BLUE ST R Power Systems Inc.

Diesel Product Line

208-600 Volt

PD50-01 60 Hz / 1800 RPM

50 kWe Standby

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	361CSL1602	361CSL1601	361CSL1601	361CSL1601	361PSL1633
Connection	12 LEAD ZIG-ZAG	12 LEAD WYE	12 LEAD DELTA	12 LEAD WYE	4 LEAD WYE
kWe	50	50	50	50	50
AMPS	208	174	151	75	60
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 Mechanical 3%
- ▶ 12V Battery System & Cables
- ► Air Cleaner (Dry Single Stage)
- ▶ Flexible Fuel Connector
- ► EPA Certified Tier 3

Listing Certifications

- ▶ UL 2200 Listed
- ▶ cUL Listed
- ▶ CSA Certified
- ▶ Seismic Certified to IBC 2018
- ▶ NFPA110 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 1500W 120V w/Isolation Valves
- ▶ Vibration Isolation Mounts
- ► Radiator Duct Flange (OPU Only)
- ▶ 2YR / 2000HR Standby Warranty
- ▶ Standard Colors White / Gray

PD50-01 1 of 4

Diesel Product Line

50 kWe



Application Data

Engine			
Manufacturer:	Perkins	Displacement - Cu. In. (lit):	269 (4.40)
Model:	1104D-44TG1	Bore - in. (cm) x Stroke - in. (cm):	4.13 (10.5) x 5.00 (12.7)
Type:	4-Cycle	Compression Ratio:	18.2:1
Aspiration:	Turbocharged	Rated RPM:	1800
Cylinder Arrangement:	4 Cylinder Inline	Max HP Stby (kWm):	85.8 (64.0)

Exhaust System	Standby
Gas Temp. (Stack): °F (°C)	1,060 (571)
Gas Volume at Stack Temp: CFM (m³/min)	484 (13.7)
Maximum Allowable Exhaust Restriction: in. H ₂ O (kPa)	60.0 (15.0)
Cooling System	
Ambient Capacity of Radiator: °F (°C)	122 (50.0)
Maximum Allowable Static Pressure on Rad. Exhaust: in. H ₂ O (kPa)	0.50 (0.12)
Water Pump Flow Rate: GPM (lit/min)	39.6 (151)
Heat Rejection to Coolant: BTUM (kW)	2,634 (46.1)
Heat Radiated to Ambient: BTUM (kW)	626 (11.0)
Air Requirements	
Aspirating: CFM (m³/min)	167 (4.73)
Air Flow Required for Rad. Cooled Unit: CFM (m³/min)	3,470 (98.2)
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)	4.28 (16.2)
At 75% of Power Rating: gal/hr (lit/hr)	3.29 (12.5)
At 50% of Power Rating: gal/hr (lit/hr)	2.34 (8.86)
Fluids Capacity	
Total Oil System: gal (lit)	2.22 (8.40)
Engine Jacket Water Capacity: gal (lit)	1.85 (7.00)
System Coolant Capacity: gal (lit)	4.36 (16.5)

PD50-01 2 of 4

Diesel Product Line

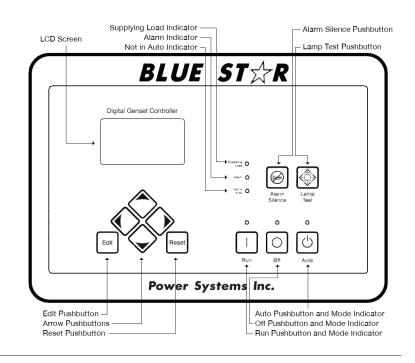
50 kWe



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

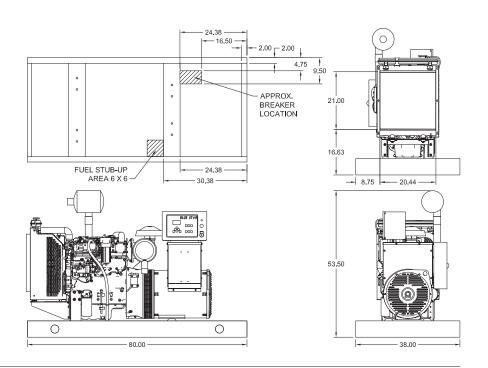


Weights / Dimensions / Sound Data

	LxWxH	Weight lbs
OPU	80 x 38 x 53.5 in	2,100
Level 1	90 x 38 x 66 in	2,600
Level 2	90 x 38 x 66 in	2,650
Level 3	120 x 38 x 60 in	2,750

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

	No Load	Full Load
OPU	72 dBA	76 dBA
Level 1	70 dBA	72 dBA
Level 2	67 dBA	69 dBA
Level 3	62 dBA	64 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.

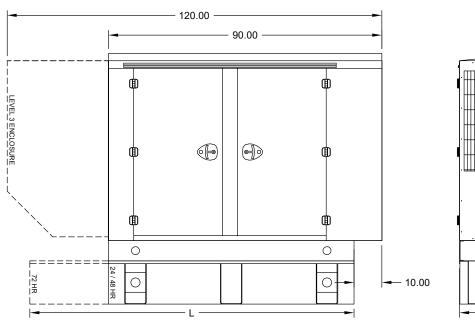
PD50-01 3 of 4

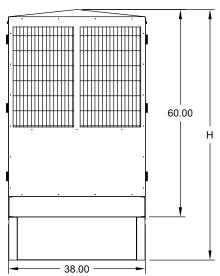
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Enclosures & Fuel Tanks





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.

Distributed By:

	24 Hour 120 Gallon	48 Hour 240 Gallon	72 Hour 360 Gallon
L	80.00	80.00	108.00
Н	80.00	96.00	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.



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