

DEMAND RESPONSE READY

Standby Power Rating
 150 kW, 188 kVA, 60 Hz

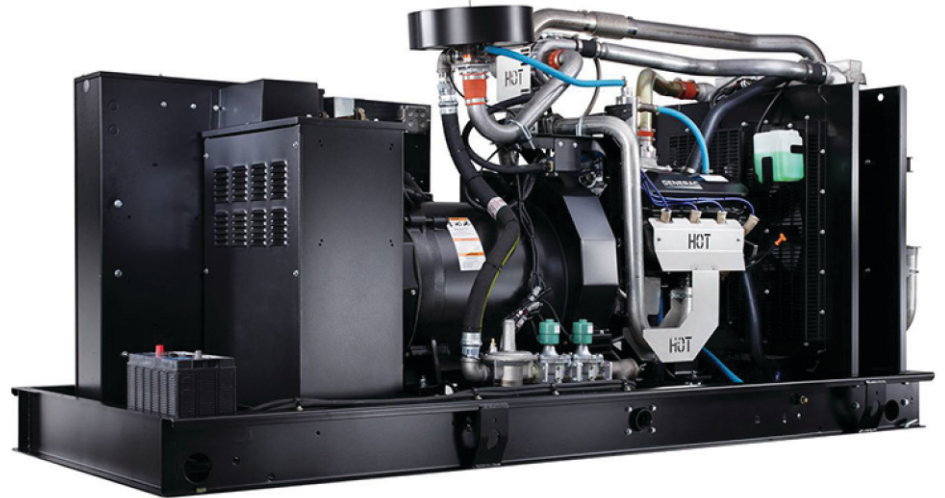


Image used for illustration purposes only



Codes and Standards

Not all codes and standards apply to all configurations. Contact factory for details.

-   UL2200, UL508, UL489
-  CSA C22.2
-   BS5514 and DIN 6271
-  SAE J1349
-  NFPA 37, 70, 99, 110
-  NEC700, 701, 702, 708
-  ISO 3046, 7637, 8528, 9001
-  NEMA ICS10, MG1, 250, ICS6, AB1
-  ANSI C62.41
-   IBC 2009, CBC 2010, IBC 2012, ASCE 7-05, ASCE 7-10, ICC-ES AC-156 (2012)

Powering Ahead

Generac ensures superior quality by designing and manufacturing most of its generator components, such as alternators, enclosures, control systems and communications software. Generac also makes its own spark-ignited engines, and you'll find them on every Generac gaseous-fueled generator. We engineer and manufacture them from the block up — all at our facilities throughout Wisconsin. Applying natural gas and LP-fueled engines to generators requires advanced engineering expertise to ensure reliability, durability and necessary performance. By designing specifically for these dry, hotter-burning fuels, the engines last longer and require less maintenance. Building our own engines also means we control every step of the supply chain and delivery process, so you benefit from single-source responsibility.

Plus, Generac Industrial Power's distribution network provides all parts and service so you don't have to deal with third-party suppliers. It all leads to a positive owner experience and higher confidence level. Generac spark-ignited engines give you more options in commercial and industrial generator applications as well as extended run time from utility-supplied natural gas.

SG150 | 9.0L | 150 kW

INDUSTRIAL SPARK-IGNITED GENERATOR SET

EPA Certified Stationary Emergency and Non-Emergency

STANDARD FEATURES

DEMAND RESPONSE READY

ENGINE SYSTEM

- Oil Drain Extension
- Air Cleaner
- Fan Guard
- Stainless Steel Flexible Exhaust Connection
- Factory Filled Oil and Coolant
- Radiator Duct Adapter (Open Set Only)
- Critical Silencer/Catalyst

Fuel System

- NPT Fuel Connection on Frame
- Primary and Secondary Fuel Shutoff

Cooling System

- Closed Coolant Recovery System
- UV/Ozone Resistant Hoses
- Factory-Installed Radiator
- 50/50 Ethylene Glycol Antifreeze
- Radiator Drain Extension

Electrical System

- Battery Charging Alternator
- Battery Cables
- Battery Tray
- Rubber-Booted Engine Electrical Connections
- Solenoid Activated Starter Motor

