



**JOHN DEERE**

# 6125HF070C

## POWERTECH SPECIFICATIONS

For Gen Set Applications

TA LUFT approved @ 1500rpm  
EPA-CARB Tier 2 Certified @ 1800rpm

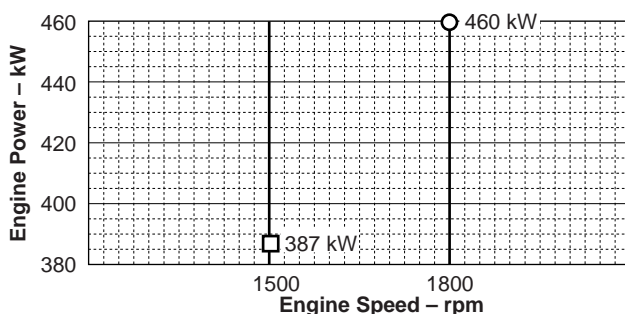
Power Units



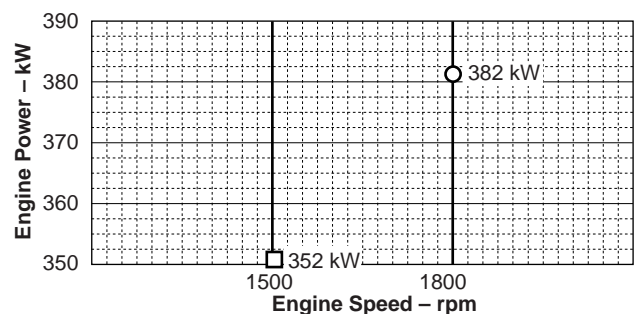
### PERFORMANCE DATA

Speed (Hz)	Generator Efficiency %	Fan Power kW	Power Factor	Calculated Gen Set rating					
				Prime			Standby		
				kW net	kVA	kWe	kW net	kVA	kWe
1500 (50)	88-92	13.5	0.8	338.5	374-390	299-313	373.5	411-429	329-344
1800 (60)	88-92	23.0	0.8	359.0	397-415	318-332	437.0	481-503	385-402

### STANDBY POWER



### PRIME POWER



Performance Data	1500rpm	1800rpm
Gross Rated Power (without fan)		
Prime = PRP – kW (hp)	352 (472)	382 (512)
Standby = LTP – kW (hp)	387 (519)	460 (617)
Rated Speed – rpm	1500	1800
Low Idle Speed – rpm	900	1000
BMEP		
Prime = PRP – kPa (psi)	2040 (296)	2027 (294)
Standby = LTP – kPa (psi)	2477 (359)	2436 (353)
Friction Power @ Rated Speed – kW (hp)	16 (21)	22 (30)
Altitude Capability – m (ft)		
Prime	2745 (9000)	2745 (9000)
Standby	2700 (8900)	2745 (9000)
Air: Fuel Ratio		
Prime = PRP	24.3 : 1	24.0 : 1
Standby = LTP	24.6 : 1	23.0 : 1
Noise		
Prime = PRP – dB(A) @ 1m	98.5	100.5
Standby = LTP – dB(A) @ 1m	99.0	101.0

**STANDBY POWER** is the nominal engine power available at varying load factors for up to 500 hours per year. This rating conforms to ISO 8528-1 "limited time running power (LTP)". The calculated generator set rating range for standby applications is based on minimum engine power (nominal –5%) to provide 100% meet-or-exceed performance for assembled standby generator sets.

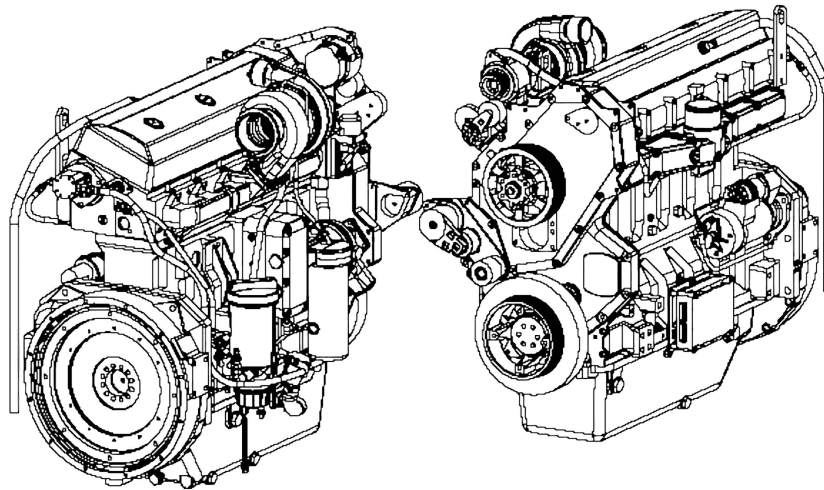
**PRIME POWER** is the nominal power an engine is capable of delivering with a variable load for an unlimited number of hours per year. This rating conforms to ISO 8528-1 "prime power (PRP)".

