

# BLUE STAR

## Power Systems Inc.

### Gaseous Product Line

208-600 Volt

GM25-02P

60 Hz / 1800 RPM

25 kWe

Prime

### Ratings

	240V	208V	240V	480V	600V
<b>Phase</b>	1	3	3	3	3
<b>PF</b>	1.0	0.8	0.8	0.8	0.8
<b>Hz</b>	60	60	60	60	60
<b>Generator Model</b>	284PSL1708	283PSL1707	283PSL1707	283PSL1706	283PSL5250
<b>Connection</b>	12 LEAD ZIG-ZAG	12 LEAD WYE	12 LEAD DELTA	12 LEAD WYE	4 LEAD WYE
<b>Prime</b>					
<b>kWe Nat (LP)</b>	25 (25)	25 (25)	25 (25)	25 (25)	25 (25)
<b>AMPS Nat (LP)</b>	104 (104)	87 (87)	75 (75)	38 (38)	30 (30)
<b>Temp Rise</b>	105°C / 40°C	105°C / 40°C	105°C / 40°C	105°C / 40°C	105°C / 40°C

### Standard Equipment

- |   |  |  |
|---|--|--|
| <p><b>Engine</b></p> <ul style="list-style-type: none"> <li>▶ Radiator Cooled Unit Mounted (50°C)</li> <li>▶ Blower Fan &amp; Fan Drive</li> <li>▶ Starter &amp; Alternator</li> <li>▶ Oil Pump &amp; Filter</li> <li>▶ Oil Drain Extension w/Valve</li> <li>▶ Governor - Electronic Isochronous</li> <li>▶ 12V Battery System &amp; Cables</li> <li>▶ Air Cleaner (Dry Single Stage)</li> <li>▶ Flexible Fuel Connector</li> <li>▶ EPA Certified</li> <li>▶ MasterTrak Remote Monitoring System</li> </ul> <p><b>Listing Certifications</b></p> <ul style="list-style-type: none"> <li>▶ UL 2200 Listed</li> <li>▶ cUL Listed</li> <li>▶ CSA Certified</li> <li>▶ Seismic Certified to IBC 2012</li> </ul> | <p><b>Generator</b></p> <ul style="list-style-type: none"> <li>▶ Brushless Single Bearing</li> <li>▶ Automatic Voltage Regulator</li> <li>▶ ± 1% Voltage Regulation</li> <li>▶ 4 Pole, Rotating Field</li> <li>▶ 105°C Prime Temperature Rise</li> <li>▶ 100% of Rated Load - One Step</li> <li>▶ 5% Maximum Harmonic Content</li> <li>▶ NEMA MG 1, IEEE and ANSI Standards Compliance for Temperature Rise</li> </ul> | <p><b>Additional</b></p> <ul style="list-style-type: none"> <li>▶ Microprocessor Based Digital Control</li> <li>▶ Interface Connection Box</li> <li>▶ Control Panel Mounted in NEMA 12 Enclosure</li> <li>▶ Base - Formed Steel</li> <li>▶ Main Line Circuit Breaker Mounted &amp; Wired</li> <li>▶ Catalyst Silencer Mounted</li> <li>▶ Battery Charger 12V 6 Amp</li> <li>▶ Jacket Water Heater -20°F 1000W 120V w/Isolation Valves</li> <li>▶ Vibration Isolation Mounts</li> <li>▶ Radiator Duct Flange (OPU Only)</li> <li>▶ Single Source Supplier</li> <li>▶ 1YR / 1500HR Prime Warranty</li> <li>▶ Standard Colors - White / Tan / Gray</li> </ul> |
|---|--|--|

# Gaseous Product Line

25 kW<sub>e</sub>



## Application Data

Engine			
Manufacturer:	General Motors	Displacement - Cu. In. (lit):	181 (3.00)
Model:	GM 3.0L EPA	Bore - in. (cm) x Stroke - in. (cm):	4.00 (10.2) x 3.60 (9.1)
Type:	4-Cycle	Compression Ratio:	9.30:1
Aspiration:	Natural	Rated RPM:	1800
Cylinder Arrangement:	4 Cylinder Inline	Max HP Stby (kW <sub>m</sub> ):	51.5 (38.4)

Exhaust System	Prime
Gas Temp. (Stack): °F (°C)	1,350 (732)
Gas Volume at Stack Temp: CFM (m <sup>3</sup> /min)	249 (7.05)
Maximum Allowable Exhaust Restriction: in. H <sub>2</sub> O (kPa)	40.8 (10.2)

