

# BLUE STAR

## Power Systems Inc.

Diesel Product Line

208-600 Volt

JD40-04FT4

60 Hz / 1800 RPM

40 kWe / 40 kWe

Standby / Prime

### Ratings

	240V	208V	240V	480V	600V
<b>Phase</b>	1	3	3	3	3
<b>PF</b>	1.0	0.8	0.8	0.8	0.8
<b>Hz</b>	60	60	60	60	60
<b>Generator Model</b>	287PSL1702	285PSL1700	285PSL1700	285PSL1700	285PSL5254
<b>Connection</b>	12 LEAD ZIG-ZAG	12 LEAD WYE	12 LEAD DELTA	12 LEAD WYE	4 LEAD WYE
<b>Standby</b>					
<b>kWe</b>	40	40	40	40	40
<b>AMPS</b>	167	139	120	60	48
<b>Temp Rise</b>	105°C / 40°C	105°C / 40°C	105°C / 40°C	105°C / 40°C	105°C / 40°C
<b>Prime</b>					
<b>kWe</b>	40	40	40	40	40
<b>AMPS</b>	167	139	120	60	48
<b>Temp Rise</b>	105°C / 40°C	105°C / 40°C	105°C / 40°C	105°C / 40°C	105°C / 40°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>▶ 12V Battery System &amp; Cables</li> <li>▶ Air Cleaner (Dry Single Stage)</li> <li>▶ Flexible Fuel Connector</li> <li>▶ EPA Certified Tier 4 Final</li> <li>▶ DOC/DPF Exhaust Filter</li> </ul> <p><b>Listing Certifications</b></p> <ul style="list-style-type: none"> <li>▶ NFPA 110 Compliant</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>▶ 105°C Standby Temperature Rise</li> <li>▶ 105°C Prime 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>▶ 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>▶ Exhaust Filter / Silencer Mounted</li> <li>▶ Battery Charger 12V 6 Amp</li> <li>▶ Jacket Water Heater -20°F 1000W 120V w/Isolation Valves</li> <li>▶ Vibration Isolation Mounts</li> <li>▶ Radiator Duct Flange (OPU Only)</li> <li>▶ Single Source Supplier</li> <li>▶ 2YR / 2000HR Standby Warranty</li> <li>▶ 1YR / 1500HR Prime Warranty</li> <li>▶ Standard Colors - White / Tan / Gray</li> </ul> |
|---|--|---|

## Application Data

Engine			
Manufacturer:	John Deere	Displacement - Cu. In. (lit):	177 (2.90)
Model:	3029HFG03	Bore - in. (cm) x Stroke - in. (cm):	4.20 (10.7) x 4.30 (11.0)
Type:	4-Cycle	Compression Ratio:	16.9:1
Aspiration:	Turbo Charged, CAC	Rated RPM:	1800
Cylinder Arrangement:	3 Cylinder Inline	Max HP Stby (kWm):	74.0 (55.2)

Exhaust System	Standby	Prime
Gas Temp. (Stack): °F (°C)	1,044 (562)	1,044 (562)
Gas Volume at Stack Temp: CFM (m³/min)	463 (13.1)	463 (13.1)
Maximum Allowable Exhaust Restriction (Post DPF): in. H <sub>2</sub> O (kPa)	22.0 (5.50)	22.0 (5.50)
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)	26.0 (98.4)	26.0 (98.4)
Heat Rejection to Coolant: BTUM (kW)	1,713 (30.0)	1,713 (30.0)
Heat Rejection to CAC: BTUM (kW)	638 (11.2)	638 (11.2)
Heat Radiated to Ambient: BTUM (kW)	444 (7.77)	444 (7.77)
Air Requirements		
Aspirating: CFM (m³/min)	177 (5.01)	177 (5.01)
Air Flow Required for Rad. Cooled Unit: CFM (m³/min)	6,714 (190)	6,714 (190)
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)	3.56 (13.5)	3.56 (13.5)
At 75% of Power Rating: gal/hr (lit/hr)	2.86 (10.8)	2.86 (10.8)
At 50% of Power Rating: gal/hr (lit/hr)	2.20 (8.33)	2.20 (8.33)
Fluids Capacity		
Total Oil System: gal (lit)	2.25 (8.50)	2.25 (8.50)
Engine Jacket Water Capacity: gal (lit)	1.32 (5.00)	1.32 (5.00)
System Coolant Capacity: gal (lit)	4.62 (17.5)	4.62 (17.5)

