

# BLUE STAR

## Power Systems Inc.

### Gaseous Product Line

208-4160 Volt

NG800-01

60 Hz / 1800 RPM

800 kWe

Standby

### 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> | S6L1D-D      | S6L1D-D       | S6L1D-C      | S6L1D-C      | MVWI734E     |
| <b>Connection</b>      | 12 LEAD WYE  | 12 LEAD DELTA | 12 LEAD WYE  | 4 LEAD WYE   | 6 LEAD WYE   |
| <b>kWe Nat (LP)</b>    | 800 (475)    | 800 (475)     | 800 (475)    | 800 (475)    | 800 (475)    |
| <b>AMPS Nat (LP)</b>   | 2779 (1650)  | 2408 (1430)   | 1204 (715)   | 963 (572)    | 139 (83)     |
| <b>Temp Rise</b>       | 125°C / 40°C | 125°C / 40°C  | 125°C / 40°C | 125°C / 40°C | 125°C / 40°C |

### Standard Equipment

#### Engine

- Radiator Cooled Unit Mounted (50°C)
- Radiator Duct Flange (OPU Only)
- 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)
- Catalyst / Silencer Mounted
- Flexible Fuel Connector
- EPA Certified

#### Generator

- Brushless Single Bearing
- Automatic Voltage Regulator
- ± 0.50% Voltage Regulation
- 4 Pole, Rotating Field
- 125°C Standby 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
- UL 2200 & cUL Listed through 600VAC
- CSA Certified through 600VAC
- Seismic Certified to IBC 2021
- NFPA 110 / CSA C282 Compliant
- Microprocessor Based Digital Control Panel Mounted in NEMA 12 Enclosure
- Base - Structural Steel
- Main Line Circuit Breaker Mounted & Wired
- Battery Charger 24V 5 Amp
- Jacket Water Heater (Qty 2) -20°F 6000W 240V w/Isolation Valves
- Vibration Isolation Mounts (Pad Type)
- 2 Year / 2000 Hour Standby Warranty
- Standard Colors - White / Gray

## Application Data

### Engine

|                       |                               |                                      |                           |
|-----------------------|-------------------------------|--------------------------------------|---------------------------|
| Manufacturer:         | Power Solutions International | Displacement - Cu. In. (lit):        | 2392 (39.2)               |
| Model:                | 40L                           | Bore - in. (cm) x Stroke - in. (cm): | 5.91 (15.0) x 7.28 (18.5) |
| Type:                 | 4-Cycle                       | Compression Ratio:                   | 10.5 : 1                  |
| Aspiration:           | Turbo Charged, CAC            | Rated RPM:                           | 1800                      |
| Cylinder Arrangement: | 12 Cylinder Vee               | Max HP Stby (kWm):                   | 1234 (921)                |

### Exhaust System

|   | <b>Standby</b> |
|---|----------------|
| Gas Temp. (Stack): °F (°C)  | 1,238 (670)    |
| Gas Volume at Stack Temp: CFM (m³/min)  | 5,420 (153)    |
| Maximum Allowable Exhaust Restriction (Post Catalyst): in. H <sub>2</sub> O (kPa) | 18.7 (4.67)    |

### 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)   | 458 (1,734)  |
| Heat Rejection to Coolant: BTUM (kW)  | 43,684 (764) |
| Heat Rejection to CAC: BTUM (kW)  | 5,977 (105)  |
| Heat Radiated to Ambient: BTUM (kW)   | 16,027 (280) |

### Air Requirements

|   |  |
|---|--|
| Aspirating: CFM (m³/min)                                    | 1,591 (45.0)                                   |
| Air Flow Required for Rad. Cooled Unit: CFM (m³/min)        | 52,000 (1,472)                                 |
| Air Flow Required for Heat Exchanger/Rem. Rad. CFM (m³/min) | Consult Factory For Remote Cooled Applications |

### Standby

### Fuel Consumption

|  | <b>Natural Gas</b> | <b>LP</b>    |
|--|--------------------|--------------|
| At 100% of Power Rating: ft3/hr (m3/hr)            | 8,865 (251)        | 2,666 (75.4) |
| At 75% of Power Rating: ft3/hr (m3/hr)             | 6,775 (192)        | 2,047 (57.9) |
| At 50% of Power Rating: ft3/hr (m3/hr)             | 4,972 (141)        | 1,518 (43.0) |
| Fuel Inlet Size: NPT                               |                    | 3.00"        |
| Fuel Pressure Required: in. H <sub>2</sub> O (kPa) |                    | 30.0 (7.50)  |

### Fluids Capacity

|   |             |
|---|-------------|
| Total Oil System: gal (lit)             | 38.6 (146)  |
| Engine Jacket Water Capacity: gal (lit) | 20.1 (76.1) |
| System Coolant Capacity: gal (lit)      | 45.4 (172)  |

All calculations based on natural gas fuel.

