Standby Power Rating
175 kW, 219 kVA, 60 Hz

Demand Response Rating
175 kW, 219 kVA, 60 Hz

Prime Power Rating
158 kW, 198 kVA, 60 Hz

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

UL2200, UL6200, UL1236, 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

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.
SG175 | 14.2L | 175 kW INDUSTRIAL SPARK-IGNITED GENERATOR SET EPA Certified Stationary Emergency and Non-Emergency

**STANDARD FEATURES**

**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 (Enclosed Unit Only)
- Oil Temperature Indication and Alarm

**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)
- 1 Year Limited Warranty (Prime Rated Units)
- Silencer Mounted in the Discharge Hood (Enclosed Unit Only)
- Ready to Accept Full Load in <10 Seconds

**ENCLOSURE (If Selected)**
- Rust-Proof Fasteners with Nylon Washers to Protect Finish
- High Performance Sound-Absorbing Material (Sound Attenuated Enclosures)
- Gasketed Doors
- Upward Facing Discharge Hood (Radiator and Exhaust)
- Stainless Steel Lift Off Door Hinges
- Stainless Steel Lockable Handles
- RhinoCoat™ - Textured Polyester Powder Coat Paint

**CONTROL SYSTEM**
- Remote Wireless Software Update Capable
- Wi-Fi®, Bluetooth®, BMS and Remote Telemetry
- Built-In Programmable Logic Eliminates the Need for External Controllers Under Most Conditions
- Ethernet Based Communications Between Generators
- Programmable I/O Channel Properties
- Built-In Diagnostics
- Power Zone® Pro Sync Controller
- 7 Inch Color Touch Screen Display
  - Resitive Color Touch Screen
  - Sunlight Readable (1400 NITS)
  - Easily Identifiable Icons
  - Multi-Lingual
  - On Screen Editable Parameters
  - Key Function Monitoring
  - Three Phase Voltage, Amperage, kW, kVA, and kVAR
  - Selectable Line to Line or Line to Neutral Measurements
  - Frequency
  - Engine Speed
  - Engine Coolant Temperature
  - Engine Oil Pressure
  - Engine Oil Temperature
  - Battery Voltage
  - Hourmeter
  - Warning and Alarm Indication
  - Diagnostics
  - Maintenance Events/Information

**Program Functions**
- NFPA 110 Level 1 Compliant
- Engine Protective Functions
- Alternator Protective Functions
- Digital Engine Governor Control
- Digital Voltage Regulator
- Multiple Programmable Inputs and Outputs
- Remote Display Capability
- Remote Communication via Modbus® RTU, Modbus TCP/IP, and Ethernet 10/100
- Alarm and Event Logging with Real Time Stamping
- Expandable Analog and Digital Inputs and Outputs
- Remote Wireless Software Update Capable
- Wi-Fi®, Bluetooth®, BMS and Remote Telemetry
- Built-In Programmable Logic Eliminates the Need for External Controllers Under Most Conditions
- Ethernet Based Communications Between Generators
- Programmable I/O Channel Properties
- Built-In Diagnostics
- Low Oil Pressure
- Low Coolant Level
- High/Low Coolant Temperature
- Sensor Failure
- Oil Temperature
- Over/Under Speed
- Over/Under Voltage
- Over/Under Frequency
- Over/Under Current
- Over Load
- High/Low Battery Voltage
- Battery Charger Current
- Phase to Phase and Phase to Neutral Short Circuits (I2T Algorithm)
### Configurable Options