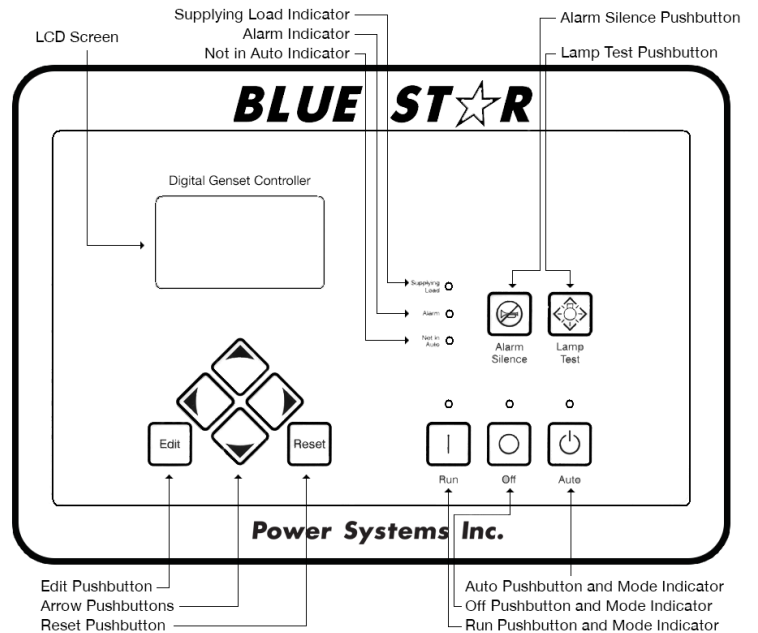
Deration Factors

Rated Power is available up to 8,000 Ft (2,438m) 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

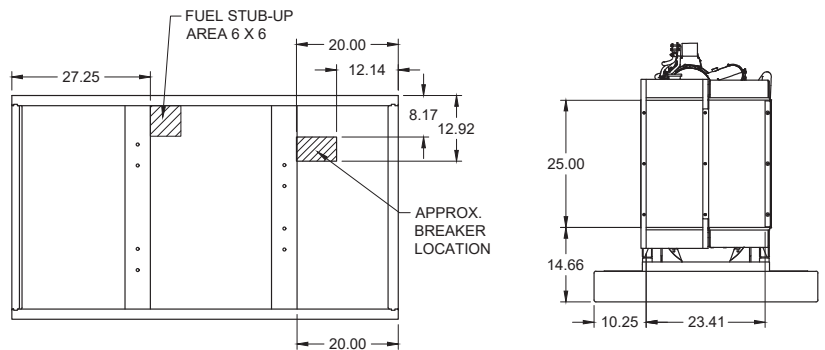
- ▶ Digital Metering
- ▶ Engine Parameters
- ▶ Generator Protection Functions
- ▶ Engine Protection
- ▶ CAN Bus ECU Communications
- ▶ Windows-Based Software
- ▶ Multilingual Capability
- ▶ Remote Communications to RDP-110 Remote Annunciator
- ▶ 16 Programmable Contact Inputs
- ▶ Up to 15 Contact Outputs (7 standard)
- ▶ UL Recognized, CSA Certified, CE Approved
- ▶ Event Recording
- ▶ IP 54 Front Panel Rating with Integrated Gasket
- ▶ NFPA 110 Level 1 Compatible



