EPA Certified Stationary Emergency



# DEMAND RESPONSE READY

Standby Power Rating 60 kW, 75 kVA, 60 Hz

**Demand Response Power Rating** 60 kW, 75 kVA, 60 Hz

**Prime Power Rating\*** 54 kW, 68 kVA, 60 Hz



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



Image used for illustration purposes only

# **Codes and Standards**

Generac products are designed to the following standards:

	UL2200, UL508,
SP:	CSA 22.2
	BS5514 and DIN
INTERNATIONAL.	SAE J1349
	NFPA 37, 70, 99,
(nec) f	NEC700, 701, 70
ISO	ISO 3046, 7637,
KE 14	NEMA ICS10, MC
ANSI American National Standards Institute	ANSI C62.41
American nauonai Stanuarus institute	

UL489

6271

110

02,708

8528, 9001

G1, 250, ICS6, AB1



IBC 2009, CBC 2010, IBC 2012, os pd ASCE 7-05, ASCE 7-10, ICC-ES AC-156 (2012)

# **Powering Ahead**

Generac ensures superior quality by designing and manufacturing most of its generator components, such as alternators, enclosures, control systems and communications software. Generac also makes its own spark-ignited engines, and you'll find them on every Generac gaseous-fueled generator. We engineer and manufacture them from the block up — all at our facilities throughout Wisconsin. Applying natural gas and LP-fueled engines to generators requires advanced engineering expertise to ensure reliability, durability and necessary performance. By designing specifically for these dry, hotter-burning fuels, the engines last longer and require less maintenance. Building our own engines also means we control every step of the supply chain and delivery process, so you benefit from single-source responsibility.

Plus, Generac Industrial Power's distribution network provides all parts and service so you don't have to deal with third-party suppliers. It all leads to a positive owner experience and higher confidence level. Generac spark-ignited engines give you more options in commercial and industrial generator applications as well as extended run time from utility-supplied natural gas.

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# **STANDARD FEATURES**

#### **ENGINE SYSTEM**

- Oil Drain Extension
- · Heavy Duty Air Cleaner
- Fan Guard ٠
- Stainless Steel Flexible Exhaust Connection
- Factory Filled Oil and Coolant .
- Critical Exhaust Silencer (Enclosed Only)

#### **Fuel System**

- Fuel Line NPT Connection
- · Primary and Secondary Fuel Shutoff

#### **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 Trav
- **Rubber-Booted Engine Electrical Connections**
- Solenoid Activated Starter Motor

#### ALTERNATOR SYSTEM

- GENprotect<sup>™</sup>
- Fault Protection
- Class H Insulation Material ٠
- 2/3 Pitch
- Skewed Stator •
- Brushless Excitation ٠
- Sealed Bearings •
- Amortisseur Winding
- Full Load Capacity Alternator

# DEMAND RESPONSE READY

INDUSTRIAL

#### **GENERATOR SET**

GENERAC

- Internal Genset Vibration Isolation
- · Separation of Circuits High/Low Voltage
- · Separation of Circuits Multiple Breakers
- Wrapped Exhaust Piping (Enclosed 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 Only)

#### ENCLOSURE (If Selected)

- Rust-Proof Fasteners with Nylon Washers to Protect Finish
- High Performance Sound-Absorbing Material (Sound Attenuation 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<sup>™</sup> Textured Polyester Powder Coat Paint

# 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)
- ٠ 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<sup>®</sup> Protocol .
- Predictive Maintenance Algorithm
- Sealed Boards ٠
- Password Parameter Adjustment Protection ٠
- Single Point Ground
- 16 Channel Remote Trending ٠
- 0.2 msec High Speed Remote Trending ٠
- 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** ٠
- Coolant Level

- Engine Speed
- Battery Voltage
- Frequency

#### Alarms and Warnings

- Oil Pressure
- Coolant Temperature
- Coolant Level

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Low Fuel Pressure Alarm

Alarms and Warnings

· Alarms and Warnings Time and Date Stamped

Snap Shots of Key Operation Parameters During

Alarms and Warnings Spelled Out (No Alarm Codes)

SPEC SHEET

2 of 6

 Engine Overspeed Battery Voltage

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# **CONFIGURABLE OPTIONS**

#### **ENGINE SYSTEM**

- Engine Coolant Heater
- Oil Heater
- Air Filter Restriction Indicator
- Stone Guard (Open Set Only)
- Critical Exhaust Silencer (Open Set Only)

