Standby Power Rating
300 kW, 375 kVA, 60 Hz

Prime Power Rating
270 kW, 338 kVA, 60 Hz

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

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
- Heavy Duty Air Cleaner
- Fan Guard
- Stainless Steel Flexible Exhaust Connection
- Factory Filled Oil & Coolant
- Radiator Duct Adapter (Open Set Only)

Fuel System

- Fuel Lockoff Solenoid
- Secondary Fuel Filter

Cooling System

- Closed Coolant Recovery System
- UV/Ozone Resistant Hoses
- Radiator Drain Extension
- 50/50 Ethylene Glycol Antifreeze
- 240 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 Bearing
- Automated Manufacturing (Winding, Insertion, Lacing, Varnishing)
- Rotor Dynamically Spin Balanced
- Amortisseur Winding
- Full Load Capacity Alternator
- Protective Thermal Switch

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
- Rhino Coat™ - Textured Polyester Powder Coat Paint

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 Paint
- Stainless Steel Hardware

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 Only)

CONTROL SYSTEM

Digital G Paralleling Control Panel - Touchscreen

Program Functions

- Programmable Crank Limiter
- 7-Day Programmable Exerciser
- Special Applications Programmable Logic Controller
- RS-232/485 Communications
- 3 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)

Full System Status Display

- Power Output (kW)
- Power Factor
- kW Hours, Total & Last Run
- Real/Reactive/Apparent Power
- All Phase AC Voltage
- All Phase Currents

PARALLELING CONTROLS

- Auto-Synchronization Process
- Isochronous Load Sharing
- Reverse Power Protection

- Maximum Power Protection
- Electrically Operated, Mechanically Held Paralleling Switch
- Sync Check System
- Independent On-Board Paralleling

- Optional Programmable Logic Full Auto Back-Up Controls (PLS)
- Shunt Trip and Auxiliary Contact

ALARMS AND WARNINGS

- Oil Pressure
- Coolant Temperature
- Coolant Level
- Engine Speed
- Battery Voltage
- Frequency

- Oil Pressure
- Coolant Temperature
- Coolant Level
- Engine Overspeed
- Battery Voltage
- Alarms & Warnings Time and Date Stamped
- 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
- Critical Exhaust Silencer

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

**ELECTRICAL SYSTEM**
- 10A UL Battery Charger
- Battery Warmer

**ALTERNATOR SYSTEM**
- Alternator Upsizing
- Anti-Condensation Heater
- Tropical Coating

**CIRCUIT BREAKER OPTIONS**
- Main Line Circuit Breaker
- Electronic Trip Breakers

**ENGINEERED OPTIONS**

**ENGINE SYSTEM**
- Coolant Heater Ball Valves
- Fluid Containment Pan

**CONTROL SYSTEM**
- Battery Disconnect Switch

**ALTERNATOR SYSTEM**
- 2nd Breaker System

**GENERATOR SET**
- GenLink® Communications Software (English Only)
- IBC Seismic Certification
- 2 Year Extended Warranty
- 5 Year Warranty
- 5 Year Extended Warranty
- 7 Year Extended Warranty
- 10 Year Extended Warranty

**ENCLOSURE**
- Weather Protected
- Level 1 Sound Attenuation
- Level 2 Sound Attenuation
- Steel Enclosure
- Aluminum Enclosure
- Up to 200 MPH Wind Load Rating*
- AC/DC Enclosure Lighting Kit

**CONTROL SYSTEM**
- NFPA 110 Compliant 21-Light Remote Annunciator
- Remote Relay Assembly (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

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

**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.
**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)**: 10.3 (628.54)
- **Bore - mm (in)**: 125 (4.92)
- **Stroke - mm (in)**: 140 (5.51)
- **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)**: 30 (31.68)

**Cooling System**

- **Cooling System Type**: Closed Recovery
- **Water Pump Type**: Pre-Lubed, Self Sealing
- **Fan Type**: Pusher
- **Fan Speed (rpm)**: 2250
- **Fan Diameter - mm (in)**: 762 (30.0)

**Fuel System**

- **Fuel Type**: Ultra Low Sulfur Diesel #2
- **Carburetor**: 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**: Standard
- **Battery Size**: See Battery Index 0161970SBY
- **Battery Voltage**: (2) 12 VDC
- **Ground Polarity**: Negative

