

# POWERDAK

### **POWER PRODUCTS, LLC**

### Diesel Product Line

208-600 Volt

BSJD350KWS 60 Hz / 1800 RPM

350 kWe Standby

### Ratings

	208 <b>V</b>	240V	480 <b>V</b>	600 <b>V</b>
Phase	3	3	3	3
PF	0.8	0.8	0.8	0.8
Hz	60	60	60	60
Generator Model	433CSL6216	433CSL6216	433CSL6216	433PSL6248
Connection	12 LEAD WYE	12 LEAD DELTA	12 LEAD WYE	4 LEAD WYE
Standby (Stationary Applications Only)				
kWe	350	350	350	350
AMPS	1216	1054	527	421
Temp Rise	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
- ▶ 24V Battery System & Cables
- ► Air Cleaner (Dry Single Stage)
- ▶ Flexible Fuel Connector
- ► EPA Certified Tier 3

#### **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 Structural Steel
- ▶ Main Line Circuit Breaker Mounted & Wired
- ► Critical Grade Silencer Mounted
- ▶ Battery Charger 24V 5 Amp
- ► Jacket Water Heater -20°F 4000W 240V w/Isolation Valves
- ▶ Vibration Isolation Mounts Pad Type
- ► Radiator Duct Flange (OPU Only)
- ▶ Single Source Supplier
- ▶ 2YR / 2000HR Standby Warranty
- ▶ Standard Colors White / Tan / Gray

# Diesel Product Line

### BSJD350KWS 350 kWe





## Application Data

Engine			
Manufacturer:	John Deere	Displacement - Cu. In. (lit):	824 (13.5)
Model:	6135HFG84	Bore - in. (cm) x Stroke - in. (cm):	5.19 (13.2) x 6.49 (16.5)
Type:	4-Cycle	Compression Ratio:	16.0:1
Aspiration:	Turbo Charged, CAC	Rated RPM:	1800
Cylinder Arrangement:	6 Cylinder Inline	Max HP Stby (kWm):	538 (401)

Exhaust System	Standby
Gas Temp. (Stack): °F (°C)	1,017 (547)
Gas Volume at Stack Temp: CFM (m³/min)	2,387 (67.6)
Maximum Allowable Exhaust Restriction: in. H <sub>2</sub> O (kPa)	30.0 (7.50)
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)	106 (400)
Heat Rejection to Coolant: BTUM (kW)	9,961 (175)
Heat Rejection to CAC: BTUM (kW)	4,269 (75.0)
Heat Radiated to Ambient: BTUM (kW)	3,984 (69.7)
Air Requirements	
Aspirating: CFM (m³/min)	883 (25.0)
Air Flow Required for Rad. Cooled Unit: CFM (m³/min)	26,661 (754)
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)	26.4 (99.9)
At 75% of Power Rating: gal/hr (lit/hr)	21.1 (79.9)
At 50% of Power Rating: gal/hr (lit/hr)	14.9 (56.4)
Fluids Capacity	
Total Oil System: gal (lit)	15.9 (60.0)
Engine Jacket Water Capacity: gal (lit)	4.76 (18.0)
System Coolant Capacity: gal (lit)	23.0 (87.1)

Deration Factors

Rated Power is available up to 5,500 ft (1,676 m) at ambient temperatures to 122°F (50°C) standby. Consult factory for site conditions above these parameters.

## Diesel Product Line

### BSJD350KWS 350 kWe

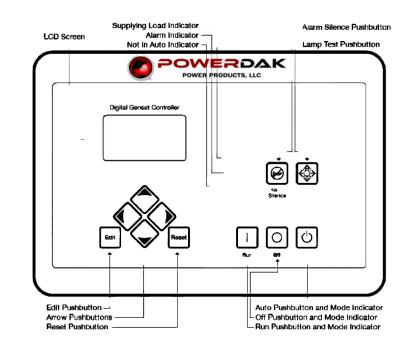




### DGC-2020 Control Panel

#### **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

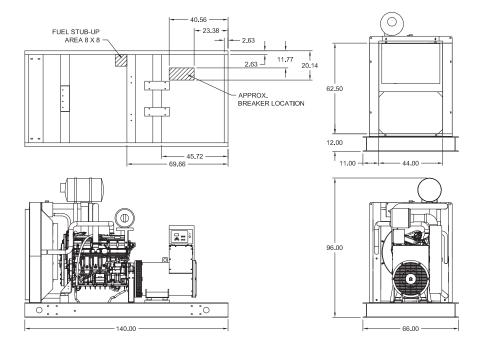


## Weights / Dimensions / Sound Data

	LxWxH	Weight lbs
OPU	140 x 66 x 96 in	8,025
Level 1	140 x 66 x 112 in	9,200
Level 2	140 x 66 x 112 in	9,275
Level 3	195 x 66 x 112 in	9,750

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

	No Load	Full Load
OPU	85 dBA	88 dBA
Level 1	82 dBA	84 dBA
Level 2	77 dBA	79 dBA
Level 3	70 dBA	73 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

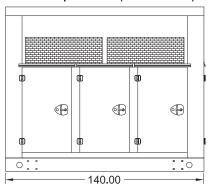
### **BSJD350KWS** 350 kWe



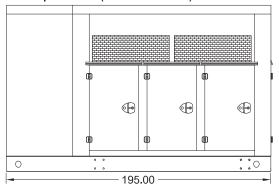


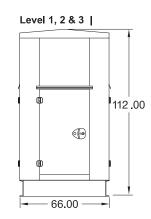
### Enclosures (LEGACY)

Level 1 & 2 | Side View (Weather Proof)





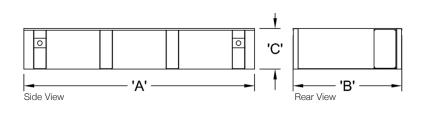


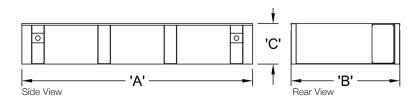


All enclosures are 150 MPH Wind Rated.

Level 2 & 3 enclosures include sound attenuation foam.

### Double Wall UL 142 Listed Fuel Tanks





	OPU / Level 1 / Level 2			
	24 Hour 710 Gallon	48 Hour 1420 Gallon	72 Hour 2130 Gallon	
Α	140.00	178.00	255.00	
В	66.00	66.00	66.00	
С	24.00	36.00	36.00	

	Level 3		
	24 Hour 710 Gallon	48 Hour 1420 Gallon	72 Hour 2130 Gallon
Α	195.00	195.00	255.00
В	66.00	66.00	66.00
С	16.00	32.00	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.

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.

Level 3 enclosure includes frontal sound & exhaust hood.