

Diesel Product Line

208-600 Volt

VD450-01	60 Hz / 1800 RPM
450 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	HCI534D	HCI534D	S4L1D-G41	HCI534C
Connection	12 LEAD WYE	12 LEAD DELTA	12 LEAD WYE	4 LEAD WYE
kWe	450	450	450	450
AMPS	1563	1355	677	482
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 3

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)
- 2 Year / 2000 Hour Standby Warranty
- Standard Colors White / Gray

450 kWe



Application Data

Engine					
Manufacturer:	Volvo Penta	Displacement - Cu. In. (lit):	984 (16.1)		
Model:	TAD1650GE	Bore - in. (cm) x Stroke - in. (cm):	5.70 (14.4) x 6.5 (16.5)		
Туре:	4-Cycle	Compression Ratio:	16.5:1		
Aspiration:	Turbo Charged, CAC	Rated RPM:	1800		
Cylinder Arrangement:	6 Cylinder Inline	Max HP Stby (kWm):	677 (498)		
Exhaust System			Standby		
Gas Temp. (Stack): °F (°C)			946 (508)		
Gas Volume at Stack Temp: CFM (m ³ /	'min)		3,214 (91.0)		
Maximum Allowable Exhaust Restricti	ion: in. H2O (kPa)		40.2 (10.0)		
Cooling System					
Ambient Capacity of Radiator: °F (°C)			131 (55.0)		
Maximum Allowable Static Pressure c	on Rad. Exhaust: in. H2O (kPa)		0.50 (0.12)		
Water Pump Flow Rate: GPM (lit/min)		122 (461)			
Heat Rejection to Coolant: BTUM (kW)	12,511 (219)			
Heat Rejection to CAC: BTUM (kW)		7,109 (125)			
Heat Radiated to Ambient: BTUM (kW)	8,971 (157)			
Air Requirements					
Aspirating: CFM (m³/min)			1,271 (36.0)		
Air Flow Required for Rad. Cooled Unit: CFM (m ³ /min)		22,473 (636)			
Air Flow Required for Heat Exchanger	/Rem. Rad. CFM (m ³ /min)	Consult Factory Fo	r Remote Cooled Applications		
Fuel Consumption					
At 100% of Power Rating: gal/hr (lit/hr)		31.5 (119)		
At 75% of Power Rating: ft3/hr (m3/hr)		23.9 (90.4)		
At 50% of Power Rating: ft3/hr (m3/hr)		16.9 (63.9)		
Fluids Capacity					
Total Oil System: gal (lit)			12.7 (48.0)		
Engine Jacket Water Capacity: gal (lit)			6.34 (24.0)		
System Coolant Capacity: gal (lit)			16.1 (61.0)		

Deration Factors: Rated Power is available up to 3,280 ft (1,000 m) at ambient temperatures to $122^{\circ}F$ (50°C). Consult factory for site conditions above these parameters.

Diesel Product Line

450 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

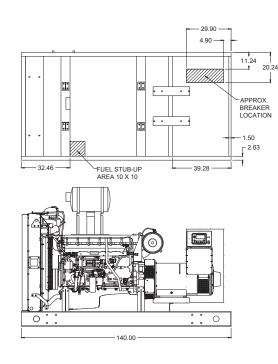
- Digital Metering
- Engine Parameters
- Generator Protection Functions
- Engine Protection
- CAN Bus (J1939) ECU Communications
- Windows-Based Software
- Multilingual Capability
- Remote Communications to DSE2548 Remote Annunciator
- 8 Programmable Contact Inputs
- 10 Contact Outputs
- RS485 Communicator 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 93 in	9,250
Level 1	180 x 72 x 103 in	10,900
Level 2	180 x 72 x 103 in	11,000
Level 3	225 x 72 x 103 in	11,400

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



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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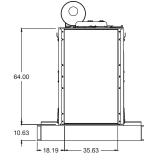
ALARM

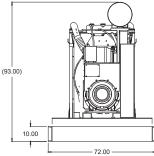
Auto Mode Button and Indicato

Menu Navigation

> Open Generator – (Manual Mode Only)

Generator — Breaker LED



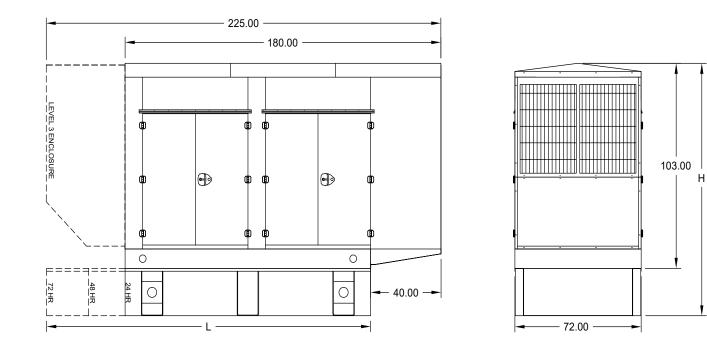


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BLUE ST R Power Systems Inc.

Enclosures & Fuel Tanks



 All enclosure models are 200 MPH wind rating certified in accordance with IBC2021 and ASCE/SEI 7-16 standards. 		24 Hour 540 Gallon	48 Hour 1080 Gallon	72 Hour 1620 Gallon
 Level 2 & 3 enclosures include sound attenuation foam 	L	140.00	216.00	330.00
 Level 3 enclosure includes frontal sound & exhaust hood. 	_			
 Enclosure height does not include exhaust stack. 	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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