



\*Assembled in the USA using domestic and foreign parts



Image used for illustration purposes only

Power Ratings		
GGW50	Standby	50kW/63kVA
	Prime	45kW/56kVA

## Codes and Standards

PRAMAC products are designed to the following standards:



BS5514 and DIN 6271



SAE J1349



NFPA 37, 70, 99, 110



NEC700, 701, 702, 708



ISO 3046, 7637, 8528, 9001



NEMA ICS10, MG1, 250, ICS6, AB1



ANSI C62.41



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

## ENERGY GENERATION

PRAMAC ensures superior quality and performance by managing all aspects of production: from design to manufacturing.

PRAMAC can trace its roots back to 1966; from then onwards it has been expanding its activity in the energy and material-handling sector, continuously growing globally with a wide and flexible product range.

In the field of power generation, PRAMAC offers solutions for every kind of power supply demand: portable and industrial generators for stand by and prime power applications and mobile and towable lighting for outdoor needs.

PRAMAC operates through a wide distribution network and provides global coverage even in the most demanding markets.



**STANDARD FEATURES**

**ENGINE SYSTEM**

- Oil Drain Extension
- Heavy Duty Air Cleaner
- Fan Guard
- Stainless Steel Flexible Exhaust Connection
- Factory Filled Oil and Coolant
- Radiator Duct Adapter (Open Set Only)
- 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
- 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**

- GENprotect™
- Class H Insulation Material
- 2/3 Pitch
- Skewed Stator
- Brushless Excitation
- Sealed Bearing
- Amortisseur Winding
- Full Load Capacity Alternator

**GENERATOR SET**

- Internal Genset Vibration Isolation
- Separation of Circuits - High/Low Voltage
- Wrapped Exhaust Piping (Enclosed Only)
- Standard Factory Testing
- 1 Year Limited Warranty or 1,000 Hours
- 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™ - 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)
- 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

**Alarms and Warnings**

- Oil Pressure
- Coolant Temperature
- Coolant Level
- Low Fuel Pressure Alarm
- Engine Overspeed
- Battery Voltage
- Alarms and Warnings Time and Date Stamped
- Snap Shots of Key Operation Parameters During Alarms and Warnings
- Alarms and Warnings Spelled Out (No Alarm Codes)



## CONFIGURABLE OPTIONS

---

### ENGINE SYSTEM

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

### ELECTRICAL SYSTEM

- 10A Battery Charger

### ALTERNATOR SYSTEM

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

### CIRCUIT BREAKER OPTIONS

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

### GENERATOR SET

- EPA Certified
- GenLink Communications Software (English Only)
- Extended Factory Testing (3-Phase Only)
- Pad Vibration Isolators

### ENCLOSURE

- Weather Protected Enclosure
- Level 1 Sound Attenuation
- Level 2 Sound Attenuation
- Level 2 Enclosure with Motorized Dampers
- Steel Enclosure
- Aluminum Enclosure
- Up to 321 KMH Wind Load Rating\*
- AC/DC Enclosure Lighting Kit
- Door Open Alarm Switch

### 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
- 10A Run Relay

## ENGINEERED OPTIONS

---

### ENGINE SYSTEM

- Coolant Heater Ball Valves
- Fluid Containment Pan

### ALTERNATOR SYSTEM

- 3rd Breaker System

### CONTROL SYSTEM

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

### GENERATOR SET

- Special Testing
- Battery Box

\*Consult factory for availability



**APPLICATION AND ENGINEERING DATA**

**ENGINE SPECIFICATIONS**

General

Make	Generac
Cylinder #	8
Type	V
Displacement - Cu In (L)	329.53 (5.4)
Bore - in (mm)	3.55 (90.17)
Stroke - in (mm)	4.17 (105.92)
Compression Ratio	9.0:1
Intake Air Method	Naturally Aspirated
Number of Main Bearings	4
Connecting Rods	Forged Steel
Cylinder Head	Aluminum
Cylinder Liners	No
Ignition	Single Fire
Piston Type	Aluminum Alloy
Crankshaft Type	Nodular Iron
Lifter Type	Hydraulic
Intake Valve Material	Steel Alloy
Exhaust Valve Material	Hardened Steel
Hardened Valve Seats	Yes

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 - qts(L)	6 (5.7)

Cooling System

Cooling System Type	Pressurized Closed Recovery
Fan Type	Pusher
Fan Speed (rpm)	2,143
Fan Diameter - in (mm)	20 (508)