ALTERNATOR SYSTEM

- UL2200 GENprotect™
- Class H Insulation Material
- 2/3 Pitch
- Skewed Stator
- Permanent Magnet Excitation
- Sealed Bearings
- Amortisseur Winding
- Full Load Capacity Alternator

GENERATOR SET

- Internal Genset Vibration Isolation
- Separation of Circuits - High/Low Voltage
- Separation of Circuits - Multiple Breakers
- Wrapped Exhaust Piping
- Standard Factory Testing
- 2 Year Limited Warranty (Standby Rated Units)
- Silencer Mounted in the Discharge Hood (Enclosed Units Only)

ENCLOSURE (If Selected)

- Rust-Proof Fasteners with Nylon Washers to Protect Finish
- High Performance Sound-Absorbing Material (Sound Attenuation Enclosures)
- Gasketed Doors
- Stamped Air-Intake Louvers
- Upward Facing Discharge Hoods (Radiator and Exhaust)
- Stainless Steel Lift Off Door Hinges
- Stainless Steel Lockable Handles
- RhinoCoat™ - Textured Polyester Powder Coat Paint

CONTROL SYSTEM



Digital H Control Panel- Dual 4x20 Display

Program Functions

- Programmable Crank Limiter
- 7-Day Programmable Exerciser
- Special Applications Programmable Logic Controller
- RS-232/485 Communications
- All Phase Sensing Digital Voltage Regulator
- 2-Wire Start Capability
- Date/Time Fault History (Event Log)
- Isochronous Governor Control
- Waterproof/Sealed Connectors
- Audible Alarms and Shutdowns
- Not in Auto (Flashing Light)

- Auto/Off/Manual Switch
- E-Stop (Red Mushroom-Type)
- NFPA 110 Level I and II (Programmable)
- Customizable Alarms, Warnings, and Events
- Modbus® Protocol
- Predictive Maintenance Algorithm
- Sealed Boards
- Password Parameter Adjustment Protection
- Single Point Ground
- 16 Channel Remote Trending
- 0.2 msec High Speed Remote Trending
- Alarm Information Automatically Annunciated on the Display

Full System Status Display

- Power Output (kW)
- Power Factor
- kW Hours, Total, and Last Run
- Real/Reactive/Apparent Power
- All Phase AC Voltage
- All Phase Currents
- Oil Pressure
- Coolant Temperature
- Coolant Level

- Engine Speed
- Battery Voltage
- Frequency

Alarms and Warnings

- Oil Pressure
- Coolant Temperature
- Coolant Level
- Low Fuel Pressure
- Engine Overspeed
- Battery Voltage
- Alarms and Warnings Time and Date Stamped
- Snap Shots of Key Operation Parameters During Alarms and Warnings
- Alarms and Warnings Spelled Out (No Alarm Codes)

CONFIGURABLE OPTIONS

DEMAND RESPONSE READY

ENGINE SYSTEM

- Engine Block Heater
- Oil Heater
- Air Filter Restriction Indicator
- Radiator Stone Guard (Open Set Only)
- Baseframe Cover/Rodent Guard
- Level 1 Fan and Belt Guards (Enclosed Units Only)
- Shipped Loose Critical Silencer (Open Set Only)

FUEL SYSTEM

- NPT Flexible Fuel Line

ELECTRICAL SYSTEM

- 10A UL Listed Battery Charger
- Battery Warmer

ALTERNATOR SYSTEM

- Alternator Upsizing
- Anti-Condensation Heater
- Tropical Coating

CIRCUIT BREAKER OPTIONS

- Main Line Circuit Breaker
- 2nd Main Line Circuit Breaker
- Shunt Trip and Auxiliary Contact
- Electronic Trip Breakers

ENGINEERED OPTIONS

ENGINE SYSTEM

- Coolant Heater Ball Valves
- Fluid Containment Pan

ALTERNATOR SYSTEM

- 3rd Breaker System

GENERATOR SET

- Demand Response Rating
- Extended Factory Testing (3-Phase Only)
- IBC Seismic Certification
- 8 Position Load Center

