PowerTech 4045H Diesel Engine

Generator Drive Engine Specifications



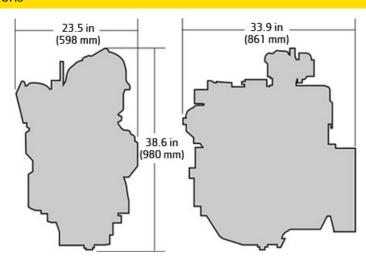


4045H shown

Certifications

Non-Emissions Certified

Dimensions



General data	
Model	4045HF120
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	17.0:1
Engine Type	In-line, 4-Cycle

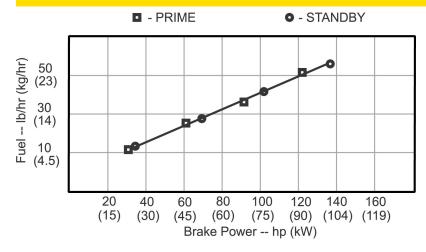
Aspiration	Turbocharged and air-to-air aftercooled
Length - mm (in)	861 (33.9)
Width - mm (in)	598 (23.5)
Height mm (in)	980 (38.6)
Weight, dry kg (lb)	396 (873)

Prime power at 50 Hz (1500 rpm) Standby power at 50 Hz (1500 rpm) 91 kW (122 hp) 102 kW (137 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											
		Rated fa	an power		Calculated generator set output						
	Generator efficiency %			Power factor	Prime		Standby				
		kW	hp		kWe	kVA	kWe	kVA			
50 (1500)	88-92	4.0	5.4	0.8	77-80	96-110	86-90	108-113			

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

Smooth Operation

- Smooth vibration with full length engine balancers

Easy to Apply, Easy to Install

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

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

- Proven and Reliable Mechanical Governor
- 3-5% Droop Governing
- 12V or 24V Electric Shutoff

Emissions

- This engine is not emission certified

John Deere Power Systems

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