POWERDAK
POWER PRODUCTS, LLC

# Diesel Product Line

**208-600 Volt**

**BSVD400KWSPT4**

**60 Hz / 1800 RPM**

**400 kWe / 400 kWe**

**Standby / Prime**

## 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** | 572RSL4025 | 572RSL4025 | 572RSL4025 | 572RSS4270 |
| **Connection** | 12 LEAD WYE | 12 LEAD DELTA | 12 LEAD WYE | 4 LEAD WYE |
| **Standby** | | | | |
| **kWe** | 400 | 400 | 400 | 400 |
| **AMPS** | 1390 | 1204 | 602 | 482 |
| **Temp Rise** | 105˚C / 40˚C | 105˚C / 40˚C | 105˚C / 40˚C | 105˚C / 40˚C |
| **Prime** | | | | |
| **kWe** | 400 | 400 | 400 | 400 |
| **AMPS** | 1390 | 1204 | 602 | 482 |
| **Temp Rise** | 105˚C / 40˚C | 105˚C / 40˚C | 105˚C / 40˚C | 105˚C / 40˚C |

## Standard Equipment

**Engine**

- Radiator Cooled Unit Mounted (55˚C)
- Blower Fan & Fan Drive
- Starter & Alternator
- Oil Pump & Filter
- Oil Drain Extension w/Valve
- Governor - Electronic Isochronous
- 24V Battery System & Cables
- SAE Flywheel Housing
- Air Cleaner (Dry Single Stage)
- Flexible Fuel Connectors
- EPA Certified - Tier 4 Final

**Listing Certifications**

- UL 2200 Listed
- cUL Listed
- CSA Certified
- Seismic Certified to IBC 2012

**Generator**

- Brushless Single Bearing
- Automatic Voltage Regulator
- ± 0.25% 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

**Additional**

- Microprocessor Based Digital Control
- Interface Connection Box
- Control Panel Mounted in NEMA 12 Enclosure
- Base - Structural Steel
- Main Line Circuit Breaker Mounted & Wired
- SCR Catalyst /Silencer Mounted
- Battery Charger 24V 5 Amp
- Jacket Water Heater -20˚F 5000W 240V w/Isolation Valves
- Vibration Isolation Mounts (Pad Type)
- Radiator Duct Flange (OPU Only)
- Single Source Supplier
- 2YR / 2000HR Standby Warranty
- 1YR / 1500HR Prime Warranty
- Standard Colors - White / Tan / Gray

# Application Data

| Engine | | | |
|---|---|---|---|
| Manufacturer: | Volvo Penta | Displacement - Cu. In. (lit): | 984 (16.1) |
| Model: | TAD1672VE | Bore - in. (cm) x Stroke - in. (cm): | 5.67 (14.4) x 6.50 (16.5) |
| Type: | 4-Cycle | Compression Ratio: | 17.0:1 |
| Aspiration: | Turbo Charged, CAC | Rated RPM: | 1800 |
| Cylinder Arrangement: | 6 Cylinder Inline | Max HP Stby (kWm): | 700 (515) |

| Exhaust System | Standby | Prime |
|---|---|---|
| Gas Temp. (Stack): °F (°C) | 932 (500) | 932 (500) |
| Gas Volume at Stack Temp: CFM (m³/min) | 3,461 (97.9) | 3,461 (97.9) |
| Maximum Allowable Exhaust Restriction (Post SCR Cat.): in. $H_2O$ (kPa) | 16.0 (4.00) | 16.0 (4.00) |
| **Cooling System** | | |
| Ambient Capacity of Radiator: °F (°C) | 131 (55.0) | 131 (55.0) |
| Maximum Allowable Static Pressure on Rad. Exhaust: in. $H_2O$ (kPa) | 0.50 (0.12) | 0.50 (0.12) |
| Water Pump Flow Rate: GPM (lit/min) | 108 (409) | 108 (409) |
| Heat Rejection to Coolant: BTUM (kW) | 12,113 (212) | 12,113 (212) |
| Heat Rejection to CAC: BTUM (kW) | 6,028 (105) | 6,028 (105) |
| Heat Radiated to Ambient: BTUM (kW) | 3,415 (59.8) | 3,415 (59.8) |
| **Air Requirements** | | |
| Aspirating: CFM (m³/min) | 1,324 (37.5) | 1,324 (37.5) |
| Air Flow Required for Rad. Cooled Unit: CFM (m³/min) | 18,180 (514) | 18,180 (514) |
| 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) | 32.0 (121) | 32.0 (121) |
| At 75% of Power Rating: gal/hr (lit/hr) | 25.6 (96.9) | 25.6 (96.9) |
| At 50% of Power Rating: gal/hr (lit/hr) | 20.8 (78.7) | 20.8 (78.7) |
| DEF Consumption (% of fuel consumption) | ± 6.00% | ± 6.00% |
| **Fluids Capacity** | | |
| Total Oil System: gal (lit) | 12.68 (48.0) | 12.68 (48.0) |
| Engine Jacket Water Capacity: gal (lit) | 8.70 (32.9) | 8.70 (32.9) |
| System Coolant Capacity: gal (lit) | 15.9 (60.2) | 15.9 (60.2) |
| 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) standby and prime.
Consult factory for site conditions above these parameters.

