

# BLUE STAR

## Power Systems Inc.

Diesel Product Line

208-600 Volt

CD300-02

60 Hz / 1800 RPM

300 kWe / 270 kWe

Standby / Prime

### Ratings

	240V	208V	240V	480V	600V
<b>Phase</b>	1	3	3	3	3
<b>PF</b>	1.0	0.8	0.8	0.8	0.8
<b>Hz</b>	60	60	60	60	60
<b>Generator Model</b>	572RSL4029	433CSL6216	433CSL6216	432CSL6212	432PSL6246
<b>Connection</b>	12 LEAD ZIG-ZAG	12 LEAD WYE	12 LEAD DELTA	12 LEAD WYE	4 LEAD WYE
<b>Standby</b>					
<b>kWe</b>	300	300	300	300	300
<b>AMPS</b>	1250	1042	903	452	361
<b>Temp Rise</b>	130°C / 27°C	130°C / 27°C	130°C / 27°C	130°C / 27°C	130°C / 27°C
<b>Prime [Only Available for Mobile Applications]</b>					
<b>kWe</b>	270	270	270	270	270
<b>AMPS</b>	1125	938	813	406	325
<b>Temp Rise</b>	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
- ▶ 24V 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 24V 5 Amp
- ▶ Jacket Water Heater -20°F 2500W 240V 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



## Application Data

Engine			
Manufacturer:	Cummins	Displacement - Cu. In. (lit):	543 (8.9)
Model:	QSL9-G7 NR3	Bore - in. (cm) x Stroke - in. (cm):	4.49 (11.4) x 5.69 (14.5)
Type:	4-Cycle	Compression Ratio:	16.1:1
Aspiration:	Turbo Charged, CAC	Rated RPM:	1800
Cylinder Arrangement:	6 Cylinder Inline	Max HP Stby (kWm):	464 (346)

Exhaust System	Standby	Prime
Gas Temp. (Stack): °F (°C)	977 (525)	919 (493)
Gas Volume at Stack Temp: CFM (m³/min)	2,341 (66.3)	2,200 (62.3)
Maximum Allowable Exhaust Restriction: in. H2O (kPa)	40.8 (10.2)	40.8 (10.2)

Cooling System	Standby	Prime
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)	72.0 (273)	72.0 (273)
Heat Rejection to Coolant: BTUM (kW)	8,262 (145)	7,469 (131)
Heat Rejection to CAC: BTUM (kW)	5,036 (88.1)	4,620 (80.9)
Heat Radiated to Ambient: BTUM (kW)	2,135 (37.4)	1,921 (33.6)

Air Requirements	Standby	Prime
Aspirating: CFM (m³/min)	898 (25.4)	867 (24.5)
Air Flow Required for Rad. Cooled Unit: CFM (m³/min)	20,637 (584)	20,637 (584)
Air Flow Required for Heat Exchanger/Rem. Rad. CFM (m³/min)	Consult Factory For Remote Cooled Applications	

Fuel Consumption	Standby	Prime
At 100% of Power Rating: gal/hr (lit/hr)	23.5 (89.0)	21.2 (80.3)
At 75% of Power Rating: gal/hr (lit/hr)	18.5 (70.0)	17.4 (65.9)
At 50% of Power Rating: gal/hr (lit/hr)	14.2 (53.7)	12.6 (47.7)

Fluids Capacity	Standby	Prime
Total Oil System: gal (lit)	9.0 (34.1)	9.0 (34.1)
Engine Jacket Water Capacity: gal (lit)	2.91 (11.0)	2.91 (11.0)
System Coolant Capacity: gal (lit)	10.7 (40.5)	10.7 (40.5)

