

# BLUE STAR Power Systems

Diesel Product Line

208-600 Volt

VD230-01

60 Hz / 1800 RPM

230 kWe

Standby

## Ratings

	240V	208V	240V	480V	600V
<b>Phase</b>	1	3	3	3	3
<b>PF</b>	1.0	0.8	0.8	0.8	0.8
<b>Hz</b>	60	60	60	60	60
<b>Generator Model</b>	S4L1D-F41	UCDI274K1	UCDI274K1	UCDI274J1	UCDI274J1
<b>Connection</b>	12 LEAD DD	12 LEAD WYE	12 LEAD DELTA	12 LEAD WYE	4 LEAD WYE
<b>kWe</b>	230	230	230	230	230
<b>AMPS</b>	958	799	692	346	277
<b>Temp Rise</b>	125°C / 40°C	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
- ± 1.00% 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
- Seismic Certified to IBC 2021
- NFPA 110 / CSA C282 Compliant
- Microprocessor Based Digital Control Panel Mounted in NEMA 12 Enclosure
- Base - Formed Steel
- Main Line Circuit Breaker Mounted & Wired
- Battery Charger 24V 5 Amp
- Jacket Water Heater -20°F 2500W 240V w/Isolation Valves
- Vibration Isolation Mounts
- 2 Year / 2000 Hour Standby Warranty
- Standard Colors - White / Gray

## Application Data

### Engine

Manufacturer:	Volvo Penta	Displacement - Cu. In. (lit):	470 (7.70)
Model:	TAD851GE	Bore - in. (cm) x Stroke - in. (cm):	4.33 (11.0) x 5.31 (13.5)
Type:	4-Cycle	Compression Ratio:	17.5:1
Aspiration:	Turbo Charged, CAC	Rated RPM:	1800
Cylinder Arrangement:	6 Cylinder Inline	Max HP Stby (kW <sub>m</sub> ):	364 (272)

### Exhaust System

### Standby

Gas Temp. (Stack): °F (°C)	824 (440)
Gas Volume at Stack Temp: CFM (m <sup>3</sup> /min)	1,926 (54.5)
Maximum Allowable Exhaust Restriction: in. H <sub>2</sub> O (kPa)	40.0 (10.0)

### Cooling System

Ambient Capacity of Radiator: °F (°C)	131 (55.0)
Maximum Allowable Static Pressure on Rad. Exhaust: in. H <sub>2</sub> O (kPa)	0.50 (0.12)
Water Pump Flow Rate: GPM (lit/min)	61.8 (234)
Heat Rejection to Coolant: BTUM (kW)	6,199 (108)
Heat Rejection to CAC: BTUM (kW)	4,038 (70.7)
Heat Radiated to Ambient: BTUM (kW)	4,840 (84.7)

### Air Requirements

Aspirating: CFM (m <sup>3</sup> /min)	831 (23.5)
Air Flow Required for Rad. Cooled Unit: CFM (m <sup>3</sup> /min)	13,781 (390)
Air Flow Required for Heat Exchanger/Rem. Rad. CFM (m <sup>3</sup> /min)	Consult Factory For Remote Cooled Applications

### Fuel Consumption

At 100% of Power Rating: gal/hr (lit/hr)	17.9 (67.8)
At 75% of Power Rating: gal/hr (lit/hr)	14.1 (53.4)
At 50% of Power Rating: gal/hr (lit/hr)	10.3 (39.0)

### Fluids Capacity

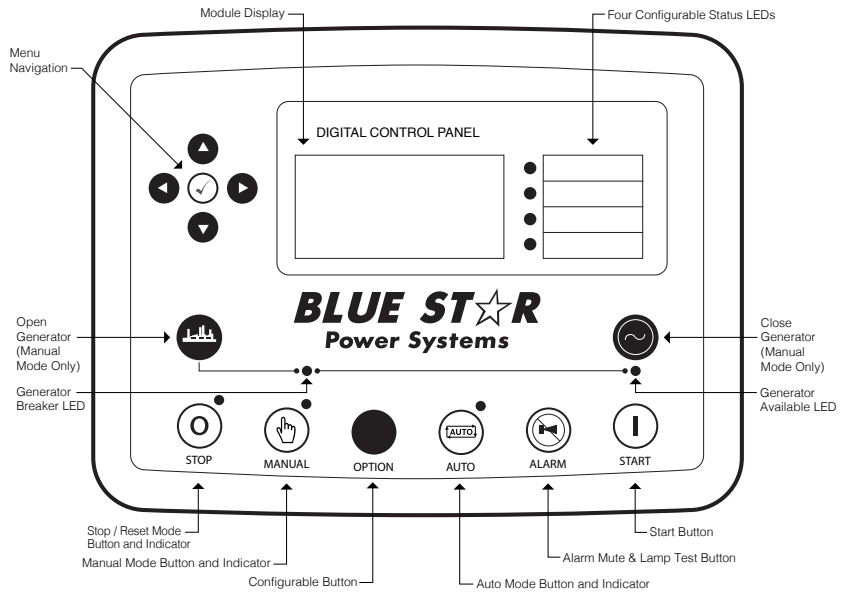
Total Oil System: gal (lit)	7.10 (26.9)
Engine Jacket Water Capacity: gal (lit)	4.49 (17.0)
System Coolant Capacity: gal (lit)	10.8 (41.0)

Deration Factors: Rated Power is available up to 4,921 Ft (1,500 m) at ambient temperatures to 122°F (50°C). Consult factory for site conditions above these parameters.

