

BLUE STAR

Power Systems

Diesel Product Line

208-600 Volt

VD700-01

60 Hz / 1800 RPM

700 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	S6L1D-C	S6L1D-C	S6L1D-C	S6L1D-C
Connection	12 LEAD WYE	12 LEAD DELTA	12 LEAD WYE	4 LEAD WYE
kWe	700	700	700	700
AMPS	2432	2107	1054	843
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 2

Generator

- Brushless Single Bearing
- Automatic Voltage Regulator
- ± 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

Application Data

Engine

Manufacturer:	Volvo Penta	Displacement - Cu. In. (lit):	1053 (17.3)
Model:	TWD1744GE	Bore - in. (cm) x Stroke - in. (cm):	5.87 (14.9) x 6.50 (16.5)
Type:	4-Cycle	Compression Ratio:	16.5:1
Aspiration:	Turbo Charged, H ₂ O to Air CAC	Rated RPM:	1800
Cylinder Arrangement:	6 Cylinder Inline	Max HP Stby (kW _m):	1066 (784)

Exhaust System

	Standby
Gas Temp. (Stack): °F (°C)	916 (491)
Gas Volume at Stack Temp: CFM (m ³ /min)	4,875 (138)
Maximum Allowable Exhaust Restriction: in. H ₂ O (kPa)	40.2 (10.0)

Cooling System

Ambient Capacity of Radiator: °F (°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)	122 (462)
Heat Rejection to Coolant: BTUM (kW)	13,137 (230)
Heat Rejection to CAC: BTUM (kW)	11,488 (202)
Heat Radiated to Ambient: BTUM (kW)	13,983 (245)

Air Requirements

Aspirating: CFM (m ³ /min)	1,988 (56.3)
Air Flow Required for Rad. Cooled Unit: CFM (m ³ /min)	26,078 (738)
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)	46.5 (176)
At 75% of Power Rating: gal/hr (lit/hr)	35.3 (134)
At 50% of Power Rating: gal/hr (lit/hr)	24.8 (93.7)

Fluids Capacity

Total Oil System: gal (lit)	13.7 (51.9)
Engine Jacket Water Capacity: gal (lit)	6.60 (25.0)
System Coolant Capacity: gal (lit)	28.4 (108)

Deration Factors: Rated Power is available up to 4,920 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

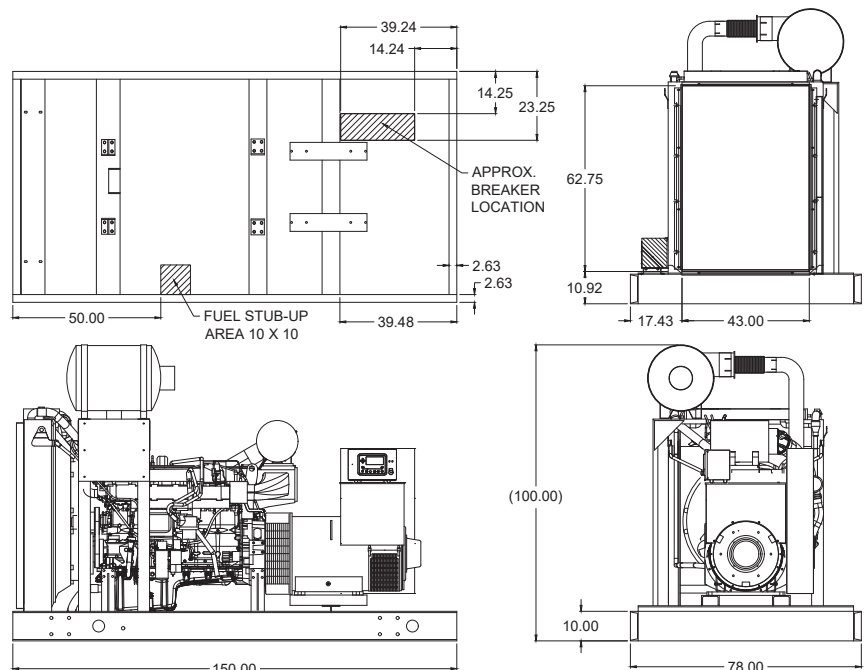
- Digital Metering
- Engine Parameters
- Generator Protection Functions
- Engine Protection
- CAN Bus (J1939) ECU Communications
- Windows-Based Software
- Multilingual Capability
- Remote Communications to DSE2548 Remote Annunciator
- 8 Programmable Contact Inputs
- 10 Contact Outputs
- RS485 Communicator 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

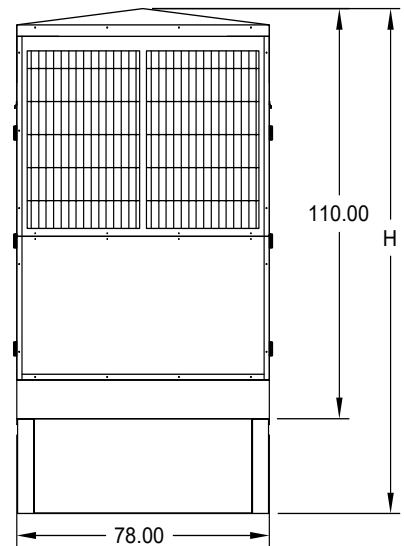
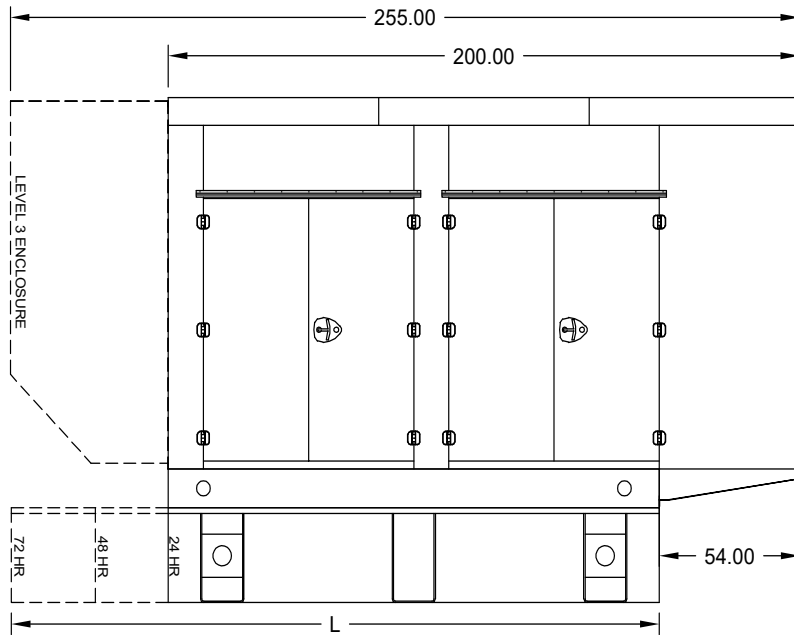
	L x W x H	Weight lbs
OPU	150 x 78 x 100 in	12,000
Level 1	200 x 78 x 110 in	14,100
Level 2	200 x 78 x 110 in	14,200
Level 3	255 x 78 x 110 in	14,700

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



	No Load	Full Load
OPU	95 dBA	97 dBA
Level 1	90 dBA	93 dBA
Level 2	85 dBA	87 dBA
Level 3	77 dBA	79 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 1300 Gallon	48 Hour 2600 Gallon	72 Hour 4000 Gallon
L	150.00	300.00	420.00
H	146.00	146.00	146.00

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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