

# PowerTech™

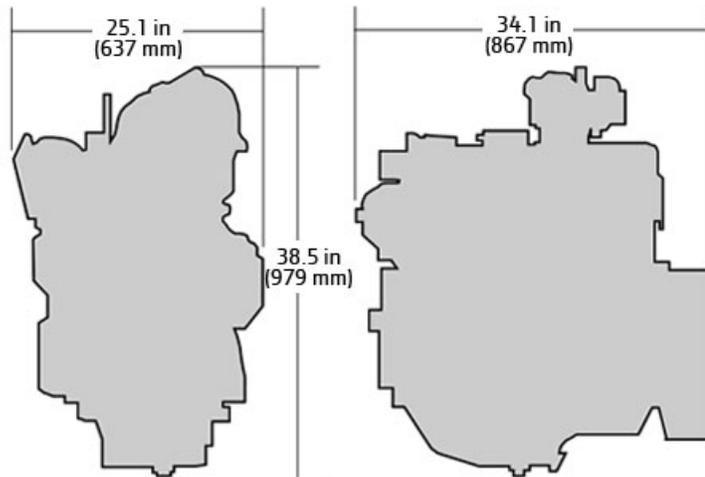
## 4045HF279 Diesel Engine

Generator Drive Engine Specifications



4045HF279 shown

### Engine dimensions



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

### Emissions

EU Stage II

### General data

Model	4045HF279	Length - mm (in) to rear of block	867 (34.1)
Number of cylinders	4	Width - mm (in)	637 (25.1)
Displacement - L (cu in)	4.5 (275)	Height-- mm (in)	979 (38.5)
Bore and Stroke-- mm (in)	106 x 127 (4.17 x 5.00)	Weight, dry - kg (lb)	451 (994)
Compression Ratio	19.0:1		
Engine Type	In-line, 4-Cycle		
Aspiration	Turbocharged and air-to-air aftercooled		

### 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
50(1500)	94	126	103	138	88-92	6.2	8	0.8	75-79	94-99	85-89	106-111

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 that provides excellent breathing from a lower cost two-valve cylinder head

### Fixed Geometry Turbocharger

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

### Turbocharged

- In turbocharged engines, the air is pre-compressed. Due to the higher pressure, more air is supplied into the combustion chamber allowing a corresponding increase in fuel injection which results in greater engine output.

### Air-to-Air Aftercooling

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

### Compact Size

- Mounting points for Tier 3/ Stage III A engines are the same as Tier 2/Stage II engines

### 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, wiring harness and associated components; industry standard SAE J1939 interface which communicates with other vehicle systems, eliminating redundant sensors and reducing vehicle total installed cost

### Additional Features

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

### Emissions

- EU Stage II