Standby Power Rating
10 kW, 13 kVA, 60 Hz

Prime Power Rating*
9 kW, 11 kVA, 60 Hz

Powering Ahead
For over 50 years, Generac has provided innovative design and superior manufacturing.

Generac ensures superior quality by designing and manufacturing most of its generator components, including alternators, enclosures and base tanks, control systems and communications software.

Generac gensets utilize a wide variety of options, configurations and arrangements, allowing us to meet the standby power needs of practically every application.

Generac searched globally to ensure the most reliable engines power our generators. We choose only engines that have already been proven in heavy-duty industrial applications under adverse conditions.

Generac is committed to ensuring our customers’ service support continues after their generator purchase.
STANDARD FEATURES

ENGINE SYSTEM
- Oil Drain Extension
- Air Filter Restriction Indicator
- Air Cleaner
- Fan Guard
- Stainless Steel Flexible Exhaust Connection
- Factory Filled Oil and Coolant
- Radiator Duct Adapter (Open Set Only)
- Critical Silencer (Enclosed Units Only)
- Engine Coolant Heater

Fuel System
- Fuel Lockoff Solenoid
- Primary Fuel Filter

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

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
- Brushless Excitation
- Sealed Bearing
- Rotor Dynamically Spin Balanced
- Amortisseur Winding (3-Phase Only)
- Full Load Capacity Alternator
- Protective Thermal Switch

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 Units Only)

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 Hoods (Radiator and Exhaust)
- Stainless Steel Lift Off Door Hinges
- Stainless Steel Lockable Handles
- RhinoCoat™ - Textured Polyester Powder Coat Paint

FUEL TANKS (If Selected)
- UL 142/ULC S601
- Double Wall
- Normal and Emergency Vents
- Sloped Top
- Sloped Bottom
- Factory Pressure Tested
- Rupture Basin Alarm
- Fuel Level
- Check Valve In Supply and Return Lines
- RhinoCoat™ - Textured Polyester Powder Coat Paint
- Stainless Steel Hardware

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)

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
- 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)
**SD010 | 2.2L | 10 kW**

**INDUSTRIAL DIESEL GENERATOR SET**

**EPA Certified Stationary Emergency**

### CONFIGURABLE OPTIONS

#### ENGINE SYSTEM
- Oil Heater
- Critical Silencer (Open Set Only)
- Radiator Stone Guard
- Level 1 Fan and Belt Guards (Enclosed Units Only)

#### FUEL SYSTEM
- NPT Flexible Fuel Line

#### ELECTRICAL SYSTEM
- 10A UL Listed Battery Charger
- Battery Warmer

#### ALTERNATOR SYSTEM
- Anti-Condensation Heater
- Tropical Coating
- Permanent Magnet Excitation

#### GENERATOR SET
- Extended Factory Testing (3-Phase Only)
- 8 Position Load Center
- Pad Vibration Isolation
- Spring Vibration Isolators

#### CIRCUIT BREAKER OPTIONS
- Main Line Circuit Breaker
- 2nd Main Line Circuit Breaker
- Shunt Trip and Auxiliary Contact
- Electronic Trip Breakers

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

#### 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

### ENGINEERED OPTIONS

#### ENGINE SYSTEM
- Coolant Heater Isolation Ball Valves
- Fluid Containment Pan

#### CONTROL SYSTEM
- Spare Inputs (x4) / Outputs (x4)
- Battery Disconnect Switch

#### ALTERNATOR SYSTEM
- 3rd Breaker System

#### GENERATOR SET
- Special Testing

#### FUEL TANKS
- UL2085 Tank
- Stainless Steel Tanks
- Special Fuel Tanks
- Vent Extensions
## ENGINE SPECIFICATIONS

### General
- **Make**: Perkins
- **EPA Emissions Compliance**: Stationary Emergency
- **EPA Emissions Reference**: See Emission Data Sheet
- **Cylinder #**: 4
- **Type**: In-Line
- **Displacement - in³ (L)**: 135 (2.22)
- **Bore - in (mm)**: 3.3 (84.0)
- **Stroke - in (mm)**: 3.9 (100.0)
- **Compression Ratio**: 23.3:1
- **Intake Air Method**: Turbocharged
- **Cylinder Head**: Cast Iron
- **Piston Type**: Aluminum
- **Crankshaft Type**: Forged Steel

