

BLUE STAR

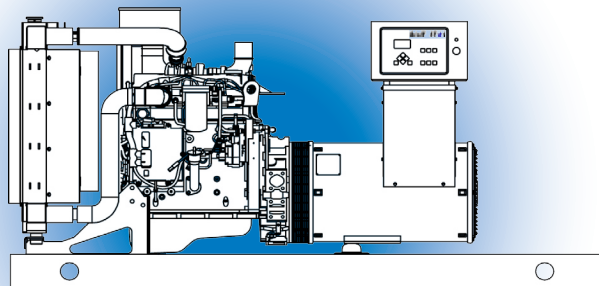
CD-100 Diesel Gen-Set

100 kW Diesel Generator Set 208 - 600 Volt

60 Hz / Standby
EPA Tier 3

Engine Technical Data:

Manufacturer:	Cummins
Model:	QSB5-G4 NR3
Type:	4-Cycle
Aspiration:	Turbo Charged CAC
Cylinder Arrangement:	Inline 4 cyl.
Displacement - Cu. In. (lit):	272 (4.5)
Bore - in. (cm) x stroke - in. (cm):	4.21 (10.7) x 4.88 (12.4)
Compression Ratio:	17.3 : 1
Rated RPM:	1800
Max HP Stby (kWm):	160 (119.4)



Voltage (L-L)	480V	208V	240V	240V	600V
Phase	3	3	3	1	3
PF	0.8	0.8	0.8	1.0	0.8
Hz	60	60	60	60	60
kW Stby (Prime)	100 (90)	100 (90)	100 (90)	100 (90)	100 (90)
AMPS Stby (Prime)	150 (135)	347 (312)	300 (270)	417 (375)	417 (375)
Generator Model	362CSL1606	362CSL1606	362CSL1606	363CSL3133	362PSL1636
Temp Rise	130° C / 27° C	130° C / 27° C	130° C / 27° C	130° C / 27° C	130° C / 27° C
Connection	12 LEAD WYE	12 LEAD WYE	12 LEAD DELTA	12 LEAD ZIG-ZAG	4 LEAD WYE

Engine Features

- Radiator Cooled
- Starter and Alternator
- Oil Pump and Filter
- Electric Isochronous Governor
- SAE J1939 Engine Communications
- EPA Tier Level 3 Certified

Generator Features

- Brushless Single Bearing
- Automatic Voltage Regulator
 - » Over-Excitation Protection
 - » Under-Frequency Compensation
- Available Voltages:
 - » 480/277 3PH 12 Wire
 - » 208/120 3PH 12 Wire
 - » 240/120 3PH 12 Wire
 - » 240/120 1PH 12 wire
 - » 600/347 3PH 4 Wire

DGC 2020 Controller Features

- Microprocessor Based, Digital Control System
- Unit-Mounted
- Engine Vitals Monitored by LCD Display:
 - » Oil Pressure
 - » Running Time
 - » Engine Temperature
 - » Safety Shutdowns:
 - ▲ HWT, OC, OS, OP
 - » Battery Voltage
 - » Generator AC Voltage
 - » AC Amperage
 - » Frequency
 - » Continuous Displays
 - ▲ Oil Pressure
 - ▲ Engine Temperature
 - ▲ Battery Voltage
 - ▲ Fuel Level

