

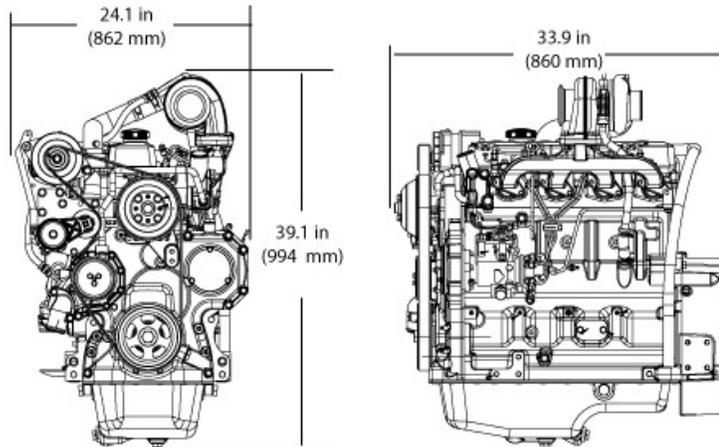
PowerTech M 4045T Diesel Engine

Generator Drive Engine Specifications



4045T shown

Dimensions



Certifications

CARB
EPA Tier 3

General data

Model	4045TF280	Aspiration	Turbocharged
Number of cylinders	4	Length - mm (in)	860 (33.9)
Displacement - L (cu in)	4.5 (275)	Width - mm (in)	612 (24.1)
Bore and Stroke-- mm (in)	106 x 127 (4.17 x 5.00)	Height-- mm (in)	994 (39.1)
Compression Ratio	19.0:1	Weight, dry-- kg (lb)	396 (873)
Engine Type	In-line, 4-Cycle		

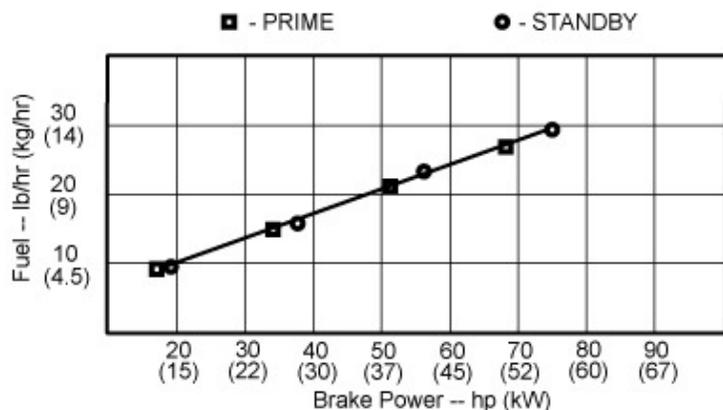
Performance data

Prime power at 60 Hz (1800 rpm)	51 kW (68 hp)
Standby power at 60 Hz (1800 rpm)	56 kW (75 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 fan power		Power factor	Calculated generator set output			
		kW	hp		Prime		Standby	
					kWe	kVA	kWe	kVA
60 (1800)	88-92	1.9	2.5	0.8	43-45	54-56	48-50	60-63

Features and benefits

2-Valve Cylinder Head

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

Mechanical Rotary Fuel Pump

- The timing and fuel injection pressures are optimized to maximize performance and fuel economy at a given rated speed

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

Compact Size

- Mounting points are the same as Tier 2/Stage II engine models

Engine Performance

- Block loading capability provided with standard electronic governor control

Additional Features

- Self-adjusting poly-vee fan drive
- Forged-steel connecting rods
- Replaceable wet-type cylinder liners
- Either-side service
- Optional final fuel filter with water separator and water-in-fuel sensor
- Optional balancer shafts

John Deere Power Systems
 3801 W. Ridgeway Ave.
 PO Box 5100
 Waterloo, IA 50704-5100
 Phone: 1-800-533-6446
 Fax: 319.292.5075

John Deere Power Systems
Usine de Saran
 La Foulonnerie - B.P. 11.13
 45401 Fleury les Aubrais Cedex
 France
 Phone: 33.2.38.82.61.19
 Fax: 33.2.38.82.60.00

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