



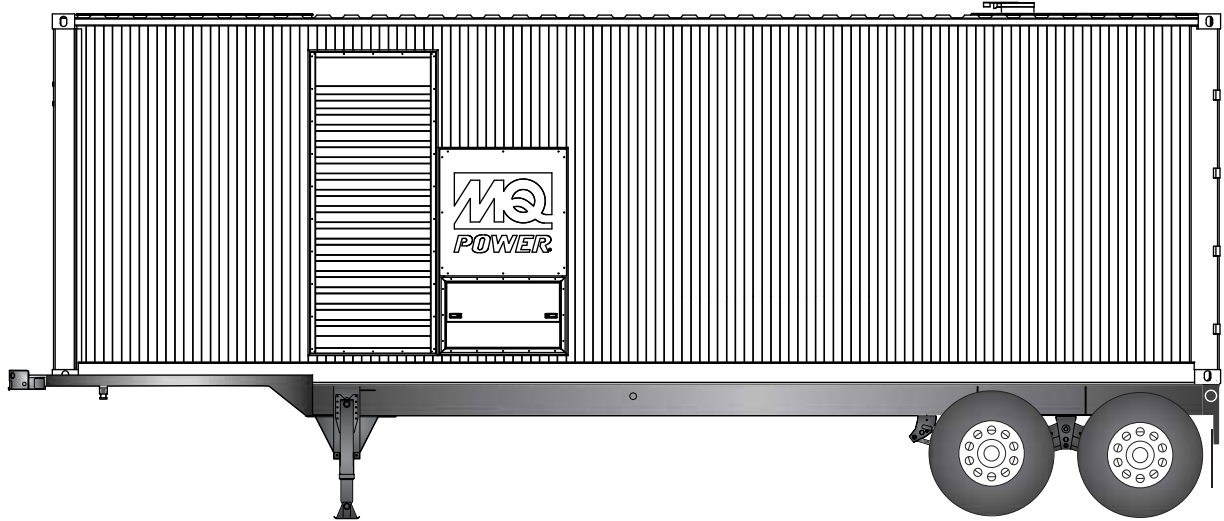
CG500V4F

MQ POWER Containerized Diesel Generator

Prime Rating — 500 kW (625 kVA)

Standby Rating — 550 kW (687 kVA)

EPA Certified Tier 4 Final, 60 Hertz



STANDARD FEATURES

Volvo Heavy Duty Diesel Engine

- Heavy duty, 4-cycle, direct injection, turbocharged, air to air intercooled diesel engine provides maximum reliability.
- EPA certified Final Tier 4 emission compliant engine with onboard SCR.
- Engine coolant heater (1500 watts).

Fuel System

- 1000 gallon, double wall UL142 fuel tank, provides 26 hours of runtime at full load.
- 84 gallons of DEF. Provides 34 hours of run time.
- Fittings and manual fuel valves for external fuel supply.
- Fueling Ladder (9-step Aluminum Construction).

Alternator

- Brushless, 4-pole, synchronous, WYE connection.
- Manual voltage reconnect board.
- Class H insulation system conforms to NEMA MG1-1.65 and BS2757.
- Drip-proof, self-venting, amortisseur windings.
- Harsh duty excitors.

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

- Basler DGC2020HD Paralleling Controller with Color LCD Touch Screen Display.
- Manual or remote engine start/stop.
- Safety shutdowns.
- Externally mounted emergency stop switch.
- Generator mainline circuit breaker, 100% rated, electronically operated, UL listed.

Specially Designed Container

- 30-foot ISO container, sound-attenuated with acoustical insulation for extremely quiet operation.
- Integral vibration isolators.
- Exterior polyurethane coating system provides long life in extreme operating conditions.
- Interior LED work lights and timer switch.
- Entrance Ladder (6-Step Aluminum Construction).



CG500V4F

MQ POWER Containerized Diesel Generator

SPECIFICATIONS

Alternator Specifications

Make	Marathon 573RSL6333
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	80° 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

Engine Specifications

Manufacturer/Model	Volvo TWD1672GE
Emissions	EPA Tier 4 Final Certified
Engine Type	4-cycle, water-cooled, direct injection, turbocharged, Charged Air Cooler and SCR.
No. of Cylinders	6
Displacement	984 in ³ (16.1 Liters)
Bore and Stroke	5.67 x 6.50 in. (144 x 165 mm)
Compression Ratio	16.8 : 1
Piston Speed (60Hz)	1,956 ft/min (9.9 m/s)
Rated RPM (60 Hz)	1800 RPM
Gross Engine Power Output At Rated RPM.	836 HP
Frequency Regulation: Steady State	± 0.25%

