# BLUE ST R Power Systems Inc.

Diesel Product Line

208-600 Volt

PD450-01 60 Hz / 1800 RPM

450 kWe Standby

## Ratings

	208V	240V	480 <b>V</b>	600V
Phase	3	3	3	3
PF	0.8	0.8	0.8	0.8
Hz	60	60	60	60
Generator Model	HCI534D	HCI534D	HCI534C	HCl534C
Connection	12 LEAD WYE	12 LEAD DELTA	12 LEAD WYE	4 LEAD WYE
kWe	450	450	450	450
AMPS	1563	1355	677	542
Temp Rise	125°C / 40°C	125°C / 40°C	125°C / 40°C	125°C / 40°C

## Standard Equipment

#### Engine

- Radiator Cooled Unit Mounted (50°C)
- Radiator Duct Flange (OPU Only)
- 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)
- Critical Grade Silencer Mounted
- Flexible Fuel Connector
- EPA Certified Tier 3

#### Generator

- Brushless Single Bearing
- Automatic Voltage Regulator
- ± 0.50% Voltage Regulation
- 4 Pole, Rotating Field
- 125°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
- UL 2200 & cUL Listed
- CSA Certified
- Seismic Certified to IBC 2021
- NFPA 110 / CSA C282 Compliant
- Microprocessor Based Digital Control Panel
   Mounted in NEMA 12 Enclosure
- Base Structural Steel
- Main Line Circuit Breaker Mounted & Wired
- Battery Charger 24V 5 Amp
- Jacket Water Heater -20°F 5000W 240V w/Isolation Valves
- Vibration Isolation Mounts (Pad Type)
- 2 Year / 2000 Hour Standby Warranty
- Standard Colors White / Gray

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# Diesel Product Line

### 450 kWe



# **Application Data**

Engine			
Manufacturer:	Perkins	Displacement - Cu. In. (lit):	928 (15.2)
Model:	2506D-E15TAG1	Bore - in. (cm) x Stroke - in. (cm):	5.39 (13.7) × 6.73 (17.1)
Type:	4-Cycle	Compression Ratio:	16.0:1
Aspiration:	Turbo Charged, CAC	Rated RPM:	1800
Cylinder Arrangement:	6 Cylinder Inline	Max HP Stby (kWm):	689 (514)
•	•		
Exhaust System			Standby
Gas Temp. (Stack): °F (°C)			1,022 (550)
Gas Volume at Stack Temp: CFM (m <sup>3</sup>	/min)		3,958 (112)
Maximum Allowable Exhaust Restrict	tion: in. H <sub>2</sub> O (kPa)		27.2 (6.80)
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)			114 (432)
Heat Rejection to Coolant: BTUM (kW	V)		10,171 (178)
Heat Rejection to CAC: BTUM (kW)			7,314 (128)
Heat Radiated to Ambient: BTUM (kV	V)		8,069 (141)
Air Requirements			
Aspirating: CFM (m³/min)			35.3 (41.5)
Air Flow Required for Rad. Cooled Ur	nit: CFM (m³/min)		30,601 (866)
Air Flow Required for Heat Exchange	r/Rem. Rad. CFM (m³/min)	Consult Factory Fo	r Remote Cooled Applications
Fuel Consumption			
At 100% of Power Rating: gal/hr (lit/h	ur)		32.7 (124)
At 75% of Power Rating: gal/hr (lit/hr)		27.5 (104)	
At 50% of Power Rating: gal/hr (lit/hr)		20.5 (77.5)	
Fluids Capacity			
Total Oil System: gal (lit)			16.4 (62.0)
Engine Jacket Water Capacity: gal (lit	)		8.43 (31.9)
System Coolant Capacity: gal (lit)			15.3 (58.0)

Deration Factors: Rated Power is available up to 3281ft (1000m) at ambient temperatures to  $104^{\circ}F$  ( $40^{\circ}C$ ). Consult factory for site conditions above these parameters.

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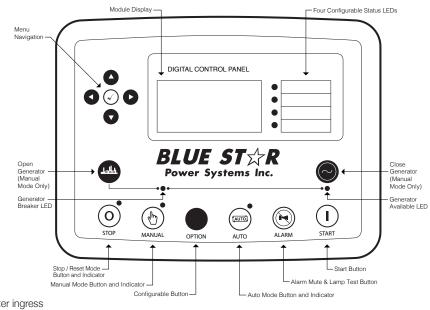
#### 450 kWe



## DCP7310 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 DSE2548 Remote Annunciator
- 8 Programmable Contact Inputs
- 10 Contact Outputs
- RS485 Communicator Interface
- cULus Listed, CE Approved
- Event Recording
- IP 65 rating (with supplied gasket) offers increased resistance to water ingress
- NFPA 110 Level 1 Compatible

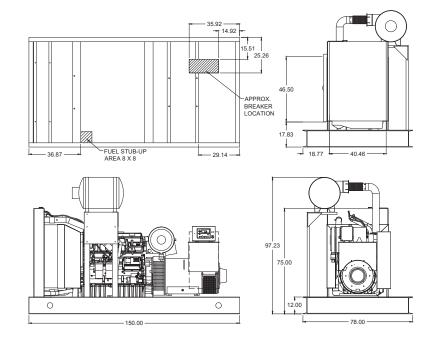


# Weights / Dimensions / Sound Data

	LxWxH	Weight lbs
OPU	150 x 78 x 98 in	9,325
Level 1	200 x 78 x 110 in	11,150
Level 2	200 x 78 x 110 in	11,225
Level 3	255 x 78 x 110 in	11,725

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

	No Load	Full Load	
OPU	90 dBA	93 dBA	
Level 1	85 dBA	88 dBA	
Level 2	81 dBA	83 dBA	
Level 3	73 dBA	75 dBA	



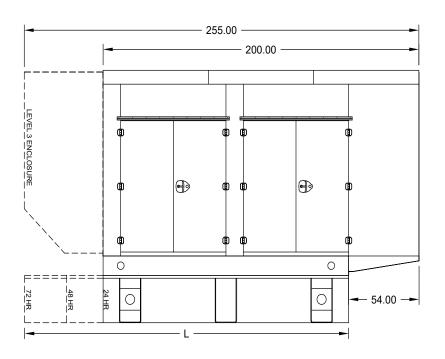
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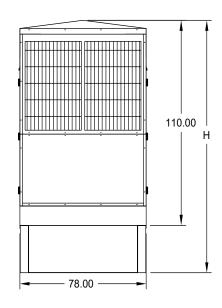
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## **Enclosures & Fuel Tanks**





- All enclosure models are 200 MPH wind rating certified in accordance with IBC2021 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 900 Gallon	48 Hour 1800 Gallon	72 Hour 2700 Gallon
L	150.00	210.00	300.00
Н	138.00	146.00	146.00

#### Notes

- All specification sheet dimensions are represented in inches.
- All drawings based on standard 480 volt standby generator. Lengths may vary with other voltages. All drawings and dimensions subject to change without notice.
- All enclosures and fuel tanks are based on the standard unit configuration. Any requested deviation can change dimensions.
- Sound data is measured at 23 feet (7 meters) in accordance with ISO 8528-10.
- All materials and specifications subject to change without notice.



American Made

#### Blue Star Power Systems, Inc.

2250 Carlson Drive
North Mankato, Minnesota 56003
Phone + 1 507 345 1776
bluestarps.com
quote.bluestarps.com
sales@bluestarps.com

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