ENCLOSURE

- Weather Protected Enclosure
- Level 1 Sound Attenuated
- Level 2 Sound Attenuated
- Level 2 Sound Attenuated with Motorized Dampers
- Steel Enclosure
- Aluminum Enclosure
- AC/DC Enclosure Lighting Kit
- Enclosure Heater
- Pad Vibration Isolation
- Up to 200 MPH Wind Load Rating (Contact Factory for Availability)
- Door Open Alarm Switch

CONTROL SYSTEM

- NFPA 110 Compliant Level 1 21-Light Remote Annunciator
- Remote Relay Assembly (8 or 16)
- Oil Temperature Indication and Alarm
- Remote E-Stop (Break Glass-Type, Surface Mount)
- Remote E-Stop (Red Mushroom-Type, Surface Mount)
- Remote E-Stop (Red Mushroom-Type, Flush Mount)
- 10A Engine Run Relay
- Ground Fault Annunciator
- 100 dB Alarm Horn
- 120V GFCI and 240V Outlets
- Damper Alarm Contacts (Motorized Dampers Only)
- Auxiliary Circuit Breaker Contacts to Controller

WARRANTY (Standby Gensets Only)

- 2 Year Extended Limited Warranty
- 5 Year Limited Warranty
- 5 Year Extended Limited Warranty
- 7 Year Extended Limited Warranty
- 10 Year Extended Limited Warranty

CONTROL SYSTEM

- Battery Disconnect Switch

GENERATOR SET

- Special Testing
- Battery Box

SG150 | 9.0L | 150 kW

INDUSTRIAL SPARK-IGNITED GENERATOR SET

EPA Certified Stationary Emergency and Non-Emergency

APPLICATION AND ENGINEERING DATA

DEMAND RESPONSE READY

ENGINE SPECIFICATIONS

General

| | |
|------------------------------------|------------------------------|
| Make | Generac |
| Cylinder # | 8 |
| Type | V |
| Displacement - in ³ (L) | 543 (8.9) |
| Bore - in (mm) | 4.49 (114.3) |
| Stroke - in (mm) | 4.25 (108) |
| Compression Ratio | G18 - 10.5:1 / G26 - 9.1:1 * |
| Intake Air Method | Turbocharged/Aftercooled |
| Number of Main Bearings | 5 |
| Connecting Rods | Forged Steel |
| Cylinder Head | Cast Iron |
| Cylinder Liners | No |
| Ignition | High Energy |
| Piston Type | Aluminum Alloy |
| Crankshaft Type | Forged Steel |
| Lifter Type | Hydraulic Roller |
| Intake Valve Material | Steel Alloy |
| Exhaust Valve Material | Stainless Steel |
| Hardened Valve Seats | Yes |

Engine Governing

| | |
|-------------------------------------|------------|
| Governor | Electronic |
| Frequency Regulation (Steady State) | ±0.25% |

Lubrication System

| | |
|-----------------------------|--------------------------------------|
| Oil Pump Type | Gear Driven |
| Oil Filter Type | Full-Flow Spin-On Cartridge |
| Crankcase Capacity - qt (L) | G18 - 8.5 (8.0) / G26 - 9.5 (10.0) * |

Cooling System

| | |
|------------------------|-----------------------------|
| Cooling System Type | Pressurized Closed |
| Fan Type | Pusher |
| Fan Speed - RPM | G18 - 2,330 / G26 - 2,386 * |
| Fan Diameter - in (mm) | 22 (559) |

Fuel System

| | |
|---|-----------------------------------|
| Fuel Type | Natural Gas, Propane Vapor/Liquid |
| Carburetor | Down Draft |
| Secondary Fuel Regulator | Standard |
| Fuel Shut Off Solenoid | Standard |
| Operating Fuel Pressure - in H ₂ O (kPa) | 7 - 11 (1.7 - 2.7) |
| Operating Fuel Pressure (LPL) - psi (kPa) | 30 - 312 (206 - 2,151) |

Engine Electrical System

| | |
|----------------------------|------------------------------|
| System Voltage | 12 VDC |
| Battery Charger Alternator | Standard |
| Battery Size | See Battery Index 0161970SBY |
| Battery Voltage | 12 VDC |
| Ground Polarity | Negative |

* G18 refers to all engines manufactured before August 3rd, 2018. G26 refers to all engines manufactured after August 3rd, 2018.

