BLUE ST R Power Systems Inc.

Diesel Product Line

208-4160 Volt

VD400-01 60 Hz / 1800 RPM

400 kWe Standby

Ratings

	208V	240V	480 V	600 V	4160V
Phase	3	3	3	3	3
PF	0.8	0.8	0.8	0.8	0.8
Hz	60	60	60	60	60
Generator Model	433CSL6220	433CSL6220	433CSL6220	433PSL6248	573FSM4352
Connection	12 LEAD WYE	12 LEAD DELTA	12 LEAD WYE	4 LEAD WYE	6 LEAD WYE
kWe	400	400	400	400	400
AMPS	1390	1204	602	482	69
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 (55°C)
- ▶ 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)
- ► Flexible Fuel Connector
- ▶ EPA Certified Tier 3

Listing Certifications

- ▶ UL 2200 Listed*
- ▶ cUL Listed*
- ► CSA Certified*
- ▶ Seismic Certified to IBC 2018

*Through 600 VAC

Generator

- ▶ Brushless Single Bearing
- ▶ Automatic Voltage Regulator
- \blacktriangleright ± 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 24V 5 Amp
- ► Jacket Water Heater -20°F 4000W 240V w/Isolation Valves
- ▶ Vibration Isolation Mounts
- ► Radiator Duct Flange (OPU Only)
- ▶ 2YR / 2000HR Standby Warranty
- ▶ Standard Colors White / Gray

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400 kWe



Application Data

Engine			
Manufacturer:	Volvo Penta	Displacement - Cu. In. (lit):	780 (12.8)
Model:	TAD1353GE	Bore - in. (cm) x Stroke - in. (cm):	5.20 (13.1) x 6.20 (15.8)
Type:	4-Cycle	Compression Ratio:	18.1:1
Aspiration:	Turbo Charged, CAC	Rated RPM:	1800
Cylinder Arrangement:	6 Cylinder Inline	Max HP Stby (kWm):	611 (449)
Exhaust System			Standby
Gas Temp. (Stack): °F (°C)			932 (500)
Gas Volume at Stack Temp: CFM (m	n³/min)		2,790 (79.0)
Maximum Allowable Exhaust Restric	etion: in. H ₂ O (kPa)		40.0 (10.0)
Cooling System			
Ambient Capacity of Radiator: °F (°C	C)		131 (55.0)
Maximum Allowable Static Pressure on Rad. Exhaust: in. H ₂ O (kPa)			0.50 (0.12)
Water Pump Flow Rate: GPM (lit/min)			87.0 (329
Heat Rejection to Coolant: BTUM (kW)			10,123 (177
Heat Rejection to CAC: BTUM (kW)			5,346 (94.0
Heat Radiated to Ambient: BTUM (kW)			3,415 (59.8)
Air Requirements			
Aspirating: CFM (m³/min)			1,102 (31.2)
Air Flow Required for Rad. Cooled L	Jnit: CFM (m³/min)		24,175 (684
Air Flow Required for Heat Exchange	er/Rem. Rad. CFM (m³/min)	Consult Factory F	or Remote Cooled Applications
Fuel Consumption			
At 100% of Power Rating: gal/hr (lit/	/hr)		27.9 (105.6)
At 75% of Power Rating: gal/hr (lit/h	ir)		21.9 (82.9)
At 50% of Power Rating: gal/hr (lit/hr)			15.0 (56.8)
Fluids Capacity			
Total Oil System: gal (lit)			9.50 (36.0)
Engine Jacket Water Capacity: gal (I	lit)		5.28 (20.0
System Coolant Capacity: gal (lit)			11.6 (44.0)

Deration Factors

Rated Power is available up to 3,280 Ft (1,000 m) at ambient temperatures to 122°F (50°C). Consult factory for site conditions above these parameters.

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Diesel Product Line

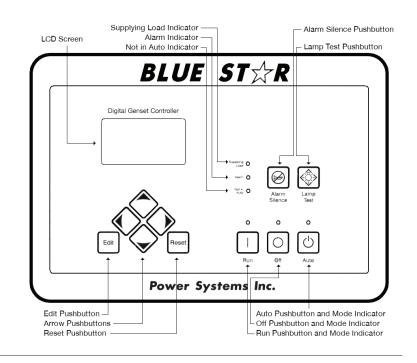
400 kWe



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

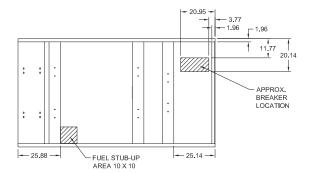


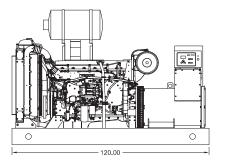
Weights / Dimensions / Sound Data

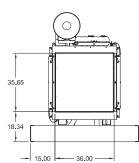
	LxWxH	Weight Ibs
OPU	120 x 66 x 83 in	7,875
Level 1	156 x 66 x 94 in	9,125
Level 2	156 x 66 x 94 in	9,200
Level 3	204 x 66 x 94 in	9,500

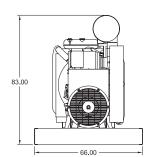
Please allow 6-12 inches for height of exhaust stack.

	No Load	Full Load
OPU	88 dBA	91 dBA
Level 1	84 dBA	86 dBA
Level 2	79 dBA	81 dBA
Level 3	70 dBA	73 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.

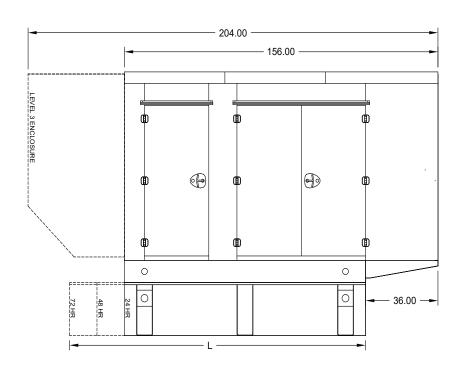
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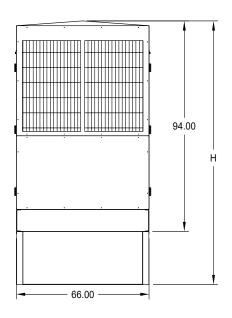
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Enclosures & Fuel Tanks





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.

	24 Hour 710 Gallon	48 Hour 1420 Gallon	72 Hour 2130 Gallon
L	120.00	192.00	276.00
Н	126.00	130.00	130.00

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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