SD2000 & MD2000 | 65.4 L | 2000 kW

INDUSTRIAL DIESEL GENERATOR SET

EPA Certified Stationary Emergency

Standby Power Rating

2000 kW, 2500 kVA, 60 Hz

*Assembled in the USA using domestic and foreign parts

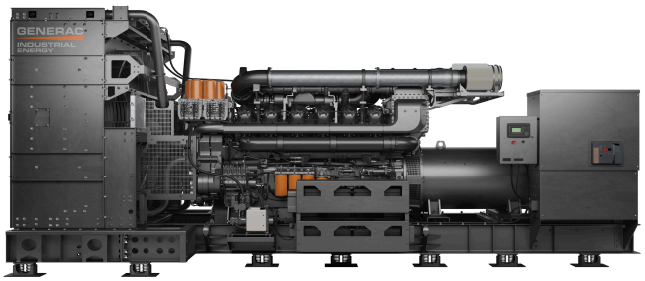

Image used for illustration purposes only

Codes and Standards

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

- UL2200, UL6200, UL1236, UL489
- CSA 22.2-100, ULC S601
- BS5514 and DIN 6271
- SAE J1349
- NFPA 20, 37, 70, 110
- NEC700, 701, 702
- NEMA ICS10, MG1, 250, ICS6, AB1
- ANSI C62.41

Powering Ahead

For over 60 years, Generac has provided innovative design and superior manufacturing.

Generac provides 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 for the most reliable engines to 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.

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GENERAC INDUSTRIAL ENERGY

STANDARD FEATURES

ENGINE SYSTEM
- Oil Drain Extension
- Air Filter Restriction Indicator
- Air Cleaner
- Fan and Belt Guards
- Stainless Steel Flexible Exhaust Connection
- Factory Filled Oil and Coolant
- Radiator Duct Adapter
- Engine Oil Heater
- Engine Coolant Heater
- Engine Pre-lubrication Pump
- Coolant Heater Ball Valves
- Fuel Cooler

FUEL SYSTEM
- Flexible Fuel Lines
- Primary and Secondary Fuel Filter

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

ELECTRICAL SYSTEM
- Battery Charging Alternator
- Battery Cables
- Battery Tray
- Rubber-Booted Engine Electrical Connections
- Solenoid Activated Starter Motor

ALTERNATOR SYSTEM
- Class H Insulation Material
- 2/3 Pitch
- Skewed Stator
- Permanent Magnet Excitation
- Sealed Bearing
- Full Load Capacity Alternator
- Bearing/Winding Temperature Monitoring

GENERATOR SET
- Separation of Circuits
- Separation of Circuits - Multiple Breakers
- Standard Factory Testing
- 2 Year Limited Warranty (Standby Rated Units)

CONTROL SYSTEM

DSE G8601 Controller

Key Features
- Advanced PLC Functionality
- Multi-Purpose PIDs
- Virtual Inputs
- On-Screen Mimic (SLDs)
- Multiple Application Support
- Multi-Level Pin Protected Front Panel Editor
- Integral LCD Display Heater
- Enhanced High-Resolution 240 x 128 Pixel Display
- Single Generator Control
- Latest ECU/ECM Support
- Touch Screen Panel PC Support
- Zero Sequence Voltage Protection
- Integral Gasket (IP65 protection)

Standard Protections
- Low Coolant Level
- High/Low Coolant Temperature
- Oil Temperature
- Overspeed
- Over/Under Voltage
- Over/Under Frequency
- Over/Under Current
- Over Load
- Battery Voltage
- Battery Charger Current
- Phase to Phase and Phase to Neutral Short Circuits (I^2T Algorithm)
- Ground Fault

Control Panel
- Auto/Off/Manual
- Indication Through Display Screen
- Audible Alarm and Silence
- Not in Auto Indication

Voltage Regulation
- Digital Control
- Three-Phase Sensing
- Negative Power Limit
- Loss of Sensing Protection
- Fault Protection (I^2T Function)
- High Voltage Limit
- Low Voltage Limit
- Maximum Power Limit
- ±0.5% Voltage Regulation

Governor Functionality
- Speed Control through ECM Integration
- Soft Start Ramping (Multiple Steps)

Qualification Testing
- Life Test in Environmental Chamber
- Temperature Rating -22 °F to +122 °F (-30 °C to +50 °C)
- Vibration Tested and Protected

