

SD200 | 8.7L | 200 kW

INDUSTRIAL DIESEL GENERATOR SET

EPA Certified Stationary Emergency

Standby Power Rating

200 kW, 250 kVA, 60 Hz

Prime Power Rating*

180 kW, 225 kVA, 60 Hz

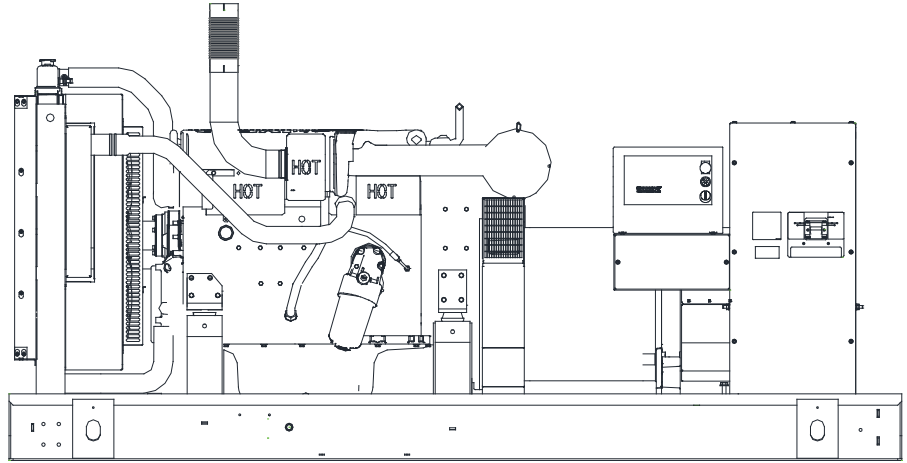


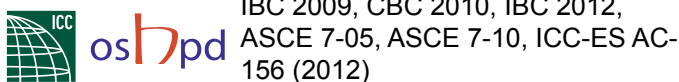
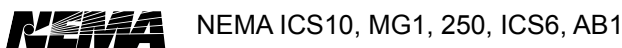
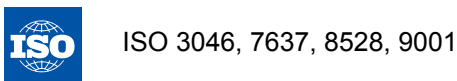
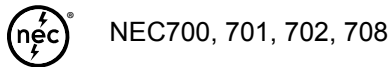
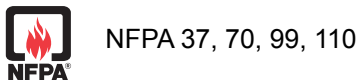
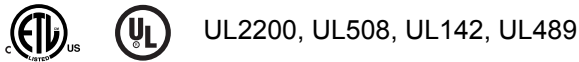
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*EPA Certified Prime ratings are not available in the US or its Territories

Codes and Standards

Generac products are designed to the following standards:



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 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
- 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 Limited Warranty (Prime Rated Units)
- Silencer Mounted in the Discharge Hood (Enclosed Only)

ENCLOSURE (If Selected)

- Rust-Proof Fasteners with Nylon Washers to Protect Finish
- High Performance Sound-Absorbing Material (Sound Attenuated 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

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
- RhinoCoat™ - Textured Polyester Powder Coat
- 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
- 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)
- 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
- 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 Alarm
- 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

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

GENERATOR SET

- Gen-Link Communications Software (English Only)
- Extended Factory Testing
- IBC Seismic Certification
- 12 Position Load Center

ENCLOSURE

- Standard Enclosure
- Level 1 Sound Attenuation
- Level 2 Sound Attenuation
- Level 2 Sound Attenuation with Motorized Dampers
- Steel Enclosure
- Aluminum Enclosure
- Up to 200 MPH Wind Load Rating*
- AC/DC Enclosure Lighting 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
- 10A Run Relay
- Ground Fault Indication and Protection Functions

TANKS (Size On The Last Page)

- Electric Fuel Level
- Mechanical Fuel Level
- 8" Fill Extension
- 13" Fill Extension
- 19" Fill Extension

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 Ball Valves
- Fluid Containment Pans
- Block Heaters

