Standby Power Rating
230 kW, 288 kVA, 60 Hz

Prime Power Rating*
207 kW, 259 kVA, 60 Hz

*EPA Certified Prime ratings are not available in the US or its Territories
*Built in the USA using domestic and foreign parts

Codes and Standards
Generac products are designed to the following standards:

- UL2200, UL508, UL142, UL489
- 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
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.
### Engine System
- Oil Drain Extension
- Air Cleaner
- Fan Guard
- Stainless Steel Flexible Exhaust Connection
- Factory Filled Oil
- Radiator Duct Adapter (Open Set Only)
- Critical Exhaust Silencer (Enclosed Only)

### 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
- 120 VAC Coolant Heater

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

### Alternator System
- GenProtect™
- 12 Leads (3-Phase, Non 600V)
- Class H Insulation Material
- Vented Rotor
- 2/3 Pitch
- Skewed Stator
- Auxiliary Voltage Regulator Power Winding
- Permanent Magnet Excitation
- Sealed Bearings
- Automated Manufacturing (Winding, Insertion, Lacing, Varnishing)
- Rotor Dynamically Spin Balanced (Get Tolerance)
- Amortisseur Winding
- 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 Warranty (Prime Rated Units)
- Silencer Mounted in the Discharge Hood (Enclosed Only)

### Control System
- Digital H Control Panel - Dual 4x20 Display
- Programmable Crank Limiter
- 7-Day Programmable Exerciser
- Special Applications Programmable PLC
- RS-232/485
- All-Phase Sensing DVR
- Full System Status
- Utility Monitoring
- 2-Wire Start Compatible
- Power Output (kW)
- Power Factor
- KW Hours, Total & Last Run
- Real/Reactive/Apparent Power
- All Phase AC Voltage
- All Phase Currents
- Oil Pressure
- Coolant Temperature
- Coolant Level
- Engine Speed
- Battery Voltage
- Frequency
- 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)
- NFPA110 Level I and II (Programmable)
- Customizable Alarms, Warnings, and Events
- Modbus protocol
- Predictive Maintenance algorithm
- Sealed Boards
- Password Parameter Adjustment Protection Single Point Ground
- 15 Channel Data Logging
- 0.2 msec High Speed Data Logging
- Alarm Information Automatically Comes Up On the Display

### Enclosure (if selected)
- Rust-Proof Fasteners with Nylon Washers to Protect Finish
- High Performance Sound-Absorbing Material (L1 & L2)
- Gasketed Doors
- Stamped Air-Intake Louvers
- Air Discharge Hoods for Radiator-Upward Pointing
- Stainless Steel Lift Off Door Hinges
- Stainless Steel Lockable Handles
- Rhino Coat™ - Textured Polyester Powder Coat

### Tanks (if selected)
- UL 142
- Double Wall
- Vents
- Sloped Top
- Sloped Bottom
- Factory Pressure Tested (2 psi)
- Rupture Basin Alarm
- Fuel Level
- Check Valve In Supply and Return Lines
- Rhino Coat™ - Textured Polyester Powder Coat
- Stainless Steel Hardware

### Alarms
- Oil Pressure (Pre-Programmable Low Pressure Shutdown)
- Coolant Temperature (Pre-Programmed High Temp Shutdown)
- Coolant Level (Pre-Programmed Low Level Shutdown)
- Low Fuel Pressure Alarm
- Engine Speed (Pre-Programmed Over Speed Shutdown)
- Battery Voltage Warning
- Alarms & Warnings Time and Date Stamped
- Alarms & Warnings for Transient and Steady State Conditions
- Snap Shots of Key Operation Parameters During Alarms & Warnings
- Alarms and Warnings Spelled Out (No Alarm Codes)
### CONFIGURABLE OPTIONS

#### ENGINE SYSTEM
- Oil Make-Up System
- Oil Heater
- Industrial Exhaust Silencer (Open Set)

#### FUEL SYSTEM
- Flexible Fuel Lines
- Primary Fuel Filter

#### ELECTRICAL SYSTEM
- 10A UL Battery Charger
- 2.5A 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
- AC/DC Enclosure Lighting Kit
- 12 VDC Enclosure Light Kit
- 120 VAC Enclosure Light Kit

