

100GGM2



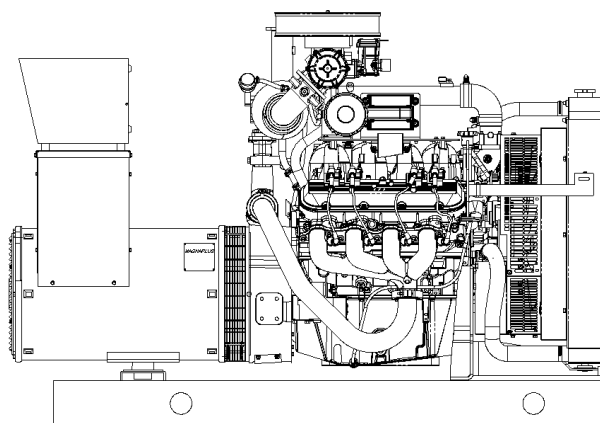
NATURAL GAS, LP GAS 120/240, 120/208, 347/600 V @ 60Hz



Standby Rating

100kW

Please contact factory for other ratings



Standard Features

- SENECA provides one-source responsibility for the generating system and accessories. All generator sets and components are factory built, and production tested.
- Generator set load acceptance ratings are as per CSA282 and NFPA 110
- Eighteen months limited warranty covers all systems and components. Two and five year extended warranties are available.
- PSI natural gas engine that meets the latest EPA emissions requirements
- Marathon Electric Generators brushless synchronous alternators with dynamic balancing and four pole construction
- Permanent Magnet (PM) generator provides superior short circuit capability
- Microprocessor based controller that's easy to use and field programmable for customized installations
- Integral Vibration isolation rubbers eliminate the need of vibration spring isolators
- Generator sets are prototype tested and production tested to ensure easy startup
- Heavy duty construction that's designed for use in prime or standby applications
- Assembled in Canada

			NATURAL GAS		LP GAS	
Voltage	Phase	Hz	125°C Rise Standby Rating kW/kVA	Current (A)	125°C Rise Standby Rating kW/kVA	Current (A)
120/240	1	60	100/100	417	100/100	417
120/208	3	60	100/125	347	100/125	347
347/600	3	60	100/125	120	100/125	120

Other configurations are available. Please contact factory if your intended application is not listed.

RATINGS: Standby ratings are continuous for the duration of any power outage. No overload capacity is specified at this rating. Prime ratings are continuous per BS 5514, DIN 6271, ISO-3046, and IEC34-1 with 10% overload capacity one hour in twelve hours. Larger alternators may be used to meet special application requirements. SENECA reserves the right to change the design or specifications without notice and without any obligation or liability whatsoever. Contact your local SENECA generator distributor for availability.

GENERAL GUIDELINES FOR DERATION: *ALTITUDE:* Derate 1.5% per 1000 ft. (305 m) elevation above 3300 ft. (1006 m). *TEMPERATURE:* Derate 0.5% per 10°F (5.5°C) temperature above 77°F (25 °C).

ALTERNATOR

Manufacturer

Design

Stator

Rotor

Insulation system

Standard temperature rise

Exciter type

Phase rotation

Alternator cooling

AC waveform total harmonic distortion

Marathon

Brushless, 4pole, Revolving field

2/3 pitch

Single Bearing, Flexible disc

Class H

125C

Torque match (shunt) standard

PMG available

A(U), B(V), C(W)

Direct drive centrifugal blower fan

< 3.5% no load to full linear load

< 2.5% for any single harmonic

ENGINE SPECIFICATIONS

Manufacturer

Model

Number of Cylinders

Bore and Stroke – in. (mm)

Displacement – in³ (L)

Compression Ratio

Valves per Cylinder – Intake/Exhaust

Combustion System

Engine Type

Aspiration

Engine Crankcase Vent System

PSI

8.8 L

8

4.35x4.50 (115x114)

537 (8.8)

