

BLUE STAR

Power Systems Inc.

Diesel Product Line

208-600 Volt

CD100-01

60 Hz / 1800 RPM

100 kWe / 90 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	363CSL3133	362CSL1606	362CSL1606	362CSL1606	362PSL1636
Connection	12 LEAD ZIG-ZAG	12 LEAD WYE	12 LEAD DELTA	12 LEAD WYE	4 LEAD WYE
Standby					
kWe	100	100	100	100	100
AMPS	417	347	301	151	120
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	90	90	90	90	90
AMPS	375	313	271	135	108
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

- ▶ 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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100 kWe / 90 kWe



Application Data

Engine

Manufacturer:	Cummins	Displacement - Cu. In. (lit):	272 (4.5)
Model:	QSB5-G4 NR3	Bore - in. (cm) x Stroke - in. (cm):	4.21 (10.7) x 4.88 (12.4)
Type:	4-Cycle	Compression Ratio:	17.3:1
Aspiration:	Turbo Charged, CAC	Rated RPM:	1800
Cylinder Arrangement:	4 Cylinder Inline	Max HP Stby (kWm):	160 (119)

Exhaust System

	Standby	Prime
Gas Temp. (Stack): °F (°C)	824 (440)	761 (405)
Gas Volume at Stack Temp: CFM (m³/min)	804 (22.7)	759 (21.4)
Maximum Allowable Exhaust Restriction: in. H2O (kPa)	40.8 (10.2)	40.8 (10.2)

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)	43.0 (163)	43.0 (163)
Heat Rejection to Coolant: BTUM (kW)	2,720 (47.6)	2,453 (42.9)
Heat Rejection to CAC: BTUM (kW)	1,596 (27.9)	1,606 (28.1)
Heat Radiated to Ambient: BTUM (kW)	1,423 (24.9)	1,281 (22.4)

Air Requirements

Aspirating: CFM (m³/min)	355 (10.0)	354 (10.0)
Air Flow Required for Rad. Cooled Unit: CFM (m³/min)	6,330 (111)	6,330 (111)
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)	8.0 (30.3)	7.2 (27.3)
At 75% of Power Rating: gal/hr (lit/hr)	6.3 (23.8)	6.0 (22.7)
At 50% of Power Rating: gal/hr (lit/hr)	4.5 (17.0)	3.9 (14.8)

Fluids Capacity

Total Oil System: gal (lit)	3.20 (12.1)	3.2 (12.1)
Engine Jacket Water Capacity: gal (lit)	2.25 (8.5)	2.25 (8.5)
System Coolant Capacity: gal (lit)	5.4 (20.4)	5.4 (20.4)

Deration Factors

Rated power available up to 3200 ft (975 m) standby and 4100ft (1250m) prime at ambient temperatures to 122°F (50°C) standby and 104°F (40°C) prime. Consult factory for site conditions above these parameters.

DGC-2020 Control Panel

Standard Features

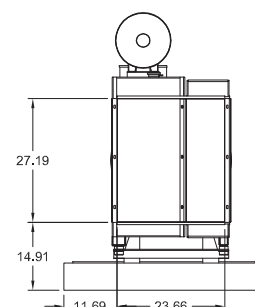
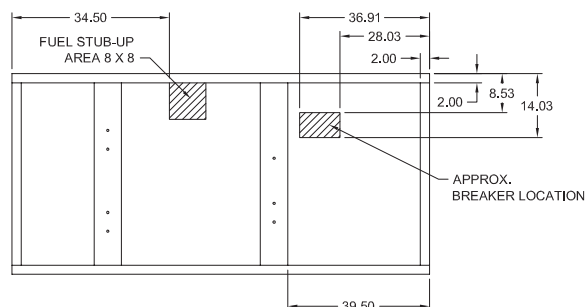
- ▶ Digital Metering
- ▶ Engine Parameters
- ▶ Generator Protection Functions
- ▶ Engine Protection
- ▶ CAN Bus ECU Communications
- ▶ Windows-Based Software
- ▶ Multilingual Capability
- ▶ Remote Communications to RDP-110 Remote Annunciator
- ▶ 16 Programmable Contact Inputs
- ▶ Up to 15 Contact Outputs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



