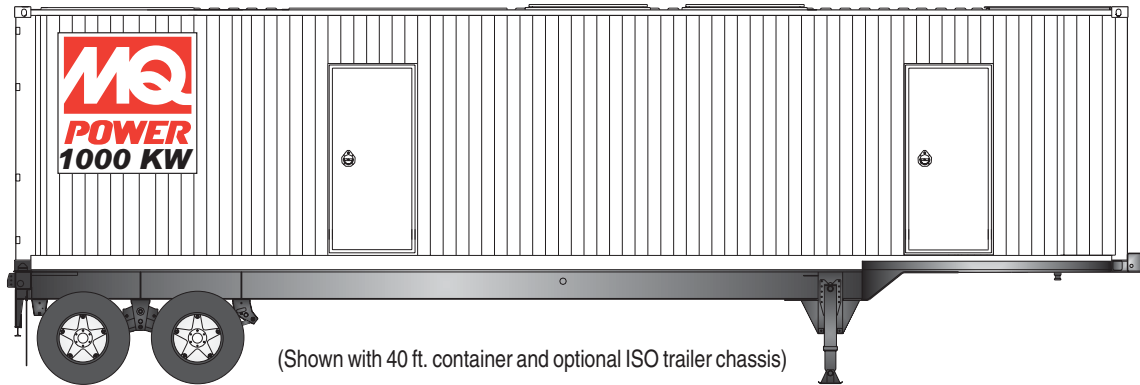




# 1000 kW Containerized Diesel Generator Set

Model	Emissions	Standby Rating	Prime Rating
EGC-1000DD	EPA Certified	60 Hertz	
		1000kW (1250kVA)	900kW (1125kVA)



(Shown with 40 ft. container and optional ISO trailer chassis)

## Standard Features

### Detroit Diesel Heavy Duty Diesel Engine

- 4-cycle design, turbocharged, aftercooled, direct injection
- Polymide blade cooling fan
- Engine coolant heater
- Meets EPA emissions standards for mobile off-highway

### Fuel System

- 1000 gallon, single wall fuel tank
- Fuel priming system
- Fuel/water separators and drip pan
- Electric fuel pump
- External fuel fill
- 30 micron Racor® fuel filter system

### Alternator

- Brushless, 4-pole, synchronous, WYE connection
- Class H insulation system conforms to NEMA MG1-22, BS5000, CSA-C22-2, IEC-34-1 standards for temperature rise
- Drip-proof, self-venting, amortisseur windings
- Epoxy impregnated windings with tropical insulation for increased environmental protection and long life

### Electronic Voltage Regulator

- Electronic automatic voltage regulator provides precise regulation
- Separate three-phase excitation 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

- Intelligen™ vibration-isolated controller
- Manual or remote engine start/stop
- RS232/Modbus communication support
- Safety shutdowns
- Externally mounted emergency stop switch
- Generator mainline circuit breaker, 100% rated, electronically operated, UL listed

### Specially Designed Container

- 40 ft. ISO container, sound-attenuated, foam-lined for extremely quiet operation
- Isolated operator control room
- Solidly mounted battery rack and cooling system
- Integral vibration isolators
- Exterior polyurethane coating system provides long life in extreme operating conditions
- Crankcase filtration system
- Interior DC lights and timer switch
- Critical grade silencer with heat blankets

### Warranty

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



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## APPLICATION DATA

### Alternator Specifications

Make	Marathon Magna Max
Type	Rotating Field
Number of Leads	4, 10 or 12
Generator Type	Rotating Field; PMG
Voltage Regulator	Solid State, Digital, Model DVR2000
Insulation	NEMA MG1-1.66
Material	Class H
Temperature Rise	Standby Rating: 130° C Prime Rating: 105° C
Bearing: Number, Type	Single Sealed
Coupling	Flexible Disk
Amortisseur Windings	Full
Voltage Regulation (no load to full load)	2% Maximum
One Step Load Acceptance % of rating per NFPA-110	100
Peak Motor Starting HP	500
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%
Voltage Dip Upon Full Load Application (1 Step)	20% for 1.6 sec.
Voltage Rise Upon Full Load Rejection (1 Step)	10% for 0.6 sec.

The 1000kW Sound Attenuated Generator includes a reconnectable 4, 10 or 12 lead generator that may be configured for any standard 60 Hz out voltage.