CONTROL SYSTEM

- Spare Inputs (x4) / Outputs (x4)
- Battery Disconnect Switch

ALTERNATOR SYSTEM

- 3rd Breaker System

GENERATOR SET

- Special Testing

ENCLOSURE

- Door Switch for Intrusion Alarm
- Enclosure Ambient Heaters

TANKS

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

* Consult factory for availability

SD200 | 8.7L | 200 kW

INDUSTRIAL DIESEL GENERATOR SET

EPA Certified Stationary Emergency

APPLICATION AND ENGINEERING DATA

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) | 2,538 |
| Fan Diameter - mm (in) | 762 (30.0) |

Fuel System

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

ALTERNATOR SPECIFICATIONS

| | |
|-------------------------------------|----------------|
| Standard Model | Generac 520 mm |
| Poles | 4 |
| Field Type | Revolving |
| Insulation Class - Rotor | H |
| Insulation Class - Stator | H |
| Total Harmonic Distortion | <5% (3-Phase) |
| Telephone Interference Factor (TIF) | < 50 |

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

SD200 | 8.7L | 200 kW

INDUSTRIAL DIESEL GENERATOR SET

EPA Certified Stationary Emergency

OPERATING DATA

POWER RATINGS

| Standby | | |
|---------------------------------|--------|-----------|
| Single-Phase 120/240 VAC @1.0pf | 200 kW | Amps: 833 |
| Three-Phase 120/208 VAC @0.8pf | 200 kW | Amps: 694 |
| Three-Phase 120/240 VAC @0.8pf | 200 kW | Amps: 601 |
| Three-Phase 277/480 VAC @0.8pf | 200 kW | Amps: 301 |
| Three-Phase 346/600 VAC @0.8pf | 200 kW | Amps: 241 |

STARTING CAPABILITIES (sKVA)

sKVA vs. Voltage Dip

| 277/480 VAC | | | | | | | | 208/240 VAC | | | | | | | |
|-------------|-----|-----|-----|-----|-----|-------|-------|-------------|-----|-----|-----|-----|-----|-----|-----|
| Alternator | kW | 10% | 15% | 20% | 25% | 30% | 35% | Alternator | kW | 10% | 15% | 20% | 25% | 30% | 35% |
| Standard | 200 | 187 | 280 | 373 | 467 | 560 | 653 | Standard | 200 | 140 | 210 | 280 | 350 | 420 | 490 |
| Upsize 1 | 300 | 303 | 454 | 605 | 757 | 908 | 1,059 | Upsize 1 | 300 | 277 | 341 | 454 | 568 | 681 | 794 |
| Upsize 2 | 350 | 383 | 575 | 767 | 958 | 1,150 | 1,342 | Upsize 2 | 350 | 280 | 410 | 535 | 640 | 770 | 900 |

FUEL CONSUMPTION RATES*

| Fuel Pump Lift- ft (m) | | Diesel - gal/hr (l/hr) | |
|--|--|------------------------|------------|
| | | Percent Load | Standby |
| 3 (1) | | 25% | 4.4 (16.7) |
| | | 50% | 8.3 (31.4) |
| Total Fuel Pump Flow (Combustion + Return) - gal/hr (l/hr) | | 75% | 11.9 (45) |
| 26 (98) | | 100% | 14.8 (56) |

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

COOLING

| | | Standby |
|---|-----------------------------|-------------|
| Coolant Flow per Minute | gal/min (l/min) | 63.3 (240) |
| Coolant System Capacity | gal (l) | 12.7 (49.2) |
| Heat Rejection to Coolant | BTU/hr | 545,646 |
| Inlet Air | cfm (m ³ /hr) | 8,872 (251) |
| Maximum Operating Ambient Temperature | °F (°C) | 122 (50) |
| Maximum Operating Ambient Temperature (Before Derate) | See Bulletin No. 0199280SSD | |
| Maximum Radiator Backpressure | in H ₂ O (kPa) | 0.5 (0.12) |

