

# PowerTech™ PVL 6068HFG05 Diesel Engine

Generator Drive Engine Specifications

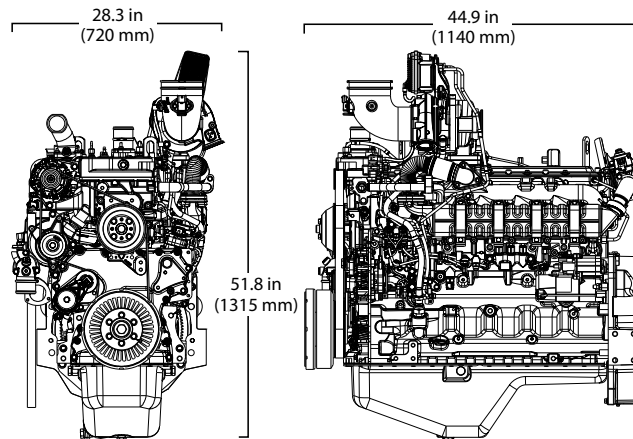


6068HFC08 shown

## Certifications

This model will fully meet EPA Final Tier 4 and CARB emission regulations.

## Engine dimensions



Dimensions may vary according to options selected. Call your distributor for more information.

## General data

Model	6068HFG05
Number of cylinders	6
Displacement – L (cu in)	6.8 (415)
Bore and Stroke – mm (in)	106 x 127 (4.2 x 5.0)
Engine Type	In-line, 4-cycle
Aspiration	Turbocharged and air-to-air aftercooled

Length – mm (in) to rear of block	1140 (44.9)
Width – mm (in)	720 (28.3)
Height – mm (in)	1315 (51.8)
Weight, dry – kg (lb)	770 (1698)

## Performance data range

Rated speed	Engine power				Generator efficiency	Rated fan power		Power factor	Calculated generator set output			
	Prime		Standby			kW	hp		Prime		Standby	
	kW	hp	kW	hp					kWe*	kVA	kWe	kVA
60 (1800)	146 – 176	196 – 235	160 & 192	215 – 257	90	9.0 – 10.8	12.0 – 14.4	0.8	124 – 148	154 – 185	136 – 163	170 – 204
50 (1500)**	146 – 151	196 – 202	160 & 165	215 – 221	90	9.0 – 9.2	12.0 – 12.4	0.8	124 – 127	154 – 159	136 – 140	170 – 175

**Prime power** is the nominal power an engine is capable of delivering with a variable load for an unlimited number of hours per year when applied in conformance with ISO 8528-1. This rating conforms to ISO3046 and SAE J1995.

**Standby power** is the maximum engine power available at varying load factors for up to 200 hours per year when applied in conformance with ISO 8528-1. This rating conforms to ISO 3046 and SAE J1995. The calculated generator set rating range for standby applications is based on minimum engine power (nominal -5 percent) to provide 100 percent meet-or-exceed performance for assembled standby generator sets.

\*Electrical power is calculated from the typical generator efficiency and fan power percentages shown. Applications may vary.

\*\*Performance information for 1500 rpm is preliminary data and is subject to change without notice.

## DOC catalyst dimensions

Size	5
Diameter – mm (in)	259.3 (10.21)
Length – mm (in)	572.85 (22.55)
Weight – kg (lb)	23.48 (52)

See your John Deere Power Systems engine distributor for more information on available filter size options.

## SCR catalyst dimensions

Size	5
Diameter – mm (in)	360.68 (14.2)
Length – mm (in)	784.86 (30.9)
Weight – kg (lb)	47.17 (104)

## Features and benefits

### DOC/SCR aftertreatment

- These engines use diesel oxidation catalyst (DOC) and selective catalytic reduction (SCR) technology to meet Final Tier 4 emission regulations. They meet customer performance without the need for a diesel particulate filter (DPF).

### Big-engine durability

- Heavy-duty components that are usually found in our larger engines are used throughout our generator drive engine line. Many of our DOC/SCR engines feature top-liner cooling, steel pistons, and variable-speed fan drives.

### Variable geometry turbocharger (VGT)

- Varies exhaust pressure based on load and speed to ensure proper EGR flow. The combination of the cooled EGR and VGT provide low-speed torque, quicker transient response, higher-peak torque, and world-class fuel economy.

### Cooled exhaust gas recirculation (EGR)

- EGR cools and mixes measured amounts of cooled exhaust gas with incoming fresh air to lower peak combustion temperatures, thereby reducing NOx.

### High-pressure common-rail (HPCR) and engine control unit (ECU)

- The HPCR fuel system provides variable common-rail pressure, multiple injections, and higher injection pressures up to 2,500 bar (36,000 psi). It also controls fuel injection timing and provides precise control for the start, duration, and end of injection.

### 4-valve cylinder head

- The 4-valve cylinder head provides excellent airflow resulting in greater low-speed torque and better transient response time by utilizing a cross-flow design.

### Air-to-air aftercooled

- This is the most efficient method of cooling intake air to help reduce engine emissions while maintaining low-speed torque, transient response time, and peak torque. It enables an engine to meet emissions regulations with better fuel economy and the lowest installed costs.

### Compact size

- Lower installed cost
- Mounting points are the same as previous engine models

### John Deere electronic engine controls

- Enables low idle speed for reduced fuel consumption
- Enables switching between 1500 and 1800 RPM without reprogramming
- Single engine control unit (ECU) manages both the engine and the aftertreatment systems
- Premium software option integrates with equipment

### Additional features

- Low idle speeds
- Dual frequency 1500/1800 rpm
- Glow plugs
- 500-hour oil change
- Self-adjusting poly-vee fan drive
- Optional factory installed variable speed fan drive improves fuel economy and reduces noise levels
- RH and LH engine mounted fuel filters
- Replaceable (wet) cylinder liners
- Low pressure fuel system with electrical transfer pump “auto prime” feature

**John Deere Power Systems**  
3801 W. Ridgeway Ave.  
PO Box 5100  
Waterloo, IA 50704-5100  
Phone: 800.553.6446  
Fax: 319.292.5075

**John Deere Power Systems**  
**Usine de Saran**  
La Foulonnerie - B.P. 11.13  
45401 Fleury les Aubrais Cedex  
France  
Phone: 33.2.38.82.61.19  
Fax: 33.2.38.82.60.00

*All values at rated speed and power with standard options unless otherwise noted. Specifications and design subject to change without notice.*