

BLUE STAR

Power Systems

Diesel Product Line

208-600 Volt

VD100-04FT4

60 Hz / 1800 RPM

100 kWe / 100 kWe

Standby / Prime

Ratings

	240V	208V	240V	480V	600V
Phase	1	3	3	3	3
PF	1.0	0.8	0.8	0.8	0.8
Hz	60	60	60	60	60
Generator Model	UCI274G	UCI274E	UCI274E	UCI274D	UCI274D
Connection	12 LEAD DD	12 LEAD WYE	12 LEAD DELTA	12 LEAD WYE	4 LEAD WYE
Standby kWe	100	100	100	100	100
AMPS	417	347	301	151	120
Temp Rise	105°C / 40°C	105°C / 40°C	105°C / 40°C	105°C / 40°C	105°C / 40°C
Prime kWe	100	100	100	100	100
AMPS	417	347	301	151	120
Temp Rise	105°C / 40°C	105°C / 40°C	105°C / 40°C	105°C / 40°C	105°C / 40°C

Standard Equipment

- | | | |
|--|--|---|
| <p>Engine</p> <ul style="list-style-type: none"> - 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) - SCR/DPF/DOC Catalyst / Silencer Mounted - Flexible Fuel Connector - EPA Certified Tier 4 Final / EU Stage 5 Certified | <p>Generator</p> <ul style="list-style-type: none"> - Brushless Single Bearing - Automatic Voltage Regulator - ± 1% Voltage Regulation - 4 Pole, Rotating Field - 105°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 | <p>Additional</p> <ul style="list-style-type: none"> - 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 - Formed Steel - Main Line Circuit Breaker Mounted & Wired - Battery Charger 24V 5 Amp - Jacket Water Heater -20°F 1500W 120V w/Isolation Valves - Vibration Isolation Mounts - 2 Year / 2000 Hour Standby Warranty - 1 Year / 1500 Hour Prime Warranty - Standard Colors - White / Gray |
|--|--|---|

Application Data

Engine

Manufacturer:	Volvo Penta	Displacement - Cu. In. (lit):	313 (5.13)
Model:	TAD581VE	Bore - in. (cm) x Stroke - in. (cm):	4.33 (11.0) x 5.31 (13.5)
Type:	4-Cycle	Compression Ratio:	17.2:1
Aspiration:	Turbo Charged, CAC	Rated RPM:	1800
Cylinder Arrangement:	4 Cylinder Inline	Max HP Stby (kWm):	175 (131)

Exhaust System

	Standby	Prime
Gas Temp. (Stack): °F (°C)	831 (444)	831 (444)
Gas Volume at Stack Temp: CFM (m³/min)	742 (21.0)	742 (21.0)
Maximum Allowable Exhaust Restriction (Post Catalyst): in. H ₂ O (kPa)	20.0 (5.00)	20.0 (5.00)

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)	67.4 (255)	67.4 (255)
Heat Rejection to Coolant: BTUM (kW)	3,731 (65.3)	3,731 (65.3)
Heat Rejection to CAC: BTUM (kW)	997 (17.4)	997 (17.4)
Heat Radiated to Ambient: BTUM (kW)	2,095 (36.7)	2,095 (36.7)

Air Requirements

Aspirating: CFM (m³/min)	325 (9.20)	325 (9.20)
Air Flow Required for Rad. Cooled Unit: CFM (m³/min)	11,237 (318)	11,237 (318)
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)	6.99 (26.5)	6.99 (26.5)
At 75% of Power Rating: gal/hr (lit/hr)	5.51 (20.9)	5.51 (20.9)
At 50% of Power Rating: gal/hr (lit/hr)	4.05 (15.3)	4.05 (15.3)
DEF Consumption (% of fuel consumption)	± 5.10%	± 5.10%

Fluids Capacity

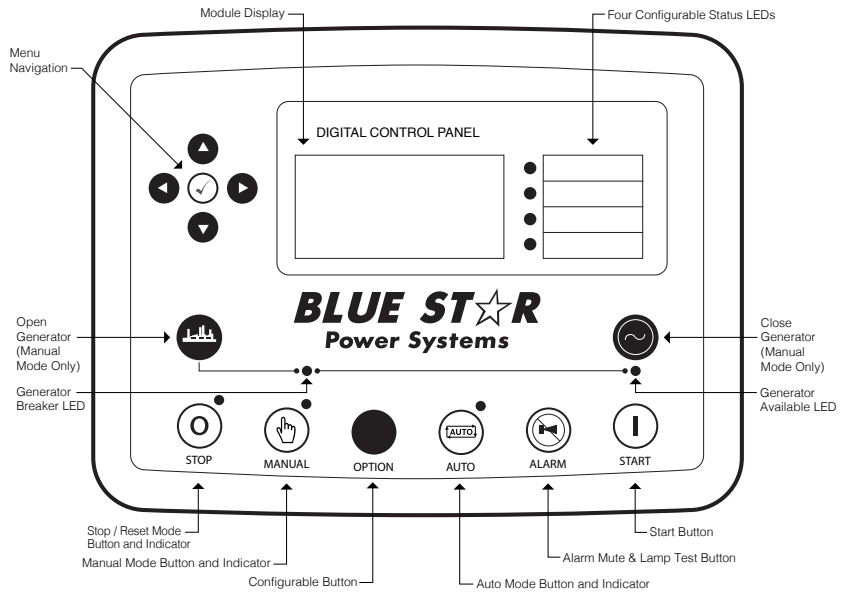
Total Oil System: gal (lit)	4.23 (16.0)	4.23 (16.0)
Engine Jacket Water Capacity: gal (lit)	3.40 (13.0)	3.40 (13.0)
System Coolant Capacity: gal (lit)	12.4 (46.9)	12.4 (46.9)
DEF Tank Capacity: gal (lit)	18.5 (70.0)	18.5 (70.0)

