# PowerTech ™ Plus 6135HF485 Diesel Engine

**Generator Drive Engine Specifications** 





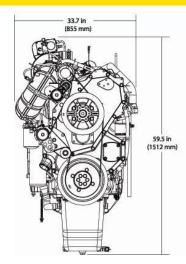
6135HF485 shown

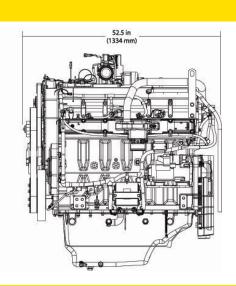
### Certifications

CARB

EPA Tier 3

### **Dimensions**





### General data

Model	6135HF485
Number of cylinders	6
Displacement - L (cu in)	13.5 (824)
Bore and Stroke mm (in)	132 x 165 (5.20 x 6.50)
Compression Ratio	16.0:1
Engine Type	In-line, 4-Cycle

Aspiration	Turbocharged and air-to-air aftercooled
Length - mm (in)	1334 (52.5)
Width - mm (in)	855 (33.7)
Height mm (in)	15 12 (59.5)
Weight, dry kg (lb)	1493 (3291)

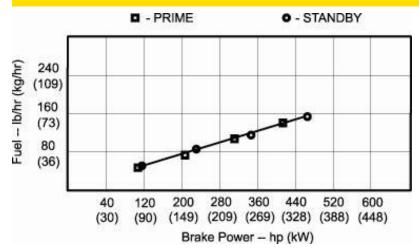
### Performance data

Prime power at 60 Hz (1800 rpm)	311 kW (417 hp)
Standby power at 60 Hz (1800 rpm)	345 kW (463 hp)

The prime power gen-set engine rating is the nominal power an engine is capable of delivering with a variable load for an unlimited number of hours per year with normal maintenance intervals observed. This rating incorporates a 10% overload capability which is available for up to 2 hours at a time. Operating time between 100% and 110% of the prime power rating is not to exceed 8% of the total engine operating time. This rating conforms to ISO 8528-1 "prime power (PRP)". The permissible average power for the prime or PRP rating is not to exceed 70% of rated prime power when calculated per ISO 8528-1.

The standby gen-set engine rating is the nominal engine power available at varying load factors for up to 200 hours per year with normal maintenance intervals observed. No overload capability is available for this rating. This rating conforms to ISO 8528-1 "Emergency Standby Power (ESP)". The permissible average power for the standby or ESP rating is calculated per ISO 8528-1.

### Performance curve



Performance data									
Hz (rpm) Generator efficiency %	Rated fa	an power		Calculated generator set output					
				Power factor	Prime		Standby		
		kW	hp		kWe	kVA	kWe	kVA	
60 (1800)	90-94	19.0	25.5	0.8	264-276	330-345	293-306	367-383	

### Features and benefits

# 4-Valve Cylinder Head

- The 4-valve cylinder head provides excellent airflow
- Cross flow design

# Electronic Unit Injector (EUI) and Engine Control Unit (ECU)

 The HPCR fuel system provides variable common rail pressure, multiple injections, and higher injection pressures, up to 1,600 bar (23,000 psi). It also controls fuel injection timing and provides precise control for the start, duration, and end of injection.

#### Cooled Exhaust Gas Recirculation-EGR

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

# Variable Geometry Turbocharger-VGT

 Varies exhaust pressure based on load and speed to insure proper EGR flow, quicker transient response for exceptional block-loading, and best-in-class fuel economy

### 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

- Horsepower/displacement ratio is best-in-class
- Lower installed cost
- Mounting points are the same as Tier 2/Stage II engine models

# John Deere Electronic Engine Controls

- Monitors critical engine functions providing warning and/or shutdown to prevent costly engine repairs; eliminates need for add-on governing components; all lowering total installed costs. Snapshot diagnostic data that can be retrieved using commonly available diagnostic service tools
- New common wiring interface connector for vehicles or available OEM instrumentation packages; new solid conduit and "T" connectors to reduce wiring stress, greater durability and improved appearance
- Factory installed engine mounted ECU or remote mounted ECU, wiring harness and associated components
- Industry standard SAE J1939 interface which communicates with other vehicle systems, eliminating redundant sensors and reducing vehicle installed cost

### Additional Features

- Self adjusting poly-vee fan drive
- R.H. and L.H. engine-mounted fuel filters
- Low-pressure fuel system with "auto-prime" feature
- Directed top-liner cooling
- 500-hour oil change

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