# POWERDAK POWER PRODUCTS, LLC

## Gaseous Product Line

### BSPS400KWSP

### 400 kWe / 350 kWe

### Ratings

-	208V	240V	480V	600V
Phase	3	3	3	3
PF	0.8	0.8	0.8	0.8
Hz	60	60	60	60
Generator Model	433CSL6220	433CSL6220	433CSL6220	433PSL6248
Connection	12 LEAD WYE	12 LEAD DELTA	12 LEAD WYE	4 LEAD WYE
Standby				
kWe Nat (LP)	400 (300)	400 (300)	400 (300)	400 (300)
AMPS Nat (LP)	1390 (1042)	1204 (903)	602 (451)	482 (361)
ſemp Rise	130°C / 27°C	130°C / 27°C	130°C / 27°C	130°C / 27°C
Prime				
kWe Nat (LP)	350 (NA)	350 (NA)	350 (NA)	350 (NA)
AMPS Nat (LP)	1246 (NA)	1054 (NA)	527 (NA)	421 (NA)
Temp Rise	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 2012

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### Generator

- Brushless Single Bearing
- Automatic Voltage Regulator
- ▶ ± 1% Voltage Regulation
- ▶ 4 Pole, Rotating Field
- ▶ 130°C Standby Temperature Rise
- ▶ 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

- 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 -20°F 4000W 240V w/Isolation Valves
- Vibration Isolation Mounts Pad Type
- Radiator Duct Flange (OPU Only)
- ▶ Single Source Supplier
- 2YR / 2000HR Standby Warranty
- ▶ 1YR / 1500HR Prime Warranty
- Standard Colors White / Tan / Gray



60 Hz / 1800 RPM

### Standby / Prime

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### Application Data

Manufacturer:	Power Solutions International	Displacement - Cu. In. (lit):	1,338 (21.9)
Model:	D219TIC	Bore - in. (cm) x Stroke - in. (cm):	5.04 (12.8) x 5.59 (14.2)
Туре:	4-Cycle	Compression Ratio:	10.5 : 1
Aspiration:	Turbo Charged, CAC	Rated RPM:	1800
Cylinder Arrangement:	12 Cylinder Vee	Max HP Stby (kWm):	612 (457)

Exhaust System	Standby	Prime	
Gas Temp. (Stack): °F (°C)	1,350 (732)	1,350 (732)	
Gas Volume at Stack Temp: CFM (m³/min)	2,995 (84.8)	2,621 (74.2)	
Maximum Allowable Exhaust Restriction: in. H2O (kPa)	40.8 (10.2)	40.8 (10.2)	
Cooling System			
Ambient Capacity of Radiator: °F (°C)	122 (50.0)	122 (50.0)	
Maximum Allowable Static Pressure on Rad. Exhaust: in. H <sub>2</sub> O (kPa)	0.50 (0.12)	0.50 (0.12)	
Water Pump Flow Rate: GPM (lit/min)	174 (659)	174 (659)	
Heat Rejection to Coolant: BTUM (kW)	25,760 (451)	22,540 (394)	
Heat Rejection to CAC: BTUM (kW)	6,080 (106)	5,320 (93.1)	
Heat Radiated to Ambient: BTUM (kW)	3,415 (59.8)	2,988 (52.3)	
Air Requirements			
Aspirating: CFM (m³/min)	968 (27.0)	847 (24.0)	
Air Flow Required for Rad. Cooled Unit: CFM (m³/min)	40,000 (1,132)	40,000 (1,132)	
Air Flow Required for Heat Exchanger/Rem. Rad. CFM (m³/min)	Consult Fa	Consult Factory For Remote Cooled Applications	

	Standby		Prime	
Fuel Consumption	Natural Gas	LP	Natural Gas	LP
At 100% of Power Rating: ft3/hr (m3/hr)	4,230 (120)	1,408 (39.8)	3,701 (105)	N/A
At 75% of Power Rating: ft3/hr (m3/hr)	3,297 (93.3)	1,097 (31.1)	2,885 (81.6)	N/A
At 50% of Power Rating: ft3/hr (m3/hr)	2,314 (65.5)	770 (21.8)	2,025 (57.3)	N/A
Fuel Inlet Size: NPT	3.0	0"	3.0	0"
Fuel Pressure Required: in. H20 (kPa)	7.00 - 11.0 (	1.75 - 2.75)	7.00 - 11.0 (	1.75 - 2.75)
Fluids Capacity				
Total Oil System: gal (lit)				10.6 (40.0)
Engine Jacket Water Capacity: gal (lit)				13.8 (52.3)
System Coolant Capacity: gal (lit)				60.2 (228)

System Coolant Capacity: gal (lit All calculations based on natural gas fuel.

Deration Factors: Temperature: Derate 1.5% Per 10°F Over 77°F Air Inlet Temperature | Altitude: Derate 2.5% Per 1,000 ft Over 1,200 ft

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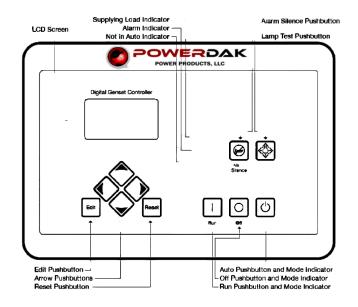


POWER PRODUCTS, LLC

## 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

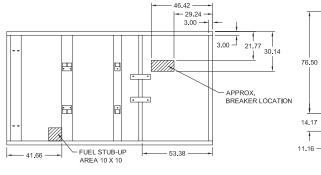


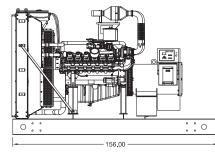
### Weights / Dimensions / Sound Data

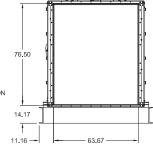
	L x W x H	Weight Ibs
OPU	156 x 86 x 98 in	10,375
Level 1	156 x 86 x 110 in	12,025
Level 2	156 x 86 x 110 in	12,150
Level 3	228 x 86 x 110 in	12,850

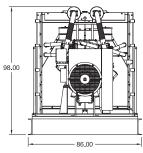
Please allow 6-12 inches for height of exhaust stack.

	No Load	Full Load
OPU	84 dBA	87 dBA
Level 1	82 dBA	85 dBA
Level 2	77 dBA	80 dBA
Level 3	72 dBA	75 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.

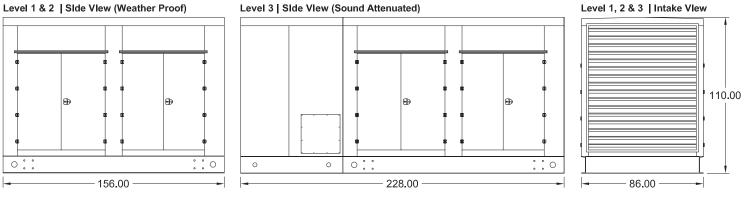
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### Enclosures



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.

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