

BLUE STAR

Power Systems Inc.

Diesel Product Line

208-600 Volt

VD600-01

60 Hz / 1800 RPM

600 kWe / 550 kWe

Standby / Prime

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	573RSL4033	573RSL4033	572RSL4031	572RSS4272
Connection	12 LEAD WYE	12 LEAD DELTA	12 LEAD WYE	4 LEAD WYE
Standby				
kWe	600	600	600	600
AMPS	2084	1806	903	723
Temp Rise	130°C / 27°C	130°C / 27°C	130°C / 27°C	130°C / 27°C
Prime				
kWe	550	550	550	550
AMPS	1911	1656	828	662
Temp Rise	105°C / 40°C	105°C / 40°C	105°C / 40°C	105°C / 40°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 - Electronic Isochronous
- ▶ 24V Battery System & Cables
- ▶ SAE Flywheel Housing
- ▶ Air Cleaner (Dry Single Stage)
- ▶ Flexible Fuel Connectors
- ▶ EPA Certified - Tier 2

Generator

- ▶ Brushless Single Bearing
- ▶ Automatic Voltage Regulator
- ▶ ± .25% Voltage Regulation
- ▶ 4 Pole, Rotating Field
- ▶ 130°C Standby Temperature Rise
- ▶ 105°C Prime Temperature Rise
- ▶ 100% of Rated Load - One Step
- ▶ 5% Maximum Harmonic Content
- ▶ NEMA MG 1, IEEE and ANSI standards compliance for temperature rise

Additional

- ▶ Microprocessor Based Digital Control
- ▶ Base - Structural Steel
- ▶ Main Line Circuit Breaker Mounted & Wired
- ▶ Critical Grade Silencer Mounted
- ▶ Battery Charger 24V 5 Amp
- ▶ Jacket Water Heater -20°F 5000W 240V w/Isolation Valves
- ▶ Vibration Isolation Mounts (Pad Type)
- ▶ Radiator Duct Flange (OPU Only)
- ▶ Single Source Supplier
- ▶ 2YR / 2000HR Standby Warranty
- ▶ 1YR / 1500HR Prime Warranty
- ▶ Standard Colorss - White / Tan / Gray

Application Data

Engine

Manufacturer:	Volvo	Displacement - Cu. In. (lit):	984 (16.12)
Model:	TWD1643GE	Bore - in. (cm) x Stroke - in. (cm):	5.7 (14.4) x 6.5 (16.5)
Type:	4-Cycle	Compression Ratio:	16.5:1
Aspiration:	Turbo Charged, H2O to Air CAC	Rated RPM:	1800
Cylinder Arrangement:	6 Cylinder Inline	Max HP Stby (kWm):	917 (674)

Exhaust System

	Standby	Prime
Gas Temp. (Stack): °F (°C)	862 (461)	792 (422)
Gas Volume at Stack Temp: CFM (m³/min)	4,594 (130)	4,202 (119)
Maximum Allowable Exhaust Restriction: in. H2O (kPa)	40.2 (10.0)	40.2 (10.0)

Cooling System

Ambient Capacity of Radiator: °F (°C)	122 (50.0)	122 (50.0)
Maximum Allowable Static Pressure on Rad. Exhaust: in. H2O (kPa)	0.5 (0.12)	0.5 (0.12)
Water Pump Flow Rate: Gpm (lit/min)	95.4 (361)	95.4 (361)
Heat Rejection to Coolant: BTUM (kW)	15,355 (270)	13,990 (246)
Heat Rejection to CAC: BTUM (kW)	7,677 (135)	6,881 (121)
Heat Radiated to Ambient: BTUM (kW)	3,928 (68.7)	3,600 (63.0)

Air Requirements

Aspirating: CFM (m³/min)	1,937 (54.8)	1,874 (53.0)
Air Flow Required for Rad. Cooled Unit: CFM (m³/min)	31,802 (900)	31,802 (900)
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)	40.8 (154.4)	36.7 (138.9)
At 75% of Power Rating: gal/hr (lit/hr)	29.7 (112.4)	26.9 (101.8)
At 50% of Power Rating: gal/hr (lit/hr)	20.0 (75.7)	18.3 (69.3)

Fluids Capacity

Total Oil System: gal (lit)	12.7 (48.0)	12.7 (48.0)
Engine Jacket Water Capacity: gal (lit)	8.7 (33.0)	8.7 (33.0)
System Coolant Capacity: gal (lit)	25.1 (95.0)	25.1 (95.0)

