**EPA Certified Stationary Emergency** 

GENERAC\* INDUSTRIAL POWER

Standby Power Rating 25 kW, 31.25 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, UL508, UL489, UL142



CSA C22.2





BS5514 and DIN 6271



**SAE J1349** 



NFPA 37, 70, 99



ISO 3046, 8528, 9001



NEMA ICS1, ICS10, MG1, 250, ICS6, AB1



ANSI/IEEE C62.41

# **POWERING AHEAD**

For over 50 years, Generac has led the industry with 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's 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 application under adverse conditions.

Generac is committed to ensuring our customers' service support continues after their generator purchase.

SPEC SHEET

### 2.2L **RD025 25kW**

# INDUSTRIAL DIESEL GENERATOR SET

**EPA Certified Stationary Emergency** 

## STANDARD FEATURES

### **ENGINE SYSTEM**

- · Cold Weather Kit
- · Oil Drain Extension
- · Fan Guard
- · Factory Filled Oil and Coolant

## **GENERATOR SET**

- · Sound Attenuated Aluminum Enclosure
- · Internal Genset Vibration Isolation
- · Separation of Circuits High/Low Voltage
- · Wrapped Exhaust Piping
- · Standard Factory Testing
- · 5 Year Limited Warranty
- Ready to Accept Full Load in <10 Seconds
- E-Stop

## **ENCLOSURE**

- · Lockable Doors
- · Rust Proof Hardware
- RhinoCoat<sup>™</sup> Textured Polyester Powder Coat

## **Electrical System**

- · Battery Charging Alternator
- · Battery Cables
- · Battery Tray
- · Rubber-Booted Engine Electrical Connections
- · Solenoid Activated Starter Motor
- · Smart Battery Charger
- · Battery Disconnect

### ALTERNATOR SYSTEM

- 2/3 Pitch
- · Skewed Stator
- · Sealed Bearings
- Low Temperature Rise (<120°C)
- Low THD (<5%)

## **Cooling System**

**GENERAC** 

- · Closed Coolant Recovery System
- · Factory-Installed Radiator
- 50/50 Ethylene Glycol Antifreeze
- · Radiator Drain Extension
- Can Operate at up to 122°F (50°C) Ambient Temperature

INDUSTRIAL

# **Fuel System**

- · Fuel Lockoff Solenoid
- · Primary Fuel Filter
- · Stainless Steel Fuel Lines

### **TANKS**

- 48 Hour Run Time
- UL142 Listed
- · Lockable Fuel Cap

### **CONTROL SYSTEM**



## **Evolution ™ Controller**

- . Two-Line Plain Text LCD Display
- Programmable Start Delay Between 10-30Seconds
- 10 Second Engine Start Sequence
- · 5 Second Engine Warm Up
- 1 Minute Engine Cool-Down
- · Starter Lock-Out
- · Smart Battery Charger
- · Automatic Voltage Regulation with Over and Under Protection
- · Automatic Low Oil Pressure Shutdown
- · Overspeed Shutdown
- · High Temperature Shutdown
- · Overcrank Protection
- · Safety Fused
- · Failure to Transfer Protection
- · Low Battery Protection
- · 50 Event Run Log
- · Future Set Capable Exerciser
- · Incorrect Wiring Protection
- · Internal Fault Protection

- · Common External Fault Capability
- · Governor Failure Protection
- · OBD2 Diagnostic Port

### **Alarms**

- · Door Open
- · Low Fuel
- · Generator Running
- · Not in Auto
- · Common Shutdown

# OPTIONAL SHIPPED LOOSE AND FIELD INSTALL KITS

### **GENERATOR SET**

- Paint Kit
- o Scheduled Maintenance Kit

### **TANKS**

- o Fuel Fill Drop Tube
- Spill Box
- o 90% Fuel Alarm
- o Tank Risers
- o Spill Box Drainback Kit
- o Vent Extension Support Kit
- o 5 Day Run Time
- o Overfill Prevention Valve



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# **APPLICATION AND ENGINEERING DATA**

# **ENGINE SPECIFICATIONS**

General

Make	Perkins
EPA Emission Compliance	Stationary Emergency
Cylinder #	4
Туре	In-Line
Displacement - in <sup>3</sup> (L)	135.2 (2.216)
Bore - in (mm)	3.30 (84.0)
Stroke - in (mm)	3.94 (100.0)
Compression Ratio	21.3:1
Intake Air Method	Turbocharged/Aftercooled
Piston Type	Aluminum Alloy
Crankshaft Type	Cast Iron OHV
Engine Block Type	Aluminum
Engine Governing	
Lingino doverning	
Governor	Electronic
Frequency Regulation (Steady State)	±0.25%
Lubrication System	
Oil Pump Type	Gear
Oil Filter Type	Full Flow Spin-On Canister
Crankcase Capacity - L (qts)	10.6 (11.2)

