 ALS01 / C01 issue 1 EASA approved) Rev. 00 or further approved revision,
  - Limitations applicable to Damage-Tolerant Airworthiness Limitation Items are provided in the A350 Airworthiness Limitations Section (ALS) Part 2 (Document 00 V 050 ALS02 / C01 issue 1 EASA approved) Rev. 00 or further approved revision,
  - Certification Maintenance Requirements are provided in the A350 Airworthiness Limitations Section (ALS) Part 3 (Document 00 V 050 ALS03 / C01 issue 2 EASA approved) Rev. 00 or further approved revision,
  - A350 System Equipment Maintenance Requirements are provided in the A350 Airworthiness Limitations Section (ALS) Part 4 (Document 00 V 050 ALS04 / C01 issue 1 EASA approved) Rev. 00 or further approved revision,
  - A350 Fuel System Airworthiness Limitations are provided in the A350 Airworthiness Limitations Section (ALS) Part 5 (Document 00 V 050 ALS05 / C01) and Variation 0.1 to Revision 00 of ALS Part 5 – Fuel Airworthiness Limitations (FAL), (Document 00 V 050 A145A/C01 issue 1 EASA approved) Rev. 00 or further approved revision,
  - A350 Maintenance Review Board Report (Document 00 V 050 AMRBR / C01 issue 1 EASA approved),
- The document "A350-900 Temporary TC limitations document", reference 00 V 050 T TCLD /C91 Issue 4, is recording the temporary limitations identified at TC, that are not published within the A350 ALS Part 3 and Part 4. This document is applicable to the A350 at TC and until further notice.
- Note: Only ALS part 3 impacts have been identified in chapter 5.4 of this document.
- The document "A350-900 - Temporary TC Limitation Document not ALS related and to be removed before EIS", reference 00 V 207 A TTCL / C91 Issue 1, is recording an additional temporary limitation identified at TC, that is not ALS related. This document is applicable to the A350 at TC and until further notice.

- NOTE 4** The differences of the Brazilian airplanes in relation to the basic EASA type design are summarized below:
1. The Brazilian Airplane Flight Manual is the STL 35000 (certification reference for TC: 00 V 101 A0941 / C9S Issue 4) including Noise Supplement.
  2. Markings and placards according to Marking and Placard Booklet Airbus A350-900 Passenger and Crew Bilingual Placards Booklet Reference V11D15001311 Original, dated March 2015.

- NOTE 5** The Type Design, system reliability and performance of the following A350 model(s) were found capable for Extended Range Operations (ETOPS) when configured, maintained and operated in accordance with the current revision of the ETOPS Configuration, Maintenance and Procedures (CMP) document, XWB/EASA: CS 25.1535/CMP.

This finding does not constitute an approval to conduct Extended Range Operations (operational approval must be obtained from the responsible Authority).

The following table provides details on the ETOPS approvals.

Model	Engine Type	180 min. Approval date	Beyond 180 min. Approval date
A350-941	TRENT XWB-84	14 AUGUST 2015	14 AUGUST 2015

- NOTE 6** The minimum required cabin crew number resulting from the certification evacuation evaluation of the A350-900 is 8 for all of the emergency exit configurations shown in section 2.4. Irrespective of the Maximum Operational Passenger Seating Capacity (MOPSC) for the concerned airplane but in accordance with RBAC 121.391, if the MOPSC for the concerned airplane exceeds 400, the minimum required cabin crew number becomes 9.

  
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**Gerente-Geral de Certificação de Produto Aeronáutico  
(MANAGER, AERONAUTICAL PRODUCT CERTIFICATION)**