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**BSVD400KWSPT4**
**400 kWe / 400 kWekWe**

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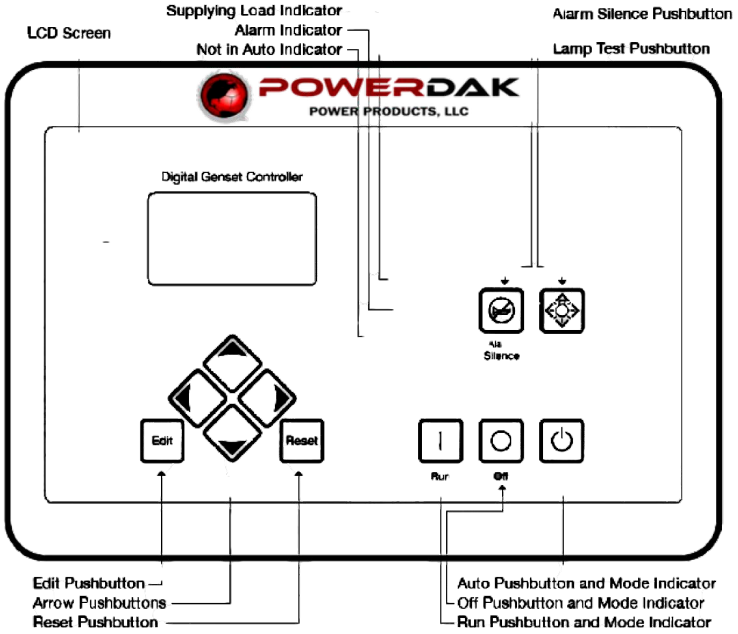
## DGC-2020 Control Panel

**Standard Features**

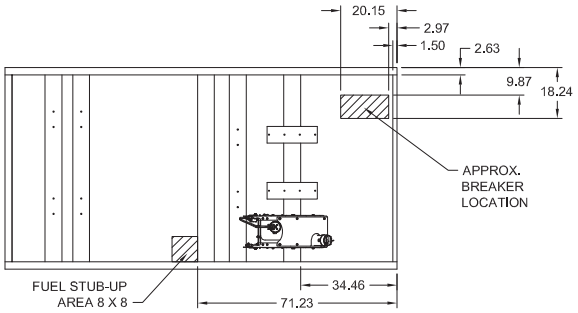
- Digital Metering
- Engine Parameters
- Generator Protection Functions
- Engine Protection
- CAN Bus ECU Communications
- Windows-Based Software
- Multilingual Capability
- Remote Communications to RDP-110 Remote Annunciator
- 16 Programmable Contact Inputs
- Up to 15 Contact Outputs (7 standard)
- UL Recognized, CSA Certified, CE Approved
- Event Recording
- IP 54 Front Panel Rating with Integrated Gasket
- NFPA 110 Level 1 Compatible

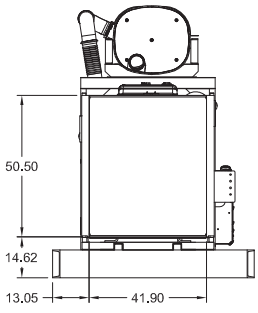



## Weights / Dimensions / Sound Data

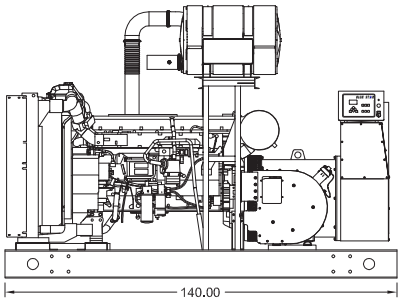
| | L x W x H | Weight lbs |
|---|---|---|
| **OPU** | 140 x 72 x 98 in | 10,000 |
| **Level 1** | 180 x 72 x 103 in | 11,650 |
| **Level 2** | 180 x 72 x 103 in | 11,725 |
| **Level 3** | 225 x 72 x 103 in | 12,175 |