### Engine Governing
- **Governor**: Electronic Isochronous
- **Frequency Regulation (Steady State)**: ±0.5%

### Lubrication System
- **Oil Pump Type**: Gear Driven
- **Oil Filter Type**: Full-Flow Cartridge
- **Crankcase Capacity - qt (L)**: 9.3 (10.6)

### Cooling System
- **Cooling System Type**: Closed Recovery
- **Fan Type**: Pusher
- **Fan Speed - RPM**: 1,980
- **Fan Diameter - in (mm)**: 18.0 (457.2)

### Fuel System
- **Fuel Type**: Ultra Low Sulfur Diesel Fuel
- **Fuel Specifications**: ASTM
- **Fuel Filtering (Microns)**: 5
- **Fuel Inject Pump**: Distribution Injection Pump
- **Fuel Pump Type**: Engine Driven Gear
- **Injector Type**: Mechanical
- **Fuel Supply Line - in (mm)**: 0.31 (7.94) ID
- **Fuel Return Line - in (mm)**: 0.19 (4.76) ID

### Engine Electrical System
- **System Voltage**: 12 VDC
- **Battery Charger Alternator**: Standard
- **Battery Size**: See Battery Index 0161970SBY
- **Battery Voltage**: 12 VDC
- **Ground Polarity**: Negative

## ALTERNATOR SPECIFICATIONS

### Standard Model
- **K0025124Y21**
- **Poles**: 4
- **Field Type**: Revolving
- **Insulation Class - Rotor**: H
- **Insulation Class - Stator**: H
- **Total Harmonic Distortion**: <5% (3-Phase Only)
- **Telephone Interference Factor (TIF)**: < 50

### Standard Excitation
- **Bearings**: Single Sealed
- **Coupling**: Direct via Flexible Disc
- **Load Capacity - Standby**: 100%
- **Prototype Short Circuit Test**: Yes
- **Voltage Regulator Type**: Digital
- **Number of Sensed Phases**: All
- **Regulation Accuracy (Steady State)**: ±0.25%
### POWER RATINGS

| Single-Phase 120/240 VAC @1.0pf | 10 kW | Standby: 42 |
| Three-Phase 120/208 VAC @0.8pf | 10 kW | Standby: 35 |
| Three-Phase 120/240 VAC @0.8pf | 10 kW | Standby: 30 |
| Three-Phase 277/480 VAC @0.8pf | 10 kW | Standby: 15 |
| Three-Phase 346/600 VAC @0.8pf | 10 kW | Standby: 12 |

### MOTOR STARTING CAPABILITIES (skVA)

<table>
<thead>
<tr>
<th>skVA vs. Voltage Dip</th>
<th>277/480 VAC</th>
<th>30%</th>
<th>208/240 VAC</th>
<th>30%</th>
</tr>
</thead>
<tbody>
<tr>
<td>K0025124Y21</td>
<td>38</td>
<td></td>
<td>K0025124Y21</td>
<td>28</td>
</tr>
</tbody>
</table>

### FUEL CONSUMPTION RATES*

<table>
<thead>
<tr>
<th>Fuel Pump Lift- ft (m)</th>
<th>Standby</th>
</tr>
</thead>
<tbody>
<tr>
<td>3 (1)</td>
<td></td>
</tr>
</tbody>
</table>

| Total Fuel Pump Flow (Combustion + Return) - gph (Lph) | 16.6 (63.0) |

<table>
<thead>
<tr>
<th>Diesel - gph (Lph)</th>
<th>Standby</th>
</tr>
</thead>
<tbody>
<tr>
<td>Percent Load</td>
<td></td>
</tr>
<tr>
<td>25%</td>
<td>0.7 (2.5)</td>
</tr>
<tr>
<td>50%</td>
<td>0.8 (3.0)</td>
</tr>
<tr>
<td>75%</td>
<td>0.9 (3.4)</td>
</tr>
<tr>
<td>100%</td>
<td>1.1 (4.0)</td>
</tr>
</tbody>
</table>

