Standby Power Rating 10 kW, 13 kVA, 60 Hz

Prime Power Rating* 9 kW, 11 kVA, 60 Hz



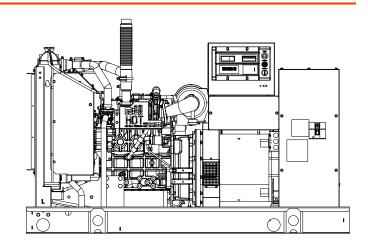


Image used for illustration purposes only

Codes and Standards

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





UL2200, UL6200, UL1236, UL489, **UL142**





CSA C22.2, 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.

SD010T | 2.2L | 10 kW

INDUSTRIAL DIESEL GENERATOR SET

EPA Certified Stationary Emergency

STANDARD FEATURES

ENGINE SYSTEM

- · Oil Drain System
- · Air Filter Restriction Indicator
- · Air Cleaner
- · Level 1 Fan and Belt Guards (Open Set Only)
- · Stainless Steel Flexible Exhaust Connection
- · Factory Filled Oil and Coolant
- · Radiator Duct Adapter (Open Set Only)
- · Critical Silencer (Enclosed Units Only)
- · Engine Coolant Heater

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

ELECTRICAL SYSTEM

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

ALTERNATOR SYSTEM

- UI 2200 GFNprotect™
- Class H Insulation Material
- 2/3 Pitch
- Skewed Stator
- **Brushless Excitation**
- Sealed Bearing
- Rotor Dynamically Spin Balanced
- Amortisseur Winding (3-Phase Only)
- **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 (Enclosed Units Only)
- Standard Factory Testing
- 2 Year Limited Warranty (Standby Rated Units)
- 1 Year Limited Warranty (Prime Rated Units)
- Silencer Mounted in the Discharge Hood (Enclosed Units Only)

ENCLOSURE (IF SELECTED)

- Rust-Proof Fasteners with Nylon Washers to **Protect Finish**
- High Performance Sound-Absorbing Material (Sound Attenuated Enclosures)
- **Gasketed Doors**
- Upward Facing Discharge Hoods (Radiator and
- Stainless Steel Lift Off Door Hinges
- Stainless Steel Lockable Handles
- RhinoCoat™ Textured Polyester Powder Coat Paint

FUEL TANKS (IF SELECTED)

- UL 142/ULC S601
- Double Wall
- Normal and Emergency Vents
- Sloped Top
- Sloped Bottom
- Factory Pressure Tested
- Rupture Basin Alarm
- Fuel Level
- Check Valve In Supply and Return Lines
- RhinoCoat™- Textured Polyester Powder Coat

Alarms and Warnings Time and Date Stamped

Alarms and Warnings Spelled Out (No Alarm

Snap Shots of Key Operation Parameters During

Stainless Steel Hardware

Alarms and Warnings

Coolant Temperature

Engine Overspeed

Alarms and Warnings

Battery Voltage

Codes)

Oil Pressure

Coolant Level

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
- · All 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

SD010T | 2.2L | 10 kW

INDUSTRIAL DIESEL GENERATOR SET

EPA Certified Stationary Emergency

CONFIGURABLE OPTIONS

ENGINE SYSTEM

- o Oil Heater
- o Critical Silencer (Open Set Only)
- o Radiator Stone Guard
- o Level 1 Fan and Belt Guards (Enclosed Units Only)

FUEL SYSTEM

o NPT Flexible Fuel Line

ELECTRICAL SYSTEM

- o 10A UL Listed Battery Charger
- o Battery Warmer

ALTERNATOR SYSTEM

- o Anti-Condensation Heater
- o Tropical Coating
- o Permanent Magnet Excitation

GENERATOR SET

- o Extended Factory Testing (3-Phase Only)
- o 8 Position Load Center
- o Pad Vibration Isolation
- o Spring Vibration Isolators

