

**DEPARTMENT OF TRANSPORTATION
FEDERAL AVIATION ADMINISTRATION**

E-245
Revision 5
Continental
R9-A

November 2, 2011

TYPE CERTIFICATE DATA SHEET NO. E-245

Engines of models described herein conforming with this data sheet (which is part of type certificate No. E-245) 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 Civil Air 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.)

Model	R9-A
Type	R9-A - Direct Drive
Impeller gear ratio	10.15:1
Rating, ICAO or ARDC, standard atmosphere	
Max. continuous hp., rpm, in.Hg. at:	
Critical altitude, ft.	500-2300-40.0-4000
Sea level pressure altitude	500-2300-41.5
Takeoff hp., 5 min., rpm, full throttle at sea level pressure altitude	525-2300-43.0
Fuel (aviation gasoline, minimum grade)	91
Lubricating oil	
Ambient air temperature	Oil grade
Above 40°F.	SAE 50
Below 40°F.	SAE 30
Bore and stroke, in.	5.0 X 5.5
Displacement, cu. in.	972
Compression ratio	6.3:1
Weight (dry), lb.	705
C.G. location	
Rear of center-line of cylinders	2.70
Below proeller shaft, in.	.43
Propeller shaft, SAE No.	30
Carburetion	Stromberg QD-9A3
Ignition, dual magnetos	CMI/TCM/Scintilla SF9RN
Timing, °BTC	Right 29, Left 26
Spark plugs	Champion RC-35S, R37S-1, REA37N, REB37N, RHA37N, RHB37E, RHB37N, R115
Applicable notes	1, 2, 3, 4
Certification basis	CAR 13 effective August 1, 1941 Type Certificate No. 245 issued April 4, 1946
Production basis	Production Certificate No. 7

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NOTE 1. Maximum permissible temperatures:

	<u>Maximum Continuous</u>	<u>Takeoff</u>
Cylinder head	450°F.	500°F.
Cylinder barrel	320°F.	320°F.
Oil inlet	185°F.	185°F.

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

Original Accessory	Direction of Rotation*	Speed Ratio to Crankshaft	Maximum torque (in.-lb.)	
			Continuous	Static
Starter	CC	.8		6000
Generator	C	3.12	150	1000
Fuel pump	CC	1.0	25	450
Vacuum or hydraulic pump	CC	1.333	100	1200
Vacuum or hydraulic pump	CC	1.313	250	2250
Propeller governor	C	1.118	125	1000

*C - Clockwise viewing drive pad; CC - Counter-clockwise

NOTE 3. Shear type rubber mounts, P/N 402233, eligible for use with this engine with 15 lbs. additional weight per set of four mounts.

NOTE 4. Engine P/N 105004 thru 105084 (excepting 105056, 105080, 105081 and 105082) incorporating rear counter weight damper pin P/N 401618 must have this pin replaced by damper pin P/N 402791 at first engine overhaul.

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