

MINISTÉRIO DA AERONÁUTICA
DEPARTAMENTO DE PESQUISAS E DESENVOLVIMENTO
CENTRO TÉCNICO AEROESPACIAL

TYPE CERTIFICATE DATA SHEET N° EM-9105

Type Certificate Holder:
TELEDYNE CONTINENTAL MOTORS
P.O. Box 90
Mobile, Alabama; 36601
U.S.A.

EM-9105
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TELEDYNE CONTINENTAL
O-200-A
JULY 17, 1991

Engines of models described herein conforming with this data sheet which is a part of type certificate n° 9105 meet the minimum standards for use in certified aircraft in accordance with the approved manufacturer's manuals and other approved instructions.

- MODEL

O-200-A

- TYPE

- 4 HO A
- . Reciprocating engine
 - . Four cylinders horizontally opposed and
 - . Air cooled
 - . Carburetor equipped

- MODEL**O-200-A**

- Rating

. Maximum continuous kw(hp);
speed, rad/s (rpm) at sea level
pressure altitude

74.6 (100)
283 (2700)

. Takeoff, kw (hp);
rad/s (rpm), full throttle, at
sea level pressure altitude.

74.6 (100)
283 (2700)

- FUEL (minimum grade aviation
gasoline conforming to ASTM
D910-75

80/87 or
100/130 (allowed as per
S.B. 77-3)

- CARBURATION (See Note 2)

Marvel-Schebler
MA-3SPA

- LUBRICATION

. Lubricating Oil, ambient air
temperature

Below 4,4°C (40°F)
Above 4,4°C (40°F)

SAE 20
SAE 40

. Oil Sump Capacity L (qts)

5,7 (6)

- MODEL**O-200-A**

- IGNITION, Dual

(TCM P/N 50483 or 642487)
2 Bendix - Scintilla
S4LN-21 or Slick
N^o 4201 magnetos

- . Timing, ^oBTC
- . Spark plugs (see Note 6)

24 Top, 24 Bottom

- BORE, STROKE AND DISPLACEMENT

- . Bore x stroke mm (in) 103,2 x 98,4 (4.062 x 3.875)
- . Displacement L (cu.in) 3,3 (201)
- . Compression ratio 7 : 1

- OVERALL DIMENSIONS:

- . Length mm (in) 724,7 (28,53)
- . Width mm (in) 801,6 (31,56)
- . Height mm (in) 588,8 (23,18)

- WEIGHT (dry) N (lbf)

845,2 (190)

- MODEL**O-200-A**

- CG LOCATION (basic engine)

. Fwd. of rear face of mounting lugs; mm (in)	116,6 (4,59)
. Below crankshaft centerline; mm (in)	31 (1,22)
. Beside crankshaft centerline; toward 1-2 cylinder side; mm (in)	6,1 (.24)

- PROPELLER SHAFTSAE N^o. 1 Flange**- CERTIFICATION BASIS:** Part 13 of the Civil Air Regulations (FAA - USA).**- NOTE 1:** Maximum permissible temperature; °C (°F):

. Cylinder head	273,8 (525)
. Cylinder barrel	143,3 (290)
. Oil inlet	107,2 (225) (Straight mineral)
	115,6 (240) (Detergent, meeting MHS-24, see Note 5)

- NOTE 2: Pressure Limits - kPa (psig)

- . Carburetor fuel inlet for ML-3SPA, TCM P/N 627143, 633028 or 640416:
(with gravity: 125mm (5.0 in) Fuel Head)
maximum allowable 41.4 (6.0)
- . Carburetor Air Intake Assembly, TCM A40793, used with MA-3SPA, Marvel - Schebler Carburetor.
- . Oil pressure limits; 0-200 Series : 276 to 414 (30 to 60)
Minimum idling with hot oil: 69 (10)

- NOTE 3: **THE FOLLOWING ACCESSORY DRIVE OR MOUNTING PROVISIONS ARE AVAILABLE.**

ACCESSORY	DIRECTION OF ROTATION (*)	SPEED RATIO TO CRANKSHAFT	MAX . TORQUE		MAX. OVERHANG MOMENT
			Nxm	(in . lbs)	
			CONT.	STATIC	Nxm (in.-lbf)
Tachometer	C	0.500 : 1	0.8 (7)	5.6 (50)	2.8 (25)
Generator	CC	2.035 : 1	6.8 (60)	67.8 (600)	11.3 (100)
Starter	C	35.7 : 1	--	--	--
Vacumm Pump **	CC	1.0 : 1	11.3 (100)	90.4 (800)	2.8 (25)
Fuel Pump (diaphragm) ***	--	0.500 : 1	--	--	--

* C - clockwise viewing drive pad;
 * CC - counterclockwise
 ** O-200 Series engines only
 *** CMC Eq. 5809 incorporating CMC P/N 40585 pump approved as part of type design of the 0-200 series engine.

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- **NOTE 4:** Oil sump (model T-211, Thorp aircraft only) installed as per John W. Thorp drawing n°. 1558
STC N°. SE8WE is approved.

 - **NOTE 5:** Marking or placards prescribing use of Continental Specification MHS-24 oil only shall be
installed on or near the oil filter on installations using 115,6°C (240°F) oil inlet
temperatures.

 - **NOTE 6:** The following spark plugs are approved for use on the engine as indicated by TCM SB-M85-7.

O-200-A

Autolite - TCM P/N 627892, 632460, 632461, 632462, 632463, 632467, 635146.

Champion - TCM P/N 635863, 635150, 635149, 646629, 627643, 646630, 627978.

PAULO GASTÃO SILVA - Maj Eng
Chefe da Divisão de Homologação Aeronáutica

Maj Brig do Ar - SERGIO XAVIER FEROLLA
Diretor do CTA

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