SD3250 & MD3250 | 87.5 L | 3250 kW

INDUSTRIAL DIESEL GENERATOR SET

EPA Certified Stationary Emergency

Standby Power Rating

3,250 kW, 4,063 kVA, 60 Hz

*Assembled in the USA using domestic and foreign parts

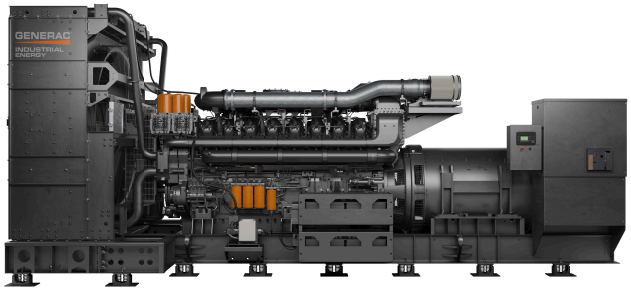

Image used for illustration purposes only

Codes and Standards

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

ULC2200, ULC6200, UL1236, UL489, UL142, ULC S601

BS5514 and DIN 6271

SAE J1349

NFPA 37, 70, 99, 110

NEC700, 701, 702, 708

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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INDUSTRIAL DIESEL GENERATOR SET

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STANDARD FEATURES

ENGINE SYSTEM
- Oil Drain Extension
- Air Cleaner
- Fan and Belt Guards
- Flexible Exhaust Connection
- Factory Filled Oil and Coolant
- Radiator Duct Adapter
- Engine Coolant Heater
- Coolant Heater Ball Valves
- Pre-Lube System

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

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

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 Bearings
- Full Load Capacity Alternator

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

CONTROL SYSTEM
- Oil Temperature Indication and Alarm

CONTROL SYSTEM

DSE G8601 Controller

The G8601 is a genset controller with integral heater designed for multiple application environments.

Key Features
- Advanced PLC Functionality
- Multi-Purpose PIDs
- Virtual Inputs
- On-Screen Mimic (SLDs)
- Multi-Level Pin Protected Front Panel Editor
- Integral LCD Display Heater
- Enhanced High-Resolution 240 x 128 Pixel Display
- Integral Gasket (IP65 protection)

Standard Protections
- Low Coolant Level
- High/Low Coolant Temperature
- Oil Temperature
- Over/Under Speed
- 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

More Features
- Uses Engine ECU
- Digital AVR Support
- Multiple Language Support
- Three Phase Generator Sensing & Protection
- Three Phase Bus Sensing
- Generator Current, Protection & 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

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INDUSTRIAL DIESEL GENERATOR SET

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CONFIGURABLE OPTIONS

ENGINE SYSTEM
- Critical Grade Silencer
- Hospital Grade Silencer
- CCV (Closed Crankcase Ventilation)
- Oil Heater
- Duplex Fuel Water Separator
- Air Filter Restriction Indicator

ELECTRICAL SYSTEM
- UL Listed Battery Charger
- Battery Warmer
- Redundant Starting System

ALTERNATOR SYSTEM
- Alternator Upsizing
- Anti-Condensation Heater
- Bearings/ Winding Temperature Monitoring

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 and 240V Outlet
- Flush Mount Annunciator Kit

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

APPLICATION AND ENGINEERING DATA

ENGINE SPECIFICATIONS

General

Make	Baudouin
EPA Emissions Compliance	Tier 2
EPA Emissions Reference	See Emissions Data Sheet
Cylinder #	16
Type	V
Displacement - in³ (L)	5339.5 (87.5)
Bore - in (mm)	7.08 (180)
Stroke - in (mm)	8.46 (215)
Compression Ratio	16.5:1
Intake Air Method	Turbocharged/Aftercooled
Cylinder Head	4-Valve

Engine Governing

Governor	Electronic
Frequency Regulation (Steady State)	0.5%

Lubrication System

Oil Pump Type	Gear Driven
Oil Filter Type	Full Flow Spin-On Cartridge
Crankcase Capacity - qt (L)	528 (500)

Cooling System

Cooling System Type	Pressurized Closed
Fan Type	Pusher
Fan Diameter - in (mm)	84 (2,134)

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)
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	K3250064N24
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 Dual
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

OPERATING DATA

POWER RATINGS

		Standby
Three-Phase 277/480 VAC @0.8pf	3,250 kW/4,062.5 kVA	Amps: 4,892.2
Three-Phase 346/600 VAC @0.8pf	3,250 kW/4,062.5 kVA	Amps: 3,913.8

MOTOR STARTING CAPABILITIES (SKVA)

skVA vs. Voltage Dip

277/480 VAC	30%	366/600 VAC	30%
K3250064N24	7,200	L3250064N24	7,200
K3400064N24	Contact Factory	L3400064N24	Contact Factory

FUEL CONSUMPTION RATES*

Fuel Pump Lift- ft (m)	Diesel - gph (Lph)		
	Percent Load	Standby	HVO (L/h) gal/h
13.6 (4.1)	25%	75.4 (285.4)	53.8 (203.8)
	50%	130.4 (493.6)	93.9 (355.3)
	75%	182.8 (691.9)	131.7 (498.5)
Total Fuel Pump Flow (Combustion + Return) - gph (Lph)	100%	234.5 (887.4)	241.7 (915.0)
898 (3,400)			

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

COOLING

		Standby
Air Flow (Fan Air Flow Across Radiator)	cfm (m^3/min)	148,808 (4,214)
Coolant Flow High Temp Circuit	gpm (Lpm)	430 (1,626)
Coolant Flow Low Temp Circuit	gpm (Lpm)	244 (920)
Coolant System Capacity	gal (L)	189.9 (718.8)
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)	1.3 (0.32)

COMBUSTION AIR REQUIREMENTS

	Standby
Flow at Rated Power cfm — (m^3/min)	9,128.8 (258.5)

ENGINE

		Standby
Rated Engine Speed	rpm	1,800
Horsepower at Rated kW**	hp	4828
Piston Speed	ft/min (m/min)	2,538 (773.5)
BMEP	psi (kPa)	398.0 (2744.1)

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

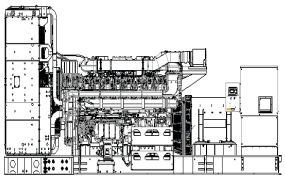
EXHAUST

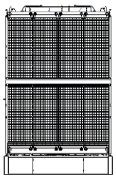
		Standby
Exhaust Flow (Rated Output)	cfm (m^3/min)	30,420 (861.4)
Maximum Allowable Back Pressure (Post Turbo)	inHg (kPa)	4.43 (15)
Exhaust Temperature (Rated Output - Post Turbo)	°F (°C)	1,022 (550)

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 10000018933

DIMENSIONS AND WEIGHTS





OPEN SET

Run Time - Hours)	Usable Capacity - Gal (L)	L x W x H - in (mm)	Weight - lbs (kg) Unit Only
No Tank	—	309 (7,848.6) x 120 (3,048) x 132 (3,352.8)	60,150 (27,340)

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