<table>
<thead>
<tr>
<th>Engine System</th>
<th>Generator Set</th>
<th>Control System</th>
<th>Demand Response Ready</th>
</tr>
</thead>
<tbody>
<tr>
<td>○ Engine Coolant Heater</td>
<td>○ Demand Response Rating</td>
<td>○ NFPA 110 Level 1 Compliant 21-Light Remote Annunciator</td>
<td>○ NFPA 110 Level 1 Compliant 21-Light Remote Annunciator</td>
</tr>
<tr>
<td>○ Baseframe Cover/Rodent Guard</td>
<td>○ Extended Factory Testing (3-Phase Only)</td>
<td>○ Remote Relay Assembly (8 or 16)</td>
<td>○ Extended Factory Testing (3-Phase Only)</td>
</tr>
<tr>
<td>○ Oil Heater</td>
<td>○ 12 Position Load Center</td>
<td>○ Remote E-Stop (Break Glass-Type, Surface Mount)</td>
<td>○ 12 Position Load Center</td>
</tr>
<tr>
<td>○ Air Filter Restriction Indicator</td>
<td>○ Vapor Recovery Heater</td>
<td>○ Remote E-Stop (Red Mushroom-Type, Surface Mount)</td>
<td>○ Vapor Recovery Heater</td>
</tr>
<tr>
<td>○ Radiator Stone Guard (Open Set Only)</td>
<td>○ Level 1 Fan and Belt Guards (Enclosed Unit Only)</td>
<td>○ Remote E-Stop (Red Mushroom-Type, Flush Mount)</td>
<td>○ Level 1 Fan and Belt Guards (Enclosed Unit Only)</td>
</tr>
<tr>
<td>○ Level 1 Fan and Belt Guards (Enclosed Unit Only)</td>
<td>○ Demand Response Rating</td>
<td>○ 10A Engine Run Relay</td>
<td>○ Demand Response Rating</td>
</tr>
<tr>
<td>○ NPT Flexible Fuel Line</td>
<td>○ Extended Factory Testing (3-Phase Only)</td>
<td>○ Ground Fault Annunciator</td>
<td>○ Extended Factory Testing (3-Phase Only)</td>
</tr>
<tr>
<td>○ 10A UL Listed Battery Charger</td>
<td>○ 12 Position Load Center</td>
<td>○ 120V GFCI and 240V Outlets</td>
<td>○ 120V GFCI and 240V Outlets</td>
</tr>
<tr>
<td>○ Battery Warmer</td>
<td>○ Vapor Recovery Heater</td>
<td>○ Damper Alarm Contacts (with Motorized Dampers Only)</td>
<td>○ Damper Alarm Contacts (with Motorized Dampers Only)</td>
</tr>
<tr>
<td>○ Alternator Upsizing</td>
<td>○ Weather Protected Enclosure</td>
<td>○ 100 dB Alarm Horn</td>
<td>○ 100 dB Alarm Horn</td>
</tr>
<tr>
<td>○ Anti-Condensation Heater</td>
<td>○ Level 1 Sound Attenuated</td>
<td>○ WARRANTY (Standby Gensets Only)</td>
<td>○ WARRANTY (Standby Gensets Only)</td>
</tr>
<tr>
<td>○ Tropical Coating</td>
<td>○ Level 2 Sound Attenuated</td>
<td>○ 2 Year Extended Limited Warranty</td>
<td>○ 2 Year Extended Limited Warranty</td>
</tr>
<tr>
<td>○ Steel Enclosure</td>
<td>○ Level 2 Sound Attenuated with Motorized Dampers</td>
<td>○ 5 Year Limited Warranty</td>
<td>○ 5 Year Limited Warranty</td>
</tr>
<tr>
<td>○ Aluminum Enclosure</td>
<td>○ Steel Enclosure</td>
<td>○ 5 Year Extended Limited Warranty</td>
<td>○ 5 Year Extended Limited Warranty</td>
</tr>
<tr>
<td>○ AC/DC Enclosure Lighting Kit</td>
<td>○ Aluminum Enclosure</td>
<td>○ 7 Year Extended Limited Warranty</td>
<td>○ 7 Year Extended Limited Warranty</td>
</tr>
<tr>
<td>○ Enclosure Heaters (with Motorized Dampers Only)</td>
<td>○ AC/DC Enclosure Lighting Kit</td>
<td>○ 10 Year Extended Limited Warranty</td>
<td>○ 10 Year Extended Limited Warranty</td>
</tr>
<tr>
<td>○ IBC Certification</td>
<td>○ Enclosure Heaters (with Motorized Dampers Only)</td>
<td>○ Door Open Alarm Switch</td>
<td>○ Door Open Alarm Switch</td>
</tr>
<tr>
<td>○ Up to 200 MPH Wind Rating (Contact Factory for Availability)</td>
<td>○ IBC Certification</td>
<td>○ Engineered Options</td>
<td>○ Engineered Options</td>
</tr>
<tr>
<td>○ Door Open Alarm Switch</td>
<td>○ Warranty (Standby Gensets Only)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
### ENGINE SPECIFICATIONS

#### General
- **Make:** Generac
- **Cylinder #:** 6
- **Type:** In-line
- **Displacement - in³ (L):** 864.71 (14.2)
- **Bore - in (mm):** 5.31 (135)
- **Stroke - in (mm):** 6.50 (165)
- **Compression Ratio:** 9.5:1
- **Intake Air Method:** Turbocharged/Aftercooled
- **Number of Main Bearings:** 7
- **Connecting Rods:** Carbon Steel
- **Cylinder Head:** Cast Iron GT250, OHV
- **Cylinder Liners:** Ductile Iron
- **Ignition:** Electronic
- **Piston Type:** Aluminum
- **Crankshaft Type:** Ductile Iron
- **Lifter Type:** Solid
- **Intake Valve Material:** Special Heat-Resistant Steel
- **Exhaust Valve Material:** High Temp Steel Alloy
- **Hardened Valve Seats:** High Temp Steel Alloy

