

# POWERDAK

### **POWER PRODUCTS, LLC**

# Gaseous Product Line

208-600 Volt

BSGM60KWS 60 Hz / 1800 RPM

60 kWe Standby

### Ratings

	240V	208V	240V	480 <b>V</b>	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	362CSL1604	361CSL1602	361CSL1602	361CSL1601	361PSL1633
Connection	12 LEAD ZIG-ZAG	12 LEAD WYE	12 LEAD DELTA	12 LEAD WYE	4 LEAD WYE
Standby					
kWe Nat (LP)	60 (60)	60 (60)	60 (60)	60 (60)	60 (60)
AMPS Nat (LP)	250 (250)	208 (208)	181 (181)	90 (90)	72 (72)
Temp Rise	130°C / 27°C	130°C / 27°C	130°C / 27°C	130°C / 27°C	130°C / 27°C

# Standard Equipment

#### **Engine**

- ▶ Radiator Cooled Unit Mounted (50°C)
- ▶ 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)
- ▶ Flexible Fuel Connector
- ► EPA Certified

#### **Listing Certifications**

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

#### Generator

- ▶ Brushless Single Bearing
- ▶ Automatic Voltage Regulator
- ▶ ± 1% Voltage Regulation
- ▶ 4 Pole, Rotating Field
- ▶ 130°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

- ► Microprocessor Based Digital Control
- ▶ Interface Connection Box
- ▶ Control Panel Mounted in NEMA 12 Enclosure
- ▶ Base Formed Steel
- ▶ Main Line Circuit Breaker Mounted & Wired
- ▶ Critical Grade Silencer Mounted
- ▶ Battery Charger 12V 6 Amp
- ► Jacket Water Heater -20°F 1500W 120V w/Isolation Valves
- ▶ Vibration Isolation Mounts
- ► Radiator Duct Flange (OPU Only)
- ▶ Single Source Supplier
- ▶ 2YR / 2000HR Standby Warranty
- ▶ Standard Colors White / Tan / Gray

# Gaseous Product Line

### BSGM60KWS 60 kWe





# Application Data

Engine			
Manufacturer:	General Motors	Displacement - Cu. In. (lit):	350 (5.70)
Model:	GM 5.7L EPA	Bore - in. (cm) x Stroke - in. (cm):	4.00 (10.2) x 3.5 (8.80)
Type:	4-Cycle	Compression Ratio:	9.40:1
Aspiration:	Natural	Rated RPM:	1800
Cylinder Arrangement:	8 Cylinder Vee	Max HP Stby (kWm):	113 (78.1)

Exhaust System		Standby
Gas Temp. (Stack): °F (°C)		1,350 (732)
Gas Volume at Stack Temp: CFM (m³/min)		553 (15.7)
Maximum Allowable Exhaust Restriction: in. H <sub>2</sub> 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 <sub>2</sub> O (kPa)		0.50 (0.12)
Water Pump Flow Rate: GPM (lit/min)		36.6 (139)
Heat Rejection to Coolant: BTUM (kW)		3,120 (54.6)
Heat Rejection to CAC: BTUM (kW)		N/A
Heat Radiated to Ambient: BTUM (kW)		854 (14.9)
Air Requirements		
Aspirating: CFM (m³/min)		173 (4.90)
Air Flow Required for Rad. Cooled Unit: CFM (m³/min)		7,400 (209)
Air Flow Required for Heat Exchanger/Rem. Rad. CFM (m³/min)	Consult Factory For Remote Cooled A	Applications
Fuel Consumption	Natural Gas	LP
At 100% of Power Rating: ft3/hr (m3/hr)	859 (24.3)	363 (10.3)
At 75% of Power Rating: ft3/hr (m3/hr)	725 (20.5)	305 (8.63)
At 50% of Power Rating: ft3/hr (m3/hr)	578 (16.4)	244 (6.91)
Fuel Inlet Size: NPT		1.00"
Fuel Pressure Required: in. H20 (kPa)	7.00 - 11.0 (	1.75 - 2.75)
Fluids Capacity		
Total Oil System: gal (lit)		1.25 (4.73)
Engine Jacket Water Capacity: gal (lit)		2.03 (7.68)
System Coolant Capacity: gal (lit)		6.00 (22.7)

# Gaseous Product Line

### BSGM60KWS 60 kWe

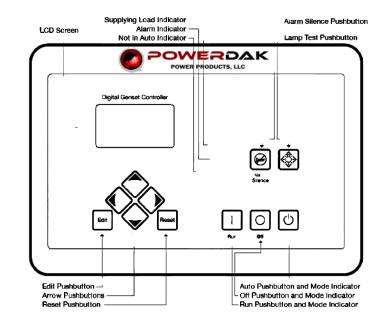




### DGC-2020 Control Panel

#### 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

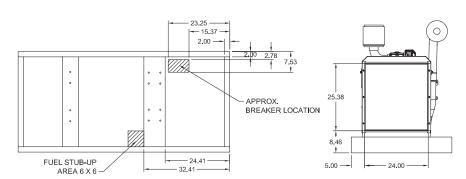


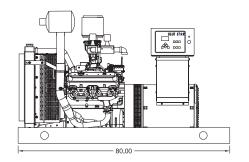
# Weights / Dimensions / Sound Data

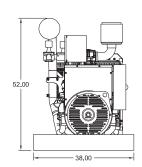
	LxWxH	Weight lbs
OPU	80 x 38 x 52 in	1,675
Level 1	90 x 38 x 60 in	2,150
Level 2	90 x 38 x 60 in	2,175
Level 3	120 x 38 x 60 in	2,325

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

	No Load	Full Load	
OPU	76 dBA	79 dBA	
Level 1	71 dBA	73 dBA	
Level 2	66 dBA	68 dBA	
Level 3	63 dBA	64 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.

# Gaseous Product Line

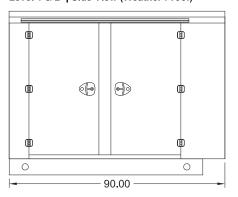
### BSGM60KWS 60 kWe

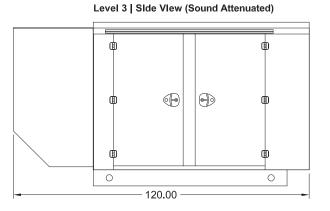


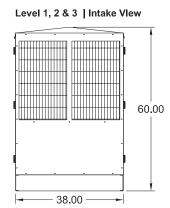


### **Enclosures**

Level 1 & 2 | Side View (Weather Proof)







All enclosures are 150 MPH Wind Rated.

Level 2 & 3 enclosures include sound attenuation foam. Level 3 enclosure includes frontal sound & exhaust hood.

All specification sheet dimensions are represented in inches. Materials and specifications subject to change without notice.

Powerdak Power Products - 3350 Jet Drive, Rapid City, South Dakota 57703 - 605.341.6160 Ext 1 - Fax 605.718.9998 e-mail: dave@dakgenerator.com





<sup>\*</sup>Enclosure height does not include exhaust stack.