CIRCUIT BREAKER OPTIONS

- o Main Line Circuit Breaker
- o 2nd Main Line Circuit Breaker
- o 3rd Main Line Circuit Breaker
- o Shunt Trip and Auxiliary Contact
- Electronic Trip Breakers

ENCLOSURE

- o Weather Protected Enclosure
- o Level 1 Sound Attenuated
- o Level 2 Sound Attenuated
- Level 2 Sound Attenuated with Motorized Dampers
- o Steel Enclosure
- o Aluminum Enclosure
- Up to 200 MPH Wind Load Rating (Contact Factory for Availability)
- o AC/DC Enclosure Lighting Kit
- o Door Open Alarm Switch
- o Enclosure Heater (with Motorized Dampers Only)

WARRANTY (Standby Gensets Only)

- o 2 Year Extended Limited Warranty
- o 5 Year Extended Limited Warranty
- o 7 Year Extended Limited Warranty
- o 10 Year Extended Limited Warranty

CONTROL SYSTEM

GENERAC

- NFPA 110 Compliant 21-Light Remote Annunciator
- o Remote Relay Assembly (8 or 16)
- o Oil Temperature Indicator and 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)
- o 100 dB Alarm Horn
- o Ground Fault Annunciaton
- o 120V GFCI and 240V Outlets
- o 10A Engine Run Relay
- Damper Alarm Contacts (with Motorized Dampers Only)

FUEL TANKS (Sizes On Last Page)

- o 8 in (203.2 mm) Fill Extension
- o 13 in (330.2 mm) Fill Extension
- o 19 in (482.6 mm) Fill Extension
- o Overfill Protection Valve
- o 5 Gallon Spill Box Return Hose
- o 5 Gallon Spill Box
- Tank Risers
- o 90% Fuel Level Switch and Alarm
- o 12' Emergency Vent
- o Fire Rated Stainless Steel Fuel Hose
- Fuel Drop Tube

ENGINEERED OPTIONS

ENGINE SYSTEM

- o Coolant Heater Ball Valves
- o Fluid Containment Pan

CONTROL SYSTEM

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

ALTERNATOR SYSTEM

o 3rd Breaker System

GENERATOR SET

o Special Testing

FUEL TANKS

- o UL 2085 Tank
- Stainless Steel Tanks
- Special Fuel Tanks
- Vent Extensions

SD010T | 2.2L | 10 kW

INDUSTRIAL DIESEL GENERATOR SET

EPA Certified Stationary Emergency



APPLICATION AND ENGINEERING DATA

ENGINE SPECIFICATIONS

General

Make	Perkins
EPA Emissions Compliance	Stationary Emergency
EPA Emissions Reference	See Emission Data Sheet
Cylinder #	4
Туре	In-line
Displacement - in ³ (L)	135 (2.22)
Bore - in (mm)	3.3 (84)
Stroke - in (mm)	3.9 (100)
Compression Ratio	23.3:1
Intake Air Method	Turbocharged
Cylinder Head	Cast Iron
Piston Type	Aluminum
Crankshaft Type	Forged Steel

Engine Governing

Governor	Electronic Isochronous
Frequency Regulation (Steady State)	±0.5%

Lubrication System

·		
Oil Pump Type	Gear Driven	
Oil Filter Type	Full-Flow Cartridge	
Crankcase Oil Capacity - qt (L)	11.2 (10.6)	

Cooling System

Cooling System Type	Closed Recovery
Fan Type	Pusher
Fan Speed - RPM	1,980
Fan Diameter - in (mm)	18.0 (457.2)

Fuel System

Fuel Type	Ultra Low Sulfur Diesel Fuel	
Fuel Specifications	ASTM	
Fuel Filtering (Microns)	5	
Fuel Inject Pump	Distribution Injection Pump	
Fuel Pump Type	Engine Driven Gear	
Injector Type	Mechanical	
Fuel Supply Line - in (mm)	0.31 (7.94) ID	
Fuel Return Line - in (mm)	0.19 (4.76) ID	

