

208-600 Volt

PS25-01 60 Hz / 1800 RPM

20 kWe Standby

### Ratings

	240 <b>V</b>	208V	240V	480 <b>V</b>	600 <b>V</b>
Phase	1	3	3	3	3
PF	1.0	0.8	0.8	0.8	0.8
Hz	60	60	60	60	60
Generator Model	283PSL1707	283PSL1706	283PSL1706	283PSL1706	283PSL5250
Connection	12 LEAD ZIG-ZAG	12 LEAD WYE	12 LEAD DELTA	12 LEAD WYE	4 LEAD WYE
kWe Nat (LP)	20 (20)	20 (20)	20 (20)	20 (20)	20 (20)
AMPS Nat (LP)	83 (83)	69 (69)	60 (60)	30 (30)	24 (24)
Temp Rise	130°C / 27°C	130°C / 27°C	130°C / 27°C	130°C / 27°C	130°C / 27°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
- ▶ 12V Battery System & Cables
- ► Air Cleaner (Dry Single Stage)
- ► Flexible Fuel Connector
- ► EPA Certified

#### **Listing Certifications**

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

#### Generator

- ▶ Brushless Single Bearing
- ► Automatic Voltage Regulator
- ▶ ± 1% Voltage Regulation
- ▶ 4 Pole, Rotating Field
- ▶ 130°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
- ▶ Microprocessor Based Digital Control
- ► Interface Connection Box
- ▶ Control Panel Mounted in NEMA 12 Enclosure
- ▶ Base Formed Steel
- ▶ Main Line Circuit Breaker Mounted & Wired
- ► Critical Grade Silencer Mounted
- ▶ Battery Charger 12V 6 Amp
- ► Jacket Water Heater -20°F 1000W 120V w/Isolation Valves
- ▶ Vibration Isolation Mounts
- ► Radiator Duct Flange (OPU Only)
- ▶ 2YR / 2000HR Standby Warranty
- ▶ Standard Colors White / Gray

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### 20 kWe



## Application Data

Engine			
Manufacturer:	Power Solutions International	Displacement - Cu. In. (lit):	144 (2.40)
Model:	PSI 2.4L	Bore - in. (cm) x Stroke - in. (cm):	3.40 (8.64) x 3.93 (9.98)
Type:	4-Cycle	Compression Ratio:	9.50:1
Aspiration:	Natural	Rated RPM:	1800
Cylinder Arrangement:	4 Cylinder Inline	Max HP Stby (kWm):	42.8 (31.9)

Exhaust System		Standby
Gas Temp. (Stack): °F (°C)		1,350 (732)
Gas Volume at Stack Temp: CFM (m³/min)		248 (7.02)
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)		1,520 (26.6)
Heat Rejection to CAC: BTUM (kW)		N/A
Heat Radiated to Ambient: BTUM (kW)		326 (5.70)
Air Requirements		
Aspirating: CFM (m³/min)		74.7 (2.11)
Air Flow Required for Rad. Cooled Unit: CFM (m³/min)		4,752 (135)
Air Flow Required for Heat Exchanger/Rem. Rad. CFM (m³/min)	Consult Factory For Ren	note Cooled Applications
Fuel Consumption	Natural Gas	LP
At 100% of Power Rating: ft3/hr (m3/hr)	431 (12.2)	184 (5.21)
At 75% of Power Rating: ft3/hr (m3/hr)	339 (9.59)	140 (3.96)
At 50% of Power Rating: ft3/hr (m3/hr)	262 (7.41)	104 (2.94)
Fuel Inlet Size: NPT		0.75"
Fuel Pressure Required: in. H <sub>2</sub> O (kPa)		11.0 (2.75)
Fluids Capacity		
Total Oil System: gal (lit)		1.12 (4.25)
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.

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

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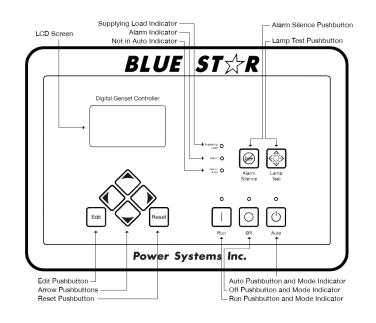
### 20 kWe



### 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

	LxWxH	Weight Ibs
OPU	66 x 36 x 45 in	1,000
Level 1	80 x 36 x 54 in	1,325
Level 2	80 x 36 x 54 in	1,375
Level 3	104 x 36 x 48 in	1,500

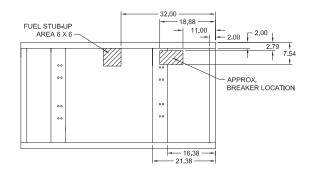
Please allow 6-12 inches for height of exhaust stack.

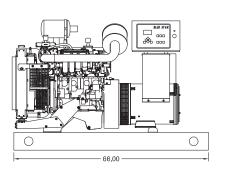
	No Load	Full Load
OPU	73 dBA	75 dBA
Level 1	66 dBA	68 dBA
Level 2	64 dBA	66 dBA

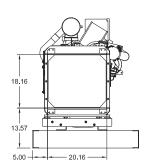
61 dBA

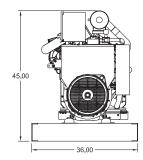
Level 3

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 standby rating.

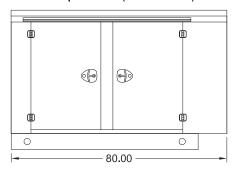
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### 20 kWe



### **Enclosures**

Level 1 & 2 | Side View (Weather Proof)



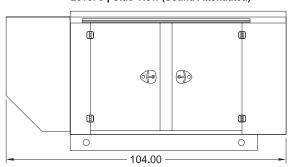
All enclosure models are 200 MPH wind rating certified in accordance with IBC2018 and ASCE/SEI 7-16 standards.

Level 2 & 3 enclosures include sound attenuation foam.

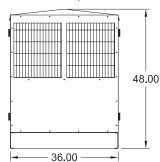
Level 3 enclosure includes frontal sound & exhaust hood.

\*Enclosure height does not include exhaust stack.

Level 3 | Side View (Sound Attenuated)



Level 1, 2 & 3 | Intake View



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





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