#### Engine Governing
- **Governor:** Electronic
- **Frequency Regulation (Steady State):** ±0.25%

#### Lubrication System
- **Oil Pump Type:** Gear Driving
- **Oil Filter Type:** Full-Flow with Cartridge
- **Crankcase Capacity - qt (L):** 36.2 (34.3)

### ALTERNATOR SPECIFICATIONS
- **Standard Model:** K0200124Y21
- **Poles:** 4
- **Field Type:** Revolving
- **Insulation Class - Rotor:** H
- **Insulation Class - Stator:** H
- **Total Harmonic Distortion:** <5% (3-Phase)
- **Telephone Interference Factor (TIF):** <50

#### Cooling System
- **Cooling System Type:** Pressurized Closed Recovery
- **Fan Type:** Pusher
- **Fan Speed - RPM:** 1,894
- **Fan Diameter - in (mm):** 30 (762)

#### Fuel System
- **Fuel Type:** Natural Gas
- **Carburetor:** Down Draft
- **Secondary Fuel Regulator:** Standard
- **Fuel Shut Off Solenoid:** Standard
- **Operating Fuel Pressure - in H₂O (kPa):** 7 - 11 (1.7 - 2.7)

#### Engine Electrical System
- **System Voltage:** 24 VDC
- **Battery Charger Alternator:** 57.5 A
- **Battery Size:** See Battery Index 0161970SBY
- **Battery Voltage:** (2) - 12 VDC
- **Ground Polarity:** Negative

#### Standard Excitation
- **Batteries:** Permanent Magnet
- **Bearings:** Sealed Ball
- **Coupling:** Direct via Flexible Disc
- **Prototype Short Circuit Test:** Yes
- **Voltage Regulator Type:** Full Digital
- **Number of Sensed Phases:** All
- **Regulation Accuracy (Steady State):** ±0.25%
## OPERATING DATA

### POWER RATINGS - NATURAL GAS

<table>
<thead>
<tr>
<th>Configuration</th>
<th>Standby/Demand Response</th>
<th>Prime</th>
</tr>
</thead>
<tbody>
<tr>
<td>Single-Phase 120/240 VAC @1.0pf</td>
<td>175 kW/175 kVA</td>
<td>158 kW/158 kVA</td>
</tr>
<tr>
<td>Three-Phase 120/208 VAC @0.8pf</td>
<td>175 kW/219 kVA</td>
<td>158 kW/198 kVA</td>
</tr>
<tr>
<td>Three-Phase 277/480 VAC @0.8pf</td>
<td>175 kW/219 kVA</td>
<td>158 kW/198 kVA</td>
</tr>
<tr>
<td>Three-Phase 346/600 VAC @0.8pf</td>
<td>175 kW/219 kVA</td>
<td>158 kW/198 kVA</td>
</tr>
</tbody>
</table>

### FUEL CONSUMPTION RATES*

<table>
<thead>
<tr>
<th>Percent Load</th>
<th>Natural Gas – scfh (m³/hr)</th>
<th>Standby/Demand Response</th>
<th>Prime</th>
</tr>
</thead>
<tbody>
<tr>
<td>25%</td>
<td>900 (25.5)</td>
<td>840 (23.8)</td>
<td></td>
</tr>
<tr>
<td>50%</td>
<td>1,440 (40.8)</td>
<td>1,380 (39.1)</td>
<td></td>
</tr>
<tr>
<td>75%</td>
<td>1,980 (56.1)</td>
<td>1,800 (51.0)</td>
<td></td>
</tr>
<tr>
<td>100%</td>
<td>2,400 (68.0)</td>
<td>2,220 (62.9)</td>
<td></td>
</tr>
</tbody>
</table>

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

### COOLING

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Standby/Demand Response</th>
<th>Prime</th>
</tr>
</thead>
<tbody>
<tr>
<td>Air Flow (Fan Air Flow Across Radiator)</td>
<td>scfm (m³/min)</td>
<td>9,162 (259.4)</td>
</tr>
<tr>
<td>Coolant Flow</td>
<td>gpm (Lpm)</td>
<td>90 (340.7)</td>
</tr>
<tr>
<td>Coolant System Capacity</td>
<td>gal (L)</td>
<td>11 (39.7)</td>
</tr>
<tr>
<td>Maximum Operating Ambient Temperature</td>
<td>°F (°C)</td>
<td>122 (50)</td>
</tr>
<tr>
<td>Maximum Radiator Backpressure</td>
<td>in H₂O (kPa)</td>
<td>0.5 (0.12)</td>
</tr>
</tbody>
</table>