### Alternator Features

- All ratings tested per MIL-STD-705 as applicable
- Protection for overload and short circuit
- Designed and built within NEMA, IEEE and ANSI standards for temperature rise
- PMG exciter for superior regulation and response
- Three-phase sensing on regulator with EMI protection
- Skewed rotor for smooth voltage wave form
- Vacuum impregnated epoxy varnish - Fungus resistant per MIL-I-24092
- Sustain short circuit current at 300% of rated current up to 10 seconds

### Engine Specifications

Manufacturer/Model	Detroit Diesel/MTU 16V2000 G81
Engine Type	4-cycle, Turbocharged, Watercooled, Intercooled
Cylinder Arrangement	16 In-Line
Displacement	1944 cu in (31.9 L)
Bore	5.11 in. (130 mm)
Stroke	5.91 in. (150 mm)
Compression Ratio	14.5:1
Piston Speed (60Hz)	29.5 ft/sec. @ 60 Hz
Bearing Main: Number	9
Bearing Main: Type	Precision half shells
Cylinder Head Material	Cast iron
Crankshaft Material	Forged steel
Brake Mean Effective Pressure (BMEP)	388 psi (2,333 kPa)
Rated RPM (60Hz)	1800 RPM
Max. Power At Rated RPM (with fan)	1495 hp (1132 kW)
Governor: Type; Make/Model	DDED Electronic
Frequency Regulation: No load to full load	Isochronous under varying loads from no load to 100% rated load
Frequency Regulation: Steady State	±0.25% of mean value for constant loads from no load to full load
Air Cleaner Type - All Models	Dry, Dual Element

### Amperage

Voltage	Phase	Power Factor	Continuous Amperes	
			Standby	Prime
277/480	3	0.8	1504	1353

### Engine Electrical System

Battery Charging Alternator Ground Type	Negative
Volts	24 VDC
Ampere Rating	60A
Starter Motor Rated Voltage	24 VDC
Minimum Recommended Battery for 0 °C / Cold Cranking Performance	800 CCA

### Exhaust System

Exhaust Temperature at Rated kW (Dry Exhaust)	1015°F (546°C)
Exhaust Flow at Rated kW (Standby)	8780 cfm (246 m³/min)
Silencer Type	Critical
Maximum Allowable Backpressure	3 in/Hg (76 mm/Hg)
Exhaust Outlet Size at hook-up	5 in. (127 mm)



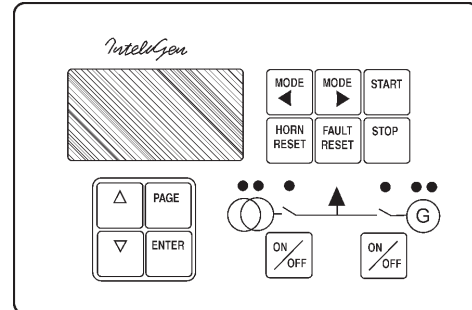
# 1000 kW Containerized Diesel Generator Set

<b>Cooling System</b>	
Exhaust Manifold Type	Dry
Radiator Design	Standard horizontal discharge
Coolant Capacity - Engine Only	20 gal. (76 L)
Coolant Capacity - Engine and Radiator	69 gal. (261 L)
Water Pump Design/Type	Belt Driven, Centrifugal
Coolant Flow	114 gal/min (432 L/min)
Engine Heat Rejection	22,865 BTU/min (402 kW)
Fan Horsepower	56.0 hp (42 kW)
Thermostat	185 °F (82 °C)

<b>Fuel System</b>		
Recommended Fuel	ASTM-D975/No.1 & No.2-D	
Fuel Pump Maximum Lift	6.0 ft. (1.8 m)	
Filter Micron Size - 98% Efficiency	2	
Total Fuel Flow	376 gal./hr. (1422 L/Hr.)	
Fuel Consumption		
Diesel at % of Load	gal/hr	L/hr
25%	20.5	77.5
50%	37	140
75%	53	200
100%	78	296

<b>Lubrication System</b>	
Type	Full Pressure
Oil Filters	3 Spin-on Full Flow
Oil Pan Capacity	25.5 gal. (96.5 L)
Oil Capacity with Filters	28.5 gal. (108 L)
Oil Pressure At Rated Speed	75 to 112 psi

<b>Derating (60Hz)</b>		
The engine power available up to 3300 ft. and 77°F at standby rating, without derating. Maximum altitude capability is 7500 ft. For operation at higher altitudes and ambient temperatures, the power should be derated according to the following factors:	Altitude	Ambient Temperature
	Above 3300 ft. derate at 1.5% per 1000 ft.	Above 77°F, derate 0.4% per 10°F