## DCP7310 Control Panel

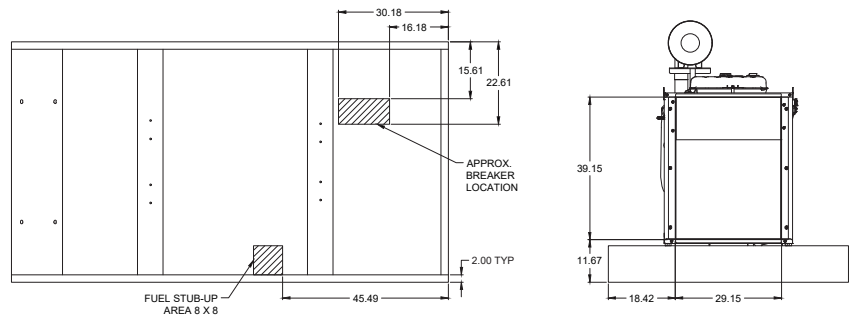
### Standard Features

- 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



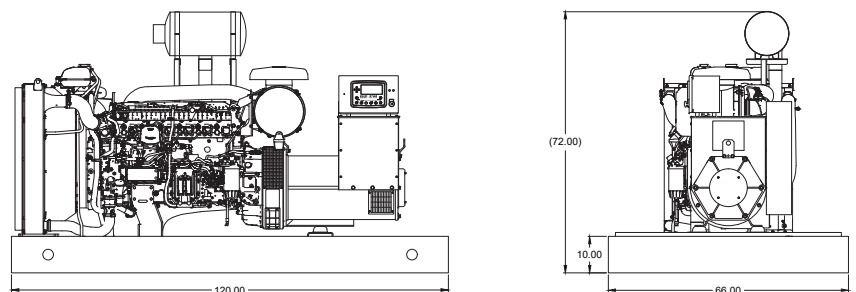
## Weights / Dimensions / Sound Data

	L x W x H	Weight lbs
<b>OPU</b>	120 x 66 x 72 in	5,125
<b>Level 1</b>	156 x 66 x 94 in	6,375
<b>Level 2</b>	156 x 66 x 94 in	6,450
<b>Level 3</b>	196 x 66 x 94 in	6,750

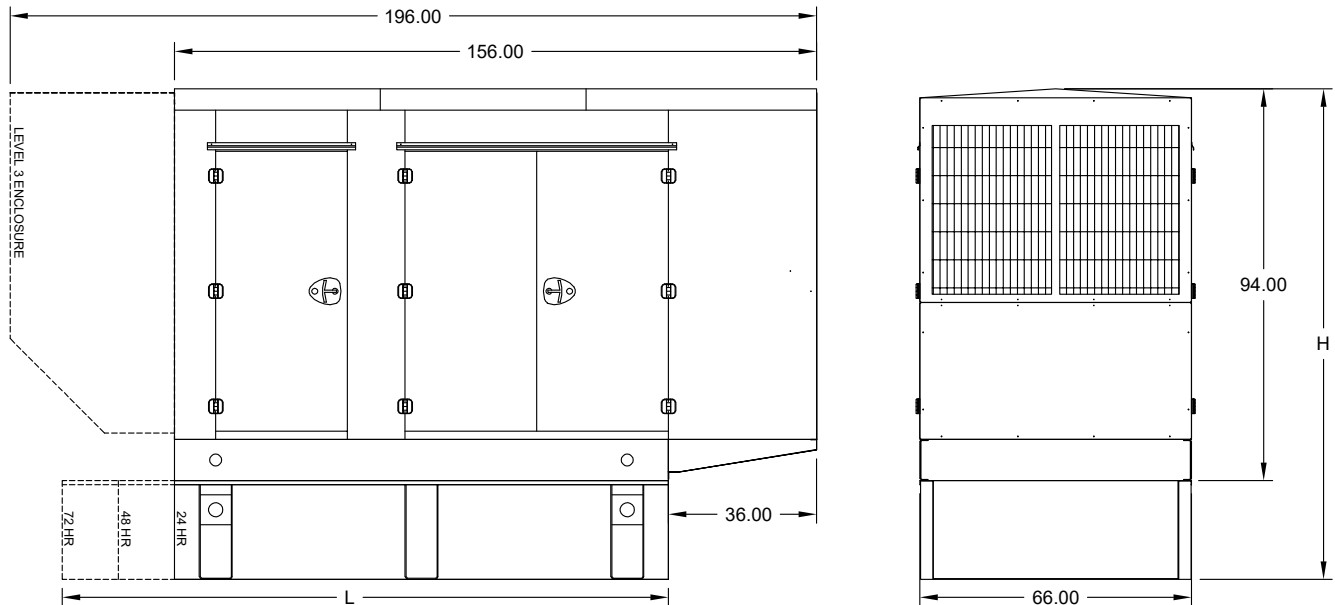


Please allow 6-12 inches for height of exhaust stack.

	No Load	Full Load
<b>OPU</b>	86 dBA	88 dBA
<b>Level 1</b>	83 dBA	85 dBA
<b>Level 2</b>	77 dBA	79 dBA
<b>Level 3</b>	69 dBA	71 dBA



## Enclosures & Fuel Tanks



- All enclosure models are 200 MPH wind rating certified in accordance with IBC2021 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 540 Gallon	48 Hour 1080 Gallon	72 Hour 1620 Gallon
<b>L</b>	120.00	162.00	228.00
<b>H</b>	118.00	130.00	130.00

### 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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