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

### COOLING

<table>
<thead>
<tr>
<th>Coolant Flow</th>
<th>gpm (Lpm)</th>
<th>Standby</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>48.9 (56.2)</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Coolant System Capacity</th>
<th>gal (L)</th>
<th>Standby</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2.5 (9.5)</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Heat Rejection to Coolant</th>
<th>BTU/hr (kW)</th>
<th>Standby</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>53,900 (16)</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Inlet Air</th>
<th>scfm (m³/min)</th>
<th>Standby</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2,800 (79)</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Maximum Operating Ambient Temperature</th>
<th>°F (°C)</th>
<th>Standby</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>122 (50)</td>
<td></td>
</tr>
</tbody>
</table>

| Maximum Operating Ambient Temperature (Before Derate) | See Bulletin No. 0199280SSD |
| Maximum Additional Radiator Backpressure | in H₂O (kPa) | Standby |
|                                          | 0.5 (0.12) | |

### COMBUSTION AIR REQUIREMENTS

| Flow at Rated Power - scfm (m³/min) | 76.2 (2.2) |

### ENGINE

<table>
<thead>
<tr>
<th>Rated Engine Speed</th>
<th>RPM</th>
<th>1,800</th>
</tr>
</thead>
<tbody>
<tr>
<td>Horsepower at Rated kW**</td>
<td>hp</td>
<td>15.8</td>
</tr>
<tr>
<td>Piston Speed</td>
<td>ft/min (m/min)</td>
<td>1,181 (360)</td>
</tr>
<tr>
<td>BMEP</td>
<td>psi (kPa)</td>
<td>51.7 (356.5)</td>
</tr>
</tbody>
</table>

### EXHAUST

<table>
<thead>
<tr>
<th>Exhaust Flow (Rated Output)</th>
<th>scfm (m³/min)</th>
<th>Standby</th>
</tr>
</thead>
<tbody>
<tr>
<td>Maximum Allowable Backpressure (Post Turbocharger)</td>
<td>inHg (kPa)</td>
<td>1.5 (5.1)</td>
</tr>
<tr>
<td>Exhaust Temperature (Rated Output)</td>
<td>°F (°C)</td>
<td>420 (215.5)</td>
</tr>
</tbody>
</table>

** 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
Prime - See Bulletin 0187510SSB
### OPEN SET (Includes Exhaust Flex)

<table>
<thead>
<tr>
<th>Run Time - Hours</th>
<th>Usable Capacity - Gal (L)</th>
<th>L x W x H - in (mm)</th>
<th>Weight - lbs (kg)</th>
</tr>
</thead>
<tbody>
<tr>
<td>No Tank</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>49</td>
<td>54 (204)</td>
<td>76.0 (1,930) x 37.4 (950) x 44.8 (1,138)</td>
<td>1,522 (691)</td>
</tr>
<tr>
<td>120</td>
<td>132 (501)</td>
<td>76.0 (1,930) x 37.4 (950) x 57.8 (1,468)</td>
<td>1,171 (909)</td>
</tr>
<tr>
<td>172</td>
<td>190 (719)</td>
<td>76.0 (1,930) x 37.4 (950) x 73.8 (1,874)</td>
<td>2,446 (1,111)</td>
</tr>
<tr>
<td>191</td>
<td>211 (799)</td>
<td>76.0 (1,930) x 37.4 (950) x 81.8 (2,078)</td>
<td>2,441 (1,108)</td>
</tr>
<tr>
<td>272</td>
<td>300 (1,136)</td>
<td>92.9 (2,360) x 37.4 (950) x 85.3 (2,167)</td>
<td>2,504 (1,136)</td>
</tr>
</tbody>
</table>