9.1:1

1/1

Premixed and Spark Ignited

V-Type, 4 cycle

Naturally Aspirated

Open

EXHAUST SYSTEMExhaust Flow – ft³/min (m³/min)

Exhaust Temperature – °F (°C)

Max. Exhaust Restriction – in. H₂O (kPa)**Standby**

1258 (36)

1436 (780)

40.8 (10.2)

ELECTRICAL SYSTEM

Min. Battery Capacity (CCA)—amp

12 Volt

650

FUEL SYSTEM

Governor Type

Natural Gas Fuel Supply Pressure at Engine – in H₂O (kPa)

Fuel Supply Line Inlet Size)

Electronic

7-11(1.74-2.74)

1 1/2 " NPT

LUBRICATING SYSTEM

Oil Press. at Rated Speed – psi (kPa)

Oil Pressure at Low Idle – psi (kPa)

Oil Pan Capacity (with filter) – USGal (L)

15 (103.4)

5 (34.5)

2.3 (8.5)

COOLING SYSTEM

Engine Heat Reject. – BTU/min (kW)
Ambient Operating Temperature – °F (°C)
Coolant Flow – USgal/min (L/min)
Coolant capacity, including Radiator – USgal (L)

Standby
6260 (110.1)
122 (50)
37 (140.1)
9.9 (37.4)

AIR SYSTEM

Maximum Air Intake Restriction
Clean Air Cleaner – in.H₂O (kPa)
Dirty Air Cleaner – in.H₂O (kPa)
Engine Air Flow – ft³/min (m³/min)
Radiator Cooling Air Requirement – ft³/min (m³/min)
Max. Restriction of Cooling Air, Intake and Discharge of Radiator, in H₂O(kPa)

Standby
3 (0.8)
13 (3.2)
361.7 (10.2)
8750 (247.8)
0.5 (0.12)

FUEL CONSUMPTION

Natural Gas, CFH (m³/h)
100%
75%
50%
25%

Standby
1300 (36.9)
980 (27.8)
685 (19.4)
355 (10.3)

LP Gas, CFH (m³/h)
100%
75%
50%
25%

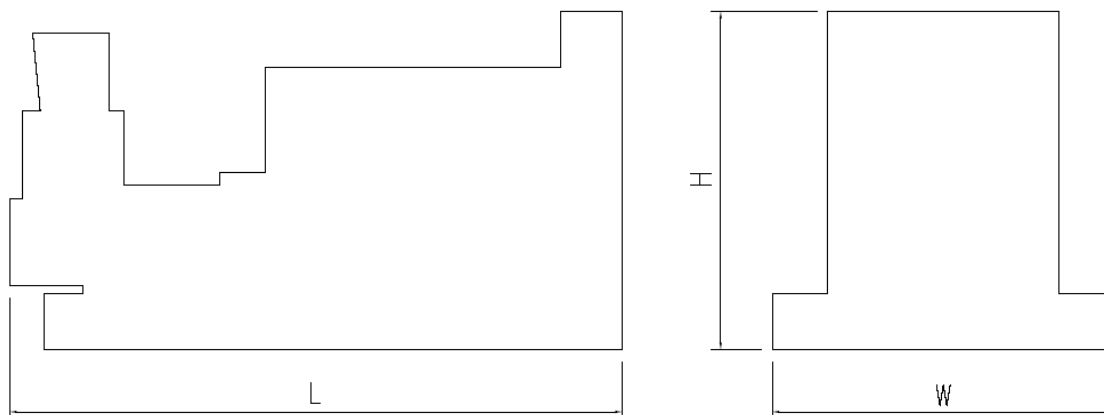
Standby
580 (16.4)
435 (12.4)
300 (8.5)
160 (4.54)

ENGINE PERFORMANCE DATA

Rated Power, Natural Gas – hp (kW)
Rated Speed, LP Gas – hp (kW)
Rated Speed — RPM