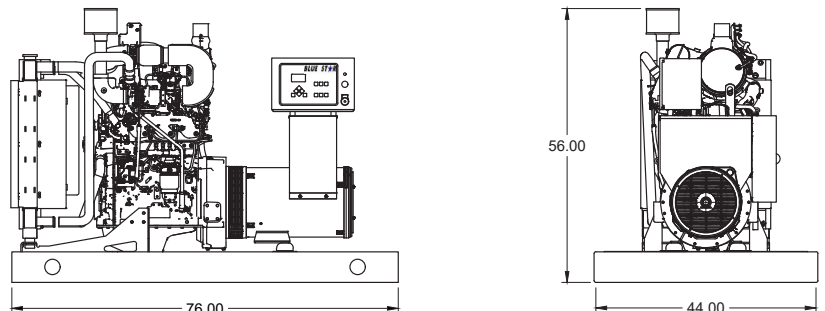
## Weights / Dimensions / Sound Data

	L x W x H	Weight lbs
<b>OPU</b>	76 x 44 x 56 in	2,075
<b>Level 1</b>	90 x 44 x 74 in	2,550
<b>Level 2</b>	90 x 44 x 74 in	2,600
<b>Level 3</b>	115 x 44 x 74 in	2,725

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

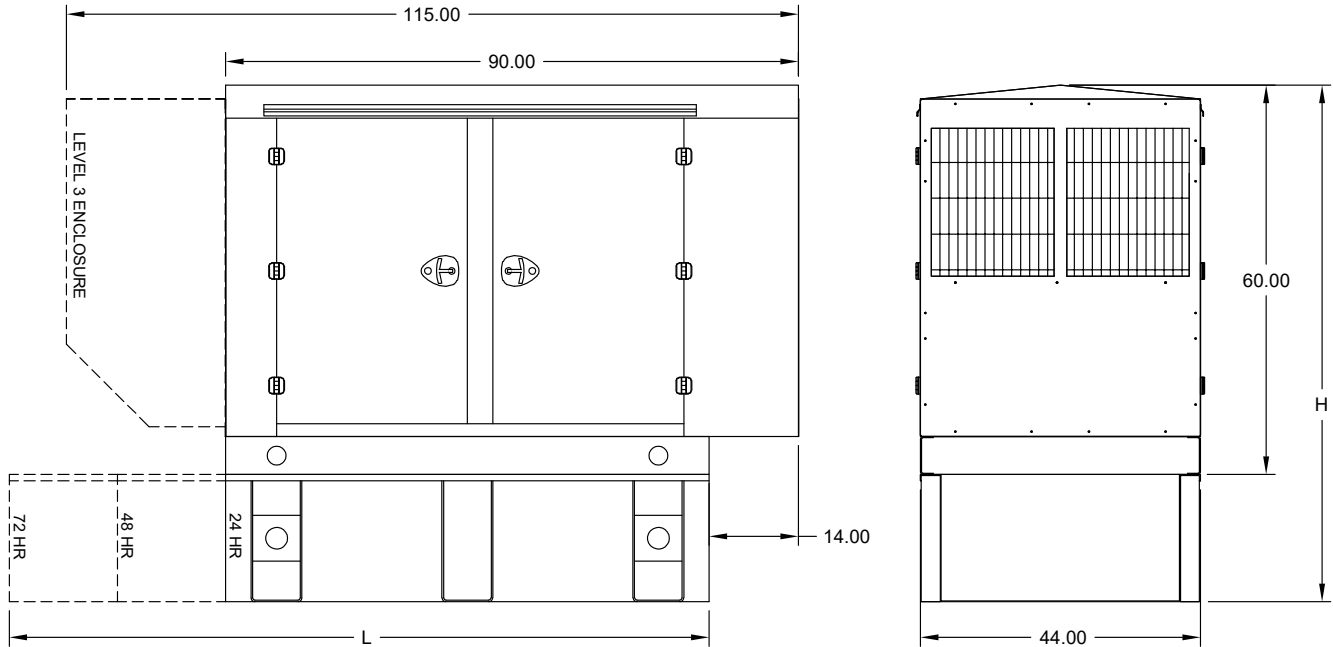


	No Load	Full Load
<b>OPU</b>	72 dBA	74 dBA
<b>Level 1</b>	66 dBA	68 dBA
<b>Level 2</b>	62 dBA	65 dBA
<b>Level 3</b>	60 dBA	62 dBA



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.

## Enclosures



All enclosures are 200 MPH wind rated 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 150 Gallon	48 Hour 300 Gallon	72 Hour 450 Gallon
<b>L</b>	76.00	100.00	110.00
<b>H</b>	80.00	88.00	96.00

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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