Cooling System	
Ambient Capacity of Radiator: °F (°C)	122 (50.0)
Maximum Allowable Static Pressure on Rad. Exhaust: in. H <sub>2</sub> O (kPa)	0.50 (0.12)
Water Pump Flow Rate: GPM (lit/min)	16.8 (63.6)
Heat Rejection to Coolant: BTUM (kW)	1,436 (25.1)
Heat Rejection to CAC: BTUM (kW)	N/A
Heat Radiated to Ambient: BTUM (kW)	326 (5.70)

Air Requirements	
Aspirating: CFM (m <sup>3</sup> /min)	77.2 (2.18)
Air Flow Required for Rad. Cooled Unit: CFM (m <sup>3</sup> /min)	4,752 (135)
Air Flow Required for Heat Exchanger/Rem. Rad. CFM (m <sup>3</sup> /min)	Consult Factory For Remote Cooled Applications

Fuel Consumption	Natural Gas	LP
At 100% of Power Rating: ft <sup>3</sup> /hr (m <sup>3</sup> /hr)	431 (12.2)	184 (5.21)
At 75% of Power Rating: ft <sup>3</sup> /hr (m <sup>3</sup> /hr)	339 (9.59)	140 (3.96)
At 50% of Power Rating: ft <sup>3</sup> /hr (m <sup>3</sup> /hr)	262 (7.41)	104 (2.94)
Fuel Inlet Size: NPT		0.75"
Fuel Pressure Required: in. H <sub>2</sub> O (kPa)		7.00 (1.75) - 11.0 (2.75)

Fluids Capacity	
Total Oil System: gal (lit)	1.00 (3.79)
Engine Jacket Water Capacity: gal (lit)	1.00 (3.79)
System Coolant Capacity: gal (lit)	3.90 (14.8)

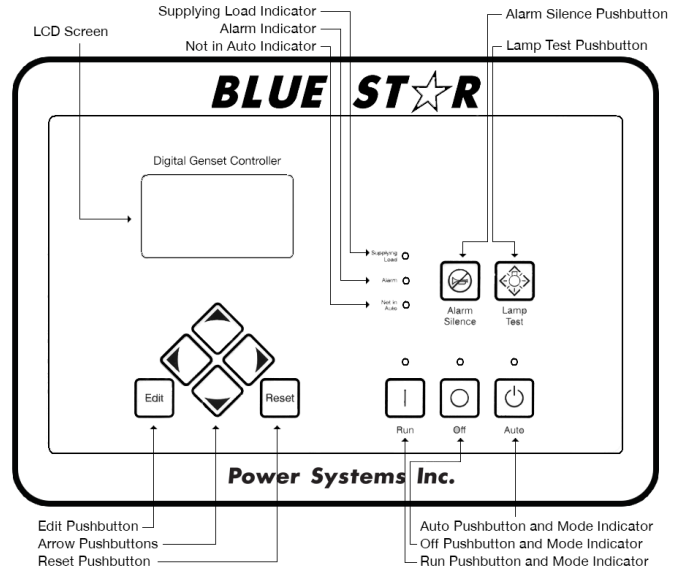
All calculations based on natural gas fuel.

Deration Factors: Temperature: Derate 1% Per 10°F Over 77°F Air Inlet Temperature | Altitude: Derate 3% Per 1,000 ft Over 328ft

## DGC-2020 Control Panel

### Standard Features

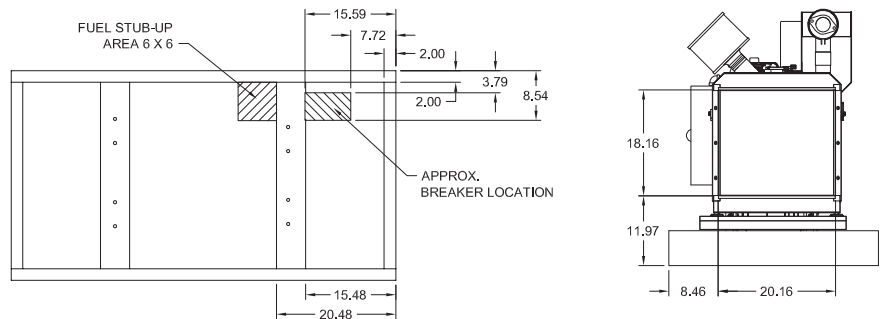
- ▶ Digital Metering
- ▶ Engine Parameters
- ▶ Generator Protection Functions
- ▶ Engine Protection
- ▶ CAN Bus ECU Communications
- ▶ Windows-Based Software
- ▶ Multilingual Capability
- ▶ Remote Communications to RDP-110 Remote Annunciator
- ▶ 16 Programmable Contact Inputs
- ▶ Up to 15 Contact Outputs (7 standard)
- ▶ UL Recognized, CSA Certified, CE Approved
- ▶ Event Recording
- ▶ IP 54 Front Panel Rating with Integrated Gasket
- ▶ NFPA 110 Level 1 Compatible



