

BLUE STAR

Power Systems Inc.

Diesel Product Line

208-600 Volt

JD50-03

60 Hz / 1800 RPM

50 kWe / 45 kWe

Standby / Prime

Ratings

	240V	208V	240V	480V	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	12 LEAD ZIG-ZAG	12 LEAD WYE	12 LEAD DELTA	12 LEAD WYE	4 LEAD WYE
Standby					
kWe	50	50	50	50	50
AMPS	208	174	151	75	60
Temp Rise	130°C / 27°C	130°C / 27°C	130°C / 27°C	130°C / 27°C	130°C / 27°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
- ▶ SAE Flywheel Housing
- ▶ Air Cleaner (Dry Single Stage)
- ▶ Flexible Fuel Connectors
- ▶ EPA Certified - Tier 3

Generator

- ▶ Brushless Single Bearing
- ▶ Automatic Voltage Regulator
- ▶ ± 1.0% Voltage Regulation
- ▶ 4 Pole, Rotating Field
- ▶ 130°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

- ▶ UL 2200 Listed
- ▶ cUL Listed
- ▶ Microprocessor Based Digital Control
- ▶ 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



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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 5.0 (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. H2O (kPa)	30 (7.5)	30 (7.5)

Cooling System

Ambient Capacity of Radiator: °F (°C)	122 (50.0)	122 (50.0)
Maximum Allowable Static Pressure on Rad. Exhaust: in. H2O (kPa)	0.5 (0.12)	0.5 (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 (9.0)	448 (7.8)

Air Requirements

Aspirating: CFM (m³/min)	180 (5.09)	173 (4.9)
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 Applications	

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 (8.0)

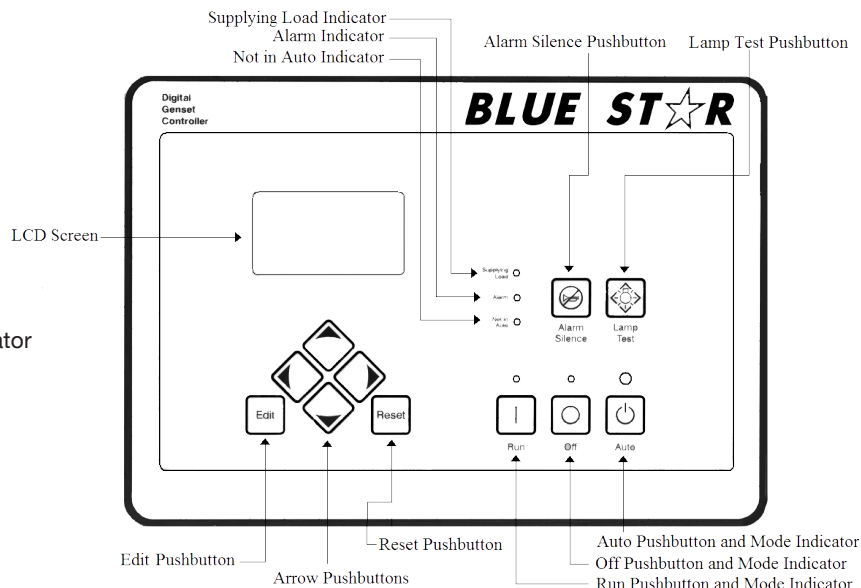
Fluids Capacity

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)

Deration Factors

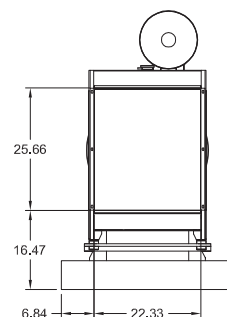
Rated Power is available up to 10,000 ft (3048 m) at ambient temperatures to 122°F (50°C) standby and prime. Consult factory for site conditions above these parameters.

- ▶ 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

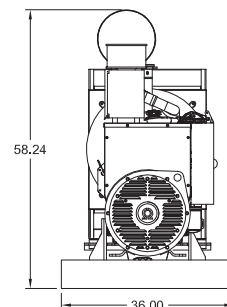
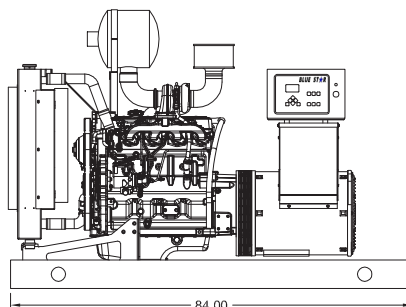


	L x W x H	Weight lbs
OPU	84 x 36 x 59 in	1975
Level 1	84 x 36 x 66 in	2350
Level 2	84 x 36 x 83 in	2550
Level 3	110 x 36 x 77 in	2700

Figure 1 is an elevation view of the fuel stub-up area. It shows a cross-section of a structure with various dimensions. Key dimensions include a total width of 39.19, a central section width of 23.41, and a distance of 15.53 from the center to the right edge. A fuel stub-up area is indicated by a hatched rectangle. An approximate breaker location is marked with a vertical line and labeled "APPROX. BREAKER LOCATION". Other dimensions include 2.00, 4.15, 8.90, and 22.81.