Photographs may show non standard equipment.  
Rated power guaranteed within + or – 5% at SAE J1995 and ISO 3046

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# Power Units Specification Data



Fuel Consumption – l/h	1500 rpm		1800 rpm	
	Prime = PRP	Standby = LTP	Prime = PRP	Standby = LTP
25% Power.....	22.5	23.8	27.2	32.0
50% Power.....	40.0	43.1	47.8	56.6
75% Power.....	60.0	64.2	69.3	83.3
100% Power.....	78.0	87.8	94.6	118.4

## General Data

Model .....	6125HF070C
Number of cylinders .....	6
Bore and Stroke – mm (in.) .....	127 x 165 (5.00 x 6.50)
Displacement – dm <sup>3</sup> (in <sup>3</sup> ) .....	12.5 (766)
Compression Ratio .....	17 : 1
Valves per Cylinder – Intake/Exhaust .....	2/2
Firing Order .....	1-5-3-6-2-4
Combustion System .....	Unit Injection
Engine type .....	In-line, 4-cycle
Aspiration .....	Turbocharged
Charge Air Cooling System .....	Air-to-air
Engine Crankcase Vent System .....	Open
Engine Crankcase Pressure – kPa (in.H <sub>2</sub> O) .....	0.5 (2)

## Physical Data

Length – mm (in.) .....	1326 (52.2)
Width – mm (in.) .....	808 (31.8)
Height – mm (in.) .....	1239 (48.8)
Weight, dry – kg (lb) .....	1205 (2657)
(includes flywheel housing, flywheel, & electrics)	
Centre of gravity location	
From Rear Face of block (X-axis) – mm (in.) .....	545 (21.5)
Right of Crankshaft (Y-axis) – mm (in.) .....	16 (0.6)
Above Crankshaft (Z-axis) – mm (in.) .....	218 (8.6)

## Electrical Data

Recommended Battery Capacity (CCA)	
12 Volt System – Amp .....	1800
24 Volt System – Amp .....	900
Maximum Allowable Starting Circuit Resistance	
12 Volt System – Ohm .....	0.0012
24 Volt System – Ohm .....	0.002
Starter Rolling Current-12 Volt System	
At 0°C (32°F) – Amp .....	1280
At -30°C (-22°F) – Amp .....	1500
Starter Rolling Current-24 Volt System	
At 0°C (32°F) – Amp .....	600
At -30°C (-22°F) – Amp .....	970

Specifications and design subject to change without notice.

## Air System

	1500rpm	1800rpm
Maximum Allowable Temperature Rise		
Ambient Air to Engine Inlet – °C (°F) .....	8 (15)	8 (15)
Maximum Air Intake Restriction		
Dirty Air Cleaner – kPa (in.H <sub>2</sub> O) .....	6.25 (25)	6.25 (25)
Clean Air Cleaner – kPa (in.H <sub>2</sub> O) .....	3 (12)	3 (12)
Engine Air Flow		
Prime = PRP – m <sup>3</sup> /min (ft <sup>3</sup> /min) .....	21.6 (763)	29.0 (1024)
Standby = LTP – m <sup>3</sup> /min (ft <sup>3</sup> /min) .....	26.8 (946)	34.0 (1201)
Recommended Intake Pipe Dia – mm (in.) .....	140 (5.5)	140 (5.5)

## Exhaust System

	1500rpm	1800rpm
Exhaust Flow		
Prime = PRP – m <sup>3</sup> /min (ft <sup>3</sup> /min) .....	52.1 (1840)	74.0 (2613)
Standby = LTP – m <sup>3</sup> /min (ft <sup>3</sup> /min) .....	64.8 (2288)	91.0 (3214)
Exhaust Temperature		
Prime = PRP – °C (°F) .....	477 (891)	530 (986)
Standby = LTP – °C (°F) .....	468 (874)	560 (1040)
Max. Allow Back Pressure – kPa (in.H <sub>2</sub> O) .....	7.5 (30)	7.5 (30)
Recommended Exhaust Pipe Dia – mm (in.) .....	127 (5)	127 (5)

## Cooling System

	1500rpm	1800rpm
Thermostat Start to open – °C (°F) .....	82 (180)	82 (180)
Engine coolant capacity – L (qt) .....	16.2 (17)	16.2 (17)
Minimum Air to Boil temperature – °C (°F) .....	47 (117)	47 (117)

## Fuel System

	1500rpm	1800rpm
Fuel Injection Pump .....	Unit/E.C.	Unit/E.C.
Governor Regulation .....	0%	0%
Governor Type .....	Electronic	Electronic
Total Fuel Flow		
Prime = PRP – kg/h (lb/h) .....	66.3 (145.9)	80.4 (176.9)
Standby = LTP – kg/h (lb/h) .....	74.6 (164.1)	100.6 (221.3)
Maximum Fuel Transfer Pump Suction – m (ft) .....	3(10)	3(10)
Fuel Filter Micron Size @ 98% Efficiency .....	2	2

## Lubrication System

	1500rpm	1800rpm
Oil Pressure at Rated Speed – kPa (psi) .....	275 (40)	275 (40)
Oil Pressure at Low Idle – kPa (psi) .....	138 (20)	138 (20)
In Pan Oil Temperature – °C (°F) .....	115 (239)	115 (239)
Total Engine Oil Capacity with filter – L (qt) .....	42 (44)	42 (44)
Engine Angularity Limits (continuous)		
Any Direction – degrees .....	20	20



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