Fuel System

Recommended Fuel	ASTM-D975-No.1 & No.2-D**	
Maximum Fuel Flow (per hour)	56 gallons (210 liters)	
Maximum Inlet Restriction (Hg)	4.4 in (112 mm)	
Fuel Tank Capacity	1000 gallons (3785.4 liters)	
Fuel Consumption - gal/hr (L/hr)	Standby	Prime
At full load	37.3 (141)	34 (129)
At 3/4 load	28.0 (106)	25.7 (97)
At 1/2 load	19.4 (74)	17.9 (68)
At 1/4 load	10.9 (41)	10.2 (39)
DEF Tank Capacity	2 x 42 gallons (160 liters)	

** Use ultra-low sulfur diesel fuel.

Cooling System

Fan Load	41 hp (30 kW)
Coolant Capacity (with radiator & CAC)	44.0 gallons (167.0 liters)
Coolant Flow Rate (radiator)	95.4 gallons (362 liters)
Coolant Flow Rate (CAC)	39.6 gallons (150 liters)
Heat Rejection to Jacket Coolant (per minute)	12,682 Btu (13.4 MJ)
Maximum Coolant Friction Head External to Engine	10.2 psi (70 kPa)
Maximum Coolant Static Head	33 feet (10 meters)
Ambient Temperature Rating	104°F (40°C)

Air

Maximum Air Cleaner Restriction	19 in. H ₂ O (5 kPa)
Alternator Cooling Air	1400 cfm (39.6 m ³ /min)
Radiator Cooling Air	28,813 cfm (815 m ³ /min)

Exhaust System

Gas Flow (full load)	4,347 cfm (123.1 m ³ /min)
Gas Temperature	831 °F (444 °C)
Maximum Back Pressure at Turbo Outlet	80.3 in. H ₂ O (20 kPa)

Lubrication System

Type	Full Pressure
Oil Filter	Spin-on, Full Flow
Oil Pressure at Rated Speed	58 psi (399 kPa)
Oil Capacity	12.7 Gallons (48 liters)

Engine Electrical System

Battery Charging Alternator Ground Type	Negative
Volts	24 VDC
Battery Charging Alternator	80 A
Starter Motor Rated Voltage	24 VDC
Battery	2 X 8D

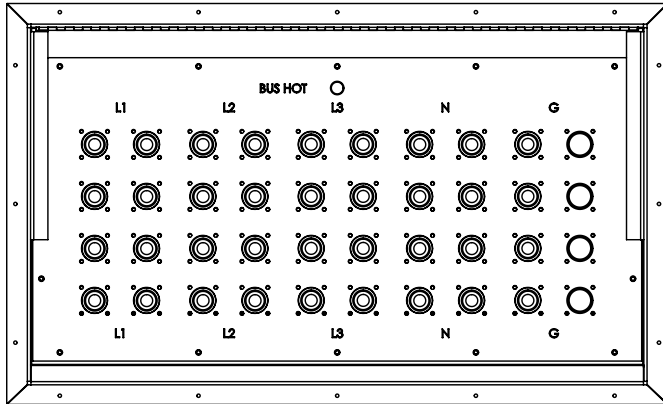
Amperage

Rated Voltage	Maximum Standby Amps
3Ø 208 Volt	1908 Amps
3Ø 480 Volt	827 Amps
Main Line Circuit Breaker Rating	2000 Amps