# **ELECTRICAL SYSTEM**

- 10A UL Battery Charger
- 2.5A UL Battery Charger
- Battery Warmer

## **ALTERNATOR SYSTEM**

- Alternator Upsizing
- Anti-Condensation Heater
- Tropical Coating
- Permanent Magnet Excitation

## **CIRCUIT BREAKER OPTIONS**

- Main Line Circuit Breaker
- 2nd Main Line Circuit Breaker
- Shunt Trip and Auxiliary Contact
- Electronic Trip Breaker

# **GENERATOR SET**

- GenLink<sup>®</sup> Communications Software (English Only)
- Extended Factory Testing (3-Phase Only)
- 8 Position Load Center

# **ENCLOSURE**

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

# DEMAND RESPONSE READY

## **CONTROL SYSTEM**

- 21-Light Remote Annunciator
- Remote Relay Assembly (8 or 16)
- Oil Temperature Indicator with 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
- O 10A Run Relay
- Ground Fault Indication and Protection Functions

## WARRANTY (Standby Gensets Only)

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

# **ENGINEERED OPTIONS**

#### **ENGINE SYSTEM**

- Coolant Heater Ball Valves
- $\circ~$  Fluid Containment Pan

# ALTERNATOR SYSTEM

○ 3rd Breaker System

#### **CONTROL SYSTEM**

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

## GENERATOR SET

- Special Testing
- Battery Box

# ENCLOSURE

○ Enclosure Ambient Heaters



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# **APPLICATION AND ENGINEERING DATA**

# **DEMAND RESPONSE READY**

**GENERAC**<sup>®</sup> | INDUSTRIAL

#### **ENGINE SPECIFICATIONS**

#### General

Make	Generac			
Cylinder #	10			
Туре	V			
Displacement - in <sup>3</sup> (L)	414.96 (6.8)			
Bore - in (mm)	3.55 (90.17)			
Stroke - in (mm)	4.17 (105.992)			
Compression Ratio	9.0:1			
Intake Air Method	Naturally Aspirated			
Number of Main Bearings	7			
Connecting Rods	Forged Steel			
Cylinder Head	Aluminum			
Cylinder Liners	No			
Ignition	High Energy			
Piston Type	Aluminum Alloy			
Crankshaft Type	Steel			
Lifter Type	Overhead Cam			
Intake Valve Material	Steel Alloy			
Exhaust Valve Material	Steel Alloy			
Hardened Valve Seats	Yes			

Cooling System Type	Pressurized Closed Recovery
Fan Type	Pusher
Fan Speed - rpm	2,300
Fan Diameter - in (mm)	22 (558)
Fuel System	
Fuel Type	Natural Gas, Propane Vapor, Propane Liquid
Carburetor	Down Draft
Secondary Fuel Regulator	Standard
Fuel Shut Off Solenoid	Standard
Operating Fuel Pressure - in H <sub>2</sub> O (kPa)	11 - 14 (2.7 - 3.5)
Engine Electrical System	

**Cooling System** 

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

#### Engine Governing

Governor	Electronic
Frequency Regulation (Steady State)	±0.25%
Lubrication System	

Oil Pump Type	Gear
Oil Filter Type	Full-Flow Spin-On Cartridge
Crankcase Capacity - qt (L)	6 (5.7)

# **ALTERNATOR SPECIFICATIONS**

Standard Model	Generac 390 mm
Poles	4
Field Type	Revolving
Insulation Class - Rotor	Н
Insulation Class - Stator	Н
Total Harmonic Distortion	<5% (3-Phase)
Telephone Interference Factor (TIF)	<50

Standard Excitation	Synchronous Brushless				
Bearings	Sealed Ball				
Coupling	Direct via Flexible Disc				
Prototype Short Circuit Test	Yes				
Voltage Regulator Type	Full Digital				
Number of Sensed Phases	All				
Regulation Accuracy (Steady State)	±0.25%				

# SPEC SHEET

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# **OPERATING DATA**

# **DEMAND RESPONSE READY**

#### **POWER RATINGS - NATURAL GAS/PROPANE VAPOR/PROPANE LIQUID**

		Standby
Single-Phase 120/240 VAC @1.0pf	60 kW	Amps: 250
Three-Phase 120/208 VAC @0.8pf	60 kW	Amps: 208
Three-Phase 120/240 VAC @0.8pf	60 kW	Amps: 180
Three-Phase 277/480 VAC @0.8pf	60 kW	Amps: 90
Three-Phase 346/600 VAC @0.8pf	60 kW	Amps: 72

