

# BLUE STAR

## Power Systems Inc.

### Diesel Product Line

208-4160 Volt

PD400-01

60 Hz / 1800 RPM

400 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>	433CSL6220	433CSL6220	433CSL6220	433PSL6248	573FSM4352
<b>Connection</b>	12 LEAD WYE	12 LEAD DELTA	12 LEAD WYE	4 LEAD WYE	6 LEAD WYE
<b>kWe</b>	400	400	400	400	400
<b>AMPS</b>	1390	1204	602	482	69.5
<b>Temp Rise</b>	130°C / 27°C	130°C / 27°C	130°C / 27°C	130°C / 27°C	130°C / 27°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>▶ 24V Battery System &amp; Cables</li> <li>▶ Air Cleaner (Dry Single Stage)</li> <li>▶ Flexible Fuel Connector</li> <li>▶ EPA Certified Tier 3</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 2018</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>▶ 130°C Standby 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>▶ Single Source Supplier</li> <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>▶ Critical Grade Silencer Mounted</li> <li>▶ Battery Charger 24V 5 Amp</li> <li>▶ Jacket Water Heater -20°F 4000W 240V w/Isolation Valves</li> <li>▶ Vibration Isolation Mounts</li> <li>▶ Radiator Duct Flange (OPU Only)</li> <li>▶ 2YR / 2000HR Standby Warranty</li> <li>▶ Standard Colors - White / Gray</li> </ul> |
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\*Through 600 VAC

## Application Data

Engine			
Manufacturer:	Perkins	Displacement - Cu. In. (lit):	763 (12.5)
Model:	2206D-E13TAG3	Bore - in. (cm) x Stroke - in. (cm):	5.12 (13.0) x 6.18 (15.7)
Type:	4-Cycle	Compression Ratio:	16.3:1
Aspiration:	Turbo Charged, CAC	Rated RPM:	1800
Cylinder Arrangement:	6 Cylinder Inline	Max HP Stby (kWm):	619 (462)
Exhaust System			Standby
Gas Temp. (Stack): °F (°C)			1,256 (680)
Gas Volume at Stack Temp: CFM (m³/min)			3,046 (86.2)
Maximum Allowable Exhaust Restriction: in. H <sub>2</sub> O (kPa)			40.0 (10.0)
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)			106 (402)
Heat Rejection to Coolant: BTUM (kW)			209 (156)
Heat Rejection to CAC: BTUM (kW)			103 (76.6)
Heat Radiated to Ambient: BTUM (kW)			3,330 (58.3)
Air Requirements			
Aspirating: CFM (m³/min)			1,053 (29.8)
Air Flow Required for Rad. Cooled Unit: CFM (m³/min)			27,845 (788)
Air Flow Required for Heat Exchanger/Rem. Rad. CFM (m³/min)		Consult Factory For Remote Cooled Applications	
Fuel Consumption			
At 100% of Power Rating: gal/hr (lit/hr)			26.7 (101)
At 75% of Power Rating: gal/hr (lit/hr)			20.6 (78.1)
At 50% of Power Rating: gal/hr (lit/hr)			15.6 (59.1)
Fluids Capacity			
Total Oil System: gal (lit)			10.6 (40.0)
Engine Jacket Water Capacity: gal (lit)			7.48 (28.3)
System Coolant Capacity: gal (lit)			13.6 (51.4)

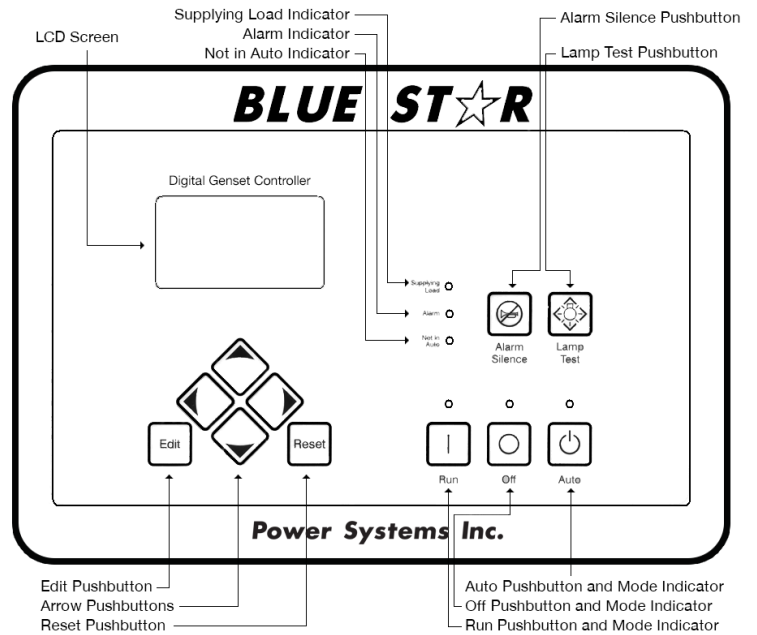
### Deration Factors

Rated Power is available up to 2,461 Ft (750 m) at ambient temperatures to 109°F (43°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

