PRAMAC | Power Engineering Division





Image used for illustration purposes only

Power Ratings			
GGW130	Standby	130kW/163kVA	

# **Codes and Standards**

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



# **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.

PRAMAC | Power Engineering Division

## **STANDARD FEATURES**

#### **ENGINE SYSTEM**

- Oil Drain Extension
- 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/Catalyst

#### **Fuel System**

- NPT Fuel Connection on Frame
- 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<sup>™</sup>
- 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
- Separation of Circuits Multiple Breakers
- Wrapped Exhaust Piping (Enclosed Units Only)
- Standard Factory Testing
- 1 Year Limited Warranty or 1,000 Hours
- 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 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
- 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<sup>®</sup> 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
- 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)

60 Hz SPEC SHEET

2 of 6

PRAMAC | Power Engineering Division

## **CONFIGURABLE OPTIONS**

#### **ENGINE SYSTEM**

- Engine Block Heater
- Air Filter Restriction Indicator
- Radiator Stone Guard (Open Set Only)
- Critical Silencer (Open Set Only)
- Baseframe Cover/Rodent Guard
- Fan and Belt Guards (Enclosed Units Only)
- Oil Heater

#### FUEL SYSTEM

○ NPT Flexible Fuel Line

#### **ELECTRICAL SYSTEM**

- 10A Battery Charger
- Battery Warmer

#### **ALTERNATOR SYSTEM**

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

### **ENGINEERED OPTIONS**

#### ENGINE SYSTEM

- Coolant Heater Ball Valves
- Fluid Containment Pan

#### **CONTROL SYSTEM**

Battery Disconnect Switch

#### **CIRCUIT BREAKER OPTIONS**

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

#### **GENERATOR SET**

- Extended Factory Testing (3-Phase Only)
- 8 Position Load Center

#### **ENCLOSURE**

- Weather Protected Enclosure
- Level 1 Sound Attenuation
- Level 2 Sound Attenuation
- Level 2 Sound Attenuation with Motorized Dampers
- Steel Enclosure
- Aluminum Enclosure
- AC/DC Enclosure Lighting Kit
- Enclosure Heater (with Motorized Dampers)
- Pad Vibration Isolators
- Up to 321 KPH Wind Load Rating (Contact Factory for Availability)
- Door Open Alarm Switch

# PRAMAC

#### **CONTROL SYSTEM**

- 21-Light Remote Annunciator
- Remote Relay Assembly (8 or 16)
- Oil Temperature Indication 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)
- 10A Engine Run Relay
- Ground Fault Annunciator
- 100 dB Alarm Horn
- 120V GFCI and 240V Outlets
- Remote Communication Modem
- O Damper Alarm Contacts (with Motorized Dampers Only)

#### **GENERATOR SET**

- Special Testing
- Battery Box

3 of 6



PRAMAC | Power Engineering Division

## **APPLICATION AND ENGINEERING DATA**



#### **ENGINE SPECIFICATIONS**

#### General

Make	Generac
Cylinder #	8
Туре	V
Displacement - In <sup>3</sup> (L)	543 (8.9)
Bore - in (mm)	4.49 (114.3)
Stroke - in (mm)	4.25 (107.95)
Compression Ratio	9.1:1
Intake Air Method	Turbocharged
Number of Main Bearings	5
Connecting Rods	Forged Steel
Cylinder Head	Cast Iron
Cylinder Liners	No
Ignition	High Energy
Piston Type	Aluminum Alloy
Crankshaft Type	Forged Steel
Lifter Type	Hydraulic Roller
Intake Valve Material	Steel Alloy
Exhaust Valve Material	Stainless Steel
Hardened Valve Seats	Yes

#### Cooling System

Pressurized Closed
Pusher
2,386
22 (559)
Natural Gas, Propane
Down Draft
Standard
Standard
7 - 11 (1.7 - 2.7)
12 VDC
40 A
See Battery Index 10000016949
12 VDC

#### Engine Governing

Governor	Electronic
Frequency Regulation (Steady State)	±0.25%

#### Lubrication System

Oil Pump Type	Gear Driven
Oil Filter Type	Full Flow Spin-On Cartridge
Crankcase Capacity - qt (L)	10 (9.5)

#### ALTERNATOR SPECIFICATIONS

Standard Model	K0150124Y21	Standard Excitation	Permanent Magnet
Poles	4	Bearings	Single Sealed Ball
Field Type	Revolving	Coupling	Direct Drive
Insulation Class - Rotor	H	Prototype Short Circuit Test	Yes
Insulation Class - Stator	Н	Voltage Regulator Type	Full Digital
Total Harmonic Distortion	<5% (3-Phase Only)	Number of Sensed Phases	All
Telephone Interference Factor (TIF)	<50	Regulation Accuracy (Steady State)	±0.25%

