

BLUE STAR

Power Systems Inc.

Diesel Product Line

208-4160 Volt

VD550-02FT4

60 Hz / 1800 RPM

550 kWe / 500 kWe

Standby / Prime

Ratings

	208V	240V	480V	600V	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	572RSL6431	572RSL6431	572RSL6429	572RSS4272	574FSM4356
Connection	12 LEAD WYE	12 LEAD DELTA	12 LEAD WYE	4 LEAD WYE	6 LEAD WYE
Standby					
kWe	550	550	550	550	550
AMPS	1911	1656	828	602	96
Temp Rise	130°C / 27°C	130°C / 27°C	130°C / 27°C	130°C / 27°C	130°C / 27°C
Prime					
kWe	500	500	500	500	500
AMPS	1737	1505	753	602	87
Temp Rise	105°C / 40°C	105°C / 40°C	105°C / 40°C	105°C / 40°C	105°C / 40°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 4 Final

Listing Certifications

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

*Through 600 VAC

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

- ▶ Single Source Supplier
- ▶ Microprocessor Based Digital Control
- ▶ Interface Connection Box
- ▶ Control Panel Mounted in NEMA 12 Enclosure
- ▶ Base - Structural Steel
- ▶ Main Line Circuit Breaker Mounted & Wired*
- ▶ SCR Catalyst / Silencer Mounted
- ▶ Battery Charger 24V 5 Amp
- ▶ Jacket Water Heater -20°F 5000W 240V w/Isolation Valves
- ▶ Vibration Isolation Mounts
- ▶ Radiator Duct Flange (OPU Only)
- ▶ 2YR / 2000HR Standby Warranty
- ▶ 1YR / 1500HR Prime Warranty
- ▶ Standard Colors - White / Gray

Application Data

Engine			
Manufacturer:	Volvo Penta	Displacement - Cu. In. (lit):	984 (16.12)
Model:	TWD1672GE	Bore - in. (cm) x Stroke - in. (cm):	5.67 (14.4) x 6.50 (16.5)
Type:	4-Cycle	Compression Ratio:	16.8:1
Aspiration:	Turbo Charged, H ₂ O to Air CAC	Rated RPM:	1800
Cylinder Arrangement:	6 Cylinder Inline	Max HP Stby (kWm):	836 (615)

Exhaust System	Standby	Prime
Gas Temp. (Stack): °F (°C)	831 (444)	793 (423)
Gas Volume at Stack Temp: CFM (m ³ /min)	4,347 (123)	4,025 (114)
Maximum Allowable Exhaust Restriction (Post SCR Cat.): in. H ₂ O (kPa)	40.0 (10.0)	44.0 (11.0)

Cooling System		
Ambient Capacity of Radiator: °F (°C)	131 (55.0)	131 (55.0)
Maximum Allowable Static Pressure on Rad. Exhaust: in. H ₂ O (kPa)	0.50 (0.12)	0.50 (0.12)
Water Pump Flow Rate: GPM (lit/min)	95.4 (361)	95.4 (361)
Heat Rejection to Coolant: BTUM (kW)	12,682 (223)	11,544 (203)
Heat Rejection to CAC: BTUM (kW)	11,715 (206)	10,635 (187)
Heat Radiated to Ambient: BTUM (kW)	4,253 (74.4)	3,842 (67.2)

Air Requirements		
Aspirating: CFM (m ³ /min)	1,703(48.2)	1,627 (46.0)
Air Flow Required for Rad. Cooled Unit: CFM (m ³ /min)	30,742 (870)	30,742 (870)
Air Flow Required for Heat Exchanger/Rem. Rad. CFM (m ³ /min)	Consult Factory For Remote Cooled Applications	

Fuel Consumption		
At 100% of Power Rating: gal/hr (lit/hr)	38.3 (145.0)	34.3 (130.0)
At 75% of Power Rating: gal/hr (lit/hr)	29.1 (110.0)	25.9 (98.0)
At 50% of Power Rating: gal/hr (lit/hr)	20.6 (78.0)	19.0 (72.0)
DEF Consumption (% of fuel consumption)	± 6.70%	± 6.70%

Fluids Capacity		
Total Oil System: gal (lit)	12.7 (48.0)	12.7 (48.0)
Engine Jacket Water Capacity: gal (lit)	8.72 (33.0)	8.72 (33.0)
System Coolant Capacity: gal (lit)	25.4 (96.0)	25.4 (96.0)
DEF Tank Capacity: gal (lit)	52.8 (200.0)	52.8 (200.0)

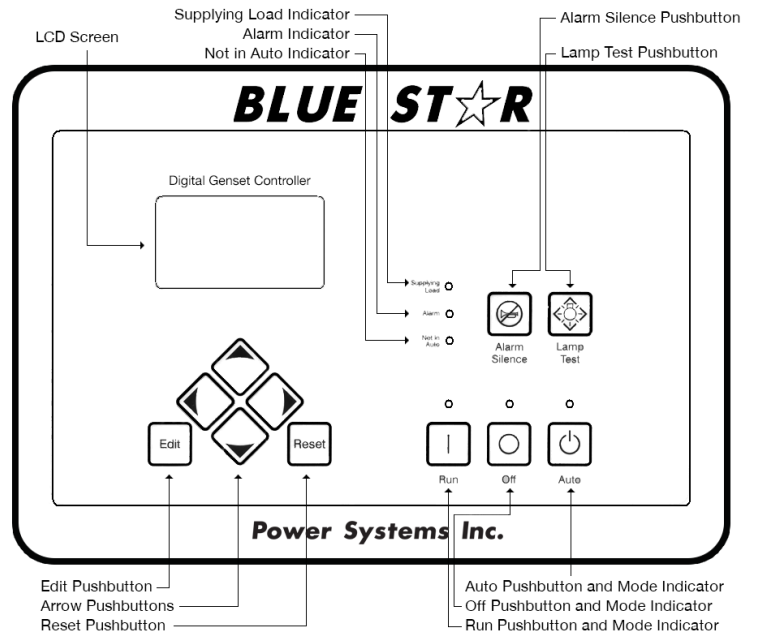
Deration Factors

Rated Power is available up to 4,921 Ft (1500m) at ambient temperatures to 122°F (50°C) standby and prime. Consult factory for site conditions above these parameters.

