

## Diesel Product Line

### 208-600 Volt

VD500-01	60 Hz / 1800 RPM
500 kWe	Standby

## Ratings

	208V	240V	480V	600V
Phase	3	3	3	3
PF	0.8	0.8	0.8	0.8
Hz	60	60	60	60
Generator Model	HCI534E	HCI534E	HCI534D	HCI534D
Connection	12 LEAD WYE	12 LEAD DELTA	12 LEAD WYE	4 LEAD WYE
kWe	500	500	500	500
AMPS	1737	1505	753	602
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 (55°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 2

### Generator

- Brushless Single Bearing
- Automatic Voltage Regulator
- $\pm$  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)
- 2YR / 2000HR Standby Warranty
- Standard Colors White / Gray

500 kWe



## Application Data

Engine					
Manufacturer:	Volvo Penta	Displacement - Cu. In. (lit):	984 (16.1)		
Model:	TAD1641GE-B	Bore - in. (cm) x Stroke - in. (cm):	5.67 (14.4) x 6.50 (16.5)		
Туре:	4-Cycle	Compression Ratio:	16.8:1		
Aspiration:	Turbo Charged, CAC	Rated RPM:	1800		
Cylinder Arrangement:	6 Cylinder Inline	Max HP Stby (kWm):	768 (573)		
Exhaust System			Standby		
Gas Temp. (Stack): °F (°C)			876 (469)		
Gas Volume at Stack Temp: CFM (m <sup>2</sup>	³/min)		3,899 (110)		
Maximum Allowable Exhaust Restric	tion: in. H2O (kPa)		40.2 (10.0)		
Cooling System					
Ambient Capacity of Radiator: °F (°C	)		131 (55.0)		
Maximum Allowable Static Pressure	on Rad. Exhaust: in. H2O (kPa)		0.50 (0.12)		
Water Pump Flow Rate: GPM (lit/min	)		122 (461)		
Heat Rejection to Coolant: BTUM (k)	V)	13,137 (230)			
Heat Rejection to CAC: BTUM (kW)		8,360 (146)			
Heat Radiated to Ambient: BTUM (kW)			9,815 (172)		
Air Requirements					
Aspirating: CFM (m³/min)			1,617 (45.8)		
Air Flow Required for Rad. Cooled U	nit: CFM (m³/min)	18,869 (534)			
Air Flow Required for Heat Exchanger/Rem. Rad. CFM (m³/min)		Consult Factory Fo	or Remote Cooled Applications		
Fuel Consumption					
At 100% of Power Rating: gal/hr (lit/h	nr)		33.9 (128)		
At 75% of Power Rating: ft3/hr (m3/h	nr)		25.5 (96.5)		
At 50% of Power Rating: ft3/hr (m3/h	nr)		17.2 (65.1)		
Fluids Capacity					
Total Oil System: gal (lit)			12.7 (48.1)		
Engine Jacket Water Capacity: gal (li	t)		8.70 (33.0)		
System Coolant Capacity: gal (lit)			15.9 (60.0)		

Deration Factors: Rated Power is available up to 6,562 ft (2,000 m) at ambient temperatures to  $122^{\circ}F$  (50°C). Consult factory for site conditions above these parameters.

# Diesel Product Line

### 500 kWe



Four Configurable Status LEDs

START

1

Alarm Mute & Lamp Test Button

L Start Button

Close Generator (Manual Mode Only)

Generator Available LED

### DCP7310 Control Panel

#### Standard Features

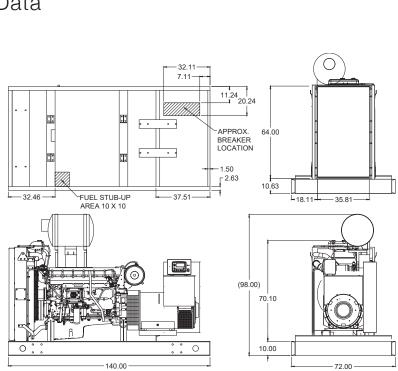
- Digital Metering
- Engine Parameters
- Generator Protection Functions
- Engine Protection
- CAN Bus (J1939) ECU Communications
- Windows-Based Software
- Multilingual Capability
- Remote Communications to DSE2548 Remote Annunciator
- 8 Programmable Contact Inputs
- 10 Contact Outputs
- RS485 Communicator 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

	L x W x H	Weight Ibs		
OPU	140 x 72 x 98 in	9,875		
Level 1	180 x 72 x 103 in	11,525		
Level 2	180 x 72 x 103 in	11,625		
Level 3	225 x 72 x 103 in	12,025		

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

	No Load	Full Load
OPU	91 dBA	94 dBA
Level 1	86 dBA	89 dBA
Level 2	81 dBA	83 dBA
Level 3	73 dBA	75 dBA



Module Display

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Manual Mode Button and Indicator

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MANUA

1

Configurable Button

DIGITAL CONTROL PANEL

BLUE STAR

Power Systems Inc.

OPTION

AUTO

AUTO

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ALARM

Auto Mode Button and Indicator

Menu Navigation

> Open Generator – (Manual Mode Only)

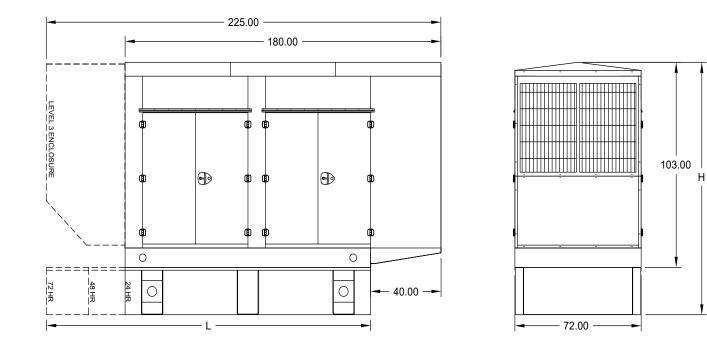
Generator — Breaker LED

# Diesel Product Line

BLUE ST R Power Systems Inc.

500 kWe

## Enclosures & Fuel Tanks



<ul> <li>All enclosure models are 200 MPH wind rating certified in accordance with IBC2021 and ASCE/SEI 7-16 standards.</li> </ul>		24 Hour 900 Gallon	48 Hour 1800 Gallon	72 Hour 2700 Gallon
<ul> <li>Level 2 &amp; 3 enclosures include sound attenuation foam</li> </ul>	L	140.00	216.00	330.00
<ul> <li>Level 3 enclosure includes frontal sound &amp; exhaust hood.</li> </ul>	-			
<ul> <li>Enclosure height does not include exhaust stack.</li> </ul>	Н	135.00	139.00	139.00

American Owned



#### 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.

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Blue Star Power Systems, Inc.