Fuel System

Fuel Type	Natural Gas, Propane Vapor
Carburetor	Down Draft
Secondary Fuel Regulator	Standard
Fuel Shut Off Solenoid	Standard (Dual)
Operating Fuel Pressure in H <sub>2</sub> O (kPa)	8 - 14 (2.0 - 3.5)

Engine Electrical System

System Voltage	12 VDC
Battery Charger Alternator	Standard
Battery Size	See Battery Index 10000016949
Battery Voltage	12 VDC
Ground Polarity	Negative

**ALTERNATOR SPECIFICATIONS**

Standard Model	Generac 390 mm
Poles	4
Field Type	Revolving
Insulation Class - Rotor	H
Insulation Class - Stator	H
Total Harmonic Distortion	<5% (3-Phase)
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	Full Digital
Number of Sensed Phases	All
Regulation Accuracy (Steady State)	±0.25%

# GGW50G | 5.4L | 50kW

## INDUSTRIAL SPARK-IGNITED GENERATOR SET

PRAMAC | Power Engineering Division



### OPERATING DATA

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

		Standby	Prime
Single-Phase 120/240 VAC @1.0pf	50 kW/50 kVA	Amps: 208	45 kW/45 kVA Amps: 188
Three-Phase 120/208 VAC @0.8pf	50 kW/63 kVA	Amps: 173	45 kW/56 kVA Amps: 156
Three-Phase 120/240 VAC @0.8pf	50 kW/63 kVA	Amps: 150	45 kW/56 kVA Amps: 135
Three-Phase 277/480 VAC @0.8pf	50 kW/63 kVA	Amps: 75	45 kW/56 kVA Amps: 68
Three-Phase 346/600 VAC @0.8pf	50 kW/63 kVA	Amps: 60	45 kW/56 kVA Amps: 54

#### STARTING CAPABILITIES (sKVA)

##### sKVA vs. Voltage Dip

277/480 VAC								208/240 VAC							
Alternator	kW	10%	15%	20%	25%	30%	35%	Alternator	kW	10%	15%	20%	25%	30%	35%
Standard	50	34	52	69	86	103	120	Standard	50	26	39	52	65	77	90
Upsize 1	60	42	63	83	104	125	146	Upsize 1	60	32	47	62	78	94	110

#### FUEL CONSUMPTION RATES\*

##### Natural Gas – ft<sup>3</sup>/hr (m<sup>3</sup>/hr)

Percent Load	Standby	Prime
25%	308 (8.7)	277.2 (7.8)
50%	527 (14.9)	474.3 (13.4)
75%	712 (20.2)	640.8 (18.2)
100%	879 (24.9)	791.1 (22.4)

##### Propane Vapor – ft<sup>3</sup>/hr (m<sup>3</sup>/hr)

Percent Load	Standby	Prime
25%	102.6 (2.9)	92.3 (2.6)
50%	175.9 (5.0)	158.3 (4.5)
75%	237.5 (6.7)	213.8 (6.0)
100%	293.2 (8.3)	264.2 (7.5)

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

#### COOLING

		Standby	Prime
Air Flow (Inlet Air Combustion and Radiator)	ft <sup>3</sup> /min (m <sup>3</sup> /min)	2,470 (70.0)	2,470 (70.0)
Coolant Flow	gal/min (l/min)	38 (144)	38 (144)
Coolant System Capacity	gal (l)	3 (11.36)	3 (11.36)
Heat Rejection to Coolant	kW (BTU/hr)	58 (200,000)	48 (166,000)
Maximum Operating Ambient Temperature	°F (°C)	122 (50)	122 (50)
Maximum Operating Ambient Temperature (Before Derate)	See Bulletin No. 10000011339		
Maximum Radiator Backpressure	in H <sub>2</sub> O (kPa)	0.5 (0.12)	0.5 (0.12)

#### COMBUSTION AIR REQUIREMENTS

	Standby	Prime
Flow at Rated Power cfm (m <sup>3</sup> /min)	115 (3.3)	108 (3.1)

#### ENGINE

		Standby	Prime
Rated Engine Speed	rpm	1,800	1,800
Horsepower at Rated kW**	hp	80	64
Piston Speed	ft/min (m/min)	1,251 (381)	1,251 (381)
BMEP	psi	107	103

#### EXHAUST

		Standby	Prime
Exhaust Flow (Rated Output)	cfm (m <sup>3</sup> /min)	357 (10.1)	336 (9.5)
Max. Allowable Backpressure	inHg (kPa)	1.5 (5.1)	1.5 (5.1)
Exhaust Temp (Rated Output - Post Silencer)	°F (°C)	1,100 (593)	1,012 (544)

\*\* Refer to "Emissions Data Sheet" for maximum bHP for EPA and SCAQMD permitting purposes.