	No Load	Full Load
OPU	75 dBA	79 dBA
Level 1	71 dBA	74 dBA
Level 2	69 dBA	72 dBA
Level 3	63 dBA	66 dBA



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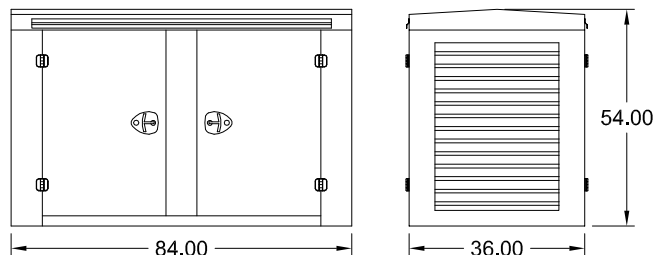
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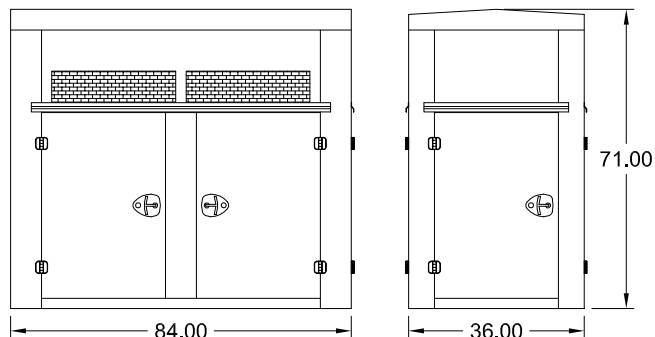


Optional Enclosures and Fuel Tanks

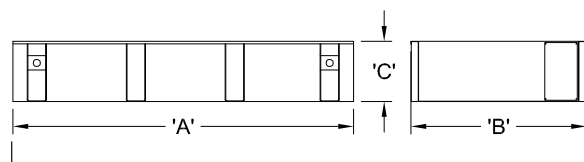
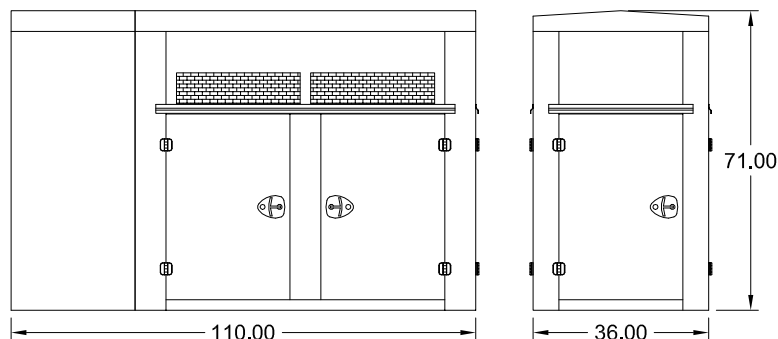
Level 1 Enclosure (WPE)



Level 2 Enclosure (WPF)



Level 3 Enclosure (SAE)



*Level 1 enclosures are 100 MPH Wind Rated as standard (up to 150 MPH available).

**Level 2 & 3 enclosures are 150 MPH Wind Rated as standard.

***Enclosure height does not include unit base or exhaust stack.

Double Wall UL 142 Listed Fuel Tanks

	24 Hour (120 Gallon)			48 Hour (240 Gallon)			72 Hour (360 Gallon)		
	A	B	C	A	B	C	A	B	C
OPU	84.00	36.00	18.00	84.00	36.00	32.00	104.00	36.00	36.00
Level 1	84.00	36.00	18.00	84.00	36.00	32.00	104.00	36.00	36.00
Level 2	84.00	36.00	18.00	84.00	36.00	32.00	104.00	36.00	36.00
Level 3	110.00	36.00	14.00	110.00	36.00	24.00	110.00	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.

***Level 1 enclosure not UL listed.

Materials and specifications subject to change without notice.

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