

BLUE STAR

Power Systems Inc.

Gaseous Product Line

208-600 Volt

PS40-01

60 Hz / 1800 RPM

40 kWe

Standby

Ratings

| | 240V | 208V | 240V | 480V | 600V |
|-----------------|--------------|--------------|---------------|--------------|--------------|
| Phase | 1 | 3 | 3 | 3 | 3 |
| PF | 1 | 0.8 | 0.8 | 0.8 | 0.8 |
| Hz | 60 | 60 | 60 | 60 | 60 |
| Generator Model | UCI224D | UCI224C | UCI224C | UCI224C | UCI224C |
| Connection | 12 LEAD DD | 12 LEAD WYE | 12 LEAD DELTA | 12 LEAD WYE | 4 LEAD WYE |
| kWe Nat (LP) | 40 (40) | 40 (40) | 40 (40) | 40 (40) | 40 (40) |
| AMPS Nat (LP) | 167 (167) | 139 (139) | 120 (120) | 60 (60) | 48 (48) |
| Temp Rise | 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 (50°C)
- Radiator Duct Flange (OPU Only)
- Blower Fan & Fan Drive
- Starter & Alternator
- Oil Pump & Filter
- Oil Drain Extension w/Valve
- Governor - Electronic Isochronous
- 12V Battery System & Cables
- Air Cleaner (Dry Single Stage)
- Critical Grade Silencer Mounted
- Flexible Fuel Connector
- EPA Certified

Generator

- Brushless Single Bearing
- Automatic Voltage Regulator
- ± 1% 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 - Formed Steel
- Main Line Circuit Breaker Mounted & Wired
- Battery Charger 12V 6 Amp
- Jacket Water Heater -20°F 1500W 120V w/Isolation Valves
- Vibration Isolation Mounts
- 2 Year / 2000 Hour Standby Warranty
- Standard Colors - White / Gray

Gaseous Product Line

40 kWe



Application Data

Engine

| | | | |
|-----------------------|-------------------------------|--------------------------------------|---------------------------|
| Manufacturer: | Power Solutions International | Displacement - Cu. In. (lit): | 262 (4.30) |
| Model: | 4.3L | Bore - in. (cm) x Stroke - in. (cm): | 4.00 (10.2) x 3.48 (8.80) |
| Type: | 4-Cycle | Compression Ratio: | 9.80:1 |
| Aspiration: | Natural | Rated RPM: | 1800 |
| Cylinder Arrangement: | 6 Cylinder Vee | Max HP Stby (kWm): | 82.2 (61.3) |

Exhaust System

Standby

| | |
|--|-------------|
| Gas Temp. (Stack): °F (°C) | 1,350 (732) |
| Gas Volume at Stack Temp: CFM (m³/min) | 362 (10.2) |
| Maximum Allowable Exhaust Restriction in. H ₂ O (kPa) | 40.8 (10.2) |

Cooling System

| | |
|---|--------------|
| Ambient Capacity of Radiator: °F (°C) | 122 (50.0) |
| Maximum Allowable Static Pressure on Rad. Exhaust: in. H ₂ O (kPa) | 0.50 (0.12) |
| Water Pump Flow Rate: GPM (lit/min) | 36.6 (138) |
| Heat Rejection to Coolant: BTUM (kW) | 2,300 (40.3) |
| Heat Rejection to CAC: BTUM (kW) | N/A |
| Heat Radiated to Ambient: BTUM (kW) | 699 (12.2) |

Air Requirements

| | |
|---|--|
| Aspirating: CFM (m³/min) | 112 (3.17) |
| Air Flow Required for Rad. Cooled Unit: CFM (m³/min) | 5,157 (146) |
| Air Flow Required for Heat Exchanger/Rem. Rad. CFM (m³/min) | Consult Factory For Remote Cooled Applications |

Standby

Fuel Consumption

Natural Gas

LP

| | | |
|--|------------|-------------|
| At 100% of Power Rating: ft³/hr (m³/hr) | 628 (17.8) | 251 (7.10) |
| At 75% of Power Rating: ft³/hr (m³/hr) | 505 (14.3) | 202 (5.72) |
| At 50% of Power Rating: ft³/hr (m³/hr) | 389 (11.0) | 155 (4.39) |
| Fuel Inlet Size: NPT | | 1.0" |
| Fuel Pressure Required: in. H ₂ O (kPa) | | 11.0 (2.75) |

Fluids Capacity

| | |
|---|-------------|
| Total Oil System: gal (lit) | 1.12 (4.25) |
| Engine Jacket Water Capacity: gal (lit) | 1.93 (7.30) |
| System Coolant Capacity: gal (lit) | 6.00 (22.7) |

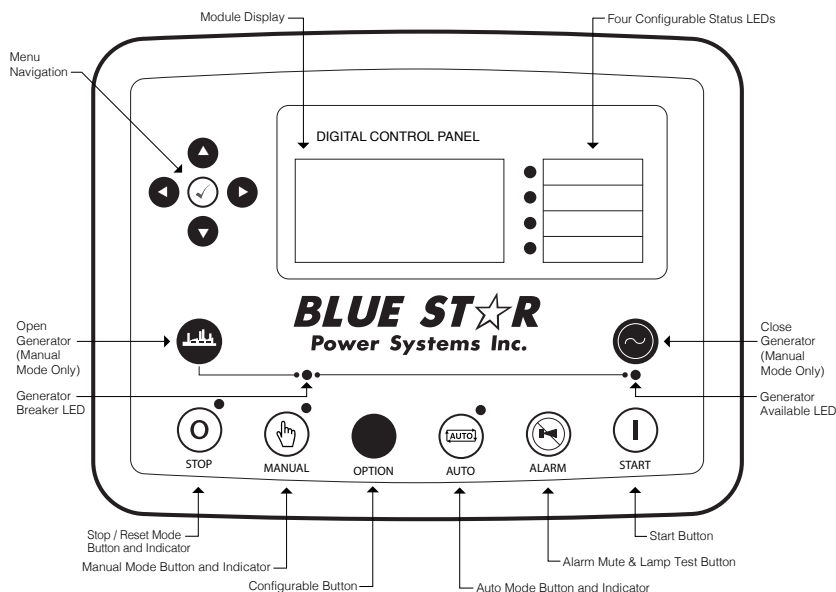
All calculations based on natural gas fuel.