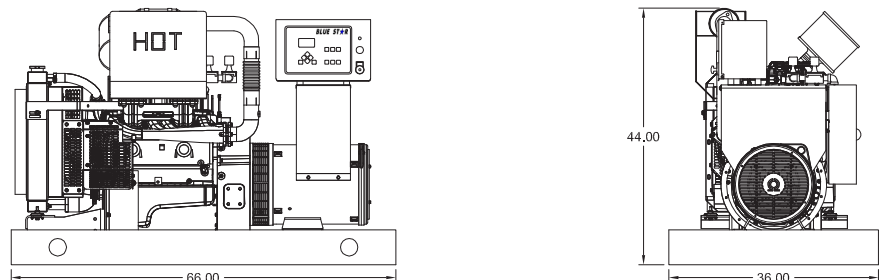
## Weights / Dimensions / Sound Data

	L x W x H	Weight lbs
<b>OPU</b>	66 x 36 x 44 in	1,075
<b>Level 1</b>	80 x 36 x 48 in	1,425
<b>Level 2</b>	80 x 36 x 48 in	1,450
<b>Level 3</b>	104 x 36 x 48 in	1,575

Please allow 6-12 inches for height of exhaust stack.



	No Load	Full Load
<b>OPU</b>	73 dBA	75 dBA
<b>Level 1</b>	66 dBA	68 dBA
<b>Level 2</b>	64 dBA	66 dBA
<b>Level 3</b>	61 dBA	62 dBA



Drawings based on standard open power 480 volt standby generator. Lengths may vary with other voltages. Subject to change without notice. Sound data as measured at 23 feet (7 meters) in accordance with ISO 8528-10 at prime rating.

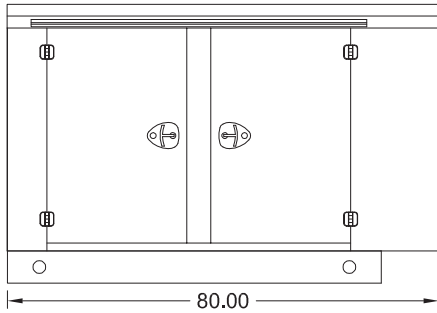
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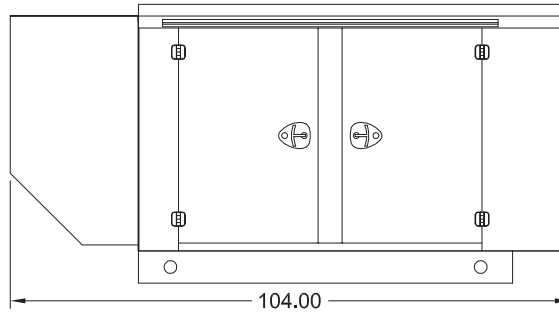


## Enclosures

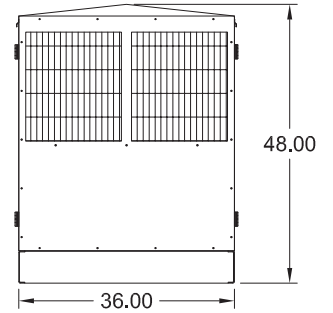
Level 1 & 2 | Side View (Weather Proof)



Level 3 | Side View (Sound Attenuated)



Level 1, 2 & 3 | Intake View



All enclosures are 150 MPH Wind Rated.

Level 2 & 3 enclosures include sound attenuation foam.

Level 3 enclosure includes frontal sound & exhaust hood.

\*Enclosure height does not include exhaust stack.

All specification sheet dimensions are represented in inches.  
Materials and specifications subject to change without notice.

American Owned



American Made

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