Deration - See Bulletin No. 10000011339.

Standby - See Bulletin No. 10000018933.

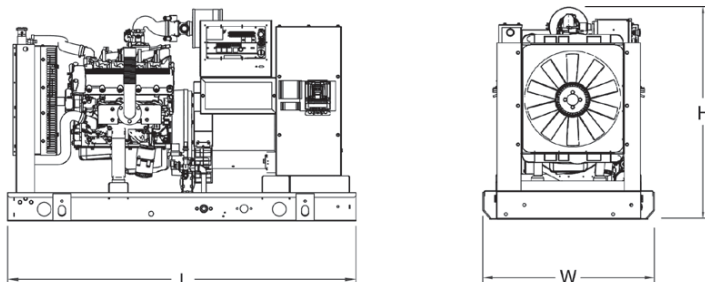
Prime - See Bulletin No. 10000018926.

**GGW50G** | **5.4L** | **50kW**  
**INDUSTRIAL SPARK-IGNITED GENERATOR SET**

PRAMAC | Power Engineering Division

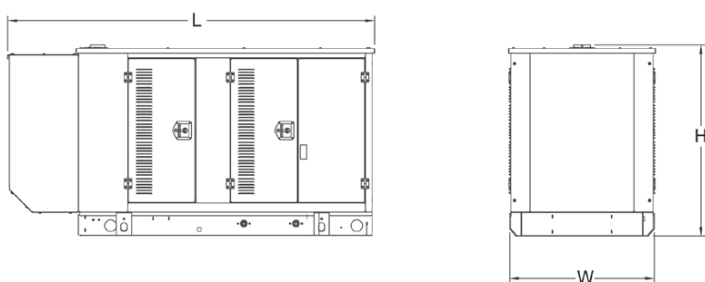


**DIMENSIONS AND WEIGHTS\***



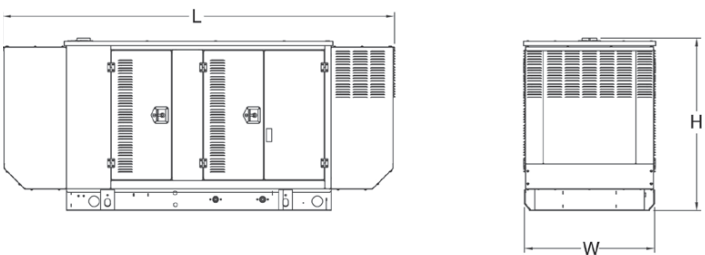
**OPEN SET (Includes Exhaust Flex)**

L x W x H in (mm)	76.0 (1,930) x 41.5 (1,053) x 46.3 (1,176)
Weight lbs (kg)	2,318 (1,051)



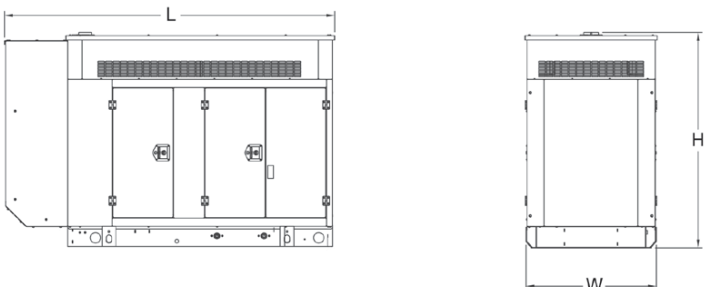
**STANDARD ENCLOSURE**

L x W x H in (mm)	93.9 (1,843.4) x 38.0 (965.1) x 49.5 (1,258.1)
Weight lbs (kg)	Steel: 2,759 (1,251) Aluminum: 2,536 (4,150)



**LEVEL 1 ACOUSTIC ENCLOSURE**

L x W x H in (mm)	112.5 (2,857.1) x 38.0 (965.1) x 49.5 (1,258.1)
Weight lbs (kg)	Steel: 2,838 (1,287) Aluminum: 2,570 (1,166)



**LEVEL 2 ACOUSTIC ENCLOSURE**

L x W x H in (mm)	94.8 (2,407) x 38.0 (965.1) x 70.0 (1,777.9)
Weight lbs (kg)	Steel: 2,990 (1,356) Aluminum: 2,636 (1,196)

\* Specification characteristics may change without notice. Dimensions and weights are for preliminary purposes only. Please consult a PRAMAC Industrial Dealer for detailed installation drawings.