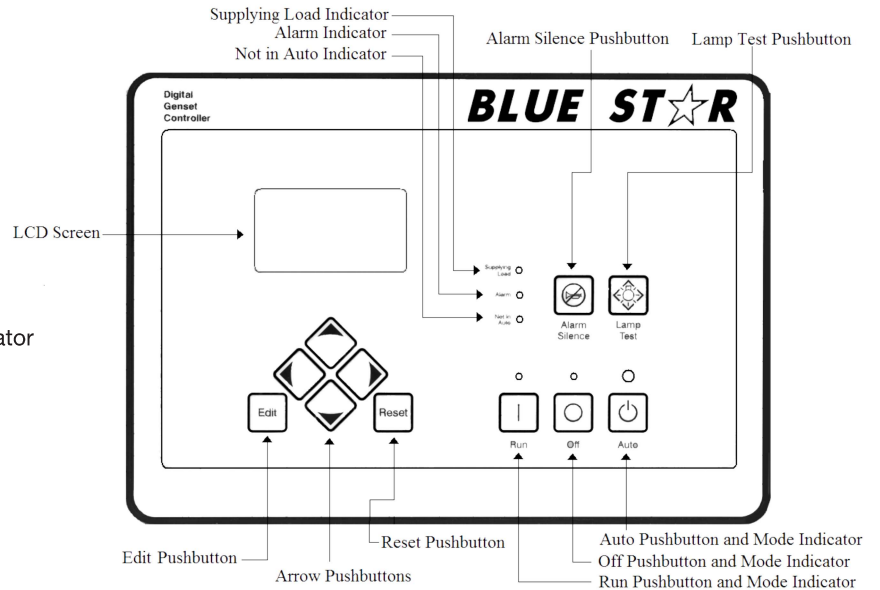
Deration Factors

Rated Power is available up to 4920 ft (1500 m) at ambient temperatures to 122°F (50°C). Consult factory for site conditions above these parameters.

DGC-2020 Control Panel

Standard Features

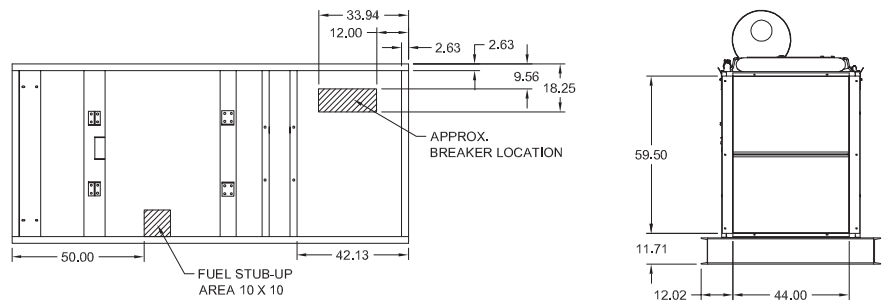
- ▶ Digital Metering
- ▶ Engine Parameters
- ▶ Generator Protection Functions
- ▶ Engine Protection
- ▶ CAN Bus ECU Communications
- ▶ Windows-Based Software
- ▶ Multilingual Capability
- ▶ Remote Communications to RDP-110 Remote Annunciator
- ▶ 16 Programmable Contact Inputs
- ▶ Up to 15 Contact Outputs (7 standard)
- ▶ UL Recognized, CSA Certified, CE Approved
- ▶ Event Recording
- ▶ IP 54 Front Panel Rating with Integrated Gasket
- ▶ NFPA 110 Level 1 Compatible



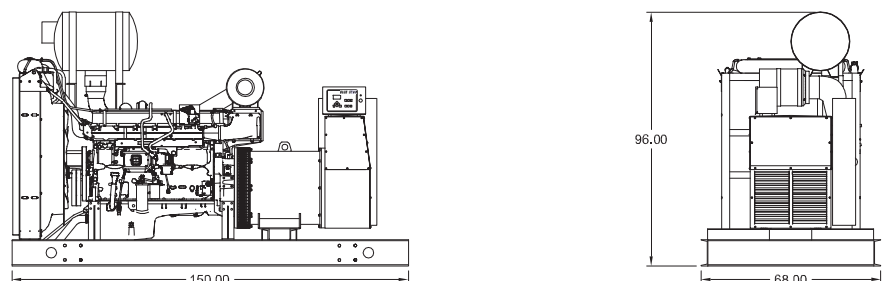
Weights / Dimensions / Sound Data

	L x W x H	Weight lbs
OPU	150 x 68 x 96 in	10,100
Level 1	150 x 68 x 114 in	10,850
Level 2	150 x 68 x 125 in	11,450
Level 3	205 x 68 x 114 in	12,050

Height measured from bottom of base to exhaust stack.



