



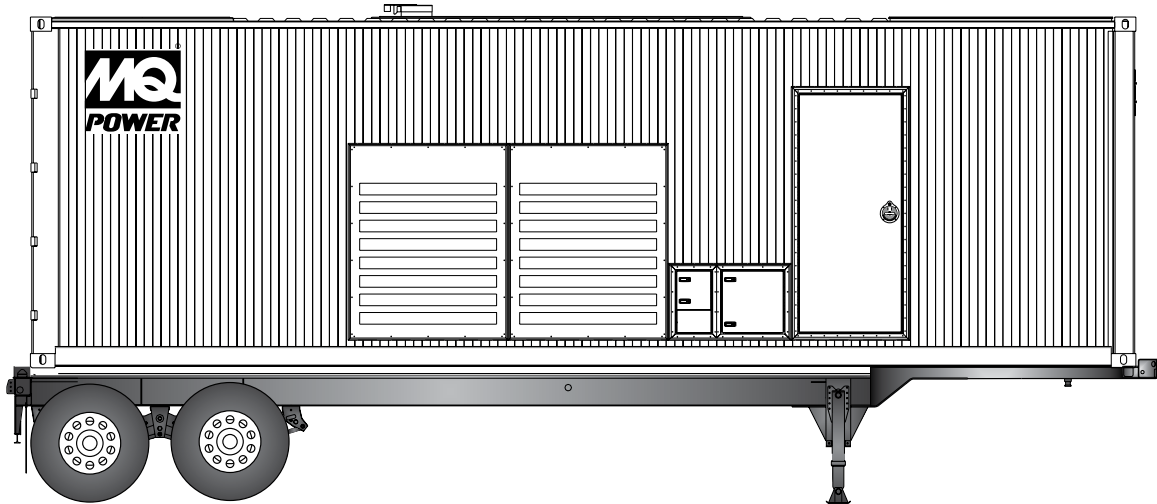
# CG800C2

## MQ POWER Containerized Diesel Generator

Prime Rating — 725 kW (906 kVA)

Standby Rating — 800 kW (1000 kVA)

EPA Certified Tier 2, 60 Hertz



### STANDARD FEATURES

#### Cummins Heavy Duty Diesel Engine

- 4-cycle design, turbocharged, aftercooled, direct injection
- Battery charger
- Engine coolant heater
- Fire extinguisher (ABC type)
- Meets EPA Tier 2 emissions standards

#### Fuel System

- 1000 gallon, double wall fuel tank
- Fuel priming system
- Manual fuel valves (for internal or external fuel supply)
- External fuel fill
- Fuel containment

#### Alternator

- Brushless, 4-pole, synchronous, WYE connection
- Class H insulation system conforms to NEMA MG1-1.65 and BS2757
- Drip-proof, self-venting, amortisseur windings

#### Electronic Voltage Regulator

- Electronic automatic voltage regulator provides precise regulation
- Separate three-phase PMG for fast recovery from block loads and motor starting

#### Full Load Acceptance

- Accepts 100% of standby nameplate rating in one step, in compliance with NFPA, para 5-13.2.6

#### Generator Control Panel

- Vibration-isolated controller
- Manual or remote engine start/stop
- Modbus communication support
- Safety shutdowns
- Externally mounted emergency stop switch
- Generator mainline circuit breaker, 100% rated, electronically operated, UL listed

#### Specially Designed Container

- 30 ft. ISO container, sound-attenuated, acoustical fiberglass for extremely quiet operation
- 4" full containment
- Integral vibration isolators
- Exterior polyurethane coating system provides long life in extreme operating conditions
- Interior DC lights and timer switches
- Critical grade silencer with insulation

#### Warranty

- Engine-generator sets are covered by an express written, one-year limited warranty



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### SPECIFICATIONS

<b>Alternator Specifications</b>	
Make	Stamford HC6G
Type	4-Pole, Rotating Field
Number of Leads	12
Generator Type	Brushless w/ PMG
Voltage Regulator	Solid State
Insulation	NEMA MG1-1.66
Material	Class H
Temperature Rise	105° C / 125° C
Bearing: Number, Type	Single, Sealed
Coupling	Flexible Disk
Amortisseur Windings	Full
Excitation	Separately-derived
Voltage Regulation (no load to full load)	0.25% Steady State
Generator Efficiency at Full Load	95%
Phase Sequence	ABC (L1, L2, L3)
L-L Harmonic Max Total	<5.0%
L-L Harmonic Max Single	<3.0%