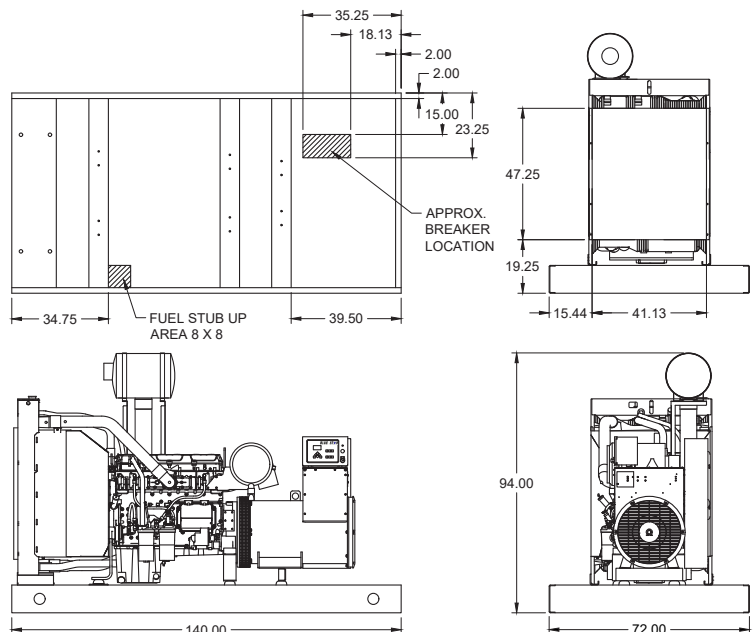


## Weights / Dimensions / Sound Data

	L x W x H	Weight lbs
<b>OPU</b>	140 x 72 x 94 in	7,700
<b>Level 1</b>	180 x 72 x 103 in	9,350
<b>Level 2</b>	180 x 72 x 103 in	9,425
<b>Level 3</b>	225 x 72 x 103 in	9,850

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

	No Load	Full Load
<b>OPU</b>	88 dBA	91 dBA
<b>Level 1</b>	84 dBA	86 dBA
<b>Level 2</b>	79 dBA	81 dBA
<b>Level 3</b>	70 dBA	73 dBA



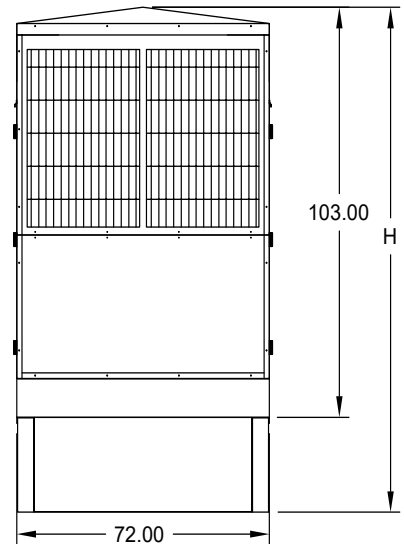
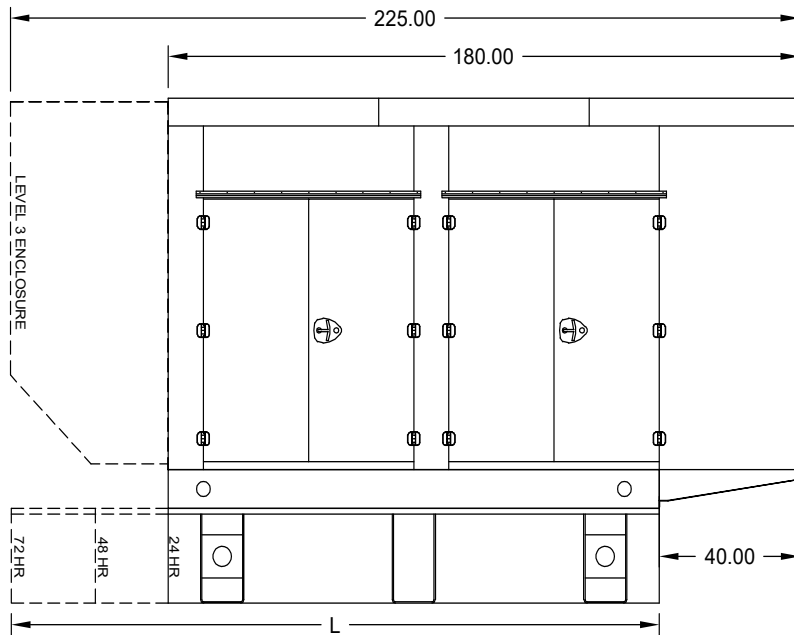
Drawings based on standard open power 480 volt standby generator. Lengths may vary with other voltages. Subject to change without notice. Sound data as measured at 23 feet (7 meters) in accordance with ISO 8528-10 at standby rating.

# Diesel Product Line

400 kWe



## Enclosures & Fuel Tanks



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.

	24 Hour 710 Gallon	48 Hour 1420 Gallon	72 Hour 2130 Gallon
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<b>L</b>	140.00	180.00	250.00
<b>H</b>	127.00	139.00	139.00

All specification sheet dimensions are represented in inches.

All enclosures and fuel tanks are based on the standard standby unit configuration. Any deviation can change dimensions.

Materials and specifications subject to change without notice.

American Owned



American Made

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