



# JOHN DEERE

## PowerTech™ **4045H** Diesel Engine for Generator Set Applications

### RATINGS

<b>Prime Power</b>	<b>Standby Power</b>
131 hp (98 kW)	145 hp (108 kW)
142 hp (106 kW)	157 hp (117 kW)

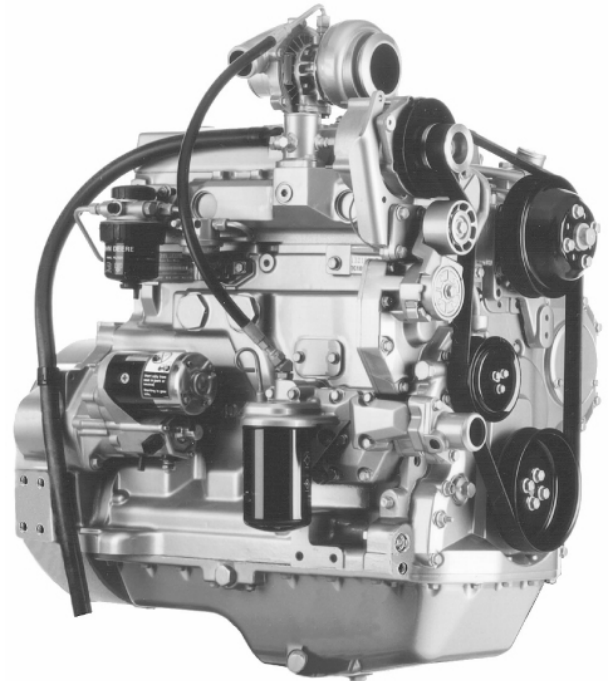
PRIME POWER is the nominal power an engine is capable of delivering with a variable load for an unlimited number of hours per year. This rating conforms to ISO 3046 and SAE J1995.

STANDBY POWER is the nominal engine power available at varying load factors for up to 500 hours per year. 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%) to provide 100% meet-or-exceed performance for assembled standby generator sets.

TIER 2 EMISSION CERTIFICATIONS: CARB and EPA

### PERFORMANCE DATA

RPM (Hz)	Generator Efficiency %	Fan Power		Power Factor	Calculated Gen Set output			
		hp	kW		Prime		Standby	
					kWe	kVa	kWe	kVa
1800 (60)	88-92	7.2	5.4	0.8	82-85	102-107	90-94	113-118
1800 (60)	88-92	7.9	5.9	0.8	87-92	109-115	97-102	121-128



### POWER AT 1800 RPM (60 Hz)

Photographs may show non-standard equipment

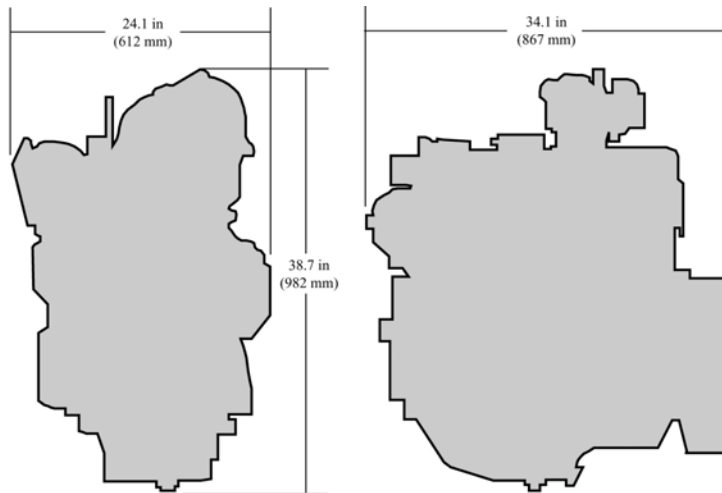


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**4045H Diesel Engine**  
for Generator Set Applications

## GENERAL DATA

Model	4045HF275	Aspiration	Turbocharged
Number of Cylinders	4	Charge Air Cooling System	Air-to-Air
Displacement - L (cu.in)	4.5 (275)	Length - in. (mm)	34.1 (867)
Bore and Stroke - in. (mm)	4.19 x 5.00 (106 x 127)	Width - in. (mm)	24.1 (612)
Compression Ratio	17.0:1	Height - in. (mm)	38.7 (982)
Engine Type	In-line, 4-Cycle	Weight - lb. (kg)	993 (451)

## DIMENSIONS



## FEATURES AND BENEFITS

### Dynamically Balanced Crankshaft

- Induction-hardened journals for long hours of reliable service
- Robust design to drive machinery from the front of the crankshaft
- Supported by five main bearings

### Forged-steel Connecting Rods

- 45-degree connecting rod/cap-joint design allows the use of large connecting rod bearings for increased durability

### Replaceable Wet-type Cylinder Liners

- Provide excellent heat dissipation
- Precision machined for long life
- Rebuild to original specifications

### Easy to Apply, Easy to Install

- Front and rear engine mounting pads on the side of the block facilitates installations
- Either side service for filters and service points
- All connection points in common locations make it easy to install or package
- Engine mounted ECU and electronic speed control simplify installation and packaging

### Smooth Operation

- Smooth vibration with full length engine balancers

### Compact Size

- Short length is ideal for both skid and packaged installations
- High mount or low mount turbocharger position to meet packaging requirements

### World-class Performance

- Excellent fuel economy and low oil consumption

### Fuel System Controls

- Electronically controlled rotary fuel injection pump with variable timing resulting in excellent fuel economy and excellent performance
- Self diagnostics and protection
- 3-5% Droop Governing
- 12V or 24V Electric Shutoff

### Emissions

- EPA Tier II Certified

*Specifications and design subject to change without notice*



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