<b>Engine Specifications</b>	
Manufacturer/Model	Cummins / QSK23-G7 NR2
Engine Type	4-cycle, Turbocharged, and Low Temperature After Cooled (Air-to -Air)
Cylinder Arrangement	6 In-Line
Displacement	1413 in <sup>3</sup> (23.15 L)
Bore	6.69 in. (169.9 mm)
Stroke	6.69 in. (169.9 mm)
Compression Ratio	16:1
Piston Speed (60Hz)	2010 ft./min (10.21 m/sec)
Bearing Main: Number	7
Bearing Main: Type	Replaceable, Precision
Cylinder Head Material	Cast iron
Crankshaft Material	Forged steel
Brake Mean Effective Pressure (BMEP)	364 psi (2510 kPa)
Rated RPM (60 Hz)	1800 RPM
Max. Power At Rated RPM (without fan)	910 hp (1220 kWm)
Governor: Type	Electronic
Frequency Regulation: Steady State	Isochronous
Air Cleaner Type - All Models	Dry

<b>Amperage</b>				
Voltage	Phase	Power Factor	Continuous Amperes	
			Standby	Prime
480 Volt	3	0.8	1202	1090

<b>Engine Electrical System</b>	
Battery Charging Alternator Ground Type	Negative
Volts	24 VDC
Alternator Ampere Rating	35 A
Starter Motor Rated Voltage	24 VDC
Minimum Recommended Battery for 0°C/ Cold Cranking Performance	1425 Ah

<b>Derating</b>		
Derating Factors (60 Hz)	Altitude	Ambient Temperature
The engine may be operated up to 2385 ft. (727 m) altitude without derating at 1800 rpm.	>2385 ft. = 3.5% per 1000 ft. (305 m)	+7% per 10°C (18°F)

<b>Cooling System</b>	
Exhaust Manifold Type	Dry
Radiator Design	Parallel cores
Coolant Capacity - Engine	53.2 gal. (201 L)
Water Pump Design/Type	Belt Driven, Centrifugal
Coolant Flow	114 gal/min (432 L/min)
Total Heat Rejection from Cooling System	31793 BTU/min (33.52 MJ/min)
Thermostat Range	200 °F (93.3 °C)

<b>Fuel System</b>		
Recommended Fuel	ASTM-D975-No.1 & No.2-D*	
Filter Micron Size	10	
Total Fuel Flow	181 gal/hr (685 L/hr)	
Fuel Tank Capacity	1000 gal (3,785 L)	
Fuel Consumption - gal/hr (L/hr)	Standby	Prime
At 1/4 load	17.0 (64.4)	15.5 (58.7)
At 1/2 load	29.0 (109.8)	27.5 (104.1)
At 3/4 load	41.0 (155.2)	38.0 (143.8)
At full load	53.0 (200.6)	48.0 (181.7)

\* - Use ultra-low sulfur diesel fuel.

<b>Lubrication System</b>	
Type	Full Pressure System
Oil Filters	4 Spin-on, Full Flow
Oil Capacity with Filters	27 gal. (102 L)
Oil Pressure at Rated Speed (minimum)	45-56 psi (310-386 kPa)

<b>Exhaust System</b>	
Exhaust Temperature at Rated kW	902° F (483° C)
Exhaust Flow at Rated kW	5455 cfm (155 m <sup>3</sup> /min)
Silencer Type	Critical
Maximum Allowable Backpressure (standby)	40.8 in/wc (10.1 kPa)
Exhaust Outlet Size at hook-up	8 in. (203 mm)



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The CG800C2 Sound Attenuated Generator is configured for standard 60 Hz, 480V output. Special voltage outputs are available (special order).

### ALTERNATOR FEATURES

- Generator protection for overload and short circuit.
- Generator is designed and built within NEMA, IEEE and ANSI standards for temperature rise.
- PMG for superior regulation and response.
- Three-phase sensing on regulator.