Engine Electrical System

System Voltage	12 VDC
Battery Charger Alternator	Standard
Battery Size	See Battery Index 0161970SBY
Battery Voltage	12 VDC
Ground Polarity	Negative

STANDARD ALTERNATOR SPECIFICATIONS

Standard Model	K0025124Y21
Poles	4
Field Type	Revolving
Insulation Class - Rotor	Н
Insulation Class - Stator	Н
Total Harmonic Distortion	<5% (3-Phase Only)
Telephone Interference Factor (TIF)	<50

Standard Excitation	Synchronous Brushless
Bearings	Single Sealed
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%

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OPERATING DATA

POWER RATINGS

	Sta	ndby
Single-Phase 120/240 VAC @1.0pf	10 kW	Amps: 42
Three-Phase 120/208 VAC @0.8pf	10 kW	Amps: 35
Three-Phase 120/240 VAC @0.8pf	10 kW	Amps: 30
Three-Phase 277/480 VAC @0.8pf	10 kW	Amps: 15
Three-Phase 346/600 VAC @0.8pf	10 kW	Amps: 12

MOTOR STARTING CAPABILITIES (SKVA)

			skVA vs	s. Voltage Dip		
120/240 VAC 1Ø	30%	277/480 VAC 3Ø	30%	208/240 VAC 3Ø	35%	
A0025044N21	12	K0025124Y21	38	K0025124Y21	28	

FUEL CONSUMPTION RATES*

	Diesel - g	ph (Lph)
Fuel Pump Lift - ft (m)	Percent Load	Standby
3 (1)	25%	0.7 (2.5)
	50%	0.8 (3.0)
Total Fuel Pump Flow (Combustion + Return) - gph (Lph)	75%	0.9 (3.4)
16.6 (63.0)	100%	1.1 (4.0)
	*Fuel supply installation	must accommodate

fuel consumption rates at 100% load.

COOLING

		Standby
Coolant Flow	gpm (Lpm)	48.9 (56.2)
Coolant System Capacity	gal (L)	2.5 (9.5)
Heat Rejection to Coolant	BTU/hr (kW)	53,900 (16)
Inlet Air	cfm (m³/min)	2,800 (79)
Maximum Operating Ambient Temperature	°F (°C)	122 (50)
Maximum Operating Ambient Temperature (Before Derate)	See Bulletin No.	0199280SSD
Maximum Additional Radiator Backpressure	in H2O (kPa)	0.5 (0.12)

COMBUSTION AIR REQUIREMENTS

	Standby
Flow at Rated Power - scfm (m³/min)	76.2 (2.2)

EXHAUST

ENGINE

		Standby
Rated Engine Speed	RPM	1,800
Horespower at Rated kW**	hp	15.8
Piston Speed	ft/min (m/min)	1,181 (360)
BMEP	psi (kPa)	51.7 (356.5)

**Refer to "Emissions Data Sheet" for ma	aximum bHP	for E	EPA a	and SCA	AQMD
permitting purposes.					

		Standby
Exhaust Flow (Rated Output)	scfm (m³/min)	110.0 (3.1)
Maximum Allowable Exhaust Backpressure	inHg (kPa)	1.5 (5.1)
(Post Turbocharger)		
Exhaust Temperature (Rated Output)	°F (°C)	420 (215.5)

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

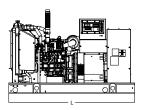
Prime - See Bulletin 0187510SSB

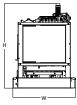
Weight - Ibs (kg)

INDUSTRIAL DIESEL GENERATOR SET

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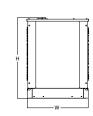
DIMENSIONS AND WEIGHTS*