COMBUSTION AIR REQUIREMENTS

| Standby | |
|---|------------|
| Flow at Rated Power cfm (m ³ /min) | 595 (16.8) |

ENGINE

| Standby | |
|--------------------------|--------------|
| Rated Engine Speed | rpm 1,800 |
| Horsepower at Rated kW** | hp 320 |
| Piston Speed | ft/min 1,593 |
| BMEP | psi 265 |

EXHAUST

| Standby | |
|---|--|
| Exhaust Flow (Rated Output) | cfm (m ³ /min) 1,345 (38.1) |
| Max. Backpressure (Post Silencer) | inHg (Kpa) 1.5 (5.1) |
| Exhaust Temp (Rated Output - Post Silencer) | °F (°C) 920 (493) |

** 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.

Standby - See Bulletin 0187500SSB

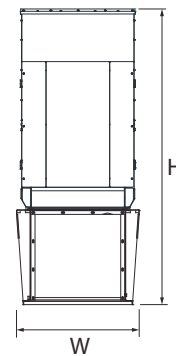
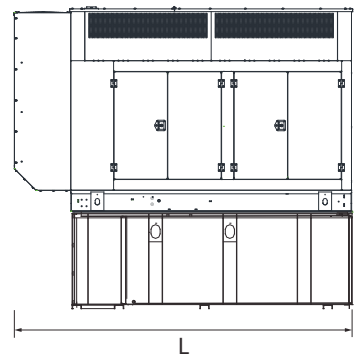
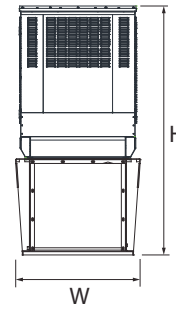
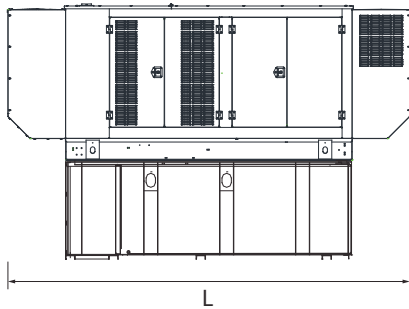
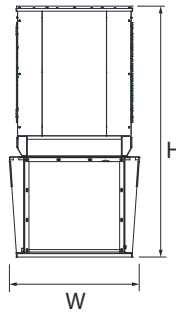
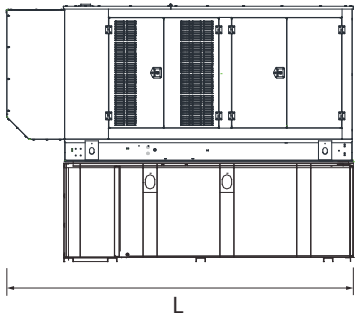
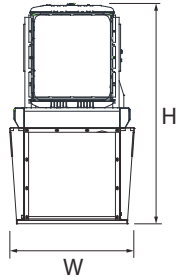
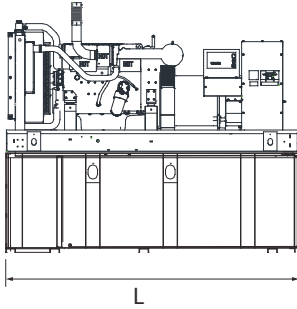
Prime - See Bulletin 0187510SSB

SD200 | 8.7L | 200 kW

INDUSTRIAL DIESEL GENERATOR SET

EPA Certified Stationary Emergency

DIMENSIONS AND WEIGHTS*



OPEN SET (Includes Exhaust Flex)