Deration Factors: Temperature: Derate 1% Per 10°F Over 77°F Air Inlet Temperature | Altitude: Derate 3% Per 1,000 ft Over 1,200 ft

DCP7310 Control Panel

Standard Features

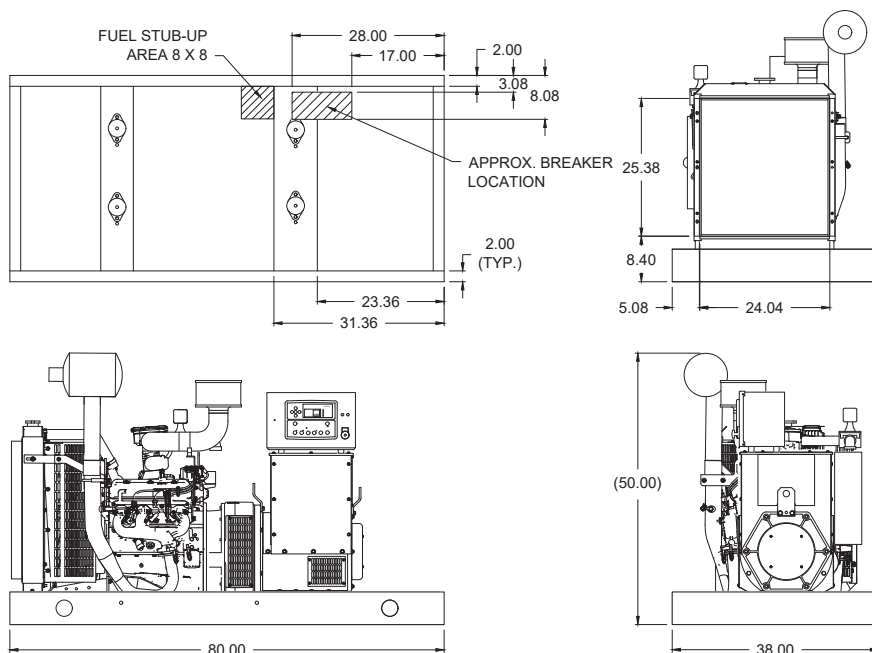
- Digital Metering
- Engine Parameters
- Generator Protection Functions
- Engine Protection
- CAN Bus (J1939) ECU Communications
- Windows-Based Software
- Multilingual Capability
- Remote Communications to DSE2548 Remote Annunciator
- 8 Programmable Contact Inputs
- 10 Contact Outputs
- RS485 Communicator 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 | 80 x 38 x 50 in | 1,575 |
| Level 1 | 90 x 38 x 60 in | 2,075 |
| Level 2 | 90 x 38 x 60 in | 2,125 |
| Level 3 | 120 x 38 x 60 in | 2,250 |

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



| | No Load | Full Load |
|----------------|---------|-----------|
| OPU | 74 dBA | 76 dBA |
| Level 1 | 68 dBA | 70 dBA |
| Level 2 | 65 dBA | 67 dBA |
| Level 3 | 62 dBA | 63 dBA |

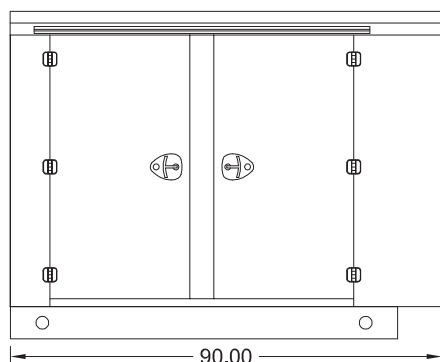
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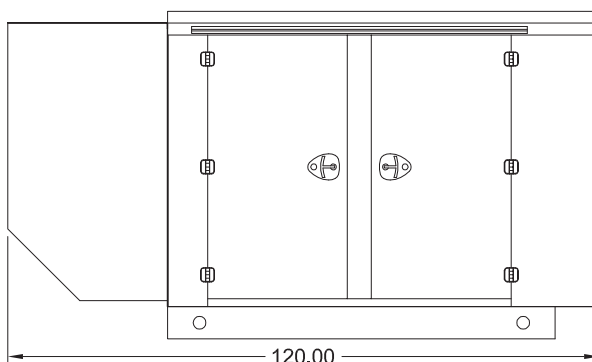
BLUE STAR
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Enclosures

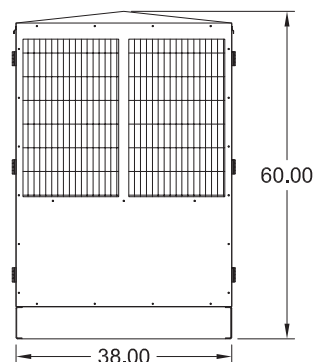
Level 1 & 2 | Side View (Weather Proof)



Level 3 | Side View (Sound Attenuated)



Level 1, 2 & 3 | Intake View



- 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.

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 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.

American Owned



American Made

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