



**AGÊNCIA NACIONAL DE AVIAÇÃO CIVIL - BRASIL**

**TYPE CERTIFICATE DATA SHEET Nº EA-2009T04**

Type Certificate Holder:

**DIAMOND AIRCRAFT INDUSTRIES INC**  
1560 Crumlin Sideroad  
London, Ontario N5V 1S2  
**CANADA**

EA-2009T04  
Sheet 01

DIAMOND  
DA20-C1

27 May 2009

This data sheet, which is part of Type Certificate No. 2009T04, 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 DA20-C1 (Utility Category), approved 27 May 2009.**

<b>ENGINE</b>	Teledyne Continental Motors IO-240-B (see EM 2009T02)	
<b>FUEL</b>	AVGAS 100 LL	
<b>ENGINE LIMITS</b>	Maximum Continuous Power 2 800 RPM (125 hp)	
<b>OIL</b>	See list in AFM	
<b>PROPELLER AND PROPELLER LIMITS</b>	<ol style="list-style-type: none"><li>1. Sensenich W69EK7-63 or Sensenich W69EK7-63G (See EH 2009T03). Diameter 1.75 m (69 in) No. Blades: 2 (two)</li><li>2. Sensenich W69EK-63 (up to S/N C0149) (See EH 2009T03) Diameter 1.75 m (69 in) No. Blades: 2 (two)</li></ol>	
<b>AIRSPEED LIMITS (CAS)</b>	Never Exceed Speed ( $V_{NE}$ ):	158.7 kcas (164 kias)
	Maximum Strutral Cruising Speed ( $V_{NO}$ ):	117.7 kcas (118 kias)
	Maneuvering ( $V_A$ ):	106.9 kcas (106 kias)
	Flaps extended ( $V_{FE}$ ):	
	- 45° (landing):	81 kcas (78 kias)
	- 15° (takeoff):	100 kcas (100 kias)
<b>CG RANGE</b>	+205 mm to +309 mm (+8.07 in to +12.16 in) at 800 kg (1 764 lb) +202 mm to +317 mm (+7.95 in to +12.48 in) at 750 kg (1 653 lb) or less Straight line variation between points given	
<b>CG RANGE</b> (Empty weight)	None	

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<b>LEVELING MEANS</b>	Wedge 55084:1000, 2 000 mm (78.7 in) behind canopy.		
<b>MAXIMUM WEIGHT</b>	Takeoff:	800 kg (1 764 lb)	
	Landing:	800 kg (1 764 lb)	
	Ramp:	803 kg (1 770 lb)	
<b>MINIMUM CREW</b>	One (1) pilot.		
<b>NUMBER OF SEATS</b>	Two (2) at +143 mm (5.6 in)		
<b>MAXIMUM BAGGAGE</b>	20 kg (44 lb) at +824 mm (+32.44 in). Only permissible with baggage harness.		
<b>FUEL CAPACITY</b>	S/N C0001 thru C0013 95 liters (25 gal) at +824 mm (+32.44 in) Usable: 80.5 liters (21.3 gal) (see Note 1)		
	S/N C0014 and Subsequent, and S/N C0001 thru C0013 if Service Bulletin DA C1-28-01 has been incorporated: 93 liters (24.5 gal) at +824 mm (+32.44 in)		
	All S/N if 20 U.S. Gal. Fuel tank (Dwg. No. 22-2813-00-00) is installed: 78 liters (20.5 gal) at + 824 mm (+32.44 in). Usable: 76 liters (20 gal) (see Note 1)		
<b>OIL CAPACITY</b>	5.68 liters (6 qt) maximum, 3.79 liters (4 qt) minimum at -1 005 mm (-39.6 in)		
<b>CONTROL SURFACE</b>	Elevator:	Up $25^{\circ} \pm 1^{\circ}$	Down $15^{\circ} \pm 1^{\circ}$
	Rudder:	Right $27^{\circ} \pm 1^{\circ}$	Left $27^{\circ} \pm 1^{\circ}$
	Aileron:	Up $15.5^{\circ} \pm 1^{\circ}$	Down $13.5^{\circ} \pm 1^{\circ}$
	Wing flaps:	T/O $15^{\circ} \pm 1^{\circ}$	LDG $45^{\circ} \pm 1^{\circ}$
<b>SERIAL NUMBER ELIGIBLE</b>	C0001 and subsequent. 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.		
<b>IMPORT ELIGIBILITY</b>	A Brazilian Certificate of Airworthiness may be issued on the basis of on an TCCA 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. 2009T04 and in condition of safe operation". The ANAC Report H.10-2021-00, dated 6 May 2009 or further revisions, contains the Brazilian requirements for the acceptance of these airplanes. (See note 4)		

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**CERTIFICATION BASIS**

Brazilian Type Certificate No. 2009T04 issued on 06 May 2009 based on RBHA 21.29 and RBHA 23 that endorses 14 CFR Part 23 effective 1 February 1965, as amended by 23-1 through 23-42. RBHA 26 that endorses JAR-VLA effective 26 April 1990, through Amendment VLA/92/1 effective 1 January 1992, used as a safety equivalence to RBHA/14 CFR Part 23, as provided by AC 23-11.

RBHA 36 that endorses 14 CFR Part 36 dated 1 December 1969, as amended by current amendment as of the date of original type Certification.

**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 equipment included empty weight must be provide with each aircraft at the time of original certification. The certificated empty weight and corresponding center of gravity location must include for Model DA20-C1, S/N C0001 thru C0013, full oil and unusable fuel of 10 kg (22.2 lb) at +824 mm (+32.44 in); and for Model DA20-C1, S/N C0014 and subsequent and S/N C0001 thru C0013 if Service Bulletin DA C1-28-01 has been incorporated, full oil and unusable fuel of 1.3 kg (2.76 lb) at +824 mm (+32.44 in).
- NOTE 2** Markings and placards. The placards specified in the approved Aircraft Flight Manual, including the placards in Portuguese specified in the Aircraft Flight Manual Supplement 12 must be displayed.
- NOTE 3** Continuing Airworthiness. Instruction for Continued Airworthiness and Service Life Limited components is included in the Maintenance Manual Document No. DA 201-C1. Revisions to Airworthiness limitation must be approved by TCCA.
- NOTE 4** The differences of the Brazilian airplanes in relation to the basic TCCA type design are summarized below:  
1. The Brazilian Airplane Flight Manual cover page.  
2. Markings and placards specified in the Aircraft Flight Manual Supplement 12.
- NOTE 5** All external portions of the airplane exposed to sunlight must be painted white except of the areas of markings and warning marks.



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