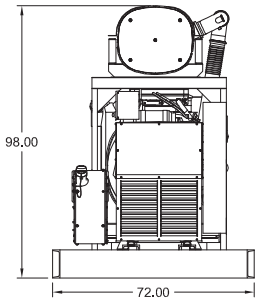
Height measured from bottom of base to highest point




| | No Load | Full Load |
|---|---|---|
| **OPU** | 86 dBA | 88 dBA |
| **Level 1** | 82 dBA | 84 dBA |
| **Level 2** | 78 dBA | 80 dBA |
| **Level 3** | 72 dBA | 74 dBA |




Drawings based on standard open power 480 volt standby generator. Lengths may vary with other voltages. Subject to change without notice.
Sound data as measured at 23 feet (7 meters) in accordance with ISO 8528-10 at standby rating.

# Diesel Product Line

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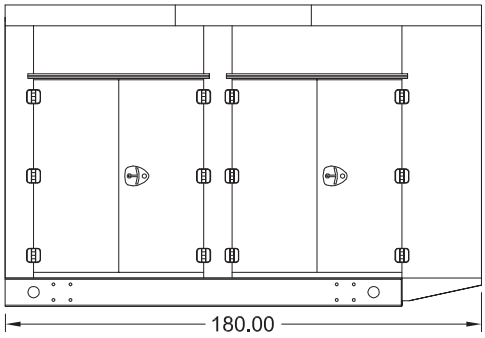
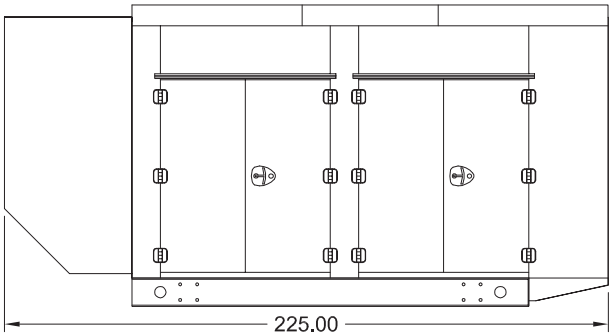
## Enclosures

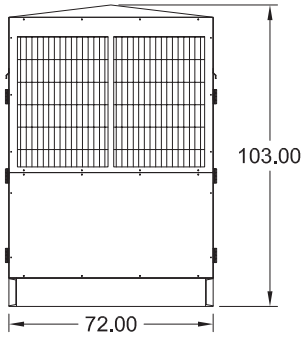
**Level 1 & 2 | Side View (Weather Proof)**




**Level 3 | Side View (Sound Attenuated)**




**Level 1, 2 & 3 | Intake View**

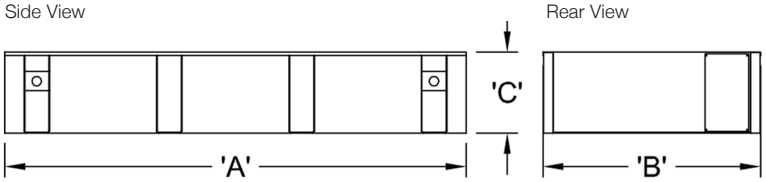



All enclosures are 150 MPH Wind Rated.
Level 2 & 3 enclosures include sound attenuation foam.
Level 3 enclosure includes frontal sound & exhaust hood.
*Enclosure height does not include exhaust stack.

## Double Wall UL 142 Listed Fuel Tanks

Side View

Rear View




| | 24 Hour 710 Gallon | 48 Hour 1420 Gallon | 72 Hour 2130 Gallon |
|---|---|---|---|
| **A** | 140.00 | 180.00 | 250.00 |
| **B** | 72.00 | 72.00 | 72.00 |
| **C** | 24.00 | 36.00 | 36.00 |

**All specification sheet dimensions are represented in inches.**
**All enclosures and fuel tanks are based on the standard standby unit configuration. Any deviation can change dimensions. Materials and specifications subject to change without notice.**

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