### WEATHER PROTECTED ENCLOSURE

<table>
<thead>
<tr>
<th>Run Time - Hours</th>
<th>Usable Capacity - Gal (L)</th>
<th>L x W x H - in (mm)</th>
<th>Weight - lbs (kg)</th>
</tr>
</thead>
<tbody>
<tr>
<td>No Tank</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>49</td>
<td>54 (204)</td>
<td>94.8 (2,409) x 38.0 (965) x 49.5 (1,258)</td>
<td>1,894 (860)</td>
</tr>
<tr>
<td>120</td>
<td>132 (501)</td>
<td>94.8 (2,409) x 38.0 (965) x 74.5 (1,893)</td>
<td>2,604 (1,182)</td>
</tr>
<tr>
<td>172</td>
<td>190 (719)</td>
<td>94.8 (2,409) x 38.0 (965) x 78.5 (1,994)</td>
<td>2,818 (1,280)</td>
</tr>
<tr>
<td>191</td>
<td>211 (799)</td>
<td>94.8 (2,409) x 38.0 (965) x 86.5 (2,196)</td>
<td>2,813 (1,277)</td>
</tr>
<tr>
<td>272</td>
<td>300 (1,136)</td>
<td>94.8 (2,409) x 38.0 (965) x 90.0 (2,287)</td>
<td>2,876 (1,305)</td>
</tr>
</tbody>
</table>

### LEVEL 1 ACOUSTIC ENCLOSURE

<table>
<thead>
<tr>
<th>Run Time - Hours</th>
<th>Usable Capacity - Gal (L)</th>
<th>L x W x H - in (mm)</th>
<th>Weight - lbs (kg)</th>
</tr>
</thead>
<tbody>
<tr>
<td>No Tank</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>49</td>
<td>54 (204)</td>
<td>112.5 (2,857) x 38.0 (965) x 49.5 (1,258)</td>
<td>2,027 (921)</td>
</tr>
<tr>
<td>120</td>
<td>132 (501)</td>
<td>112.5 (2,857) x 38.0 (965) x 74.5 (1,893)</td>
<td>2,737 (1,243)</td>
</tr>
<tr>
<td>172</td>
<td>190 (719)</td>
<td>112.5 (2,857) x 38.0 (965) x 78.5 (1,994)</td>
<td>2,951 (1,341)</td>
</tr>
<tr>
<td>191</td>
<td>211 (799)</td>
<td>112.5 (2,857) x 38.0 (965) x 86.5 (2,196)</td>
<td>2,946 (1,338)</td>
</tr>
<tr>
<td>272</td>
<td>300 (1,136)</td>
<td>112.5 (2,857) x 38.0 (965) x 90.0 (2,287)</td>
<td>3,009 (1,366)</td>
</tr>
</tbody>
</table>

### LEVEL 2 ACOUSTIC ENCLOSURE

<table>
<thead>
<tr>
<th>Run Time - Hours</th>
<th>Usable Capacity - Gal (L)</th>
<th>L x W x H - in (mm)</th>
<th>Weight - lbs (kg)</th>
</tr>
</thead>
<tbody>
<tr>
<td>No Tank</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>49</td>
<td>54 (204)</td>
<td>94.8 (2,409) x 38.0 (965) x 61.1 (1,551)</td>
<td>2,032 (923)</td>
</tr>
<tr>
<td>120</td>
<td>132 (501)</td>
<td>94.8 (2,409) x 38.0 (965) x 86.1 (2,186)</td>
<td>2,742 (1,245)</td>
</tr>
<tr>
<td>172</td>
<td>190 (719)</td>
<td>94.8 (2,409) x 38.0 (965) x 90.1 (2,287)</td>
<td>2,956 (1,343)</td>
</tr>
<tr>
<td>191</td>
<td>211 (799)</td>
<td>94.8 (2,409) x 38.0 (965) x 98.1 (2,491)</td>
<td>2,951 (1,340)</td>
</tr>
<tr>
<td>272</td>
<td>300 (1,136)</td>
<td>94.8 (2,409) x 38.0 (965) x 101.6 (2,580)</td>
<td>3,014 (1,368)</td>
</tr>
</tbody>
</table>

* All measurements are approximate and for estimation purposes only. Specification characteristics may change without notice. Please contact a Generac Power Systems Industrial Dealer for detailed installation drawings.