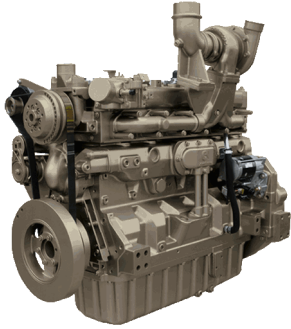


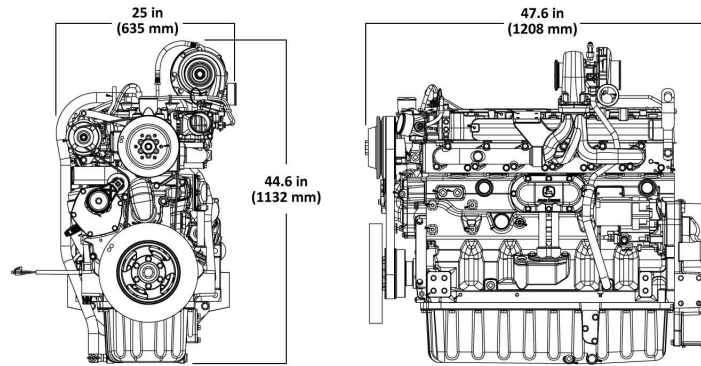
PowerTech™ E 6090HFG86 Diesel Engine

Generator Drive Engine Specifications



6090HFG86 shown

Engine dimensions



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

Certifications

EPA Tier 3

General data

| | | | |
|---------------------------|---|-----------------------------------|-------------|
| Model | 6090HFG86 | Length - mm (in) to rear of block | 1208 (47.6) |
| Number of cylinders | 6 | Width - mm (in) | 635 (25.0) |
| Displacement - L (cu in) | 9.0 (549) | Height-- mm (in) | 1132 (44.6) |
| Bore and Stroke-- mm (in) | 118.4 x 136 (4.66 x 5.35) | Weight, dry-- kg (lb) | 841 (1854) |
| Compression Ratio | 16.0 : 1 | | |
| Engine Type | In-line, 4-cycle | | |
| Aspiration | Turbocharged and air-to-air aftercooled | | |

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) | 0 | 0 | 345 | 463 | 90-94 | 13.8 | 19 | 0.8 | 0 | 0 | 298-311 | 373-389 |

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

Fixed Geometry Turbocharger

- Fixed geometry turbochargers are precisely matched to the power level and application

4-Valve Cylinder Head

- Provides excellent airflow resulting in better transient response
- U-flow design

Air-to-Air Aftercooled

- Most efficient method of cooling intake air to help reduce engine emissions while improving transient response time
- Enables an engine to meet emissions with better fuel economy and the lowest installed costs

High Pressure Common Rail Fuel System

- HPCR: Higher injection pressures, up to 1600 bar (23, 500 PSI) variable injection pressure, variable timing control, multiple injections and controls the duration of injection

Compact Size

- Mounting points for Tier 3/Stage III A engine models same as Tier 2/Stage 2 engine models

John Deere Electronic Controls

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

Additional Features

- Single-piece low friction piston; directed top-liner cooling; gear-driven auxiliary drive; optional 500-hour oil change; self-adjusting poly-vee fan-drive; optional rear PTO; engine mounted ECU