Deration Factors: Temperature: Derate 1.5% Per 5°F Over 77°F Air Inlet Temperature | Altitude: Derate 4.5% Per 1,000 ft Over 1,200 ft

## DCP7310 Control Panel

### Standard Features

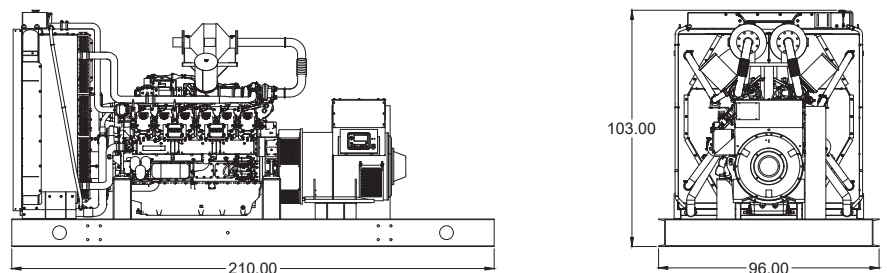
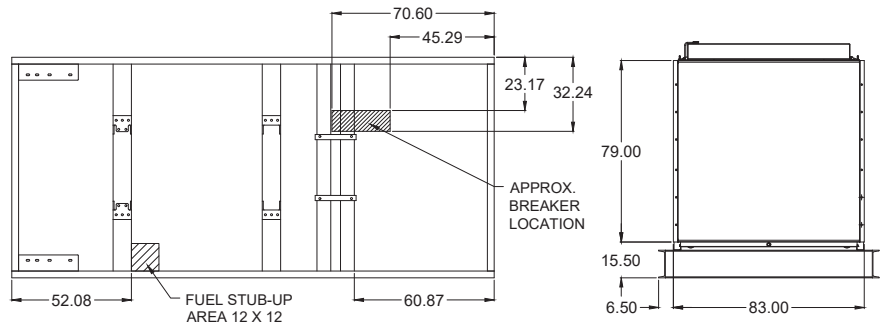
- Digital Metering
- Engine Parameters
- Generator Protection Functions
- Engine Protection
- CAN Bus (J1939) ECU Communications
- Windows-Based Software
- Multilingual Capability
- Remote Communications to DSE2548 Remote Annunciator
- 8 Programmable Contact Inputs
- 10 Contact Outputs
- RS485 Communicator Interface
- cULus Listed, CE Approved
- Event Recording
- IP 65 rating (with supplied gasket) offers increased resistance to water ingress
- 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 | 16,975     |
| <b>Level 1</b> | 210 x 96 x 108 in | 18,225     |
| <b>Level 2</b> | 210 x 96 x 108 in | 18,425     |
| <b>Level 3</b> | 285 x 96 x 108 in | 19,875     |

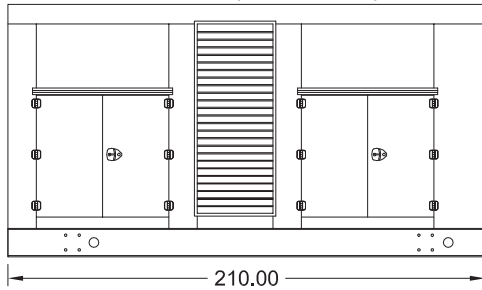
Please allow 6-12 inches for height of exhaust stack.



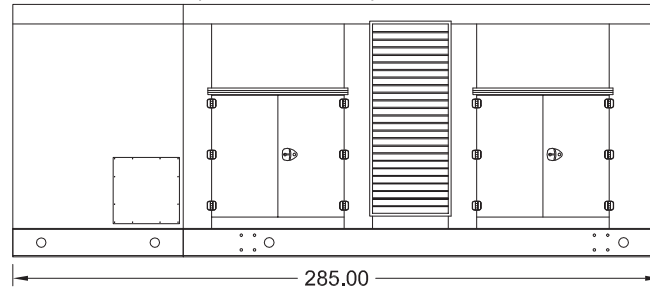
|                | No Load | Full Load |
|----------------|---------|-----------|
| <b>OPU</b>     | 87 dBA  | 90 dBA    |
| <b>Level 1</b> | 85 dBA  | 88 dBA    |
| <b>Level 2</b> | 80 dBA  | 83 dBA    |
| <b>Level 3</b> | 75 dBA  | 78 dBA    |

## Enclosures

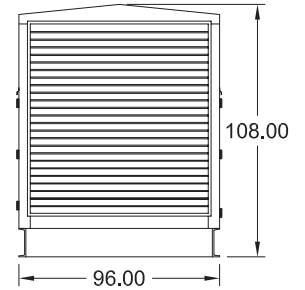
Level 1 & 2 | Side View (Weather Proof)



Level 3 | Side View (Sound Attenuated)



Level 1, 2 & 3 | Intake View



- All enclosure models are 200 MPH wind rating certified in accordance with IBC2021 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.

### Notes

- All specification sheet dimensions are represented in inches.
- All drawings based on standard 480 volt standby generator. Lengths may vary with other voltages. All drawings and dimensions subject to change without notice.
- All enclosures are based on the standard unit configuration. Any requested deviation can change dimensions.
- Sound data is measured at 23 feet (7 meters) in accordance with ISO 8528-10.
- All materials and specifications subject to change without notice.

American Owned



American Made

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