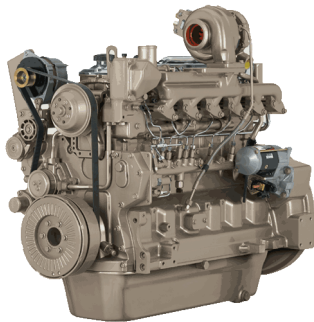


PowerTech™ E

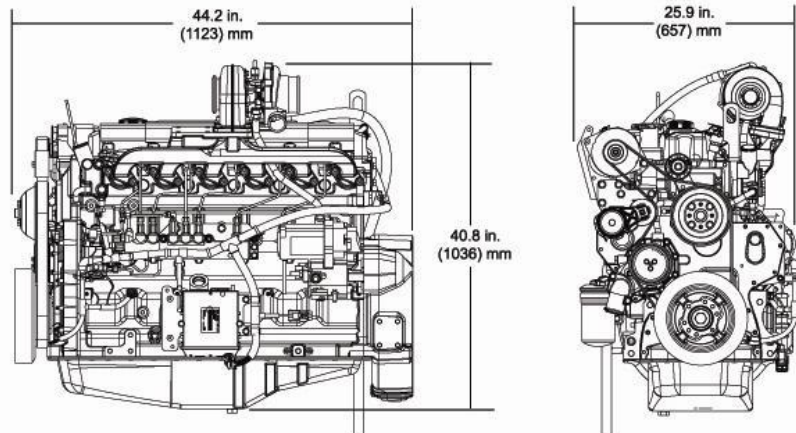
6068HF285 Diesel Engine

Generator Drive Engine Specifications



6068HF285 shown

Engine dimensions



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

Certifications

CARB
EPA Tier 3

General data

| | | | |
|---------------------------|---|-----------------------------------|-------------|
| Model | 6068HF285 | Length - mm (in) to rear of block | 1123 (44.2) |
| Number of cylinders | 6 | Width - mm (in) | 657 (25.9) |
| Displacement - L (cu in) | 6.8 (415) | Height-- mm (in) | 1036 (40.8) |
| Bore and Stroke-- mm (in) | 106 x 127 (4.17 x 5.00) | Weight, dry-- kg (lb) | 608 (1340) |
| Compression Ratio | 19.0:1 | | |
| Engine Type | In-line, 4-Cycle | | |
| Aspiration | Turbocharged and air-to-air aftercooled | | |

Performance data range

| Rated speed Hz(rpm) | 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) | 134-161 | 180-216 | 147-177 | 197-237 | 88-92 | 8.1-9.8 | 11-13 | 0.8 | 111-139 | 139-174 | 122-154 | 153-193 |

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 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 to conform with ISO 8528-1. This rating conforms to ISO 3046 and SAE J1995. 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.

Features and benefits

2-Valve Cylinder Head

- Cross-flow head design provides excellent breathing from a lower-cost 2-valve cylinder head

High Pressure Common Rail Fuel System (HPCR) and Engine Control Unit (ECU)

- The HPCR fuel system provides variable common-rail pressure, multiple injections, and higher injection pressures, up to 1600 bar (23,000 PSI). It also controls fuel injection timing and provides precise control for the start, duration, and end of the injection

Fixed Geometry Turbocharger

- Fixed geometry turbochargers are precisely matched to the power level and application

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

Multiple Injection Strategy

- The new HPCR fuel system and engine control unit (ECU) allow for multiple fuel injections. The number of fuel injections, based on speed and load, help contribute to lower combustion temperatures, which reduce the formation of NOx and particulates. The multiple injection strategy also provides an added benefit of noise reduction

John Deere Electronic Engine Controls

- Electronic engine controls monitor critical engine functions, providing warning and/or shutdown to prevent costly repairs and eliminate the need for add-on governing components, all lowering total installed costs.

Compact Size

- Mounting points are the same as Tier 2/Stage II engine models

Engine Performance

- Block loading capability provided with standard electronic governor control

Additional Features

- Self-adjusting poly-vee fan drive
- Forged-steel connecting rods
- Replaceable wet-type cylinder liners
- Either-side service
- 500-hour oil change