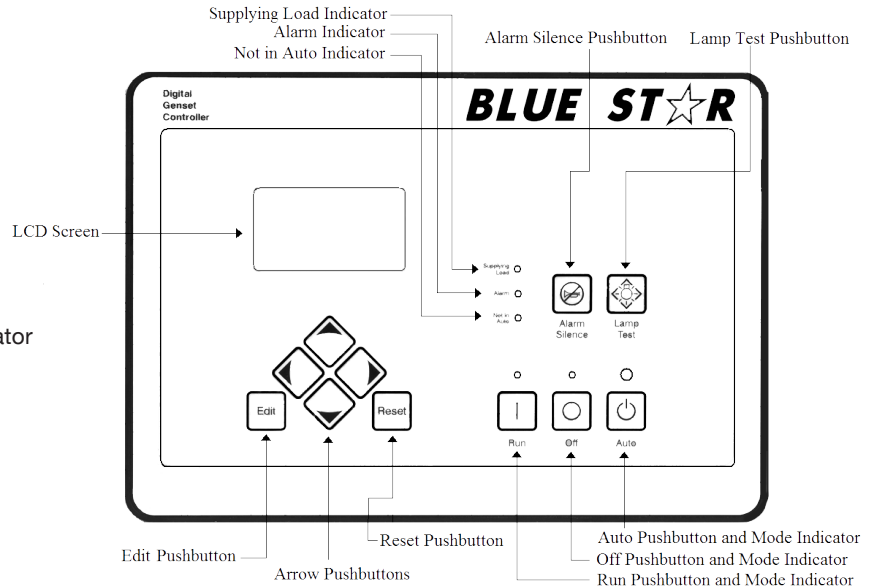
Deration Factors

Rated power available up to 1750 ft (533 m) at ambient temperatures to 104°F standby and prime. Consult factory for site conditions above these parameters.

## DGC-2020 Control Panel

### Standard Features

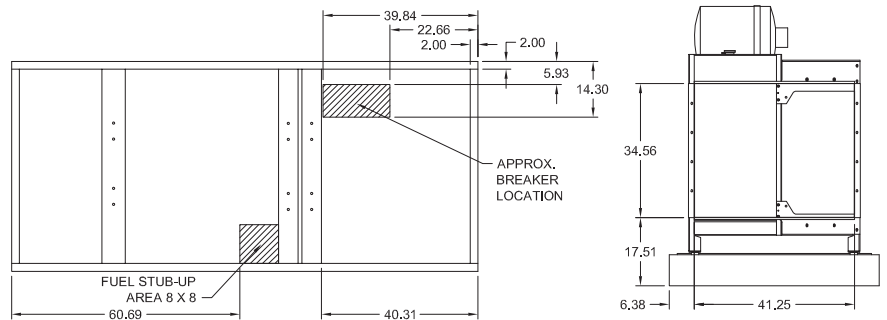
- ▶ Digital Metering
- ▶ Engine Parameters
- ▶ Generator Protection Functions
- ▶ Engine Protection
- ▶ CAN Bus ECU Communications
- ▶ Windows-Based Software
- ▶ Multilingual Capability
- ▶ Remote Communications to RDP-110 Remote Annunciator
- ▶ 16 Programmable Contact Inputs
- ▶ Up to 15 Contact Outputs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



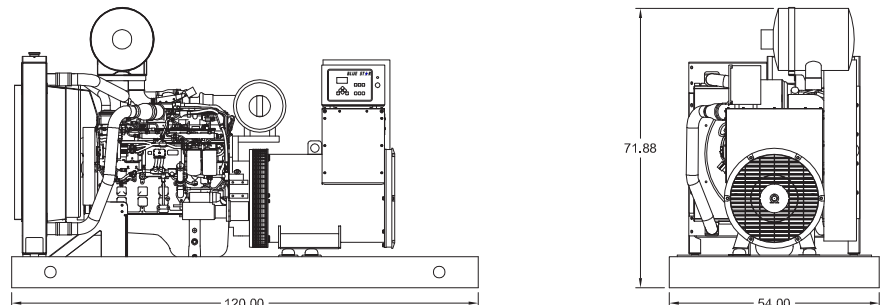
## Weights / Dimensions / Sound Data

	L x W x H	Weight lbs
<b>OPU</b>	120 x 54 x 72 in	4675
<b>LEVEL 1</b>	120 x 54 x 88 in	5450
<b>LEVEL 2</b>	120 x 54 x 106 in	5750
<b>LEVEL 3</b>	160 x 54 x 98 in	6375

Height measured from bottom of base to exhaust stack.



