

# BLUE STAR

## Power Systems Inc.

### Gaseous Product Line

208-4160 Volt

NG500-01P

60 Hz / 1800 RPM

450 kWe

Prime

### Ratings

	208V	240V	480V	600V	4160V
<b>Phase</b>	3	3	3	3	3
<b>PF</b>	0.8	0.8	0.8	0.8	0.8
<b>Hz</b>	60	60	60	60	60
<b>Generator Model</b>	572RSL6429	572RSL6429	572RSL6427	572RSS4270	573FSM4354
<b>Connection</b>	12 LEAD WYE	12 LEAD DELTA	12 LEAD WYE	4 LEAD WYE	6 LEAD WYE
<b>kWe Nat (LP)</b>	450 (335)	450 (335)	450 (335)	450 (335)	450 (335)
<b>AMPS Nat (LP)</b>	1563 (1164)	1355 (1009)	677 (504)	542 (403)	78 (58)
<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

#### Engine

- ▶ Radiator Cooled Unit Mounted (50°C)
- ▶ Blower Fan & Fan Drive
- ▶ Starter & Alternator
- ▶ Oil Pump & Filter
- ▶ Oil Drain Extension w/Valve
- ▶ Governor - Electronic Isochronous
- ▶ 24V Battery System & Cables
- ▶ Air Cleaner (Dry Single Stage)
- ▶ Flexible Fuel Connector
- ▶ EPA Certified
- ▶ MasterTrak Remote Monitoring System

#### Listing Certifications

- ▶ UL 2200 Listed\*
- ▶ cUL Listed\*
- ▶ CSA Certified\*
- ▶ Seismic Certified to IBC 2018
- ▶ NFPA 110 Compliant

\*Through 600 VAC

#### Generator

- ▶ Brushless Single Bearing
- ▶ Automatic Voltage Regulator
- ▶ ± .25% Voltage Regulation
- ▶ 4 Pole, Rotating Field
- ▶ 105°C Prime Temperature Rise
- ▶ 100% of Rated Load - One Step
- ▶ 5% Maximum Harmonic Content
- ▶ NEMA MG 1, IEEE and ANSI Standards Compliance for Temperature Rise

#### Additional

- ▶ Single Source Supplier
- ▶ Microprocessor Based Digital Control
- ▶ Interface Connection Box
- ▶ Control Panel Mounted in NEMA 12 Enclosure
- ▶ Base - Structural Steel
- ▶ Main Line Circuit Breaker Mounted & Wired\*
- ▶ Catalyst / Silencer Mounted
- ▶ Battery Charger 24V 5 Amp
- ▶ Jacket Water Heater (Qty 2) -20°F 5000W 240V w/Isolation Valves
- ▶ Vibration Isolation Mounts (Pad Type)
- ▶ Radiator Duct Flange (OPU Only)
- ▶ 1YR / 1500HR Prime Warranty
- ▶ Standard Colors - White / Gray

## Application Data

Engine			
Manufacturer:	Power Solutions International	Displacement - Cu. In. (lit):	1941 (31.8)
Model:	31.8L	Bore - in. (cm) x Stroke - in. (cm):	5.91 (15.0) x 5.91 (15.0)
Type:	4-Cycle	Compression Ratio:	10.5 : 1
Aspiration:	Turbocharged, CAC	Rated RPM:	1800
Cylinder Arrangement:	12 Cylinder Vee	Max HP Stby (kW <sub>m</sub> ):	966 (716)

Exhaust System	Standby
Gas Temp. (Stack): °F (°C)	1,138 (614)
Gas Volume at Stack Temp: CFM (m <sup>3</sup> /min)	3,220 (91.1)
Maximum Allowable Exhaust Restriction (Post catalyst): in. H <sub>2</sub> O (kPa)	20.4 (5.10)

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)	361 (1368)
Heat Rejection to Coolant: BTUM (kW)	29,142 (510)
Heat Rejection to CAC: BTUM (kW)	3,229 (56.5)
Heat Radiated to Ambient: BTUM (kW)	3,714 (26.1)

Air Requirements	
Aspirating: CFM (m <sup>3</sup> /min)	1,125 (31.8)
Air Flow Required for Rad. Cooled Unit: CFM (m <sup>3</sup> /min)	65,100 (1,842)
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)	5,464 (155)	1,945 (55.0)
At 75% of Power Rating: ft <sup>3</sup> /hr (m <sup>3</sup> /hr)	4,228 (120)	1,540 (43.6)
At 50% of Power Rating: ft <sup>3</sup> /hr (m <sup>3</sup> /hr)	3,271 (92.6)	1,217 (34.4)
Fuel Inlet Size: NPT		3.00"
Fuel Pressure Required: in. H <sub>2</sub> O (kPa)		11.0 (2.70)

Fluids Capacity	
Total Oil System: gal (lit)	32.2 (122)
Engine Jacket Water Capacity: gal (lit)	29.1 (110)
System Coolant Capacity: gal (lit)	68.1 (258)

All calculations based on natural gas fuel.

