



DEERE

DIESEL

6068HF158

POWERTECH

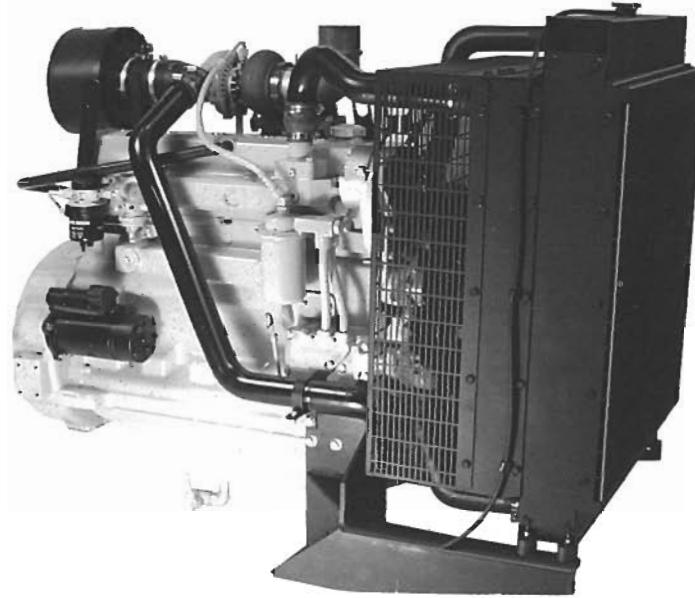
SPECIFICATIONS

For Gen Set Applications

TA LUFT approved @ 1500 rpm

EPA-CARB Tier 1 Certified @ 1800 rpm

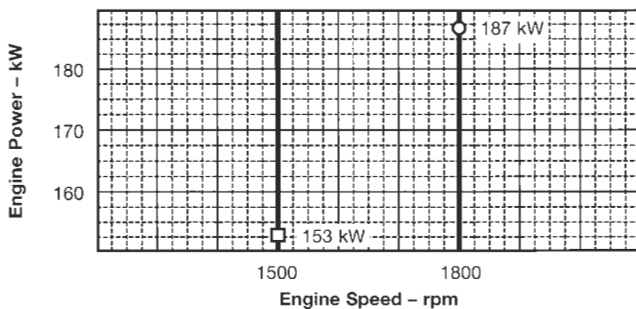
Power Units



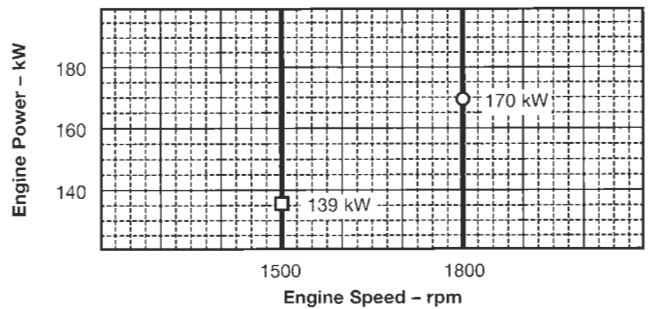
PERFORMANCE DATA

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	5	0.8	134	147-154	118-123	148	162-169	130-136
1800 (60)	88-92	6	0.8	164	180-189	144-151	181	198-207	158-166

STANDBY POWER



PRIME POWER



Performance Data	1500 rpm	1800 rpm
Gross Rated Power (without fan)		
Prime = PRP - kW (hp)	139 (186)	170 (228)
Standby = LTP - kW (hp)	153 (205)	187 (251)
Rated Speed - rpm	1500	1800
Low Idle Speed - rpm	No	No
BMEP		
Prime = PRP - kPa (psi)	1635 (237)	1666 (242)
Standby = LTP - kPa (psi)	1800 (261)	1833 (266)
Friction Power @ Rated Speed - kW (hp)	13 (17)	17 (23)
Altitude Capability		
Prime - m (ft)	2300 (7500)	2300 (7500)
Standby - m (ft)	1500 (5000)	1500 (5000)
Air: Fuel Ratio		
Prime = PRP	27.4 : 1	28.6 : 1
Standby = LTP	27.9 : 1	29.0 : 1
Noise		
Prime = PRP - dB(A) @ 1 m	93.6	95.5
Standby = LTP - dB(A) @ 1 m	94.9	96.9