D.		
	P	
	ı III	

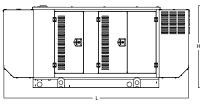
OPEN SE	T		
Run Tim - Hours	Usable e Capacity - gal (L)	L x W x H - in (mm)	Weight - lbs (kg)
No Tank	(-	76.0 (1,930) x 37.4 (950) x 44.8 (1,138)	1,456 - 1,641 (661 - 745)
49	54 (204)	76.0 (1,930) x 37.4 (950) x 57.8 (1,468)	1,936 - 2,121 (879 - 963)
120	132 (500)	76.0 (1,930) x 37.4 (950) x 69.8 (1,773)	2,166 - 2,351 (983 - 1,067)
172	190 (719)	106.0 (2,692) x 37.4 (950) x 79.3 (2,014)	2,380 - 2,565 (1,081 - 1,165)
191	211 (799)	76.0 (1,930) x 37.4 (950) x 81.8 (2,078)	2,375 - 2,560 (1,078 - 1,162)
272	300 (1,136))	92.9 (2,360) x 37.4 (950) x 85.3 (2,167)	2,438 - 2,623 (1,106 - 1,190)



WEATHER PROTECTED ENCLOSURE

			vvoigni	ibo (itg)
Run Tim - Hours	Usable ^e Capacity - gal (L)	L x W x H - in (mm)	Steel	Aluminum
No Tank	-	94.8 (2,408) x 38.0 (965) x 49.5 (1,257)		
49	54 (204)	94.8 (2,408) x 38.0 (965) x 62.5 (1,588)		
120	132 (500)	94.8 (2,408) x 38.0 (965) x 74.5 (1,892)	.	
172	190 (719)	106.0 (2,692) x 38.0 (965) x 75.5 (1,917)	372 (169)	241 (109)
191	211 (799)	94.8 (2,408) x 38.0 (965) x 86.5 (2,197)	•	
272	300 (1,136))	94.8 (2,408) x 38.0 (965) x 90.0 (2,286)		

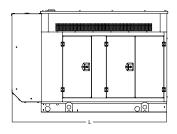
LEVEL 1 SOUND ATTENUATED ENCLOSURE

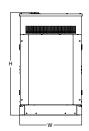




		Weight -	lbs (kg)
Run Time Capacity - Hours gal (L)	L x W x H - in (mm)	Steel	Aluminum
No Tank -	112.5 (2,857) x 38.0 (965) x 49.5 (1,258)		
49 54 (204)	112.5 (2,857) x 38.0 (965) x 62.5 (1,588)	_	
120 132 (500	112.5 (2,857) x 38.0 (965) x 74.5 (1,893)	_	
172 190 (719	112.5 (2,857) x 38.0 (965) x 84.0 (2,134)	505 (229)	338 (153)
191 211 (799	112.5 (2,857) x 38.0 (965) x 86.5 (2,198)	_	
272 (1,136))	112.5 (2,857) x 38.0 (965) x 90.0 (2,287)	_	

LEVEL 2 SOUND ATTENUATED ENCLOSURE





			Weight -	lbs (kg)
Run Time - Hours	Usable Capacity - gal (L)	L x W x H - in (mm)	Steel	Aluminum
No Tank	-	94.8 (2,408) x 38.0 (965) x 61.9 (1,572)		
49	54 (204)	94.8 (2,408) x 38.0 (965) x 74.9 (1,903)		
120	132 (500)	94.8 (2,408) x 38.0 (965) x 86.9 (2,207)		
172	190 (719)	106.0 (2,692) x 38.0 (965) x 87.9 (2,232)	510 (231)	341 (155)
191	211 (799)	94.8 (2,408) x 38.0 (965) x 98.9 (2,512)		
272	300 (1,136))	94.8 (2,408) x 38.0 (965) x 102.4 (2,601)		

^{*} All measurements are approximate and for estimation purposes only. Specification characteristics may change without notice. Please contact a Generac Power Systems Industrial Dealer for detailed installation drawings. Extended and not extended tank offerings vary. Contact dealer for options.