### ALTERNATOR SPECIFICATIONS

<table>
<thead>
<tr>
<th>Standard Model</th>
<th>Generac 520 mm</th>
</tr>
</thead>
<tbody>
<tr>
<td>Poles</td>
<td>4</td>
</tr>
<tr>
<td>Field Type</td>
<td>Revolving</td>
</tr>
<tr>
<td>Insulation Class - Rotor</td>
<td>H</td>
</tr>
<tr>
<td>Insulation Class - Stator</td>
<td>H</td>
</tr>
<tr>
<td>Total Harmonic Distortion</td>
<td>&lt;5%</td>
</tr>
<tr>
<td>Telephone Interference Factor (TIF)</td>
<td>&lt;50</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Standard Excitation</th>
<th>Permanent Magnet</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bearings</td>
<td>Single Sealed Cartridge</td>
</tr>
<tr>
<td>Coupling</td>
<td>Direct, Flexible Disc</td>
</tr>
<tr>
<td>Load Capacity - Standby</td>
<td>100%</td>
</tr>
<tr>
<td>Prototype Short Circuit Test</td>
<td>Yes</td>
</tr>
<tr>
<td>Voltage Regulator Type</td>
<td>Digital</td>
</tr>
<tr>
<td>Number of Sensed Phases</td>
<td>All</td>
</tr>
<tr>
<td>Regulation Accuracy (Steady State)</td>
<td>±0.25%</td>
</tr>
</tbody>
</table>
# OPERATING DATA

## POWER RATINGS

<table>
<thead>
<tr>
<th></th>
<th>Standby</th>
<th>Prime</th>
</tr>
</thead>
<tbody>
<tr>
<td>Three-Phase 120/208 VAC @0.8pf</td>
<td>288 kW</td>
<td>270 kW</td>
</tr>
<tr>
<td></td>
<td>Amps: 1000</td>
<td>Amps: 937</td>
</tr>
<tr>
<td>Three-Phase 277/480 VAC @0.8pf</td>
<td>300 kW</td>
<td>270 kW</td>
</tr>
<tr>
<td></td>
<td>Amps: 451</td>
<td>Amps: 406</td>
</tr>
<tr>
<td>Three-Phase 346/600 VAC @0.8pf</td>
<td>300 kW</td>
<td>270 kW</td>
</tr>
<tr>
<td></td>
<td>Amps: 361</td>
<td>Amps: 325</td>
</tr>
</tbody>
</table>

## STARTING CAPABILITIES (sKVA)

<table>
<thead>
<tr>
<th></th>
<th>480 VAC</th>
<th>208/240 VAC</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alternator kW</td>
<td>10%</td>
<td>15%</td>
</tr>
<tr>
<td>Standard</td>
<td>350</td>
<td>383</td>
</tr>
<tr>
<td>Upsize 1</td>
<td>400</td>
<td>387</td>
</tr>
<tr>
<td>Upsize 2</td>
<td>500</td>
<td>457</td>
</tr>
</tbody>
</table>

## FUEL CONSUMPTION RATES*

<table>
<thead>
<tr>
<th></th>
<th>Diesel - gph (lph)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fuel Pump Lift - ft (m)</td>
<td>3 (1)</td>
</tr>
<tr>
<td>Total Fuel Pump Flow (Combustion + Return) gph (lph)</td>
<td>31 (117)</td>
</tr>
</tbody>
</table>

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

## COOLING

<table>
<thead>
<tr>
<th></th>
<th>Standby</th>
<th>Prime</th>
</tr>
</thead>
<tbody>
<tr>
<td>Coolant Flow per Minute gal/min (l/min)</td>
<td>95 (360)</td>
<td>95 (360)</td>
</tr>
<tr>
<td>Coolant System Capacity gal (l)</td>
<td>16.6 (63)</td>
<td>16.6 (63)</td>
</tr>
<tr>
<td>Heat Rejection to Coolant BTU/hr</td>
<td>814,783</td>
<td>733,673</td>
</tr>
<tr>
<td>Inlet Air cfm (m³/hr)</td>
<td>14,505 (411)</td>
<td>14,505 (411)</td>
</tr>
<tr>
<td>Maximum Radiator Backpressure in H₂O</td>
<td>0.5</td>
<td>0.5</td>
</tr>
</tbody>
</table>

## COMBUSTION AIR REQUIREMENTS

<table>
<thead>
<tr>
<th></th>
<th>Standby</th>
<th>Prime</th>
</tr>
</thead>
<tbody>
<tr>
<td>Flow at Rated Power cfm (m³/min)</td>
<td>850 (24.07)</td>
<td>765 (21.67)</td>
</tr>
</tbody>
</table>

## ENGINE

<table>
<thead>
<tr>
<th></th>
<th>Standby</th>
<th>Prime</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rated Engine Speed rpm</td>
<td>1800</td>
<td>1800</td>
</tr>
<tr>
<td>Horsepower at Rated kW** hp</td>
<td>480</td>
<td>432</td>
</tr>
<tr>
<td>Piston Speed ft/min</td>
<td>1654</td>
<td>1654</td>
</tr>
<tr>
<td>BMEP psi</td>
<td>336</td>
<td>302</td>
</tr>
</tbody>
</table>