#### **STARTING CAPABILITIES (sKVA)**

							sKVA vs.	Voltage Di	р						
			277/	480 VAC							208	/240 VAC			
Alternator	kW	10%	15%	20%	25%	30%	35%	Alternator	kW	10%	15%	20%	25%	30%	35%
Standard	60	42	63	83	104	125	146	Standard	60	32	47	62	78	94	110
Upsize 1	70	59	88	117	147	176	205	Upsize 1	70	44	66	88	110	132	154
Upsize 2	100	79	118	157	197	236	275	Upsize 2	100	59	89	118	148	177	206
Upsize 3*	130	116	174	232	290	348	406	Upsize 3*	130	87	131	174	218	261	305
* Druchlooo	Only							•							

\* Brushless Only

#### **FUEL CONSUMPTION RATES\***

Natural Gas –	ft³/hr (m³/hr)	Propane Vapor	- ft³/hr (m³/hr)	Propane Liqui	d - gph (lph)
Percent Load	Standby	Percent Load	Standby	Percent Load	Standby
25%	323 (9.1)	25%	122 (3.5)	25%	3.4 (12.9)
50%	554 (15.7)	50%	210 (5.9)	50%	5.9 (22.3)
75%	748 (21.2)	75%	283 (8.0)	75%	7.9 (29.9)
100%	923 (26.1)	100%	349 (9.9)	100%	9.8 (37.1)

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

#### COOLING

		Standby
Air Flow (Inlet Air Combustion and Radiator)	ft <sup>3</sup> /min (m <sup>3</sup> /min)	5,785 (163.8)
Coolant Flow	gpm (lpm)	38 (144)
Coolant System Capacity	gal (L)	6.3 (23.9)
Heat Rejection to Coolant	BTU/hr (kW)	252,000 (73.9)
Maximum Operating Ambient Temperature	°F (°C)	122 (50)
Maximum Operating Ambient Temperature (Before Derate)		See Bulletin No. 0199270SSD
Maximum Radiator Backpressure	in H <sub>2</sub> O (kPa)	0.5 (0.12)

#### **COMBUSTION AIR REQUIREMENTS**

		Flow at Rated Power	cfm (m <sup>3</sup> /min) 185 (5.2)		
ENGINE			EXHAUST		
		Standby			Standby
Rated Engine Speed	rpm	1,800	Exhaust Flow (Rated Output)	cfm (m <sup>3</sup> /min)	520 (14.7)
Horsepower at Rated kW**	hp	96	Maximum Exhaust Backpressure	inHg (kPa)	1.5 (5.1)
Piston Speed	ft/min (m/min)	1,251 (381)	Exhaust Temp (Rated Output - Post Silencer)	°F (°C)	1,050 (565.6)
BMEP	psi (kPa)	102 (703)	-		

Standby

\*\* 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

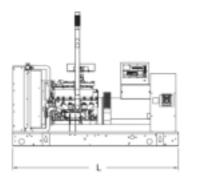


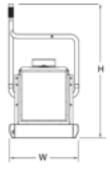
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# **DIMENSIONS AND WEIGHTS\***

# **DEMAND RESPONSE READY**

INDUSTRIAL



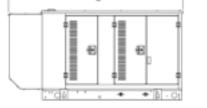


# **OPEN SET (Includes Exhaust Flex)**

L x W x H - in (mm) 92.9 (2,360) x 40.0 (1,016) x 75.4 (1,914) Weight - Ibs (kg) 1,929 (875)

GENERAC

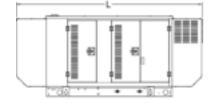
# STANDARD ENCLOSURE

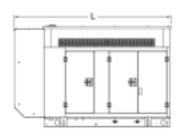




L x W x H - in (mm)	11
Weight - Ibs (kg)	

#### 1.8 (2,840) x 40.5 (1,028) x 56.2 (1,427) Steel: 2,370 (1,075) Aluminum: 2,075 (941)





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# LEVEL 1 ACOUSTIC ENCLOSURE

L x W x H - in (mm)	129.4 (3,287) x 40.5 (1,028) x 56.2 (1,427)
Weight - Ibs (kg)	Steel: 2,590 (1,175) Aluminum: 2,147 (974)

# **LEVEL 2 ACOUSTIC ENCLOSURE**

L x W x H - in (mm)	111.8 (2,840) x 40.5 (1,028) x 68.6 (1,743)
Weight - Ibs (kg)	Steel: 2,811 (1,275) Aluminum: 2,220 (1,007)

\* All measurements are approximate and for estimation purposes only.

YOUR FACTORY RECOGNIZED GENERAC INDUSTRIAL DEALER

Specification characteristics may change without notice. Please consult a Generac Power Systems Industrial Dealer for detailed installation drawings.

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