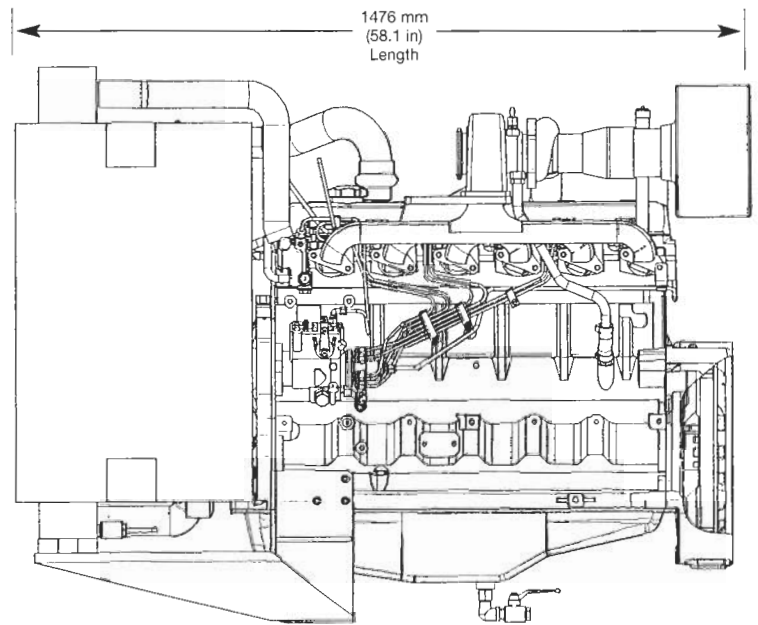
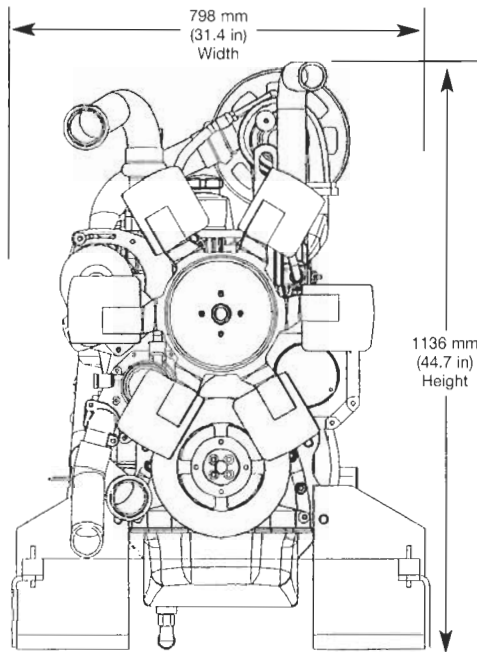
STANDBY POWER is the nominal engine power available at varying load factors for up to 500 hours per year. This rating conforms to ISO 8528-1 "limited time running power (LTP)". The calculated generator set rating range for standby applications is based on minimum engine power (nominal -5%) to provide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



Power Unit Specification Data



Fuel Consumption - l/h	1500 rpm		1800 rpm	
	Prime = PRP	Standby = LTP	Prime = PRP	Standby = LTP
25% Power	9.0	10.0	11.5	13.0
50% Power	17.5	19.0	21.0	23.5
75% Power	26.0	28.5	32.0	35.0
100% Power	33.5	36.0	41.5	45.0

General Data

Model	6068HF158
Number of cylinders	6
Bore and Stroke - mm (in.)	106 x 127 (4.19 x 5.00)
Displacement - dm ³ (in ³)	6.8 (414)
Compression Ratio	17.0 : 1
Valves per Cylinder - Intake/Exhaust	1 / 1
Firing Order	1-5-3-6-2-4
Combustion System	Direct 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 ₂ O)	0.5 (2)

Physical Data

Length - mm (in.)	1476 (58.1)
Width - mm (in.)	798 (31.4)
Height - mm (in.)	1136 (44.7)
Weight, dry - kg (lb)	745 (1642)
(Includes flywheel housing, flywheel, & electrics)	
Center of gravity location	
From Rear Face of block (X-axis) - mm (in.)	447 (17.6)
Right of Crankshaft (Y-axis) - mm (in.)	-10 (-0.4)
Above Crankshaft (Z-axis) - mm (in.)	176 (6.9)

Electrical Data

Recommended Battery Capacity (CCA)	
12 Volt System - Amp	800
24 Volt System - Amp	570
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	920
At -30°C (-22°F) - Amp	1300
Starter Rolling Current - 24 Volt System	
At 0°C (32°F) - Amp	600
At -30°C (-22°F) - Amp	700

Air System

	1500 rpm	1800 rpm
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 ₂ O)	6.25 (25)	6.25 (25)
Clean Air Cleaner - kPa (in. H ₂ O)	3 (12)	3 (12)
Engine Air Flow		
Prime = PRP - m ³ /min (ft ³ /min)	10.2 (360)	12.8 (452)
Standby = LTP - m ³ /min (ft ³ /min)	11.2 (395)	14.1 (498)

Exhaust System

	1500 rpm	1800 rpm
Exhaust Flow		
Prime = PRP - m ³ /min (ft ³ /min)	23.1 (816)	32.0 (1130)
Standby = LTP - m ³ /min (ft ³ /min)	25.4 (897)	37.2 (1243)
Exhaust Temperature		
Prime = PRP - °C (°F)	555 (1031)	533 (991)
Standby = LTP - °C (°F)	575 (1067)	553 (1027)
Max. Allow. Back Pressure - kPa (in.H ₂ O)	7.5 (30)	7.5 (30)
Recommended Exhaust Pipe Dia - mm (in.)	101.6 (4)	101.6 (4)

Cooling System

	1500 rpm	1800 rpm
Thermostat Start to open - °C (°F)	82 (180)	82 (180)
Power Unit Coolant Capacity - L (qt)	26.0 (27.5)	26.0 (27.5)
Minimum Air to Boil temperature - °C (°F)	47 (117)	47 (117)

Fuel System

	1500 rpm	1800 rpm
Fuel Injection Pump	Stanadyne	Stanadyne
Governor Regulation	5%	5%
Governor Type	Mechanical	Mechanical
Total Fuel Flow		
Prime = PRP - kg/h (lb/h)	93 (205)	96 (212)
Standby = LTP - kg/h (lb/h)	93 (205)	96 (212)
Maximum Fuel Transfer Pump Suction - m (ft)	0.9 (3)	0.9 (3)
Fuel Filter Micron Size @ 98% Efficiency	8	8

Lubrication System

	1500 rpm	1800 rpm
Oil Pressure at Rated Speed - kPa (psi)	345 (50)	345 (50)
Oil Pressure at Low Idle - kPa (psi)	105 (15)	105 (15)
In Pan Oil Temperature - °C (°F)	115 (240)	115 (240)
Total Engine Oil Capacity with filter - L (qt)	19 (20.1)	19 (20.1)
Engine Angularity Limits (continuous)		
Any Direction - degrees	20	20

Specifications and design subject to change without notice.



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