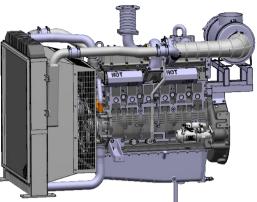
DOOSAN INFRACORE GENERATOR ENGINE

DP126LB

Ratings	Gross Engir	ne Output	Net Engine Output		
(kWm/PS)	Standby	Prime	Standby	Prime	
1500rpm(50Hz)	362/492	327/445	346/470	311/423	
1800rpm(60Hz)	402/547	366/498	378/514	342/465	



Ratings Definitions

The power ratings of Emergency Standby and Prime are in accordance with ISO 8528. Fuel Stop power in accordance with ISO 3046.

Electric power (kWe) must be considered cooling fan loss, alternator efficiency, altitude derating and ambient temperature.

<u>STANDBY POWER RATING</u> is applicable for supplying emergency power for the duration of the utility power outage. No overload capability is available for this rating. A standby rated engine should be sized for a maximum of an 80% average load factor and 200 hours of operation per year. This includes less than 25 hours per year at the Standby Power rating.

<u>PRIME POWER RATING</u> is available for an unlimited number of hours per year in variable load application. Variable load should not exceed a 70% average of the Prime Power rating during any operating period of 24 hours. The Total operating time at 100% Prime Power shall not exceed 500 hours per year. A 10% overload capability is available for a period of 1 hour withing a 12 hour period of operation. Total operating time at the 10% overload power shall not exceed 25 hours per year.

© GENERAL ENGINE DATA

○ Engine Model	DP126LB
o Engine Type	4-Cycle, In-line, 6-Cylinder Diesel, water cooled, Turbo charged & intercooled
o Bore x stroke	123 x 155 mm
o Displacement	11.051 liters
o Compression ratio	
○ Rotation	Counter clockwise viewed from Elvwheel
◦ Firing order	1-5-3-6-2-4
○ Injection timing	17+1
o Dry weight	1008 Ka
○ Dimension (LxWxH)	1 426 x 1 096 x 1 295 mm
○ Fly wheel housing	SAE NO.1M
◦ Fly wheel	Clutch NO 14M
 Number of teeth on fluwbool 	106
Maximum Bending Moment at Rear Face to Block	1325 N • M
© EXHAUST SYSTEM	
Maximum Back Pressure	5.9 kPa
Maximum Intake Air Restriction	
. With Clean Filter Element	2.16 kPa
. With Dirty Filter Element	6.23 kPa
 Max. static pressure after Radiator 	0.125 kPa

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○ COOLING SYSTEM

eed circulation prox. 23 lit., With Radiator : Approx.51 lit.(standard) driven by Pulley e, Opening temp. 82°C , Full open temp. 95°C stic , 810 mm diameter, 7 blade
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stic , 810 mm diameter, 7 blade
and and the formation
er circuit of engine.
ssure feed type
n by crank-shaft gear
ge type
Λin. 20 liters
100 kPa
d : Min 300 kPa
lea Front un 10 dea Side to side 22.5 dea
leg , Front up 10 deg , Side to side 22.5 deg on Manual
I speed control)
8528)
unger type pump on injection pump
) : Full flow, High efficiency dust in fuel filter, cartrudg
:) : Full flow, cartridge type with water drain valve
nator
nator regulator



◎ VALVE SYSTEM

о Туре	-	Overhead valve type			
 Number of valve 	Intake 2, exhaust	Intake 2, exhaust 2 per cylinder			
 Valve lashes at cold 	Intake 0.4mm, E	Intake 0.4mm, Exhaust 0.5mm			
 Valve timing 					
	Opening	Close			
Intake valve	24 deg. BTDC	38 deg. ABDC			
Exhaust valve	62 deg. BBDC	25 deg. ATDC			
	•••••••••••••••••••••••••••••••••••••••				

O PERFORMANCE DATA	Prime Power		Standby Power		
 Governed Engine speed 	rpm	1500	1800	1500	1800
○ Engine Idle Speed	rpm	800	800	800	800
 Over speed limit 	rpm	1650	1980	1650	1980
 Gross Engine Power Output 	kW	327	366	362	402
	ps	445	498	492	547
o Break Mean effective pressure	Мра	2.37	2.21	2.62	2.43
o Mean Piston Speed	m/s	7.75	9.3	7.75	9.3
 Friction Power 	kW	26.3	38.4	26.3	38.4
	ps	35.7	52.2	35.7	52.2
 Specific fuel consumption 					
25% load	liters/hr	20.2	24.0	22.1	26.1
50% load	liters/hr	38.4	43.4	42.5	47.3
75% load	liters/hr	57.1	64.0	63.1	70.1
100% load	liters/hr	76.0	85.8	84.5	96.4
○ Fan Power	kW	16	24	16	24
 Sound Pressure at 1m from the 	each side of	Cylinder Block			
(without Fan)	dB(A)	99.5	100.4	99.5	100.5

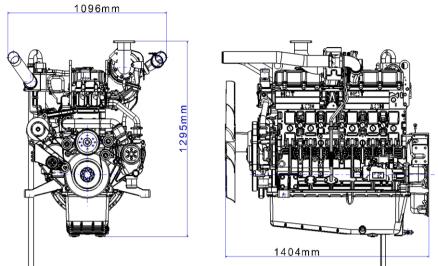
The all data and the specific fuel consumption are based on ISO 3046/1, Standard reference conditions are in accordance with 298 K(25° Celsius) air temperature, 100kPa(1000mbar) air pressure, 60% relative humidity, 110m(361ft) altitude.

Engine Data with Dry Type Exhaust Manifold					
○ Intake Air Flow	m3/min	19.0	25.4	20.9	27.0
○ Exhaust gas temp. after turbo.	°C	575.0	505.0	590.0	535.0
 Exhaust Gas Flow 	m3/min	52.9	62.1	58.3	67.6
 Heat Rejection to Exhaust 	kW	253.3	290.8	279.3	324.6
 Heat Rejection to Coolant 	kW	92.4	102.7	114.0	125.4
 Heat Rejetion to Intercooler 	kW	46.7	57.6	73.4	87.1
 Radiated Heat to Ambient 	kW	43.0	43.0	32.0	33.0
 Cooling water circulation 	liters/min	435	525	435	525
○ Cooling fan air flow	m3/min	312	528	312	528

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ENGINE DIMENSION



CONVERSION TABLE

in. = mm x 0.0394 PS = kW x 1.3596 psi = kg/cm2 x 14.2233 in3 = lit. x 61.02 hp = PS x 0.98635 lb = kg x 2.20462 kW = Kcal/sec x 0.239 $\label{eq:lb/ft} \begin{array}{l} \text{lb/ft} = \text{N.m x } 0.737 \\ \text{U.S. gal} = \text{lit. x } 0.264 \\ \text{kW} = 0.2388 \ \text{kcal/s} \\ \text{lb/PS.h} = \text{g/kW.h x } 0.00162 \\ \text{cfm} = \text{m}^3/\text{min x } 35.336 \\ \text{Mpa} = \text{Pa x } 1000 = \text{bar x } 10 \end{array}$

Doosan Infracore Co., Ltd. 21st Floor, Doosan Tower, 18-12, Euljiro 6-ga, Jung-gu, Seoul, Korea.

TEL:+82-2-3398-8400 / FAX:+82-2-3398-8509 E-mail:enginesales@doosan.com Web site:www.doosaninfracore.com

 $\ensuremath{\mathbbmm}$ Speccifications are subject to change without prior notice

