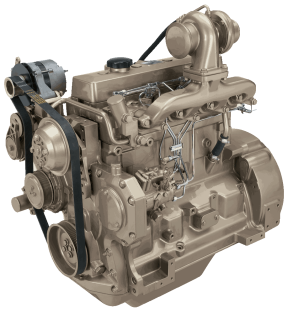
PowerTech ™ E 4045HFG82 Diesel Engine

Generator Drive Engine Specifications



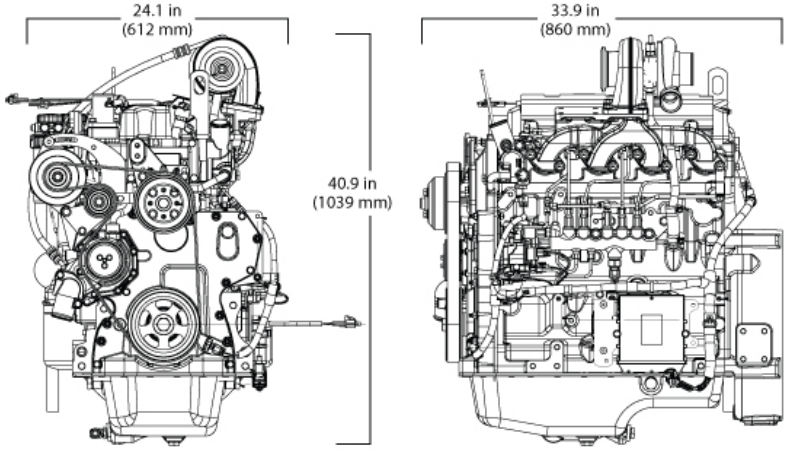
4045HFG82 shown

Certifications

EPA Tier 3

EU Stage III A

Engine dimensions



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

General data

Model	4045HFG82
Number of cylinders	4
Displacement - L (cu in)	4.5 (275)
Bore and Stroke-- mm (in)	106 x 127 (4.17 x 5.00)
Compression Ratio	19.0 : 1
Engine Type	In-line, 4-cycle
Aspiration	Turbocharged and air-to-air aftercooled

Length - mm (in) to rear of block	860 (33.9)
Width - mm (in)	612 (24.1)
Height-- mm (in)	1039 (40.9)
Weight, dry-- kg (lb)	491 (1082)

Performance data range

Rated speed	Engine power				Generator efficiency	Rated fan power		Power factor	Calculated generator set output			
	Prime		Standby			kW	hp		Prime		Standby	
Hz(rpm)	kW	hp	kW	hp	%				kWe*	kVA	kWe	kVA
50(1500)	76-112	102-150	83-123	111-165	88-92	7.0-9	9-12	0.8	59-97	73-121	65-107	81-134
60(1800)	77-115	103-154	85-126	114-169	88-92	10.3-15.5	14-21	0.8	54-96	68-120	61-107	76-133

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.

Photographs may show non-standard equipment.

Features and benefits

Fixed Geometry Turbocharger

- Fixed geometry turbochargers are sized for a specific power range and optimized to provide excellent performance across the entire torque curve. They are also designed to maximize fuel economy between the engine's rated speed and peak torque.

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.

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 1,600 bar (23,000 psi). It also controls fuel injection timing and provides precise control for the start, duration, and end of injection.

2-Valve Cylinder Head

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

Air-to-Air Aftercooled

- This is the most efficient method of cooling intake air to help reduce engine emissions. 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 previous engine models

Electronic Engine Controls

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

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