## EXHAUST

<table>
<thead>
<tr>
<th></th>
<th>Standby</th>
<th>Prime</th>
</tr>
</thead>
<tbody>
<tr>
<td>Exhaust Flow (Rated Output) cfm (m³/min)</td>
<td>2240 (63.4)</td>
<td>2016 (57.1)</td>
</tr>
<tr>
<td>Max. Backpressure (Post Silencer) in Hg (Kpa)</td>
<td>1.5 (5.1)</td>
<td>1.5 (5.1)</td>
</tr>
<tr>
<td>Exhaust Temp (Rated Output - Post Silencer) °F (°C)</td>
<td>1020 (549)</td>
<td>918 (492)</td>
</tr>
<tr>
<td>Exhaust Outlet Size (Open Set) mm (in)</td>
<td>101.6 (4)</td>
<td>101.6 (4)</td>
</tr>
</tbody>
</table>

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

Dératation – Operational characteristics consider maximum ambient conditions. Dérate 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>136 (3454) x 58 (1473) x 68 (1727)</td>
<td>5816 (2638)</td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>183 (693)</td>
<td>136 (3454) x 58 (1473) x 81 (2057)</td>
<td>6764 (3068)</td>
</tr>
<tr>
<td>20</td>
<td>438 (1659)</td>
<td>136 (3454) x 58 (1473) x 93 (2382)</td>
<td>7076 (3210)</td>
</tr>
<tr>
<td>31</td>
<td>693 (2624)</td>
<td>136 (3454) x 58 (1473) x 105 (2667)</td>
<td>7379 (3347)</td>
</tr>
<tr>
<td>43</td>
<td>946 (3518)</td>
<td>208 (5283) x 58 (1473) x 108 (2743)</td>
<td>8841 (4010)</td>
</tr>
<tr>
<td>60</td>
<td>1325 (5015)</td>
<td>278 (7061) x 58 (1473) x 108 (2743)</td>
<td>9856 (4471)</td>
</tr>
</tbody>
</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>
</tr>
</thead>
<tbody>
<tr>
<td>No Tank</td>
<td>175 (4445) x 58 (1473) x 78 (1981)</td>
<td>1295 (588)</td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>183 (693)</td>
<td>175 (4445) x 58 (1473) x 91 (2311)</td>
<td>501 (227)</td>
</tr>
<tr>
<td>20</td>
<td>438 (1659)</td>
<td>175 (4445) x 58 (1473) x 103 (2616)</td>
<td>1470 (667)</td>
</tr>
<tr>
<td>31</td>
<td>693 (2624)</td>
<td>175 (4445) x 58 (1473) x 115 (2921)</td>
<td>935 (425)</td>
</tr>
<tr>
<td>43</td>
<td>946 (3518)</td>
<td>208 (5283) x 58 (1473) x 118 (2997)</td>
<td>1470 (667)</td>
</tr>
<tr>
<td>60</td>
<td>1325 (5015)</td>
<td>278 (7061) x 58 (1473) x 118 (2997)</td>
<td>935 (425)</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>200 (5080) x 58 (1473) x 78 (1981)</td>
<td>2515 (1141)</td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>183 (693)</td>
<td>200 (5080) x 58 (1473) x 91 (2311)</td>
<td>1131 (514)</td>
</tr>
<tr>
<td>20</td>
<td>438 (1659)</td>
<td>200 (5080) x 58 (1473) x 103 (2616)</td>
<td>2515 (1141)</td>
</tr>
<tr>
<td>31</td>
<td>693 (2624)</td>
<td>200 (5080) x 58 (1473) x 115 (2921)</td>
<td>1131 (514)</td>
</tr>
<tr>
<td>43</td>
<td>946 (3518)</td>
<td>234 (5944) x 58 (1473) x 118 (2997)</td>
<td>1470 (667)</td>
</tr>
<tr>
<td>60</td>
<td>1325 (5015)</td>
<td>304 (7722) x 58 (1473) x 118 (2997)</td>
<td>935 (425)</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>180.6 (4586) x 57.6 (1463) x 107.2 (2724)</td>
<td>2515 (1141)</td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>183 (693)</td>
<td>180.6 (4586) x 57.6 (1463) x 120 (3048)</td>
<td>1131 (514)</td>
</tr>
<tr>
<td>20</td>
<td>438 (1659)</td>
<td>180.6 (4586) x 57.6 (1463) x 132 (3353)</td>
<td>2515 (1141)</td>
</tr>
<tr>
<td>31</td>
<td>693 (2624)</td>
<td>180.6 (4586) x 57.6 (1463) x 144 (3658)</td>
<td>1131 (514)</td>
</tr>
<tr>
<td>43</td>
<td>946 (3518)</td>
<td>208 (5283) x 57.6 (1463) x 148 (3759)</td>
<td>2515 (1141)</td>
</tr>
<tr>
<td>60</td>
<td>1325 (5015)</td>
<td>278 (7061) x 57.6 (1463) x 146 (3708)</td>
<td>1131 (514)</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.