Additional Standard Features

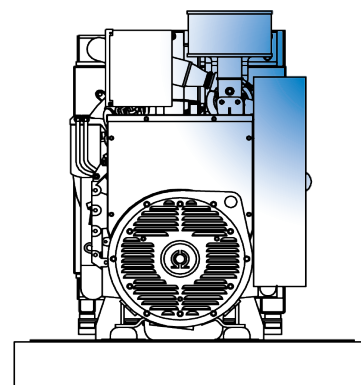
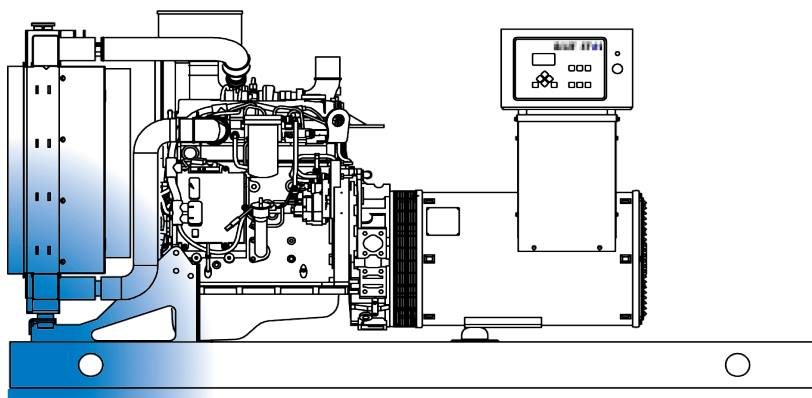
- Main Circuit Breaker (Mounted and Wired)
- Flexible Fuel Connectors
- Battery: 12 Volt with Rack
- Battery Charger: 12 Volt 6 Amp
- Vibration Isolation Mounts
- Jacket Water Heater: -20°F w/ Isolation Valves
- Critical Grade Silencer (Mounted)
- Oil Drain Valve with Extension
- Radiator Duct Adapter (OPU Only)
- Emergency Stop Pushbutton

Optional Features

- Sub-Base Fuel Tanks (Single or Double Wall) With or Without Electrical Stub-Up Area
- Enclosures: Level 1, Level 2, or Level 3
- Remote Monitoring Panels
- PMG Excitation.

CD100-01

BLUE STAR



UNIT DIMENSIONS

Unit Type	Dimensions (L x W x H)
OPU	100 x 44 x 49 in
LEVEL 1	100 x 44 x 72 in
LEVEL 2	100 x 44 x 90 in
LEVEL 3	132 x 44 x 84 in

UNIT WEIGHT

Unit Type	Weight (Less Tank): lbs (kg)
OPU	2125 (964)
LEVEL 1	2675 (1213)
LEVEL 2	2925 (1327)
LEVEL 3	3150 (1429)

Dimensions and weights based on standard 480V unit. All dimensions and weights may vary with other voltages. Consult factory for installation drawings and accurate weights for your particular unit.

SOUND DATA

Unit Type	Standby		Prime	
	No Load	Full Load	No Load	Full Load
OPU w/ Std Critical Silencer	76 dBA	79 dBA	76 dBA	79 dBA
LEVEL 1	74 dBA	78 dBA	74 dBA	77 dBA
LEVEL 2 (w/o foam)	73 dBA	77 dBA	73 dBA	76 dBA
LEVEL 3	71 dBA	74 dBA	71 dBA	73 dBA

INSTALLATION DATA

	Standby	Prime
Exhaust System		
Gas Temp. (Stack): °F (°C)	824 (440)	761 (405)
Gas Volume at Stack Temp: CFM (m³/min)	804 (22.75)	759 (21.48)
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)	122 (50)
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)	40 (151)	40 (151)
Heat Rejection to Coolant: BTUM (kW)	2,720 (47.6)	2,453 (42.9)
Heat Rejection to CAC: BTUM (kW)	1,326 (23)	1,202 (21)
Heat Radiated to Ambient: BTUM (kW)	1,565 (27.4)	1,409 (24.7)
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)	4.1 (15.5)
Fluids Capacity		
Total Oil System: gal (lit)	2.9 (11.0)	2.9 (11.0)
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)

FORM #: CD100-01 5-8-12 Specifications subject to change at any time without notice.

Deration Factors: Rated Power available up to 8200 ft (2500 m) at ambient temperatures to 122° F (50° C). Consult factory for site conditions above these parameters

BLUE STAR

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