### COMBUSTION AIR REQUIREMENTS

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Standby/Demand Response</th>
<th>Prime</th>
</tr>
</thead>
<tbody>
<tr>
<td>Flow at Rated Power - scfm (m³/min)</td>
<td>379 (10.7)</td>
<td>354 (10.0)</td>
</tr>
</tbody>
</table>

### ENGINE

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Standby/Demand Response</th>
<th>Prime</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rated Engine Speed</td>
<td>RPM 1,800</td>
<td>1,800</td>
</tr>
<tr>
<td>Horsepower at Rated kW**</td>
<td>hp 266</td>
<td>240</td>
</tr>
<tr>
<td>Piston Speed</td>
<td>ft/min (m/min)</td>
<td>1,950 (594)</td>
</tr>
<tr>
<td>BMEP</td>
<td>psi (kPa)</td>
<td>135 (932)</td>
</tr>
</tbody>
</table>

### EXHAUST

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Standby/Demand Response</th>
<th>Prime</th>
</tr>
</thead>
<tbody>
<tr>
<td>Exhaust Flow (Rated Output)</td>
<td>scfm (m³/min)</td>
<td>1,270 (36)</td>
</tr>
<tr>
<td>Max. Backpressure (Post Silencer)</td>
<td>inHg (kPa)</td>
<td>0.75 (2.54)</td>
</tr>
<tr>
<td>Exhaust Temp (Rated Output - Post Silencer) °F (°C)</td>
<td>1,350 (732)</td>
<td>1,318 (714)</td>
</tr>
</tbody>
</table>

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

** Derate – 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
Prime - See Bulletin 0187510SSB

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

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Standby - See Bulletin 0187500SSB
Demand Response - See Bulletin 10000018250
Prime - See Bulletin 0187510SSB
## DIMENSIONS AND WEIGHTS*

**OPEN SET (Includes Exhaust Flex)**

<table>
<thead>
<tr>
<th>Dimension</th>
<th>Measurement (in)</th>
<th>Measurement (mm)</th>
</tr>
</thead>
<tbody>
<tr>
<td>L x W x H</td>
<td>128.0 (3,251) x 52.9 (1,344) x 62.3 (1,582)</td>
<td></td>
</tr>
</tbody>
</table>

**Weight - lbs (kg)**

<table>
<thead>
<tr>
<th>Material</th>
<th>Measurement (lbs)</th>
<th>Measurement (kg)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Steel</td>
<td>5,281 - 6,031</td>
<td>2,395 - 2,735</td>
</tr>
<tr>
<td>Aluminum</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**WEATHER PROTECTED ENCLOSURE**

<table>
<thead>
<tr>
<th>Dimension</th>
<th>Measurement (in)</th>
<th>Measurement (mm)</th>
</tr>
</thead>
<tbody>
<tr>
<td>L x W x H</td>
<td>154.4 (3,922) x 54.0 (1,372) x 69.8 (1,773)</td>
<td></td>
</tr>
</tbody>
</table>

**Weight - lbs (kg)**

<table>
<thead>
<tr>
<th>Material</th>
<th>Steel</th>
<th>Aluminum</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>6,261 - 7,596</td>
<td>6,795 - 7,286</td>
</tr>
</tbody>
</table>

**LEVEL 1 SOUND ATTENUATED ENCLOSURE**

<table>
<thead>
<tr>
<th>Dimension</th>
<th>Measurement (in)</th>
<th>Measurement (mm)</th>
</tr>
</thead>
<tbody>
<tr>
<td>L x W x H</td>
<td>179.9 (4,569) x 54.0 (1,372) x 69.8 (1,773)</td>
<td></td>
</tr>
</tbody>
</table>

**Weight - lbs (kg)**

<table>
<thead>
<tr>
<th>Material</th>
<th>Steel</th>
<th>Aluminum</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>6,566 - 8,059</td>
<td>5,926 - 7,000</td>
</tr>
</tbody>
</table>

**LEVEL 2 SOUND ATTENUATED ENCLOSURE**

<table>
<thead>
<tr>
<th>Dimension</th>
<th>Measurement (in)</th>
<th>Measurement (mm)</th>
</tr>
</thead>
<tbody>
<tr>
<td>L x W x H</td>
<td>154.4 (3,922) x 54.0 (1,372) x 93.3 (2,370)</td>
<td></td>
</tr>
</tbody>
</table>

**Weight - lbs (kg)**

<table>
<thead>
<tr>
<th>Material</th>
<th>Steel</th>
<th>Aluminum</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>6,801 - 8,632</td>
<td>6,027 - 7,247</td>
</tr>
</tbody>
</table>

* 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. Please contact a Generac Power Systems Industrial Dealer for detailed installation drawings.