#### CONTROL SYSTEM
- 21-Light Remote Annunciator
- Remote Relay Panel (8 or 16)
- Oil Temperature Sender with Indication 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)
- Remote Communication - Modem
- Remote Communication - Ethernet
- 10A Run Relay
- Ground Fault Indication and Protection Functions

#### GENERATOR SET
- Gen-Link Communications Software (English Only)
- Extended Factory Testing
- IBC Seismic Certification
- 8 Position Load Center
- 2 Year Extended Warranty
- 5 Year Warranty
- 5 Year Extended Warranty
- 7 Year Extended Warranty
- 10 Year Extended Warranty

#### ENCLOSURE
- Standard Enclosure
- Level 1 Sound Attenuation
- Level 2 Sound Attenuation
- Steel Enclosure
- Aluminum Enclosure
- Up to 200 MPH Wind Load Rating*

#### TANKS (SIZE ON LAST PAGE)
- Electric Fuel Level
- Mechanical Fuel Level
- 8” Fill Extension
- 13” Fill Extension
- 19” Fill Extension

### ENGINEERED OPTIONS

#### ENGINE SYSTEM
- Coolant Heater Ball Valves
- Fluid Containment Pans
- Block Heaters

#### ALTERNATOR SYSTEM
- 3rd Breaker System

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

#### GENERATOR SET
- Special Testing

#### ENCLOSURE
- Motorized Dampers
- Door Switch for Intrusion Alarm
- Enclosure Ambient Heaters

#### TANKS
- Overfill Protection Valve
- UL2085 Tank
- ULC S-601 Tank
- Special Fuel Tanks
- Vent Extensions

### RATING DEFINITIONS

Standby - Applicable for a varying emergency load for the duration of a utility power outage with no overload capability.

Prime - Applicable for supplying power to a varying load in lieu of utility for an unlimited amount of running time. A 10% overload capacity is available for 1 out of every 12 hours. The Prime Power option is only available on International applications. Power ratings in accordance with ISO 8528-1, Second Edition.

*Consult factory for availability
## ENGINE SPECIFICATIONS

**General**
- **Make**: Iveco/FPT
- **EPA Emissions Compliance**: Stationary Emergency
- **EPA Emissions Reference**: See Emission Data Sheet
- **Cylinder #**: 6
- **Type**: In-Line
- **Displacement - L (cu. in)**: 8.7 (530.91)
- **Bore - mm (in)**: 117 (4.61)
- **Stroke - mm (in)**: 135 (5.31)
- **Compression Ratio**: 16.5:1
- **Intake Air Method**: Turbocharged/Aftercooled
- **Cylinder Head**: 4-Valve
- **Piston Type**: Aluminum
- **Crankshaft Type**: Dropped Forged Steel

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

**Lubrication System**
- **Oil Pump Type**: Gear
- **Oil Filter Type**: Full Flow
- **Crankcase Capacity - L (qts)**: 28 (29.57)

## Cooling System
- **Cooling System Type**: Closed Recovery
- **Water Pump Type**: Pre-Lubed, Self Sealing
- **Fan Type**: Pusher
- **Fan Speed (rpm)**: 2538
- **Fan Diameter - mm (in)**: 762 (30.0)
- **Coolant Heater Wattage**: 2000
- **Coolant Heater Standard Voltage**: 240V

## Fuel System
- **Fuel Type**: Ultra Low Sulfur Diesel Fuel
- **Fuel Specifications**: ASTM
- **Fuel Filtering (microns)**: 5
- **Fuel Inject Pump Make**: Electronic
- **Fuel Pump Type**: Engine Driven Gear
- **Injector Type**: Common Rail
- **Engine Type**: Direct Injection
- **Fuel Supply Line - mm (in.)**: 12.7 (0.5) NPT
- **Fuel Return Line - mm (in.)**: 12.7 (0.5) NPT

## Engine Electrical System
- **System Voltage**: 24 VDC
- **Battery Charger Alternator**: Std
- **Battery Size**: See Battery Index 0161970SBY
- **Battery Voltage**: 12 VDC
- **Ground Polarity**: Negative