Standby
155.2 (115.7)
164.4 (122.6)
1800

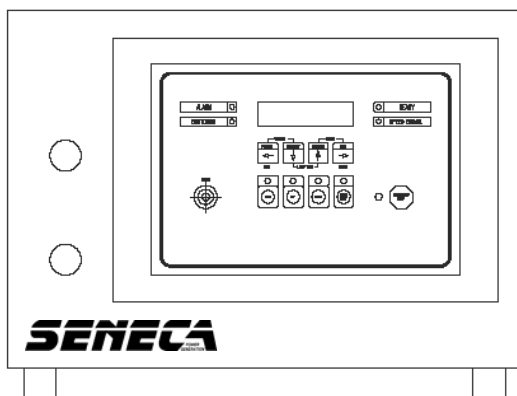
*NOTE: These are provided for reference only and should not be used for planning installation.
Contact your local distributor for more detailed information.*



Dimensions & Weight

L x W x H, in. (mm)	79x32.5x55 (2268x930x1265)
Weight (max.) wet lb. (kg)	2300 (1045)

ENGINE CONTROLLER



Engine Control & Monitoring

- **Auto Start Control:** Cycle cranking with integral speed sensor from engine mounted magnetic pick-up for crank disconnect and over speed protection
- **6 Programmable Binary Fault Alarms/Shutdown Inputs:** Alarms/shutdowns to meet/exceed requirements of NFPA 99, 110 & CSA 282
- **Engine Parameter Display:** Digital display of oil pressure, coolant temp, battery voltage, RPM, and fuel level
- **5 Programmable Outputs** (when AMF option is utilized, 2 outputs are dedicated for AMF control): programmable functions such as common alarm and shutdown contacts for remote indication
- **Configurable Set Points/Time Delays:** Password protected access to set time delays (engine start, crank, rest, cool down, oil bypass etc)
- **Event Logging:** Standard 150 event logs with time/date stamp capability utilizing on board real-time clock with battery back-up

Standard Features

- ❑ Steel Base
- ❑ 150 C Temperature Rise Alternator
- ❑ Permanent Magnet Generator
- ❑ Dynagen Controller, Run Relay, Failure Relay
- ❑ Main Line Circuit Breaker
- ❑ Block Heater, Isolation Valve
- ❑ Battery, NOCO charger, rack and Cables
- ❑ Residential Grade Silencer, Flex Pipe
- ❑ Integrated Vibration Isolator Mounts
- ❑ Gas Shut Off Valves
- ❑ CSA Approval
- ❑ Standard Factory Test
- ❑ 18 Months Warranty

Governor

- ☐ Voltage Adjust Potentiometer
- ☐ Voltage Regulator Relocation Kit

Controller

- ☐ Common Failure Relay
- ☐ Customer Connection
- ☐ Remote Annunciator Panel
- ☐ Dry Contact Kit (Isolated Alarm)
- ☐ Extension Wiring Harness for Remote Mounting
- ☐ Remote Emergency Stop
- ☐ Run Relay

Enclosure

- ☐ Sound Attenuated
- ☐ Weather Proof

Available Options

Open Unit

- ☐ Exhaust Silencer, Critical Grade
- ☐ Exhaust Silencer, Hospital Grade
- ☐ Exhaust Silencer, Hospital Plus Grade
- ☐ Special Silencer

Cooling System

- Radiator Duct Flange

Electrical System

- Battery Charger, Vulcan
- Battery Charger, Thomson technology
- Battery Charger, Special Requirement
- Battery Heater
- 125 C Temperature Rise Alternator
- 105 C Temperature Rise Alternator
- 80 C Temperature Rise Alternator
- Alternator Strip heater
- RTD

Engine and Generator

- ☐ Air Cleaner, Heavy Duty
- ☐ Air Cleaner Restriction Indicator
- ☐ Load Bank Breaker
- ☐ Line Circuit Breaker with Shunt Trip, Aux Switch
- ☐ Spring Isolators
- ☐ Seismic Spring Isolators

Distributed in Canada by

