

**DEPARTMENT OF TRANSPORTATION  
FEDERAL AVIATION ADMINISTRATION**

EISO  
Revision 1  
CONTINENTAL  
6-320-B  
November 2, 2011

**TYPE CERTIFICATE DATA SHEET NO. EISO**

Engines of models described herein conforming with this data sheet (which is part of type certificate No. EISO) and other approved data on file with the Federal Aviation Administration meet the minimum standards for use in certificated aircraft in accordance with pertinent aircraft data sheets and applicable portions of the Federal Aviation Regulations provided they are installed, operated and maintained as prescribed by the approved manufacturer's manuals and other approved instructions.

Type Certificate Holder                      Continental Motors  
P. O. Box 90  
Mobile, Alabama 36601

Type Certificate Holder Record            Teledyne Continental Motors  
Ownership & name change as of April 19, 2011 (Continental Motors, Inc.)

<b>Model</b>	<b><u>6-320-B</u></b>
Type	6HOGA
Reduction Gear Ratio	.5:1
Rating, ICAO or ARDC standard atmosphere	
Max. continuous hp, rpm, pressure altitude	300-4000
Takeoff hp, 5 min. rpm, full throttle at sea level pressure altitude	320-4400
Fuel (aviation gasoline, minimum grade)	100/130
Lubricating oil	Lubricating oils qualified under SAE-J1899 or J1966 are considered qualified under CMI Spec MHS-24
Bore and stroke, in.	4.875 x 3.625
Displacement, cu. in.	406
Compression ratio	9.1:1
Weight (dry), lb.	382
C. G. location (basic engine)	
Aft of front face of prop flange, in.	21.47
Below crankshaft centerline, in.	.38
Beside crankshaft centerline, in. left (view from anti-propeller end)	.73
Propeller shaft	ARP-502 Type I Flange 4-7/8 in. O.D. with six 1/2 in. bolt holes in 4 in. diameter circle CMI Injection system
Fuel injection	One CMI/TCM/Scintilla D-2000
Ignition, dual magneto	30
Timing, °BTC	(see NOTE 3)
Spark plugs	9.0 - 5.0 usable at 36° nose up and 5.0 usable at 24° nose down
Oil Sump Capacity, qt.	1, 2, 3, 4
NOTES	

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Certification basis Federal Aviation Regulations Part 33 dated February 1, 1965, as amended by 33-1 through 33-4.  
Application for Type Certificate dated February 3, 1970.  
Type Certificate No. EISO issued May 27, 1975.

Production basis None. Each engine produced is subject to compliance with FAR 21.128, and a detailed inspection by an FAA representative for workmanship and conformance to the approved technical data.

NOTE 1. Operating Limitations

A. Maximum permissible temperatures:

Cylinder head bayonet, thermocouple 460°F  
Oil inlet 240°F

B. Fuel pressure limits:

Inlet to injection pump, min. - minus 3.5 p.s.i.g.  
max. - plus 5.5 p.s.i.g.  
Recommended flight min. - minus 1.0 p.s.i.g.

C. Fuel flow limits: See manufacturer's FAA approved fuel flow schedule Curve No. 75-028

D. Oil pressure limits:

30 - 60 p.s.i.g. (30 p.s.i.g. min. in flight)  
2-4-6 side - Normal 10 p.s.i.g.  
Idle 100 p.s.i.g.

NOTE 2. The following accessory drive or mounting provisions are available:

Accessory	Direction of Rotation*	Speed Ratio to Crankshaft	Max. Torque (in.-lb.)		Maximum Overhang Moment (in.-lb.)
			Continuous	Static	
**Propeller governor	C	.59:1	30	825	50
Tachometer	C	.5:1	7	50	25
Optional (2)	C	.75:1	50***	800	80
Alternator (belt driven)	C	2:1	150	800	150
Oil Cooler	--	--	--	--	65
Starter: CMI P/N 636364 eligible					

\*C - Clockwise viewing drive pad

\*\*Modified AND 20010 pad.

\*\*\*One drive approved at 100 in. lbs. max. cont. provided second does not exceed 50 in. lbs. max. cont.

NOTE 3. The following spark plugs and/or those listed in CMI Service Information Letter SIL03-2 are approved on this engine:  
Champion RHU-27E, RHU-30E, RHU-30P, RHU-30W, and Smith Industries, Ltd. RS101R.

NOTE 4. Overhaul Manual X 30144, approved May 31, 1973.

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