ALTERNATOR SPECIFICATIONS

| | |
|-------------------------------------|-------------|
| Standard Model | K0150124Y26 |
| Poles | 4 |
| Field Type | Revolving |
| Insulation Class - Rotor | H |
| Insulation Class - Stator | H |
| Total Harmonic Distortion | <5% |
| Telephone Interference Factor (TIF) | <50 |

| | |
|------------------------------------|--------------------|
| Standard Excitation | Permanent Magnet |
| Bearings | Single Sealed Ball |
| Coupling | Direct Drive |
| Prototype Short Circuit Test | Yes |
| Voltage Regulator Type | Full Digital |
| Number of Sensed Phases | All |
| Regulation Accuracy (Steady State) | ±0.25% |

SG150 | 9.0L | 150 kW

INDUSTRIAL SPARK-IGNITED GENERATOR SET

EPA Certified Stationary Emergency and Non-Emergency

OPERATING DATA

DEMAND RESPONSE READY

POWER RATINGS

| | G18, G26 - Natural Gas * | | G18, G26 - Propane/Dual Fuel * | |
|---------------------------------|--------------------------|-----------|--------------------------------|-----------|
| Single-Phase 120/240 VAC @1.0pf | 144 kW | Amps: 600 | 134 kW | Amps: 558 |
| Three-Phase 120/208 VAC @0.8pf | 150 kW | Amps: 521 | 140 kW | Amps: 486 |
| Three-Phase 120/240 VAC @0.8pf | 150 kW | Amps: 452 | 140 kW | Amps: 422 |
| Three-Phase 277/480 VAC @0.8pf | 150 kW | Amps: 226 | 140 kW | Amps: 211 |
| Three-Phase 346/600 VAC @0.8pf | 150 kW | Amps: 181 | 140 kW | Amps: 169 |

MOTOR STARTING CAPABILITIES (skVA)

| skVA vs. Voltage Dip | | | |
|----------------------|-----|-------------|-----|
| 277/480 VAC | 30% | 208/240 VAC | 30% |
| K0150124Y26 | 327 | K0150124Y26 | 250 |
| K0200124Y21 | 478 | K0200124Y21 | 361 |

FUEL CONSUMPTION RATES*

| Natural Gas – scfh (m ³ /hr) | | Propane Vapor – scfh (m ³ /hr) | | Propane Liquid – gph (Lph) | |
|---|--------------|---|------------|----------------------------|-------------|
| Percent Load | Standby | Percent Load | Standby | Percent Load | Standby |
| 25% | 668 (18.9) | 25% | 280 (7.9) | 25% | 6.7 (25.4) |
| 50% | 1,127 (31.9) | 50% | 430 (12.2) | 50% | 11.4 (43.2) |
| 75% | 1,583 (44.8) | 75% | 573 (16.2) | 75% | 15.7 (59.4) |
| 100% | 2,042 (57.8) | 100% | 720 (20.4) | 100% | 20.0 (75.7) |

* Fuel supply installation must accommodate fuel consumption rates at 100% load.

COOLING

| | | Standby |
|---|----------------------------|---------------|
| Air Flow (Fan Air Flow Across Radiator) | scfm (m ³ /min) | 5,598 (158.5) |
| Coolant Flow | gpm (Lpm) | 27.5 (104) |
| Coolant System Capacity | gal (L) | 6.3 (24.0) |
| Maximum Operating Air Temperature on Radiator | °F (°C) | 122 (50) |
| Maximum Operating Ambient Temperature (Before Derate) | See Bulletin 0199270SSD | |
| Maximum Radiator Backpressure | in H ₂ O (kPa) | 0.5 (0.12) |

COMBUSTION AIR REQUIREMENTS

| | Standby |
|--|-----------|
| Flow at Rated Power scfm (m ³ /min) | 343 (9.7) |

ENGINE

| | | Standby |
|--------------------------|----------------|-------------|
| Rated Engine Speed | RPM | 1,800 |
| Horsepower at Rated kW** | hp | 229 |
| Piston Speed | ft/min (m/min) | 1,275 (389) |
| BMEP | psi (kPa) | 185 (1,277) |

EXHAUST

| | | Standby |
|---|----------------------------|--------------|
| Exhaust Flow (Rated Output) | scfm (m ³ /min) | 1,206 (34.1) |
| Backpressure (Post Silencer) | inHg (kPa) | 0.75 (2.54) |
| Exhaust Temp (Rated Output - Post Silencer) | °F (°C) | 1,440 (782) |

* G18 refers to all engines manufactured before August 3rd, 2018. G26 refers to all engines manufactured after August 3rd, 2018.