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

DCP7310 Control Panel

Standard Features

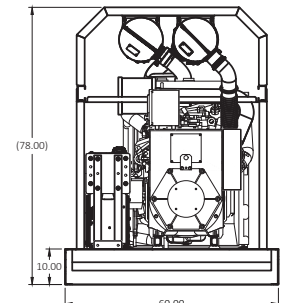
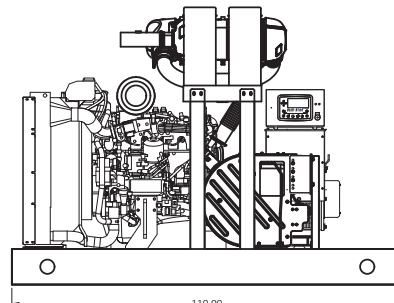
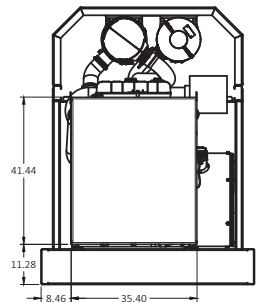
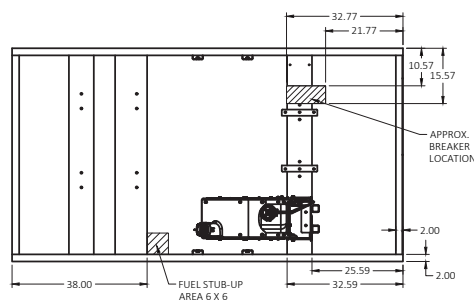
- Digital Metering
- Engine Parameters
- Generator Protection Functions
- Engine Protection
- CAN Bus (J1939) ECU Communications
- Windows-Based Software
- Multilingual Capability
- Remote Communications to DSE2548 Remote Annunciator
- 8 Programmable Contact Inputs
- 10 Contact Outputs
- RS485 Communicator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

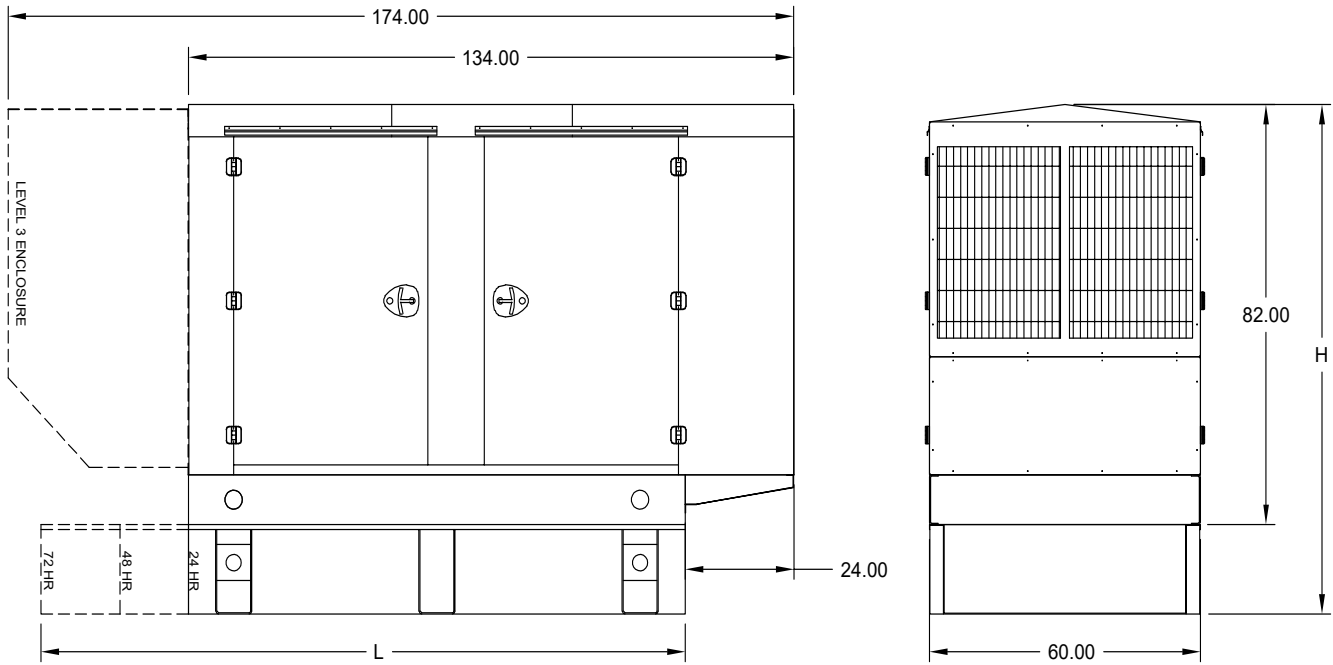
	L x W x H	Weight lbs
OPU	110 x 60 x 78 in	4,250
Level 1	134 x 60 x 82 in	5,250
Level 2	134 x 60 x 82 in	5,300
Level 3	174 x 60 x 82 in	5,575

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



	No Load	Full Load
OPU	77 dBA	80 dBA
Level 1	73 dBA	76 dBA
Level 2	69 dBA	72 dBA
Level 3	65 dBA	67 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 250 Gallon	48 Hour 500 Gallon	72 Hour 750 Gallon
L	110.00	110.00	120.00
H	96.00	110.00	118.00

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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