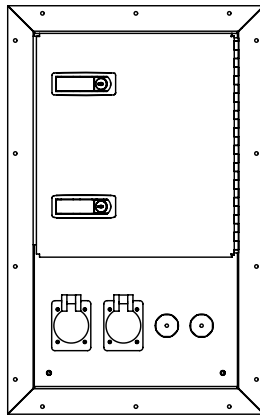


CG500V4F

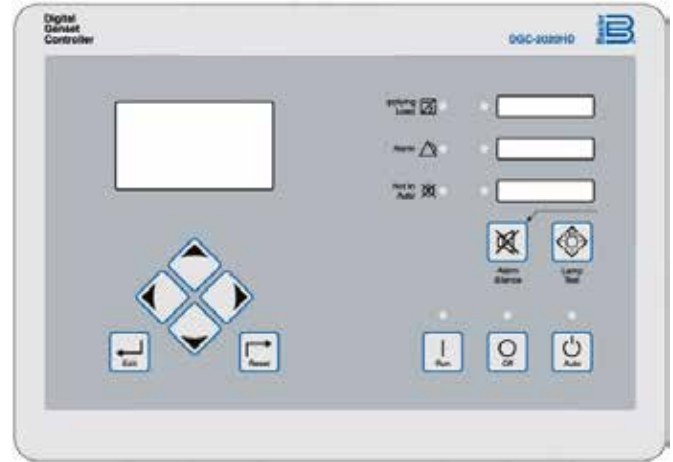
MQ POWER Containerized Diesel Generator



8-Set Camlok Panel



Shore Power and Paralleling Receptacles



Basler DGC2020HD Digital Genset

DIGITAL CONTROLLER FEATURES

- Microprocessor-based paralleling controller with integrated programmable logic and load sharing capabilities
- Local and Remote Generator Control
- Automatic and Manual Starting and Stopping
- Load Sharing of kW and kvars Over Ethernet
- ECU Communications via SAE J1939
- 16 Programmable Contact Inputs, 12 Programmable Contact Outputs
- Programmable Logic
- Automatic Transfer Switch Control Integrated RS485
- Auto Synchronizing
- Color Touch Screen

MONITORING

- Engine RPM
- Engine run time
- Generator voltage
- Generator current
- Generator frequency
- Oil pressure
- Battery voltage
- Fuel level
- DEF level
- Running hour meter
- Coolant temperature
- Generator under/over voltage alarm/shutdown
- Generator under/over frequency alarm/shutdown
- Over Current alarm/shutdown
- Warm up and cooling functions
- Maintenance timer

WARRANTY*

Volvo Engine

12 months from date of purchase with unlimited hours.

Generator

24 months from date of purchase or 2000 hours (whichever occurs first).

Trailer

12 months excluding normal wear items.

**Refer to the express written, one-year limited warranty sheet for additional information.*

NOTICE

Specifications are subject to change without notice.



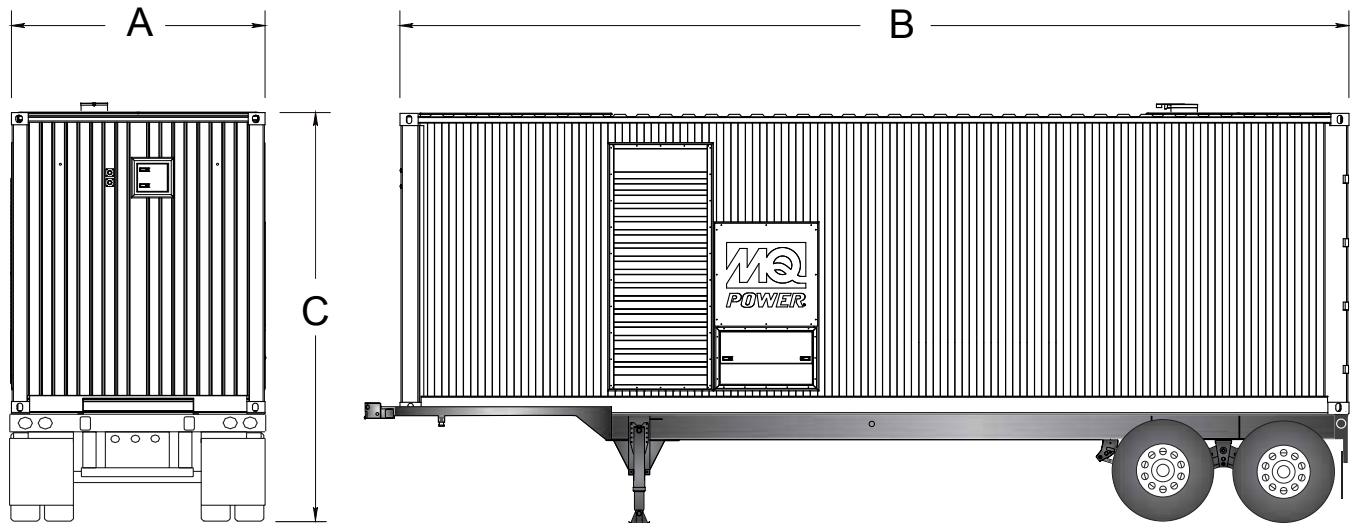
CG500V4F

MQ POWER Containerized Diesel Generator

OPTIONAL FEATURES AND ACCESSORIES

- New 30-ft Container Chassis with Upgrade Wheel/Tire Package
- Custom Paint Colors (Arctic White is Standard)
- Chassis Air Ride Suspension Upgrade
- Power Balance™ — Designed to provide additional generator load when operating under low temperature and/or low load conditions.

DIMENSIONS



Weight and Dimensions		
A	B	C
96 in. (2,438 mm)	360 in. (9,144 mm)	163 in. (4,140 mm)
Weight (Dry with Trailer)*		32,040 lbs (14,533 kg)
Weight (Wet with Trailer)*		39,906 lbs (18,101 kg)

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