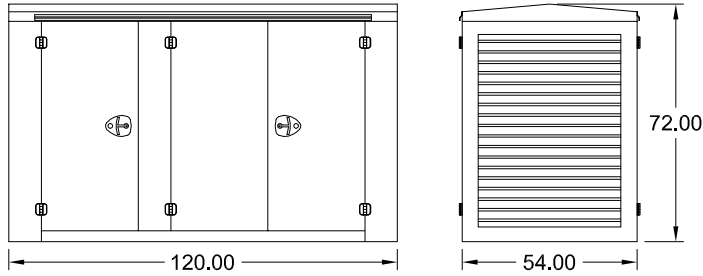
	No Load	Full Load
<b>OPU</b>	84 dBA	87 dBA
<b>Level 1</b>	80 dBA	83 dBA
<b>Level 2</b>	79 dBA	82 dBA
<b>Level 3</b>	72 dBA	74 dBA



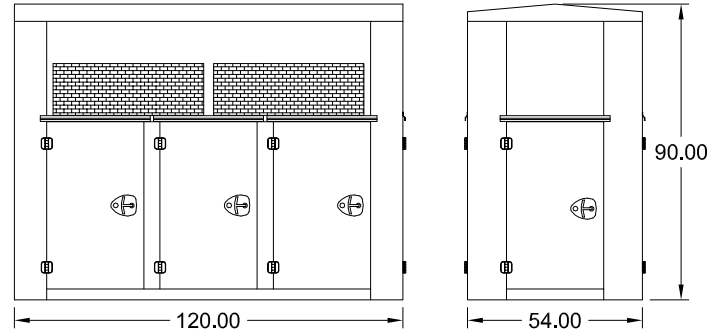
Drawings based on standard open power 480 volt standby generator. Lengths may vary with other voltages. Subject to change without notice. Sound data as measured at 23 feet (7 meters) in accordance with ISO 8528-10 at standby rating.

## Optional Enclosures and Fuel Tanks

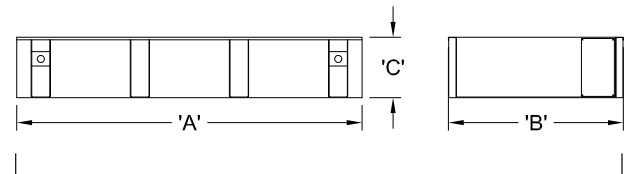
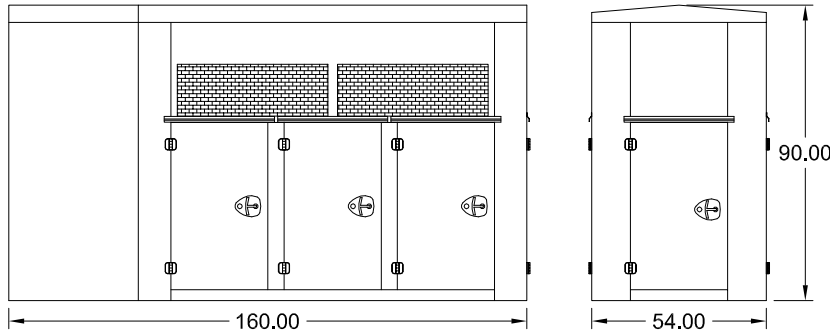
### Level 1 Enclosure (WPE)



### 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 (560 Gallon)			48 Hour (1120 Gallon)			72 Hour (1680 Gallon)		
	A	B	C	A	B	C	A	B	C
<b>OPU</b>	120.00	54.00	32.00	195.00	54.00	36.00	275.00	54.00	36.00
<b>Level 1</b>	120.00	54.00	32.00	195.00	54.00	36.00	275.00	54.00	36.00
<b>Level 2</b>	120.00	54.00	32.00	195.00	54.00	36.00	275.00	54.00	36.00
<b>Level 3</b>	160.00	54.00	22.00	195.00	54.00	36.00	275.00	54.00	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:



**Blue Star Power Systems, Inc.**

52146 Ember Rd, Lake Crystal, MN 56055

Phone + 1 507 726 2508

www.bluestarps.com