

## TYPE CERTIFICATE DATA SHEET № EM-2009T02

Type Certificate Holder:

TELEDYNE CONTINENTAL MOTORS, INC. 2039 Broad Street Mobile, Alabama 36615 USA

EM-2009T02-00

Sheet 01

TELEDYNE CONTINETAL IO-240-B.

06 March 2009

Engines of models described herein conforming with this data sheet, which is part of Type Certificate No. 2009T02, meet the minimum standards for use in certificated aircraft in accordance with pertinent aircraft data sheets and applicable portions of the Brazilian Aeronautical Regulations provided they are installed, operated, and maintained as prescribed by the approved manufacturer's manuals and other instructions.

MODEL IO-240-B

TYPE 4HOA. Four-cylinder horizontally opposed piston engine, naturally aspirated, air-cooled, fuel injected, direct drive.

RATINGS IO-240-B

Max. continuous, hp (rpm) full throttle at

Sea level pressure altitude: 125 (2 800)

Takeoff (5 min), hp (rpm) full throttle at

Sea level pressure altitude: 125 (2 800)

TELEDYNE CONTINENTAL 06 March 2009 EM-2009T02-00 Sheet 2/4

IO-240-B

**FUEL TYPE** (Min. grade aviation gasoline) 100 or 100LL

**FUEL INJECTION** TCM Injector 639231A34

OIL, LUBRICATION Oils meeting TCM Specification MHS-24 are eligible for use in this engine.

IGNITION See Note 4

COMPRESSION RATIO 8.5:1

**WEIGHT** kg (lb) 115.7 (255)

BORE AND STROKE mm (in) 112.7 x 98.4

(4.438 x 3.875)

**DISPLACEMENT** liters (Cu in) 3.93 (240)

**PROPELLER SHAFT-** Type 1 flange: 4.875" O.D. with six ½" bolt holes in 4" diameter circle. **SPECIFICATIONS** 

TIMING °BTC 26

SPARKS PLUGS Champion REM38E, REM38P, RHM38E and RHM38P are approved on this engine.

OIL SUMP CAPACITY liters (Qts) 5.68 (6.0);

2.84 (3.0) usable at 10° nose up; 2.84 (3.0) usable at 10°

nose down

(BASIC ENGINE, DRY)

TELEDYNE CONTINENTAL 06 March 2009 EM-2009T02-00 Sheet 3/4

**IMPORT REQUIREMENTS**Each engine imported separately and/or spare parts must be accompanied by an Airworthiness Certificate for Export and/or an Airworthiness Approval Tag, respectively, issued by FAA, attesting that the particular engine and/or parts

were submitted to the governmental quality control before delivery and are in conformity with the ANAC approved type

06 Mar 2009

design.

CERTIFICATION BASIS Brazilian Type Certificate No. 2009T02 based on the RBHA 33, Model Application Issued TC

which endorses the 14 CFR Part 33, amendments 1 through 14, IO-240-B 30 Jun 2008

effective 10 August 1990 and 14 CFR 33.28, amendment 15.

**PRODUCTION BASIS** FAA Production Certificate No. 508.

## **NOTES:**

**NOTE 1** Maximum Permissible Temperatures:

Cylinder Head 238°C (460°F) Oil Inlet 116°C (240°F)

NOTE 2 Fuel Pressure Limits:

Inlet to injection pump, Min - Minus 2 psig

Max - Plus 6 psig

Outlet to Vapor Return Line Max - 3.5 psig

NOTE 3 Oil Pressure Limits, at Outlet Normal 30-60 psig

Idle 10 psig Max (Cold oil) 100 psig

NOTE 4 This engine could be equipped with the following ignition systems: two TCM S4LSC-21 or two Slick 4301.

NOTE 5 This engine is eligible for pusher and tractor operation.

NOTE 6 Engine model numbers may include a suffix to define minor specification changes. Example: IO-240-B (1B).

NOTE 7 Maximum exhaust back pressure shall not exceed 5.08 cm Hg (2 in Hg) above ambient at the turbocharger exhaust outlet flange.

NOTE 8 Installation of Health Status Annunciator (HAS) display is subject to the requirements established by the certification basis of the aircraft.

NOTE 9 The following accessory drive or mounting provisions are available for IO-240-B series engines.

Λοοοροση		Direction of	Speed Ratio to	Max. Torque (in-lb)		Max. Overhang
Accessory		Rotation (*)	Crankshaft	Cont	Static	Moment (in-lb)
Starter		CCW	24.727:1	50	#	#
Alternator		CCW	2.035:1	30	100	100
Tachometer	(optional)	CW	0.5:1	7	50	25
Magneto	(**)	CW	1.0:1	#	#	#
Fuel Pump	. ,	CCW	1:1	40	800	#
Vacuum Pump	(***)	CW	1:1	25	800	25

<sup>(\*) &</sup>quot;CW" = Clockwise and "CCW" = Counterclockwise (viewing drive pad).

**NOTE 10** Applicable FAA approved and/or accepted manuals:

- Operation & Installation: p/n X30620

Maintenance: p/n X30621AOverhaul: p/n X30622A

ADEMIR ANTÔNIO DA SILVA

Gerente Geral, Certificação de Produto Aeronáutico (Manager, Aeronautical Product Certification)

<sup>(\*\*)</sup> Magneto drives not used on IOF-240-B FADEC engine.

<sup>(\*\*\*)</sup> This drive is an AND 20000 pad modified for speed only.