

POWERDAK

POWER PRODUCTS, LLC

Diesel Product Line

208-600 Volt

BSJD50KWSP

60 Hz / 1800 RPM

50 kWe / 45 kWe

Standby / Prime

Ratings

	240V	208V	240V	480 V	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	361CSL1602	361CSL1601	361CSL1601	361CSL1601	361PSL1633		
Connection	onnection 12 LEAD ZIG-ZAG 12 LEAD WYE 12 L		12 LEAD DELTA	12 LEAD WYE	4 LEAD WYE		
Standby							
kWe	50	50	50	50	50		
AMPS	208	174	151	75	60		
Temp Rise	105°C / 40°C	105°C / 40°C	105°C / 40°C	105°C / 40°C	105°C / 40°C		
Prime [Only Available For Mobile Applications]							
kWe	45	45	45	45	45		
AMPS	188	156	135	68	54		
Temp Rise	105°C / 40°C	105°C / 40°C	105°C / 40°C	105°C / 40°C	105°C / 40°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 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
- ▶ 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 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
- ▶ 1YR / 1500HR Prime Warranty
- ▶ Standard Colors White / Tan / Gray

Diesel Product Line

BSJD50KWSP 50 kWe / 45 kWe





Application Data

Engine			
Manufacturer:	John Deere	Displacement - Cu. In. (lit):	275 (4.5)
Model:	4045TF280	Bore - in. (cm) x Stroke - in. (cm):	4.19 (10.6) x 5.00 (12.7)
Type:	4-Cycle	Compression Ratio:	19.0:1
Aspiration:	Turbo Charged	Rated RPM:	1800
Cylinder Arrangement:	4 Cylinder Inline	Max HP Stby (kWm):	75.0 (56.0)

Exhaust System	Standby	Prime
Gas Temp. (Stack): °F (°C)	945 (507)	918 (492)
Gas Volume at Stack Temp: CFM (m³/min)	448 (12.7)	424 (12.0)
Maximum Allowable Exhaust Restriction: in. H ₂ O (kPa)	30 (7.50)	30 (7.50)
Cooling System		
Ambient Capacity of Radiator: °F (°C)	122 (50.0)	122 (50.0)
Maximum Allowable Static Pressure on Rad. Exhaust: in. H₂O (kPa)	0.50 (0.12)	0.50 (0.12)
Water Pump Flow Rate: GPM (lit/min)	38.0 (144)	38.0 (144)
Heat Rejection to Coolant: BTUM (kW)	1,821 (31.9)	1707 (29.9)
Heat Radiated to Ambient: BTUM (kW)	512 (9.00)	448 (7.80)
Air Requirements		
Aspirating: CFM (m³/min)	180 (5.09)	173 (4.90)
Air Flow Required for Rad. Cooled Unit: CFM (m³/min)	4,760 (135)	4,760 (135)
Air Flow Required for Heat Exchanger/Rem. Rad. CFM (m³/min)	Consult Factory For Remote Cooled Applic	ations
Fuel Consumption		
At 100% of Power Rating: gal/hr (lit/hr)	4.13 (15.6)	3.82 (14.4)
At 75% of Power Rating: gal/hr (lit/hr)	3.25 (12.3)	2.99 (11.3)
At 50% of Power Rating: gal/hr (lit/hr)	2.21 (8.37)	2.11 (8.00)
Fluids Capacity		
Total Oil System: gal (lit)	3.88 (14.7)	3.88 (14.7)
Engine Jacket Water Capacity: gal (lit)	2.25 (8.52)	2.25 (8.52)
System Coolant Capacity: gal (lit)	5.38 (20.4)	5.38 (20.4)

Diesel Product Line

BSJD50KWSP 50 kWe / 45 kWe

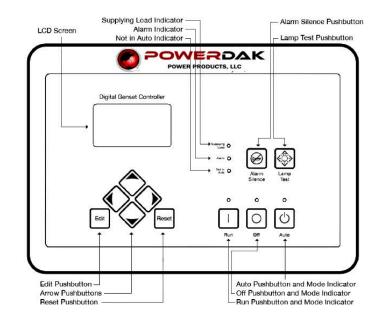




DGC-2020 Control Panel

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

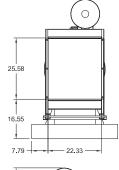


Weights / Dimensions / Sound Data

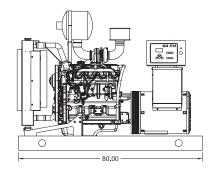
	LxWxH	Weight lbs
OPU	80 x 38 x 58 in	2,000
Level 1	90 x 38 x 60 in	2,500
Level 2	90 x 38 x 60 in	2,550
Level 3	120 x 38 x 60 in	2,700

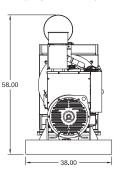
Please allow 6-12 inches for height of exhaust stack.

39.19 — FUEL STUB-U AREA 6 X			20.18	-	— 12.31 — 2.00
				Ŧ	4.78
•		00			— APPROX. BREAKER LOCATION
		°°			
			 19.58	-	



	No Load	Full Load
OPU	73 dBA	77 dBA
Level 1	71 dBA	73 dBA
Level 2	68 dBA	70 dBA
Level 3	63 dBA	65 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

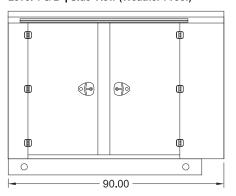
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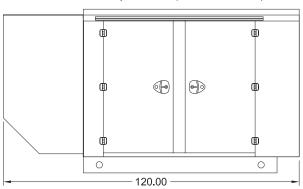


Enclosures

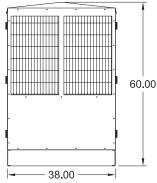
Level 1 & 2 | Side View (Weather Proof)







Level 1, 2 & 3 | Intake View

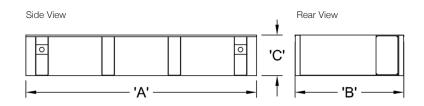


All enclosures are 150 MPH Wind Rated.

Level 2 & 3 enclosures include sound attenuation foam.

Level 3 enclosure includes frontal sound & exhaust hood.

Double Wall UL 142 Listed Fuel Tanks



	24 Hour 48 Hour 120 Gallon 240 Gallon		72 Hour 360 Gallon
Α	80.00	80.00	108.00
В	38.00	38.00	38.00
С	20.00	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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^{*}Enclosure height does not include exhaust stack.