| Run Time Hours | Usable Capacity Gal (L) | L x W x H (in (mm)) | Weight lbs (kg) |
|----------------|-------------------------|---------------------------------------|-----------------|
| No Tank | - | 128 (3,251) x 54 (1,372) x 58 (1,473) | 4,465 (2,025) |
| 10 | 153 (579.2) | 128 (3,251) x 54 (1,372) x 71 (1,803) | 5,470 (2,481) |
| 25 | 372 (1,407) | 128 (3,251) x 54 (1,372) x 83 (2,108) | 5,892 (2,673) |
| 40 | 589 (2,227) | 128 (3,251) x 54 (1,372) x 95 (2,413) | 6,309 (2,862) |
| 47 | 693 (2,623.3) | 136 (3,454) x 54 (1,372) x 95 (2,413) | 6,060 (2,749) |
| 64 | 946 (3,581) | 208 (5,283) x 54 (1,372) x 99 (2,515) | 7,490 (3,397) |
| 90 | 1,325 (5,015.7) | 278 (7,061) x 54 (1,372) x 99 (2,515) | 8,505 (3,858) |

STANDARD ENCLOSURE

| Run Time Hours | Usable Capacity Gal (L) | L x W x H (in (mm)) | Weight lbs (kg) Enclosure Only | |
|----------------|-------------------------|--|--------------------------------|-----------|
| | | | Steel | Aluminum |
| No Tank | - | 155 (3,937) x 54 (1,372) x 70 (1,778) | | |
| 10 | 153 (579.2) | 155 (3,937) x 54 (1,372) x 83 (2,108) | | |
| 25 | 372 (1,407) | 155 (3,937) x 54 (1,372) x 95 (2,413) | | |
| 40 | 589 (2,227) | 155 (3,937) x 54 (1,372) x 107 (2,718) | 941 (427) | 474 (215) |
| 47 | 693 (2,623.3) | 155 (3,937) x 54 (1,372) x 107 (2,718) | | |
| 64 | 946 (3,581) | 208 (5,283) x 54 (1,372) x 111 (2,819) | | |
| 90 | 1,325 (5,015.7) | 278 (7,061) x 54 (1,372) x 111 (2,819) | | |

LEVEL 1 ACOUSTIC ENCLOSURE

| Run Time Hours | Usable Capacity Gal (L) | L x W x H (in (mm)) | Weight lbs (kg) Enclosure Only | |
|----------------|-------------------------|--|--------------------------------|-----------|
| | | | Steel | Aluminum |
| No Tank | - | 180 (4,572) x 54 (1,372) x 70 (1,778) | | |
| 10 | 153 (579.2) | 180 (4,572) x 54 (1,372) x 83 (2,108) | | |
| 25 | 372 (1,407) | 180 (4,572) x 54 (1,372) x 95 (2,413) | | |
| 40 | 589 (2,227) | 180 (4,572) x 54 (1,372) x 107 (2,718) | 1,246 (565) | 606 (275) |
| 47 | 693 (2,623.3) | 180 (4,572) x 54 (1,372) x 107 (2,718) | | |
| 64 | 946 (3,581) | 234 (5,944) x 54 (1,372) x 111 (2,819) | | |
| 90 | 1,325 (5,015.7) | 304 (7,722) x 54 (1,372) x 111 (2,819) | | |

LEVEL 2 ACOUSTIC ENCLOSURE

| Run Time Hours | Usable Capacity Gal (L) | L x W x H (in (mm)) | Weight lbs (kg) Enclosure Only | |
|----------------|-------------------------|--|--------------------------------|-----------|
| | | | Steel | Aluminum |
| No Tank | - | 155 (3,937) x 54 (1,372) x 93 (2,362) | | |
| 10 | 153 (579.2) | 155 (3,937) x 54 (1,372) x 106 (2,692) | | |
| 25 | 372 (1,407) | 155 (3,937) x 54 (1,372) x 118 (2,997) | | |
| 40 | 589 (2,227) | 155 (3,937) x 54 (1,372) x 130 (3,302) | 1,482 (672) | 708 (321) |
| 47 | 693 (2,623.3) | 155 (3,937) x 54 (1,372) x 130 (3,302) | | |
| 64 | 946 (3,581) | 208 (5,283) x 54 (1,372) x 132 (3,353) | | |
| 90 | 1,325 (5,015.7) | 278 (7,061) x 54 (1,372) x 132 (3,353) | | |

* 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.