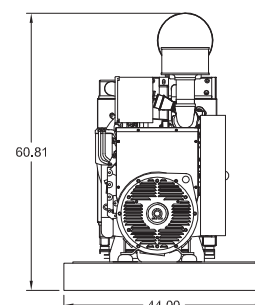
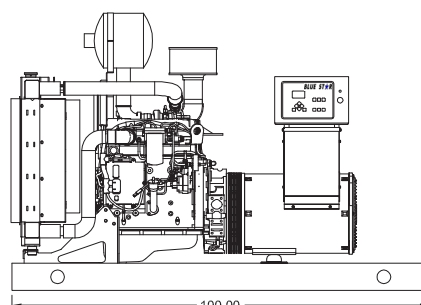
Weights / Dimensions / Sound Data

	L x W x H	Weight lbs
OPU	100 x 44 x 61 in	2125
LEVEL 1	100 x 44 x 72 in	2675
LEVEL 2	100 x 44 x 90 in	2925
LEVEL 3	132 x 44 x 84 in	3150

Height measured from bottom of base to exhaust stack.



	No Load	Full Load
OPU	82 dBA	84 dBA
Level 1	76 dBA	79 dBA
Level 2	73 dBA	76 dBA
Level 3	69 dBA	71 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.

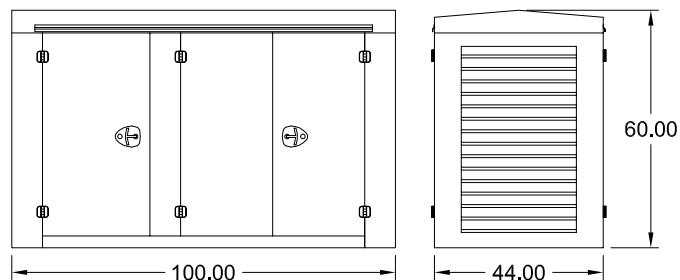
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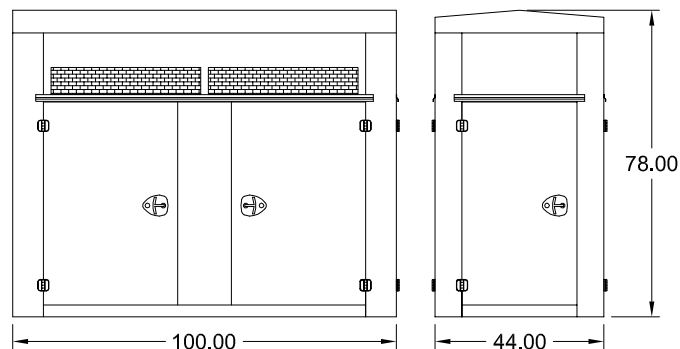


Optional Enclosures and Fuel Tanks

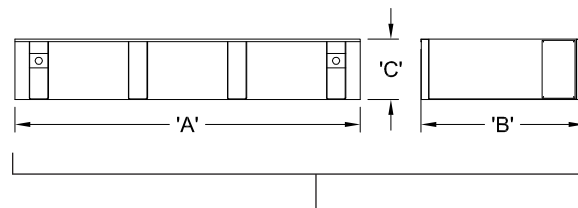
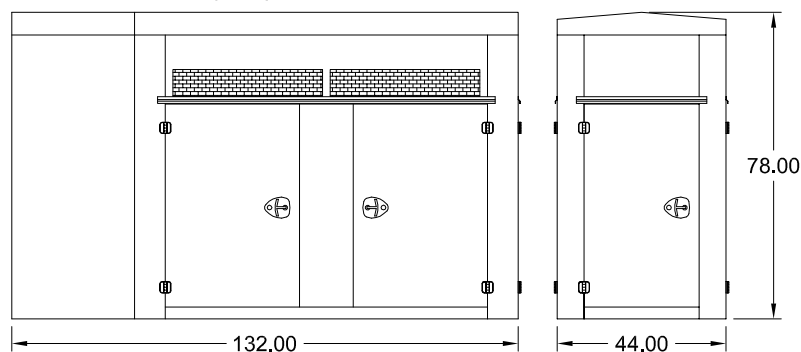
Level 1 Enclosure (WPE)



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 (250 Gallon)			48 Hour (500 Gallon)			72 Hour (750 Gallon)		
	A	B	C	A	B	C	A	B	C
OPU	100.00	44.00	26.00	115.00	44.00	36.00	165.00	44.00	36.00
Level 1	100.00	44.00	26.00	115.00	44.00	36.00	165.00	44.00	36.00
Level 2	100.00	44.00	26.00	115.00	44.00	36.00	165.00	44.00	36.00
Level 3	132.00	44.00	18.00	132.00	44.00	30.00	165.00	44.00	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.

Distributed By:



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