Connections (Actual I/O May Vary Due to Configuration)
- 4 Analog Inputs
- 12 Digital Inputs
  - 9 Active Low Digital Outputs

Customer Ports
- Ethernet
- 2 RS-485
- 2 USB
- CANBus

Codes and Standards
- UL 6200
- CE
- NFPA 110 Capable

More Features
- Built-in Governor
- Digital AVR Support
- Multiple Language Support
- Three-Phase Generator Sensing and Protection
- Three-Phase Bus Sensing
- Generator Current, Protection and Power Monitoring
- Configurable Timers
- Integrated SNMP
- Data Logging
- PC Configuration
- DSENet® (Expansion Support)
- Flexible I/O (Inputs/Outputs)
- Automatic and Front Panel Breaker Control
- Power-Save Mode

CONFIGURABLE OPTIONS

ENGINE SYSTEM
- Critical Grade Silencer
- Hospital Grade Silencer
- CCV (Closed Crankcase Ventilation)
- Oil Heater
- Radiator Duct Flange
- Radiator Stone Guard
- Duplex Fuel Water Separator
- Oil Make Up Kit

ELECTRICAL SYSTEM
- 20A UL Listed Battery Charger (x2)
- Battery Warmer
- Redundant Starting System

ALTERNATOR SYSTEM
- Alternator Upsizing
- Anti-Condensation Heater

CIRCUIT BREAKER OPTIONS
- Main Line Circuit Breaker
- 2nd Main Line Circuit Breaker
- 3rd Main Line Circuit Breaker
- 4th Main Line Circuit Breaker
- Shunt Trip and Auxiliary Contact
- Electronic Trip Breakers

GENERATOR SET
- Spring Isolators (Standard/Seismic)
- 24 Position Load Center
- Extended Factory Testing

CONTROL SYSTEM
- NFPA 110 Level 1 Compliant 21-Light Remote Annunciator
- Remote Output Relays (8 or 16)
- Remote E-Stop (Break Glass-Type, Surface Mount)
- Remote E-Stop (Red Mushroom-Type, Surface Mount)
- Remote E-Stop (Red Mushroom-Type, Flush Mount)
- 100 dB Alarm Horn
- Ground Fault Annunciator
- 10 Amp Engine Run Relay
- 120V GFCI Outlet
- Flush Mount Annunciator Kit
- Damper Alarm Contacts (with Motorized Dampers Only)

WARRANTY (Standby Gensets Only)
- 2 Year Extended Limited Warranty
- 5 Year Extended Limited Warranty
- 7 Year Extended Limited Warranty
- 10 Year Extended Limited Warranty

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GENERAC INDUSTRIAL ENERGY

APPLICATION AND ENGINEERING DATA

ENGINE SPECIFICATIONS

General

Make	Baudouin
EPA Emissions Compliance	Tier 2
EPA Emissions Reference	See Emissions Data Sheet
Cylinder #	20
Type	V
Displacement - in^3 (L)	3,991.0 (65.4)
Bore - in (mm)	5.91 (150)
Stroke - in (mm)	7.28 (185)
Compression Ratio	15:1
Intake Air Method	Turbocharged/Aftercooled
Cylinder Head	4-Valve

Engine Governing

Governor	Electronic
Frequency Regulation (Steady State)	5%

Lubrication System

Oil Pump Type	Gear Driven
Oil Filter Type	Full Flow Spin-On Cartridge
Crankcase Capacity - qt (L)	304 (288)

Cooling System

Cooling System Type	Pressurized Closed
Fan Type	Pusher
Fan Diameter - in (mm)	88 (2,235)

Fuel System

Fuel Type	Ultra Low Sulfur Diesel #2
Fuel Specifications	ASTM
Fuel Filtering (Microns)	4
Fuel Inject Pump	High Pressure Common Rail
Injector Type	Electronic
Fuel Supply Line O.D. Minimum - in (mm)	0.748 (19)
Fuel Return Line O.D. Minimum - in (mm)	0.748 (19)
Governor	ECU
Governor Steady State Speed Stability at Constant Load (ISO 8528–5 Class G3)[2]	≤ ±0.5%
Max. restriction at fuel inlet (Bar)	0.1

Engine Electrical System

System Voltage	24 VDC
Battery Charger Alternator	Standard
Battery Size	See Battery Index 0161970SBY
Battery Voltage	24 VDC
Ground Polarity	Negative