PRAMAC | Power Engineering Division



#### **OPERATING DATA**

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

	Standby
Single-Phase 120/240 VAC @1.0pf	130 kW/130 kVA Amps: 542
Three-Phase 120/208 VAC @0.8pf	130 kW/163 kVA Amps: 452
Three-Phase 120/240 VAC @0.8pf	130 kW/163 kVA Amps: 391
Three-Phase 277/480 VAC @0.8pf	130 kW/163 kVA Amps: 196
Three-Phase 346/600 VAC @0.8pf	130 kW/163 kVA Amps: 157

#### MOTOR STARTING CAPABILITIES (skVA)

skVA vs. Voltage Dip				
277/480 VAC	30%	208/240 VAC	30%	
(0130124Y21	327	K0130124Y21	327	
(0150124Y21	326	K0150124Y21	244	
(0200124Y21	478	K0200124Y21	361	
	277/480 VAC (0130124Y21 (0150124Y21	277/480 VAC         30%           (0130124Y21         327           (0150124Y21         326	x0130124Y21         327         K0130124Y21           x0150124Y21         326         K0150124Y21	

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

Natural Gas -	- scfh (m³/hr)	LPV – scf	h (m³/hr)	LPL – gr	oh (Lph)
Percent Load	Standby	Percent Load	Standby	Percent Load	Standby
25%	635 (18.0)	25%	265 (7.5)	25%	6.3 (23.8)
50%	1,005 (28.4)	50%	390 (11.0)	50%	10.1 (38.2)
75%	1,401 (39.7)	75%	516 (14.6)	75%	14.0 (53.0)
100%	1,797 (50.9)	100%	642 (18.2)	100%	17.7 (67.0)

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

#### COOLING

		Standby
Air Flow (Fan Air Flow Across Radiator) - Open Set	cfm (m <sup>3</sup> /min)	7,445 (211)
Coolant Flow	gpm (Lpm)	28 (104)
Coolant System Capacity	gal (L)	6.3 (24.0)
Maximum Operating Ambient Temperature	°F (°C)	122 (50)
Maximum Operating Ambient Temperature (Before Derate)		See Bulletin No. 0199270SSD
Maximum Additional Radiator Backpressure	in H <sub>2</sub> O (kPa)	0.5 (0.12)

#### **COMBUSTION AIR REQUIREMENTS**

ENGINE

		Standby
Rated Engine Speed	RPM	1,800
Horsepower at Rated kW	hp	194
Piston Speed	ft/min (m/min)	1,275 (389)
BMEP	psi (kPa)	157 (1,083)

Flow at Rated Power - cfm (m <sup>3</sup> /mi	n)
---	----

Standby

298 (8.4)

#### EXHAUST

	Standby
cfm (m <sup>3</sup> /min)	1,033 (29)
inHg (kPa)	0.75 (2.54)
°F (°C)	1,413 (767)
	inHg (kPa)

Deration - See Bulletin No. 10000011339.

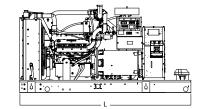
60Hz - See Bulletin No. 10000011339.

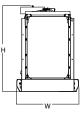
50Hz - See Bulletin No. 10000011319.

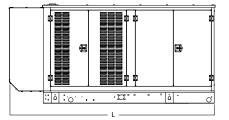
PRAMAC | Power Engineering Division

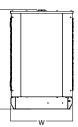
# **DIMENSIONS AND WEIGHTS\***

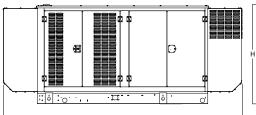


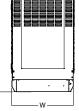


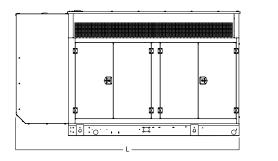












\* Specification characteristics may change without notice. Dimensions and weights are for preliminary purposes only. Please contact a PRAMAC Industrial Dealer for detailed installation drawings.

6 of 6

#### **OPEN SET**

 L x W x H - in (mm)
 110 (2,794) x 39.9 (1,013) x 54.3 (1,378)

 Weight - lbs (kg)
 2,627 - 2,674 (1,129 - 1,213)

#### WEATHER PROTECTED ENCLOSURE

L x W x H - in (mm)	132.7 (3,371) x 40.5 (1,029) x 64.1 (1,627)
Weight - Ibs (kg)	Steel: 3,388 - 3,434 (1,537 - 1,558)
	Aluminum: 3,009 - 3,055 (1,365 - 1,386)

#### LEVEL 1 SOUND ATTENUATED ENCLOSURE

L x W x H - in (mm)	129.5 (3,289) x 40.5 (1,029) x 56.2 (1,427)
Weight - Ibs (kg)	Steel: 3,624 - 3,670 (1,644 - 1,665) Aluminum: 3,110 - 3,157 (1,411 - 1,432)

#### LEVEL 2 SOUND ATTENUATED ENCLOSURE

L x W x H - in (mm)	144.5 (3,670) x 40.5 (1,029) x 80.9 (2,054)
Weight - Ibs (kg)	Steel: 3,743 - 3,789 (1,689 - 1,719) Aluminum: 3,161 - 3,207 (1,434 - 1,455)