

# BLUE STAR

## Power Systems Inc.

### Diesel Product Line

208-600 Volt

JD250-03IT4

60 Hz / 1800 RPM

250 kWe / 230 kWe

Standby / Prime

### Ratings

	240V	208V	240V	480V	600V
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	572RSL4025	432CSL6210	432CSL6210	432CSL6210	432PSL6246
Connection	12 LEAD ZIG-ZAG	12 LEAD WYE	12 LEAD DELTA	12 LEAD WYE	4 LEAD WYE
Standby					
kWe	250	250	250	250	250
AMPS	1041	868	753	376	301
Temp Rise	130°C / 27°C	130°C / 27°C	130°C / 27°C	130°C / 27°C	130°C / 27°C
Prime					
kWe	230	230	230	230	230
AMPS	958	799	692	346	277
Temp Rise	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
- ▶ 12V Battery System & Cables
- ▶ SAE Flywheel & Housing
- ▶ Air Cleaner (Dry Single Stage)
- ▶ Exhaust Particulate Filter / Silencer Mtd
- ▶ Flexible Fuel Connectors
- ▶ EPA Certified - Tier IT4

#### Generator

- ▶ Brushless Single Bearing
- ▶ Automatic Voltage Regulator
- ▶ ± 1.0% 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
- ▶ Base - Formed Steel
- ▶ Main Line Circuit Breaker Mounted & Wired
- ▶ Battery Charger 12V 6 Amp
- ▶ Jacket Water Heater -20°F 2500W 240V w/Isolation Valves
- ▶ Vibration Isolation Mounts
- ▶ Radiator Duct Flange (OPU Only)
- ▶ Single Source Supplier
- ▶ 2YR / 2000HR Standby Warranty
- ▶ 1YR / 1500HR Prime Warranty
- ▶ Standard Colors - White / Tan / Gray

# Diesel Product Line

250 kWe / 230 kWe



## Application Data

### Engine

Manufacturer:	John Deere	Displacement - Cu. In. (lit):	549 (9.0)
Model:	6090HFG95	Bore - in. (cm) x Stroke - in. (cm):	4.66 (11.8) x 5.35 (13.6)
Type:	4-Cycle	Compression Ratio:	16:1
Aspiration:	Turbo Charged, CAC	Rated RPM:	1800
Cylinder Arrangement:	6 Cylinder Inline	Max HP Stby (kWm):	398 (297)

### Exhaust System

Standby	Prime
Gas Temp. (Stack): °F (°C)	716 (380)
Gas Volume at Stack Temp: CFM (m³/min)	1483 (42.0)
Maximum Allowable Exhaust Restriction: in. H2O (kPa)	41.0 (10.3)

### Cooling System

Ambient Capacity of Radiator: °F (°C)	122 (50.0)	122 (50.0)
Maximum Allowable Static Pressure on Rad. Exhaust: in. H2O (kPa)	0.5 (0.12)	0.5 (0.12)
Water Pump Flow Rate: Gpm (lit/min)	107 (405)	107 (405)
Heat Rejection to Coolant: BTUM (kW)	10,194 (179)	10,194 (179)
Heat Rejection to CAC: BTUM (kW)	4,952 (87.0)	4,952 (87.0)
Heat Radiated to Ambient: BTUM (kW)	2,312 (40.5)	2,127 (37.2)

### Air Requirements

Aspirating: CFM (m³/min)	742 (21.0)	742 (21.0)
Air Flow Required for Rad. Cooled Unit: CFM (m³/min)	22,302 (631)	22,302 (631)
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)	19.1 (72.4)	13.9 (52.8)
At 75% of Power Rating: gal/hr (lit/hr)	13.9 (52.7)	10.8 (40.9)
At 50% of Power Rating: gal/hr (lit/hr)	9.7 (36.7)	7.5 (28.5)

### Fluids Capacity

Total Oil System: gal (lit)	9.0 (34.0)	9.0 (34.0)
Engine Jacket Water Capacity: gal (lit)	4.5 (17.0)	4.5 (17.0)
System Coolant Capacity: gal (lit)	13.2 (50.0)	13.2 (50.0)

#### Deration Factors

Rated Power is available up to 5500 ft (1676 m) at ambient temperatures to 122°F (50°C) standby and prime.  
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 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