Cooling System Type	Pre-Lubed, Self-Sealing
Fan Type	Pusher
Fan Speed (rpm)	1,980
Fan Diameter - mm (in)	18.0 (457.2)

# Fuel System

Fuel Type	Ultra Low Sulfur Diesel Fuel
Fuel Specification	ASTM
Fuel Pump Type	Mechanical Engine Driven Gear
Injector Type	Mechanical
Fuel Supply Line (mm/in)	7.94/0.31 (ID)
Fuel Return Line (mm/in)	4.76/0.19 (ID)
Fuel Filtering (microns)	25

# Engine Electrical System

System Voltage	12 VDC
Battery Charger Alternator	Standard
Battery Size	Group 27F
Battery Voltage	12 VDC
Ground Polarity	Negative

# **ALTERNATOR SPECIFICATIONS**

Standard Model	Generac
Poles	4
Field Type	Rotating
Insulation Class - Rotor	F
Insulation Class - Stator	Н
Total Harmonic Distortion	<5%
Telephone Interference Factor (TIF)	<50

Standard Excitation	Direct
Bearings	Sealed Ball
Coupling	Flexible Disc
Prototype Short Circuit Test	Yes
Voltage Regulator Type	Full Digital
Regulation Accuracy (Steady State)	±1.0%

# RD025 | 2.2L | 25kW

# INDUSTRIAL DIESEL GENERATOR SET

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# **OPERATING DATA**

# **POWER RATINGS**

 Single-Phase 120/240 VAC @1.0pf
 25 kW
 Amps: 104

# **MOTOR STARTING CAPABILITIES (skVA)**

skVA vs. Voltage Dip at 30% 120/240 V, Single-Phase at 0.4pf 168

# **FUEL CONSUMPTION RATES\***

Percent Load	Diesel gal/hr (L/hr)	Run Hours with Standard Tank
25%	0.85	248
50%	1.28	164
75%	1.65	127
100%	2.10	100

<sup>\*</sup> Fuel supply installation must accommodate fuel consumption rates at 100% load.

# **COOLING**

	Standby	
Air Flow (Radiator and Alternator)	cfm (m³/min) 2,800 (79)	
Coolant System Capacity	gal (I) 2.5 (9.5)	
Heat Rejection to Coolant	BTU/hr (MJ/hr) 11,085 (117)	
Temperature Deration	3% for every 5°C above 25°C or 1.7% for every 5°F over 77	°F
Altitude Deration	1% for every 100 m above 915 or 3% for every 1,000 ft over	er 3,000 ft
Maximum Radiator Backpressure	in H <sub>2</sub> O 0.5	

# **COMBUSTION AIR REQUIREMENTS**

Standby
Flow at Rated Power cfm (m³/min) 87.9 (2.5)

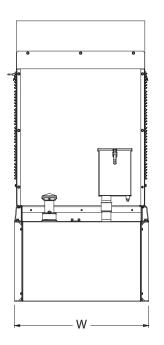
ENGINE			EXHAUST	
		Standby		Standby
Rated Engine Speed	rpm	1,800	Exhaust Flow (Rated Output) cfm (m	<sup>3</sup> /min) 268.4 (7.6)
			Exhaust Temp (Rated Output - Post Silencer) °F (°C)	865 (463)

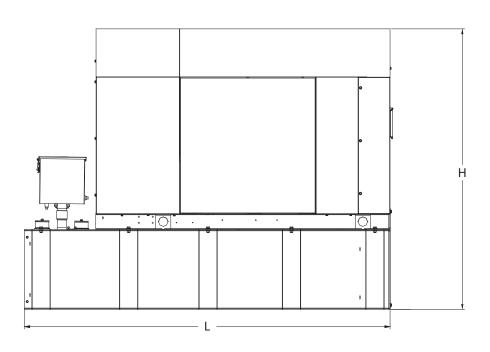
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# **DIMENSIONS AND WEIGHTS\***





Enclosed Unit with Extended Run Tank	LxWxHin (mm)	102.6 (2,607) x 35.0 (888) x 90.8 (2,307)
(211 Usable Gal)	Sound output in dB(A) at 23ft with generator operating at normal Load	65

\* All measurements are approximate and for estimation purposes only. Drawing is for illustration purposes only, not to scale.

	YOUR FACTORY RECOGNIZED GENERAC INDUSTRIAL DEALER
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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.