Deration Factors: Rated Power Available to 6200 ft (1890m) at Ambient Temperatures to 122°F (50°C). Consult factory for site conditions above these parameters.

## DGC-2020 Control Panel

### Standard Features

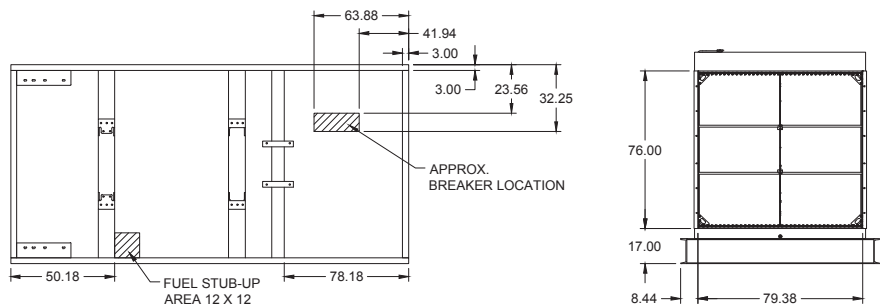
- ▶ Digital Metering
- ▶ Engine Parameters
- ▶ Generator Protection Functions
- ▶ Engine Protection
- ▶ CAN Bus (J1939) ECU Communications
- ▶ Windows-Based Software
- ▶ Multilingual Capability
- ▶ Remote Communications to RDP-110 Remote Annunciator
- ▶ 16 Programmable Contact Inputs
- ▶ 15 Contact Outputs
- ▶ RS485 Communicator Interface
- ▶ UL Recognized, CSA Certified, CE Approved
- ▶ Event Recording
- ▶ IP 54 Front Panel Rating with Integrated Gasket
- ▶ NFPA 110 Level 1 Compatible



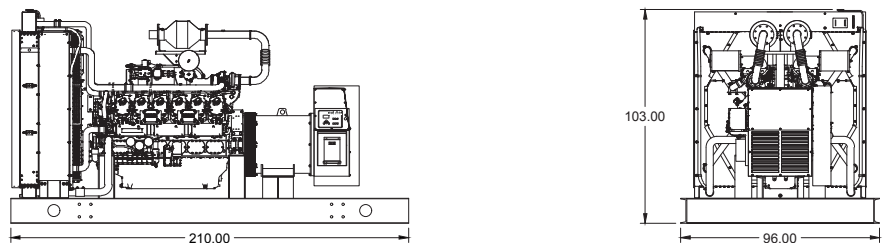
## Weights / Dimensions / Sound Data

	L x W x H	Weight lbs
<b>OPU</b>	210 x 96 x 103 in	15,100
<b>Level 1</b>	210 x 96 x 108 in	17,000
<b>Level 2</b>	210 x 96 x 108 in	17,200
<b>Level 3</b>	285 x 96 x 108 in	18,200

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



	No Load	Full Load
<b>OPU</b>	86 dBA	89 dBA
<b>Level 1</b>	84 dBA	87 dBA
<b>Level 2</b>	79 dBA	82 dBA
<b>Level 3</b>	74 dBA	77 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 standby rating.

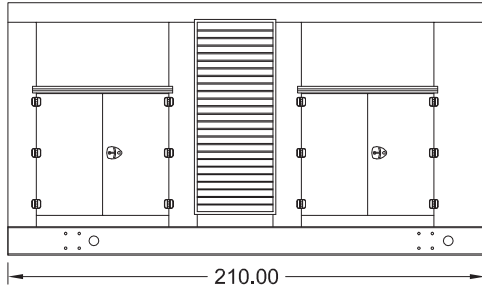
# Gaseous Product Line

450 kWe

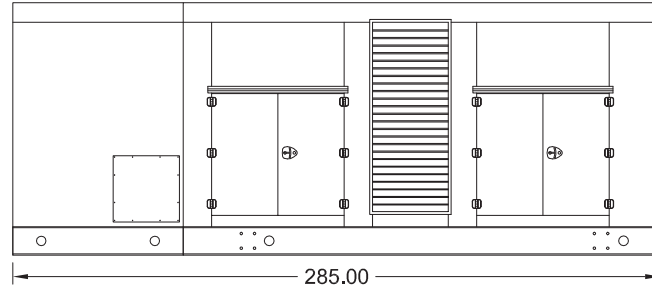


## Enclosures

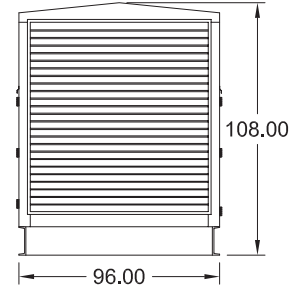
Level 1 & 2 | Side View (Weather Proof)



Level 3 | Side View (Sound Attenuated)



Level 1, 2 & 3 | Intake View



All enclosure models are 200 MPH wind rating certified in accordance with IBC2018 and ASCE/SEI 7-16 standards.

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.

Distributed By:

American Owned



American Made

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