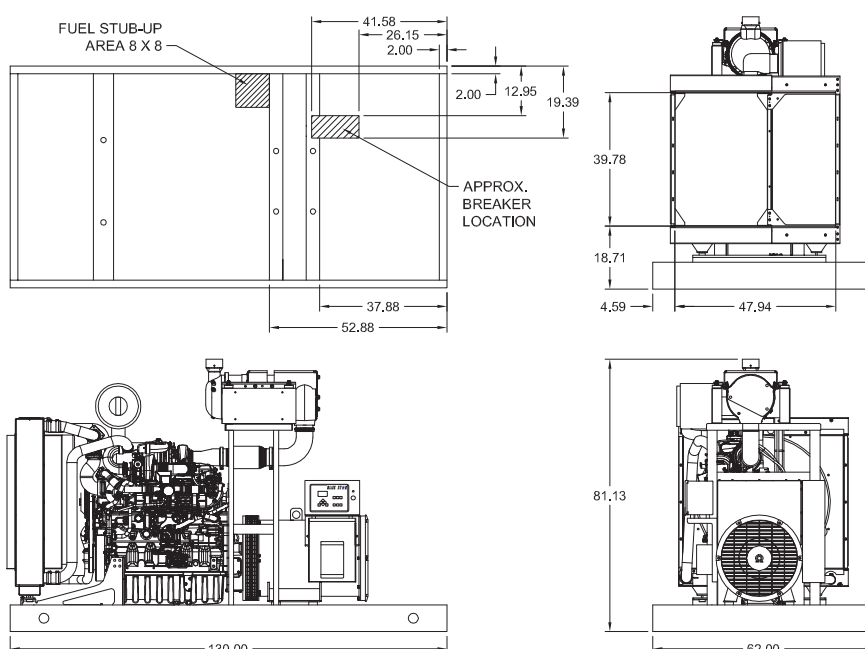


## Weights / Dimensions / Sound Data

	L x W x H	Weight lbs
<b>OPU</b>	130 x 62 x 81 in	6500
<b>Level 1</b>	130 x 62 x 100 in	7500
<b>Level 2</b>	130 x 62 x 114 in	7950
<b>Level 3</b>	190 x 62 x 106 in	8400

Height measured from bottom of base to exhaust stack.

	No Load	Full Load
<b>OPU</b>	78 dBA	82 dBA
<b>Level 1</b>	76 dBA	80 dBA
<b>Level 2</b>	75 dBA	78 dBA
<b>Level 3</b>	67 dBA	70 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.

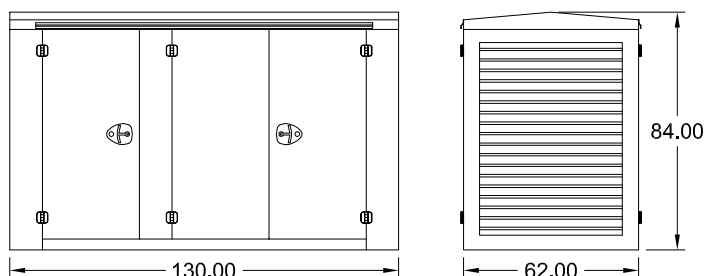
# Diesel Product Line

250 kW<sub>e</sub> / 230 kW<sub>e</sub>

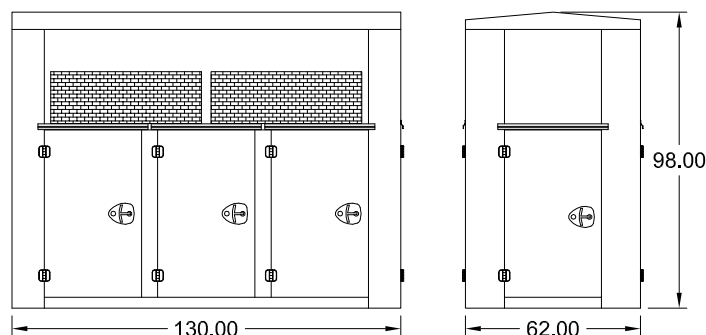


## Optional Enclosures and Fuel Tanks

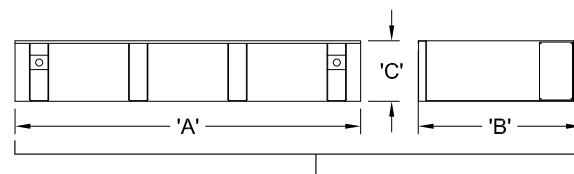
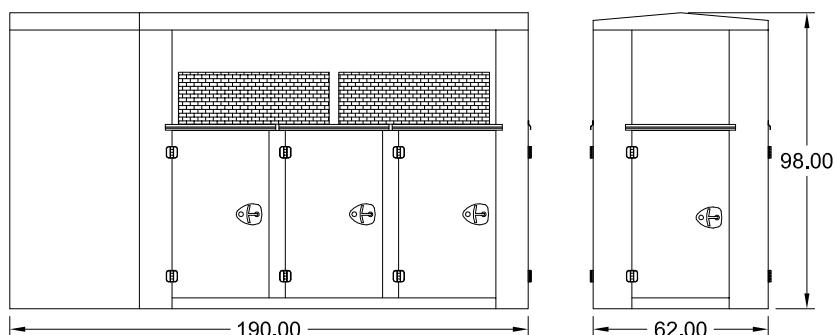
**Level 1 Enclosure (WPE)**



**Level 2 Enclosure (WPF)**



**Level 3 Enclosure (SAE)**



\*Level 1 enclosures are 100 MPH Wind Rated as standard (up to 150 MPH available).

\*\*Level 2 & 3 enclosures are 150 MPH Wind Rated as standard.

\*\*\*Enclosure height does not include unit base or exhaust stack.

### Double Wall UL 142 Listed Fuel Tanks

	24 Hour (475 Gallon)			48 Hour (950 Gallon)			72 Hour (1425 Gallon)		
	A	B	C	A	B	C	A	B	C
<b>OPU</b>	130.00	62.00	22.00	150.00	62.00	36.00	210.00	62.00	36.00
<b>Level 1</b>	130.00	62.00	22.00	150.00	62.00	36.00	210.00	62.00	36.00
<b>Level 2</b>	130.00	62.00	22.00	150.00	62.00	36.00	210.00	62.00	36.00
<b>Level 3</b>	190.00	62.00	14.00	190.00	62.00	28.00	210.00	62.00	36.00

\*All specification sheet dimensions are represented in inches.

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

\*\*\*Level 1 enclosure not UL listed.

Materials and specifications subject to change without notice.

Distributed By:



A USA COMPANY

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