## ALTERNATOR SPECIFICATIONS

- **Standard Model**: 520 mm
- **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 Excitation
- **Bearings**: Single Sealed Cartridge
- **Coupling**: Direct, Flexible Disc
- **Prototype Short Circuit Test**: Yes
- **Voltage Regulator Type**: Digital
- **Number of Sensed Phases**: All
- **Regulation Accuracy (Steady State)**: ±0.25%
SD230 | 8.7L | 230 kW
INDUSTRIAL DIESEL GENERATOR SET
EPA Certified Stationary Emergency

OPERATING DATA

POWER RATINGS

<table>
<thead>
<tr>
<th>Type</th>
<th>Standby 230 kW</th>
<th>Amps</th>
</tr>
</thead>
<tbody>
<tr>
<td>Single-Phase 120/240 VAC @1.0pf</td>
<td>230 kW</td>
<td>958</td>
</tr>
<tr>
<td>Three-Phase 120/208 VAC @0.8pf</td>
<td>230 kW</td>
<td>798</td>
</tr>
<tr>
<td>Three-Phase 120/240 VAC @0.8pf</td>
<td>230 kW</td>
<td>692</td>
</tr>
<tr>
<td>Three-Phase 277/480 VAC @0.8pf</td>
<td>230 kW</td>
<td>346</td>
</tr>
<tr>
<td>Three-Phase 346/600 VAC @0.8pf</td>
<td>230 kW</td>
<td>277</td>
</tr>
</tbody>
</table>

STARTING CAPABILITIES (sKVA)

<table>
<thead>
<tr>
<th>Voltage</th>
<th>Alternator kW</th>
<th>10%</th>
<th>15%</th>
<th>20%</th>
<th>25%</th>
<th>30%</th>
<th>35%</th>
</tr>
</thead>
<tbody>
<tr>
<td>480 VAC</td>
<td>Standard</td>
<td>250</td>
<td>263</td>
<td>395</td>
<td>527</td>
<td>658</td>
<td>790</td>
</tr>
<tr>
<td></td>
<td>Upsize 1</td>
<td>300</td>
<td>303</td>
<td>454</td>
<td>605</td>
<td>757</td>
<td>908</td>
</tr>
<tr>
<td></td>
<td>Upsize 2</td>
<td>350</td>
<td>383</td>
<td>575</td>
<td>767</td>
<td>958</td>
<td>1150</td>
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<table>
<thead>
<tr>
<th>Voltage</th>
<th>Alternator kW</th>
<th>10%</th>
<th>15%</th>
<th>20%</th>
<th>25%</th>
<th>30%</th>
<th>35%</th>
</tr>
</thead>
<tbody>
<tr>
<td>208/240 VAC</td>
<td>Standard</td>
<td>250</td>
<td>197</td>
<td>296</td>
<td>395</td>
<td>494</td>
<td>593</td>
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<tr>
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<td>Upsize 1</td>
<td>300</td>
<td>277</td>
<td>341</td>
<td>454</td>
<td>568</td>
<td>681</td>
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<tr>
<td></td>
<td>Upsize 2</td>
<td>350</td>
<td>280</td>
<td>410</td>
<td>535</td>
<td>640</td>
<td>770</td>
</tr>
</tbody>
</table>

FUEL CONSUMPTION RATES*

<table>
<thead>
<tr>
<th>Fuel Pump Lift: ft (m)</th>
<th>3 (1)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Fuel Pump Flow (Combustion + Return) - gal/hr (l/hr)</td>
<td>26 (98)</td>
</tr>
<tr>
<td><strong>Standby</strong></td>
<td>gal/min (l/min)</td>
</tr>
<tr>
<td>Coolant System Capacity</td>
<td>gal (l)</td>
</tr>
<tr>
<td>Heat Rejection to Coolant</td>
<td>BTU/hr</td>
</tr>
<tr>
<td>Inlet Air</td>
<td>cfm (m3/hr)</td>
</tr>
<tr>
<td>Max. Operating Radiator Air Temp</td>
<td>°F (°C)</td>
</tr>
<tr>
<td>Max. Operating Ambient Temperature (Before Derate)</td>
<td>°F (°C)</td>
</tr>
<tr>
<td>Maximum Radiator Backpressure</td>
<td>in H2O</td>
</tr>
</tbody>
</table>