ALTERNATOR SPECIFICATIONS

Standard Model	L2050064N24
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
Coupling	Direct Drive
Bearings	Sealed Ball
Prototype Short Circuit Test	Yes
Voltage Regulator Type	Digital
Number of Sensed Phases	3
Regulation Accuracy (Steady State)	±0.25%

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GENERAC INDUSTRIAL ENERGY

POWER RATINGS

		Standby	Part Number
Three-Phase 240/416 VAC @0.8pf	2000 kW/2500 kVa	Amps: 3035.9	K3250064N24
Three-Phase 277/480 VAC @0.8pf	2000 kW/2500 kVa	Amps:3,007.0	L2050064N24
Three-Phase 346/600 VAC @0.8pf	2000 kW/2500 kVa	Amps: 2405.6	L2100064N24

MOTOR STARTING CAPABILITIES (SKVA)

skVA vs. Voltage Dip

240/416 VAC	30%	277/480 VAC	30%	346/600VAC	30%
K3250064N24	Contact Factory	L2050064N24	Contact Factory	L2100064N24	Contact Factory

FUEL CONSUMPTION RATES*

Fuel Pump Lift- ft (m)	Diesel - gph (Lph)	
Contact Factory	Percent Load	Standby
	25%	42.8 (162.0)
	50%	79.1 (299.5)
Total Fuel Pump Flow (Combustion + Return) - gph (Lph)	75%	119.7 (453.0)
Contact Factory	100%	153.1 (579.5)

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

COOLING

		Standby
Air Flow (Fan Air Flow Across Radiator)	cfm (m^3/min)	Contact Factory
Coolant Flow (LT)	gpm (Lpm)	213.5 (808.3)
Coolant Flow (HT)	gpm (Lpm)	420 (1590)
Coolant System Capacity	gal (L)	97 (367)
Maximum Operating Ambient Temperature	°F (°C)	122 (50)
Maximum Operating Ambient Temperature (Before Derate)	See Bulletin No. 0199280SSD	
Maximum Additional Radiator Backpressure	in H_2O (kPa)	Contact Factory

COMBUSTION AIR REQUIREMENTS

	Standby
Flow at Rated Power cfm — (m^3/min)	6,339.0 (179.5)

ENGINE

		Standby
Rated Engine Speed	rpm	1,800
Horsepower at Rated kW**	hp	2,950.0
Piston Speed	ft/min (m/min)	2,185 (666)
BMEP	psi (kPa)	329.7 (2,273)

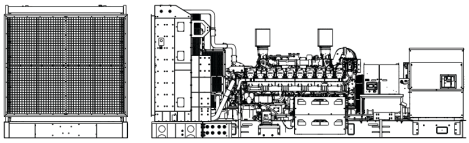
** See “Emissions Data Sheet” for maximum bHP for EPA and SCAQMD permitting purposes.

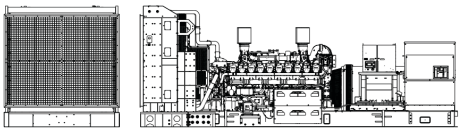
EXHAUST

		Standby
Exhaust Flow (Rated Output)	cfm (m^3/min)	20,708.5 (586.4)
Maximum Allowable Back Pressure (Post Turbo)	inHg (kPa)	1.08 (7.5)
Exhaust Temperature (Rated Output - Post Turbo)	°F (°C)	957.2 (514)

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 BS5514 and DIN6271 standards.
Standby - See Bulletin 0187500SSB
Prime - See Bulletin 0187510SSB

DIMENSIONS AND WEIGHTS*





OPEN SET 764 FRAME

Run Time - Hours)	Usable Capacity - Gal (L)	L x W x H - in (mm)	Weight - lbs (kg) Unit Only
No Tank	—	288 (7,315.2) x 113 (2,870.2) x 121.4 (3084.7)	39,408 (17,963)

OPEN SET 1020 FRAME

Run Time - Hours)	Usable Capacity - Gal (L)	L x W x H - in (mm)	Weight - lbs (kg) Unit Only
No Tank	—	310 (7,874) x 113 (2,870.2) x 121.4 (3084.7)	46,584 (21,157)

*Weights will vary based on options selected.

Part No. A0010313693
Rev. A 04/08/2026