** Refer to "Emissions Data Sheet" for maximum bHP for EPA and SCAQMD permitting purposes.

Deration – Operational characteristics consider maximum ambient conditions. Derate factors may apply under atypical site conditions.

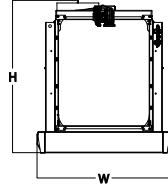
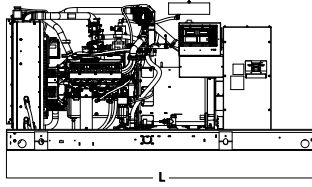
Please contact a Generac Power Systems Industrial Dealer for additional details. All performance ratings in accordance with ISO3046, BS5514, ISO8528, and DIN6271 standards.

Standby - See Bulletin 0187500SSB

Demand Response - See Bulletin 10000018250

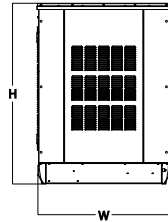
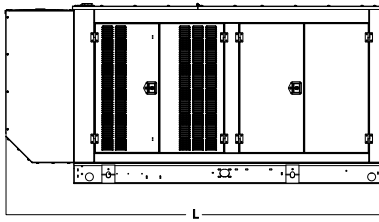
DIMENSIONS AND WEIGHTS*

DEMAND RESPONSE READY



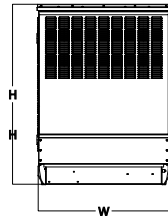
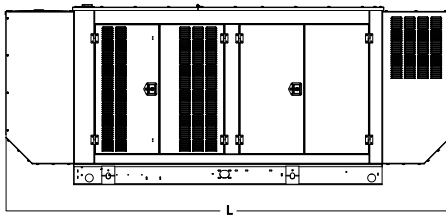
OPEN SET (Includes Exhaust Flex)

| | |
|---------------------|---|
| L x W x H - in (mm) | 116.5 (2,959) x 49.7 (1,262) x 55.6 (1,412) |
| Weight - lbs (kg) | 2,946 (1,336) |



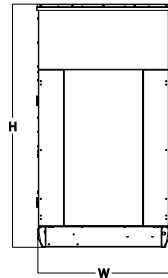
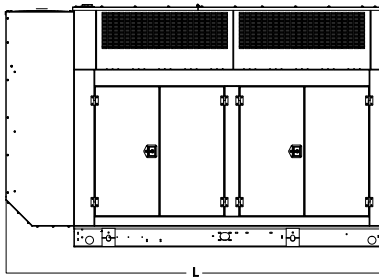
WEATHER PROTECTED ENCLOSURE

| | |
|---------------------|---|
| L x W x H - in (mm) | 143.0 (3,631) x 50.4 (1,280) x 68.2 (1,732) |
| Weight - lbs (kg) | Steel: 3,843 (1,743) Aluminum: 3,384 (1,535) |



LEVEL 1 ACOUSTIC ENCLOSURE

| | |
|---------------------|---|
| L x W x H - in (mm) | 168.5 (4,280) x 50.4 (1,280) x 68.2 (1,732) |
| Weight - lbs (kg) | Steel: 4,129 (1,873) Aluminum: 3,508 (1,591) |



LEVEL 2 ACOUSTIC ENCLOSURE

| | |
|---------------------|---|
| L x W x H - in (mm) | 143.0 (3,632) x 50.4 (1,280) x 91.7 (2,329) |
| Weight - lbs (kg) | Steel: 4,321 (1,960) Aluminum: 3,592 (1,629) |

* All measurements are approximate and for estimation purposes only.

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|--|
| YOUR FACTORY RECOGNIZED GENERAC INDUSTRIAL DEALER |
| |

Specification characteristics may change without notice. Dimensions and weights are for preliminary purposes only. Please contact a Generac Power Systems Industrial Dealer for detailed installation drawings.