AGÊNCIA NACIONAL DE AVIAÇÃO CIVIL - BRASIL

TYPE CERTIFICATE DATA SHEET Nº EM-2012T12

Type Certificate Holder:

LYCOMING ENGINES – AVCO CORPORATION
652, Oliver Street
Williamsport, Pennsylvania, PA 17701
USA

EM-2012T12
Sheet 01
LYCOMING
AEIO-580-B1A
05 October 2012

Engines of models described herein conforming with this data sheet, which is part of Type Certificate No. 2012T12, 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 AEIO-580-B1A

TYPE 6HOA Direct Drive

RATINGS

	AEIO-580-B1A
Max. continuous, hp. - rpm. full throttle at:	
Sea level pressure altitude:	315-2700
Takeoff, hp. - rpm full throttle at:	
Sea level pressure altitude:	315-2700

Legend: "#" Does not apply

MODEL		AEIO-580-B1A
FUEL TYPE	(mínimum grade aviation gasoline)	100/100LL
FUEL PUMP DRIVE		See Note 3
INJECTION	Precision Airmotive Corp (PAC).	PAC RSA-10ED1 or Lycoming FM-250
OIL, LUBRICATION	Lubricants should conform to the specifications as listed or to subsequent revisions thereto.	Service Instruction Nº 1014
BORE AND STROKE	mm (in)	135.1 x 111.1 (5.319 x 4.375)
DISPLACEMENT	L (cu.in)	9.55 (583)
COMPRESSION RATIO		8.9:1
IGNITION	Dual	Slick 6393 (left) 6350 (right)
C.G. LOCATION	(Dry with starter installed)	
	From front face of propeller mounting flange, mm (in)	460.5 (18.13)
	Off propeller shaft center line (vertical), mm (in)	12.7 (0.50) below
	Off propeller shaft center line (lateral), mm (in)	23.9 (0.94) left
TIMING, °BTC		20
SPARK PLUGS		See Note 4

MODEL		AEIO-580-B1A
OIL SUMP CAPACITY	L (qts) Usable oil L (qt.), Normal operation 20° nose up or down Minimum safe oil L (qt.), Aerobatic operation 37° nose up and 25° nose down	15.1 (16) 5.9 (6.2) up 5.3 (5.6) down 8.5 (9.0)
WEIGHT (DRY)	Less Started and Alternator, kg (lb)	202.3 (446)
PROPELLER SHAFT	Specification A.S. 127	Type 2 Flange Modified
APPLICABLE NOTES		1,2,3,4,6,8

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 design.

CERTIFICATION BASIS

	Model	Application	Issued TC
Brazilian Requirements for Aeronautical Certification – RBHA 33, which endorses FAR 33 effective February 1, 1965 amendments -1 though -20	AEIO-580-B1A	03 Feb. 2012	05 October 2012

NOTES:

NOTE 1 Maximum permissible temperatures:

	AEIO-580-B1A
Cylinder head (well type thermocouple), C° (F°)	240.5 (465)
Oil gallery, C° (F°)	118.3 (245)

NOTE 2 Pressure limits:

		Minimum	Maximum	Minimum Idle
Fuel	p.s.i. at inlet to fuel pump	-2	65	#
	p.s.i. at inlet to fuel injector	29	65	12

		Minimum	Maximum
Oil	Normal operation, p.s.i.	55	95
	Idling, p.s.i.	25	#
	Starting, warm-up, taxi and take off, p.s.i.	#	115

NOTE 3 Accessory Drive Provisions: For additional information on engine drives, refer to Lycoming Operator's Manual.

Accessory	AEIO-580-B1A	Rotation facing Drive Pad	Speed Ratio to Crankshaft	Max. Torque N.m (in.-lb.) Cont	Static	Max. Overhung Moment N.m (in.-lb.)
Starter	*	CC	16.556:1	#	50.84 (450)	16.95 (150)
Alternator	*	C	3.2:1	6.80 (60)	13.56 (120)	19.80 (175)
Accessory # 1	*	CC	1.300:1	7.90 (70)	50.84 (450)	2.82 (25)
Hydraulic Pump	*	C	1.385:1	11.30 (100)	90.39 (800)	4.52 (40)
Tachometer	*	C	0.500:1	0.79 (7)	5.65 (50)	0.56 (5)
Prop. Governor	*	C	0.947:1	14.10 (125)	248.57 (2200)	2.80 (25)
Fuel Pump		Plunger	0.500:1	#	#	1.13 (10)
Fuel Pump	*	CC	1.000:1	2.80 (25)	50.84 (450)	2.80 (25)

"C" Clockwise "CC" Counter Clockwise

NOTE 4 Spark Plugs: See latest revision of Lycoming Service Instruction Nº 1042 for approved equipment.

NOTE 5 Reserved

NOTE 6 Accessories and Equipment: Starters and Alternators approved for use on this engine are listed in the latest revisions of Lycoming Service Instruction Nº 1154.

Legend: "#" Does not apply

NOTE 7 Reserved

NOTE 8 This engine incorporates provisions for absorbing propeller thrust in both tractor and pusher type installations.

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