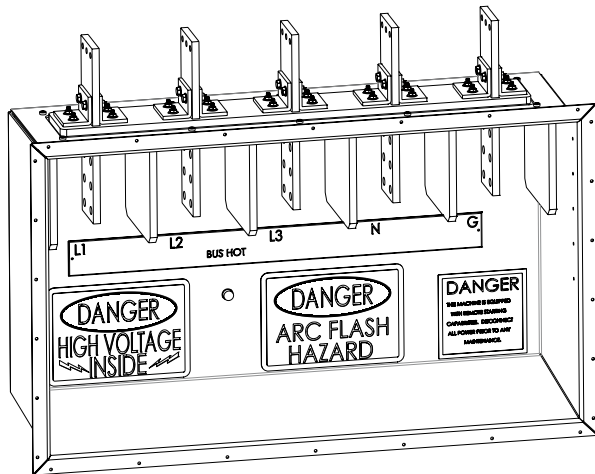
### OPTIONAL FEATURES AND ACCESSORIES

#### Generator Set

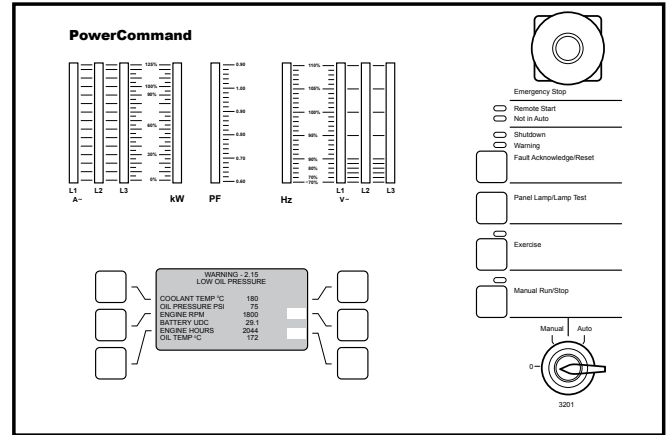
- Genset-to-Genset Paralleling Control System
- Remote Controller
- Custom Outlet Panels
- Oil Pan Heater
- Alternator Strip Heater

#### Container

- ISO Trailer Chassis (30 ft.)
- 9-Step Fueling Ladder with Hand Rail
- Personnel Ladder (Aluminum Construction)
- Custom Paint Colors (Arctic White is Standard)



Bus Panel



Power Command Digital Genset Control

### DIGITAL CONTROLLER FEATURES

- Local and Remote Generator Control
- Automatic and Manual Starting and Stopping
- Engine and Generator Protection
- Digital Voltage Regulation
- ECU Communications via SAE J1939
- 4 Programmable Contact Inputs
- AC Output Metering
- Integrated RS485
- Auto Synchronizing
- Digital Alarm and Status Display

#### Monitoring

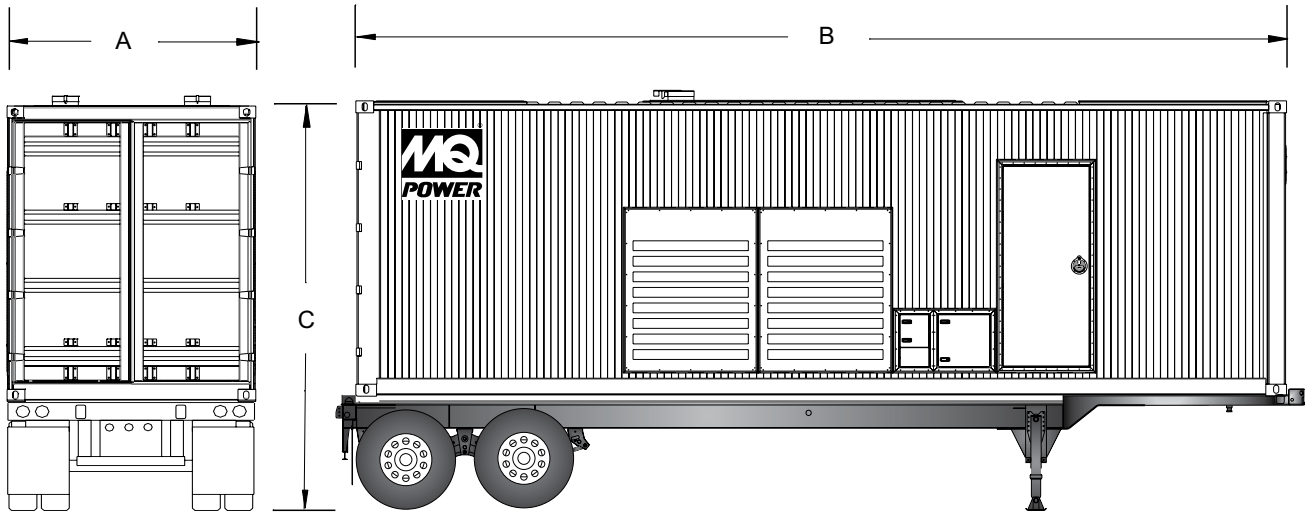
- Engine RPM
- Engine Run Time
- Generator Voltage
- Generator Current
- Generator Frequency
- Oil Pressure
- Battery Voltage
- Low Fuel Alarm
- Running Hour Meter
- Coolant Temperature
- Generator Under/Over Voltage Alarm/Shutdown
- Generator Under/Over Frequency Alarm/Shutdown
- Over Current Alarm/Shutdown



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### DIMENSIONS



<b>Weight and Dimensions</b>		
<b>A</b>	<b>B</b>	<b>C</b>
96 in. (2,438 mm)	360 in. (9,144 mm)	163 in. (4,137 mm)
Weight (Wet)*		41,010 lbs (18,601 kg)
Weight (Wet with Trailer)*		47,010 lbs (21,323 kg)

\* - Weight is approximate. Wet weight does not include fuel.

Your Multiquip dealer is:

