BLUE STAR
Power Systems

Diesel Product Line

208-600 Volt

PD450-01

60 Hz / 1800 RPM

450 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	HCI534D	HCI534D	HCI534C	HCI534C
Connection	12 LEAD WYE	12 LEAD DELTA	12 LEAD WYE	4 LEAD WYE
kWe	450	450	450	450
AMPS	1563	1355	677	542
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 (50˚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
- ± 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:	Perkins	Displacement - Cu. In. (lit):	928 (15.2)
Model:	2506D-E15TAG1	Bore - in. (cm) x Stroke - in. (cm):	5.39 (13.7) x 6.73 (17.1)
Type:	4-Cycle	Compression Ratio:	16.0:1
Aspiration:	Turbo Charged, CAC	Rated RPM:	1800
Cylinder Arrangement:	6 Cylinder Inline	Max HP Stby (kWm):	689 (514)

Exhaust System	Standby
Gas Temp. (Stack): °F (°C)	1,022 (550)
Gas Volume at Stack Temp: CFM (m^3/min)	3,958 (112)
Maximum Allowable Exhaust Restriction: in. H_2O (kPa)	27.2 (6.80)
Cooling System	
Ambient Capacity of Radiator: °F (°C)	122 (50.0)
Maximum Allowable Static Pressure on Rad. Exhaust: in. H_2O (kPa)	0.50 (0.12)
Water Pump Flow Rate: GPM (lit/min)	114 (432)
Heat Rejection to Coolant: BTUM (kW)	10,171 (178)
Heat Rejection to CAC: BTUM (kW)	7,314 (128)
Heat Radiated to Ambient: BTUM (kW)	8,069 (141)
Air Requirements	
Aspirating: CFM (m^3/min)	1,466 (41.5)
Air Flow Required for Rad. Cooled Unit: CFM (m^3/min)	30,601 (866)
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)	32.7 (124)
At 75% of Power Rating: gal/hr (lit/hr)	27.5 (104)
At 50% of Power Rating: gal/hr (lit/hr)	20.5 (77.5)
Fluids Capacity	
Total Oil System: gal (lit)	16.4 (62.0)
Engine Jacket Water Capacity: gal (lit)	8.43 (31.9)
System Coolant Capacity: gal (lit)	15.3 (58.0)

Deration Factors: Rated Power is available up to 3281ft (1000m) at ambient temperatures to 104°F (40°C).
Consult factory for site conditions above these parameters.

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450 kWe

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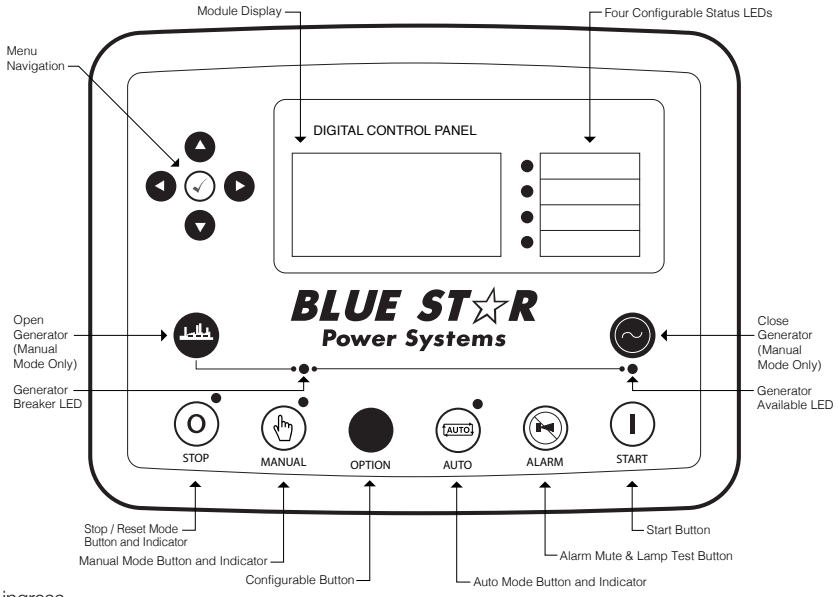
DCP7310 Control Panel

Standard Features

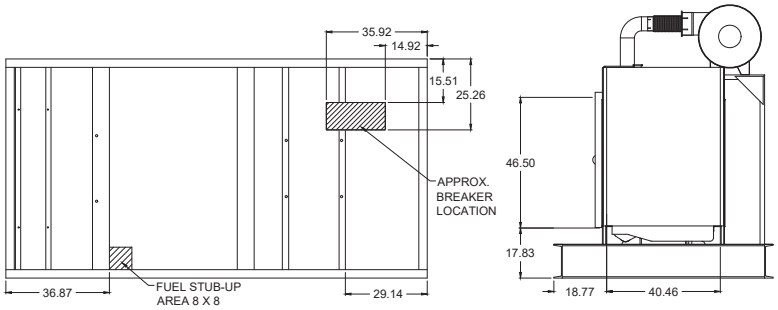
- Digital Metering
- Engine Parameters
- Generator Protection Functions
- Engine Protection
- CAN Bus (J1939) ECU Communications
- Windows-Based Software
- Multilingual Capability
- Remote Communications to DSE2548 Remote Annunciator
- 8 Programmable Contact Inputs
- 10 Contact Outputs
- RS485 Communicator Interface
- cULus Listed, CE Approved
- Event Recording
- IP 65 rating (with supplied gasket) offers increased resistance to water ingress
- NFPA 110 Level 1 Compatible



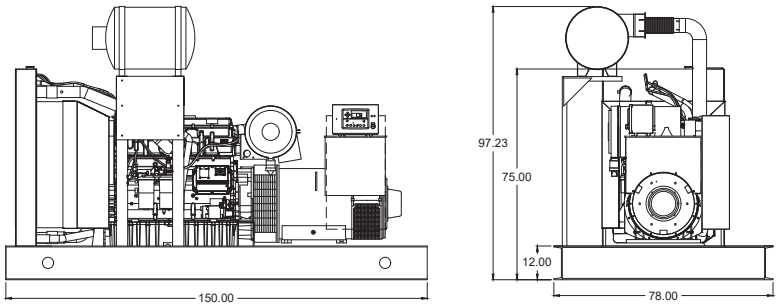
Weights / Dimensions / Sound Data

	L x W x H	Weight lbs
OPU	150 x 78 x 98 in	9,325
Level 1	200 x 78 x 110 in	11,150
Level 2	200 x 78 x 110 in	11,225
Level 3	255 x 78 x 110 in	11,725

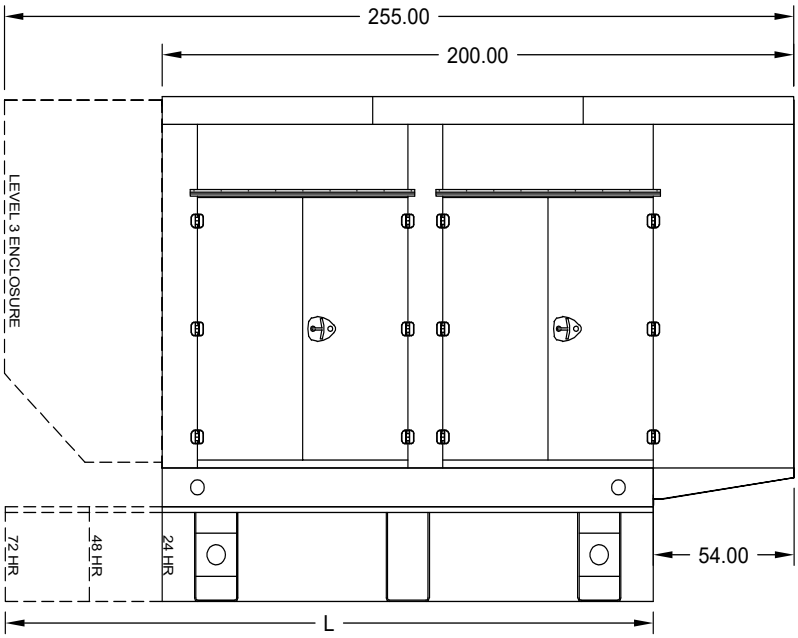
Please allow 6-12 inches for height of exhaust stack.

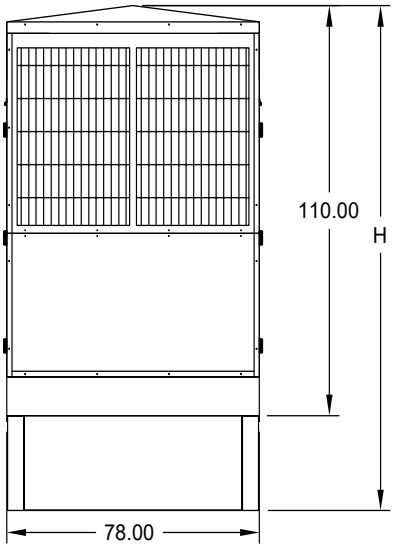


	No Load	Full Load
OPU	90 dBA	93 dBA
Level 1	85 dBA	88 dBA
Level 2	81 dBA	83 dBA
Level 3	73 dBA	75 dBA



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 900 Gallon	48 Hour 1800 Gallon	72 Hour 2700 Gallon
L	150.00	210.00	300.00
H	138.00	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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