COMBUSTION AIR REQUIREMENTS

| Flow at Rated Power cfm (m3/min) | 660 (18.69) |

ENGINE

| Rated Engine Speed | rpm | 1800 |
| Horsepower at Rated kW** | hp | 359 |
| Piston Speed | ft/min | 1593 |
| BMEP | psi | 305 |

EXHAUST

| Exhaust Flow (Rated Output) | cfm (m3/min) | 1424 (40.4) |
| Max. Backpressure (Post Silencer) | in Hg (Kpa) | 1.5 (5.1) |
| Exhaust Temp (Rated Output - Post Silencer) | °F (°C) | 955 (513) |
| Exhaust Outlet Size (Open Set) | mm (in) | 101.6 (4) |

** 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 consult a Generac Power Systems Industrial Dealer for additional details. All performance ratings in accordance with ISO3046, BS5514, ISO8528 and DIN6271 standards.
### 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>10</td>
<td>153 (579.2)</td>
<td>128 (3251) x 54 (1372) x 58 (1473)</td>
<td>4465 (2025)</td>
</tr>
<tr>
<td>25</td>
<td>372 (1407)</td>
<td>128 (3251) x 54 (1372) x 83 (2108)</td>
<td>5892 (2673)</td>
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<tr>
<td>40</td>
<td>589 (2227)</td>
<td>128 (3251) x 54 (1372) x 95 (2413)</td>
<td>6309 (2862)</td>
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<tr>
<td>47</td>
<td>693 (2623.3)</td>
<td>136 (3454) x 54 (1372) x 95 (2413)</td>
<td>6060 (2749)</td>
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<tr>
<td>64</td>
<td>946 (3581)</td>
<td>208 (5283) x 54 (1372) x 99 (2515)</td>
<td>7490 (3397)</td>
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<tr>
<td>90</td>
<td>1325 (5015.7)</td>
<td>278 (7061) x 54 (1372) x 99 (2515)</td>
<td>8505 (3858)</td>
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</table>

### STANDARD 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>
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</thead>
<tbody>
<tr>
<td>No Tank</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>10</td>
<td>153 (579.2)</td>
<td>155 (3937) x 54 (1372) x 70 (1778)</td>
<td>941 (427)</td>
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<td>372 (1407)</td>
<td>155 (3937) x 54 (1372) x 83 (2108)</td>
<td>474 (215)</td>
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<td>40</td>
<td>589 (2227)</td>
<td>155 (3937) x 54 (1372) x 95 (2413)</td>
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<tr>
<td>47</td>
<td>693 (2623.3)</td>
<td>155 (3937) x 54 (1372) x 107 (2718)</td>
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</tr>
<tr>
<td>64</td>
<td>946 (3581)</td>
<td>208 (5283) x 54 (1372) x 111 (2819)</td>
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<tr>
<td>90</td>
<td>1325 (5015.7)</td>
<td>278 (7061) x 54 (1372) x 111 (2819)</td>
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</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>
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<td></td>
<td></td>
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<tr>
<td>10</td>
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<td>180 (4572) x 54 (1372) x 70 (1778)</td>
<td>1246 (565)</td>
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<td>372 (1407)</td>
<td>180 (4572) x 54 (1372) x 83 (2108)</td>
<td>606 (275)</td>
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<tr>
<td>40</td>
<td>589 (2227)</td>
<td>180 (4572) x 54 (1372) x 95 (2413)</td>
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</tr>
<tr>
<td>47</td>
<td>693 (2623.3)</td>
<td>180 (4572) x 54 (1372) x 107 (2718)</td>
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</tr>
<tr>
<td>64</td>
<td>946 (3581)</td>
<td>234 (5944) x 54 (1372) x 111 (2819)</td>
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<td>90</td>
<td>1325 (5015.7)</td>
<td>304 (7722) x 54 (1372) x 111 (2819)</td>
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</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>10</td>
<td>153 (579.2)</td>
<td>155 (3937) x 54 (1372) x 93 (2362)</td>
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<td>25</td>
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<td>208 (5283) x 54 (1372) x 132 (3353)</td>
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<td>1325 (5015.7)</td>
<td>278 (7061) x 54 (1372) x 132 (3353)</td>
<td></td>
</tr>
</tbody>
</table>

* All measurements are approximate and for estimation purposes only.

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