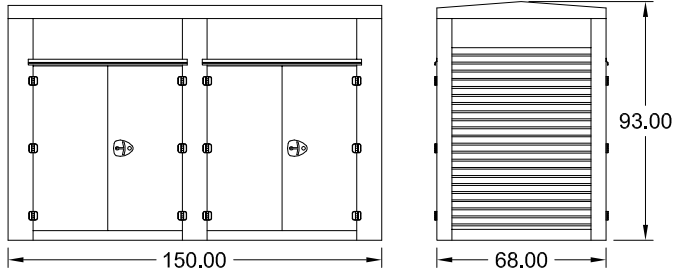
	No Load	Full Load
OPU	87 dBA	91 dBA
Level 1	85 dBA	87 dBA
Level 2	83 dBA	85 dBA
Level 3	75 dBA	77 dBA



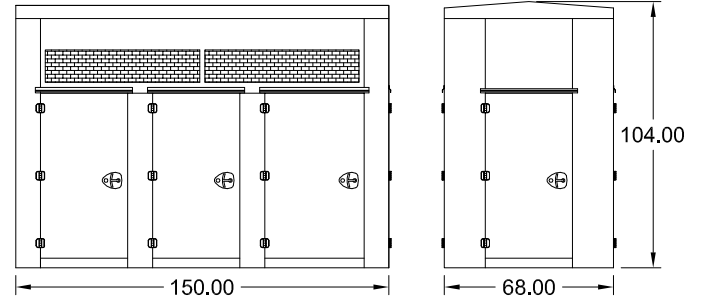
Drawings based on standard open power 480 volt standby generator. Lengths may vary with other voltages. Subject to change without notice. Sound data as measured at 23 feet (7 meters) in accordance with ISO 8528-10 at standby rating.

Optional Enclosures and Fuel Tanks

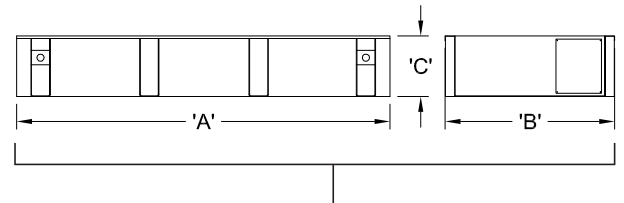
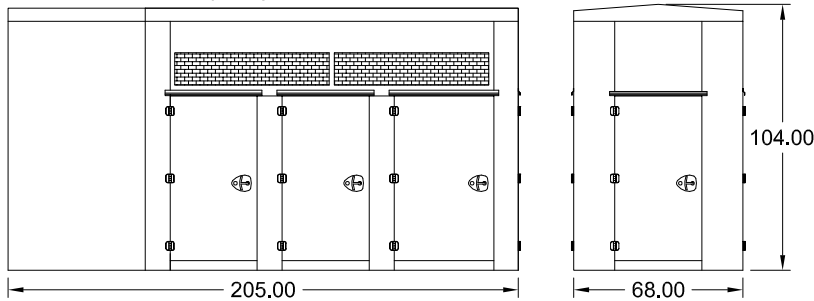
Level 1 Enclosure (WPE)



Level 2 Enclosure (WPF)



Level 3 Enclosure (SAE)



*Level 1 enclosures are 100 MPH Wind Rated as standard (up to 150 MPH available).

**Level 2 & 3 enclosures are 150 MPH Wind Rated as standard.

***Enclosure height does not include unit base or exhaust stack.

Double Wall UL 142 Listed Fuel Tanks

	24 Hour (1250 Gallon)			48 Hour (2500 Gallon)			72 Hour (3750 Gallon)		
	A	B	C	A	B	C	A	B	C
OPU	175.00	68.00	36.00	315.00	68.00	36.00	460.00	68.00	36.00
Level 1	175.00	68.00	36.00	315.00	68.00	36.00	460.00	68.00	36.00
Level 2	175.00	68.00	36.00	315.00	68.00	36.00	460.00	68.00	36.00
Level 3	205.00	68.00	30.00	315.00	68.00	36.00	460.00	68.00	36.00

*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.

***Level 1 enclosure not UL listed.

Materials and specifications subject to change without notice.

Distributed By:



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