**Inteligen Digital Genset Controller**

### Digital Controller Features

- Large graphic back-lit LCD display 128x64 pixel resolution
- Automatic and manual starting and stopping
- Phase sequence supervision
- Automatic shutdown/alarm function
- Input frequency 50-60 Hz
- Parameters adjustable via PC or iG keyboard
- Predefined and user definable configurations available. One configuration includes set of inputs/outputs and parameters
- Adjustable parameters for each configuration
- 6 LED indicators
- Push buttons for simple control
- 4 programmable outputs (out of 20 functions selection)
- 4 binary configuration inputs
- Lamp test during start up
- Real time clock
- Sealed membrane panel to IP65
- 180 x 113 mm front panel mounted case
- Speed measurement from magnetic pickup
- Oil pressure, Coolant temperature, Battery voltage and Fuel level measurements
- Running Hour Meter
- All Generator metering, kVAr, kW, V1-V3, Hz, I1-I3, kWh, kVAh
- Generator under/over voltage alarm/shutdown
- Generator under/over frequency alarm/shutdown
- Over Current alarm/shutdown
- Warm up and cooling functions
- Pre-lubrication function with timers
- Adjustable crank attempts
- Data logging
- Remote communications (RS232/Modbus)



# 1000 kW Containerized Diesel Generator Set

## Optional Features and Accessories

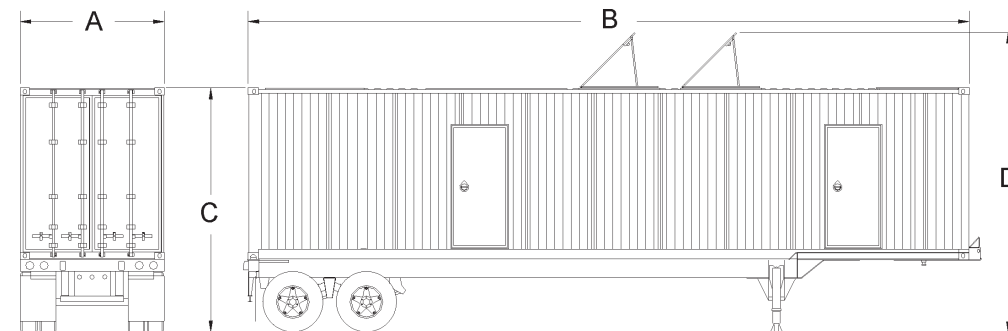
### Generator Set

- Genset-to-Genset Paralleling Control System
- Base Load-to-Utility Paralleling Control System
- Custom Outlet Panels
- Rotary Voltage Selector Switch (High Wye/Low Wye Voltages)
- Auxiliary Oil Reservoir with Level Control (15-gallon)
- Centrifugal Oil Filter System
- Oil Pan Heater with Thermostat
- Alternator Strip Heater
- AC Battery Charger with Shore Power Receptacle
- Rotary Voltage Selector Switch
- 120VAC Convenience Receptacle

### Container

- ISO Trailer Chassis (40 ft.)
- Double-wall Fuel Tank (900-gallon capacity)
- Fluid Containment
- Manual Fuel Valves (For Internal or External Fuel Supply)
- Entrance Ladder (6-Step, Aluminum Construction)
- Fueling Ladder (Aluminum Step Construction with Hand Rail)
- Interior Lights (AC Work lights)
- Custom Paint Colors (Artic White is Standard)

*SPECIAL OPTIONS AVAILABLE UPON REQUEST*



### Weight and Dimensions

A	B	C	D
96 in. (2,438 mm)	480 in. (12,192 mm)	163 in. (4,137 mm)	199 in. (5,054 mm)
Weight (Wet)*		38,460 lbs (17,445 kg)	
Weight (Wet with trailer)*		45,200 lbs (20,500 kg)	

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

**40 ft. Container**

Backfeed to a utility system can cause electrocution and/or property damage. Do not connect to any building's electrical system except through an approved device. Features and specifications are subject to change without notice.

Your MQ Power dealer is:



**MQ POWER**  
 POST OFFICE BOX 6254  
 CARSON, CA 90749  
 310-537-3700 • 800-421-1244  
 FAX: 310-632-2656  
 E-MAIL: [mqpower@multiquip.com](mailto:mqpower@multiquip.com)  
 WEBSITE: [www.mqpower.com](http://www.mqpower.com)