

PowerTech™ M

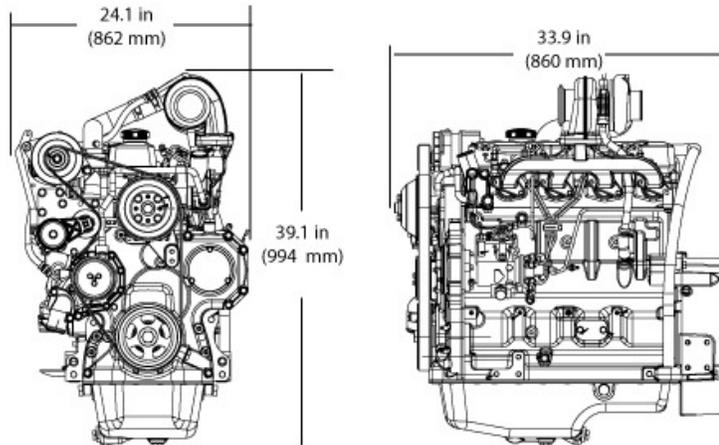
4045TF280 Diesel Engine

Generator Drive Engine Specifications



4045TF280 shown

Engine dimensions



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

Emissions

CARB
EPA Tier 3

General data

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

Performance data range

Rated speed Hz(rpm)	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
60(1800)	51-57	68-76	56-63	75-84	88-92	1.9	3	0.8	43-51	54-64	48-56	60-70

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 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

- Excellent block loading capability

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