DGC-2020 Control Panel

Standard Features

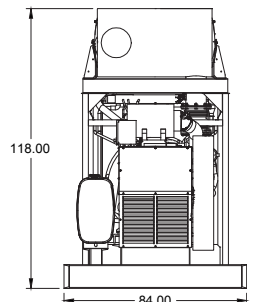
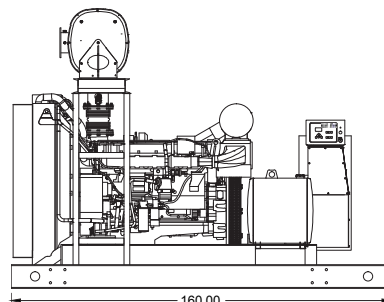
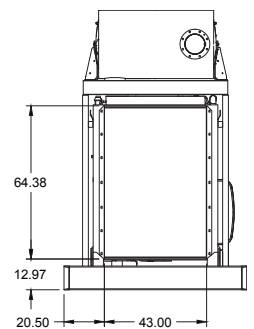
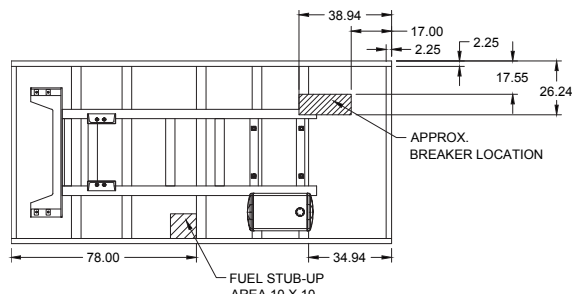
- ▶ Digital Metering
- ▶ Engine Parameters
- ▶ Generator Protection Functions
- ▶ Engine Protection
- ▶ CAN Bus (J1939) ECU Communications
- ▶ Windows-Based Software
- ▶ Multilingual Capability
- ▶ Remote Communications to RDP-110 Remote Annunciator
- ▶ 16 Programmable Contact Inputs
- ▶ 15 Contact Outputs
- ▶ 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

	L x W x H	Weight lbs
OPU	160 x 84 x 118 in	12,525
Level 1	198 x 84 x 122 in	14,450
Level 2	198 x 84 x 122 in	14,525
Level 3	252 x 84 x 122 in	15,175

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

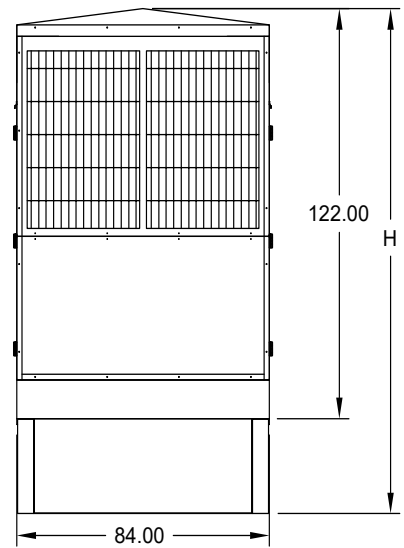
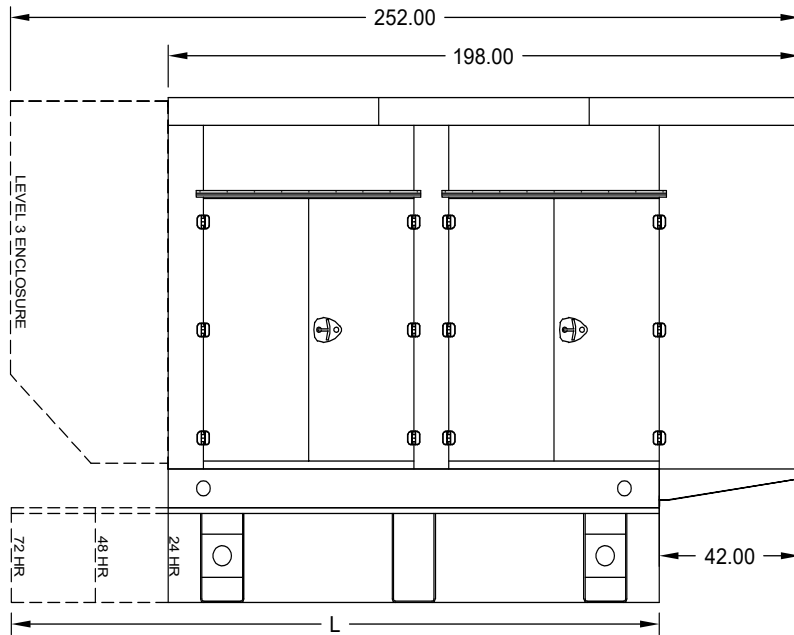
Drawings based on standard open power 480 volt standby generator. Lengths may vary with other voltages. Subject to change without notice. Sound data as measured at 23 feet (7 meters) in accordance with ISO 8528-10 at standby rating.

Diesel Product Line

550 kW / 550 kW



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 1000 Gallon	48 Hour 2000 Gallon	72 Hour 3000 Gallon
L	160.00	204.00	294.00
H	148.00	158.00	158.00

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.

American Owned



American Made

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