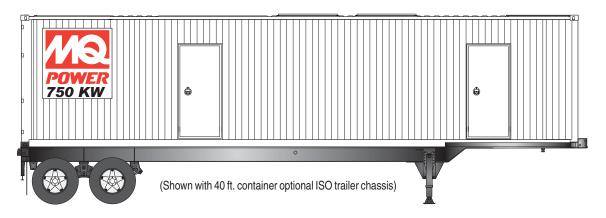


Model	<b>Emissions</b>	Standby Rating	Prime Rating
EGC-750DD	EPA Certified	60 Hertz	
		750kW (937.5kVA)	600kW (750kVA)



## **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**

- Inteligen<sup>™</sup> 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
- Intregral vibration isolators
- Exterior polyurethane coating system provides long life in extreme operating conditions
- Interior DC lights and timer switch
- Critical grade silencer with heat blankets
- Electrically operated roof mounted air intake vent doors

#### Warranty

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



## **APPLICATION DATA**

Alternator Specifications		
Make	Marathon Magna Max	
Туре	4-Pole, Rotating Field	
Number of Leads	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: 125° 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 750 KW Sound Attenuated Generator includes a reconnectable 10 or 12 lead generator that is configured for standard 60 Hz, 480V or 208V output. Special voltage outputs are available.

#### **Alternator Features**

- All ratings tested per MIL-STD-705 as applicable.
- Generator protection for overload and short circuit.
- Generator is 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 12V2000-G81	
Туре	4-cycle, Turbocharged, Air to Water Aftercooled	
Cylinder Arrangement	V-12	
Displacement	1458 in <sup>3</sup> (23.9 liter)	
Bore	5.12 in. (130 mm)	
Stroke	5.91 in. (150 mm)	
Compression Ratio	14.5:1	
Piston Speed (60Hz)	29.5 ft./sec. (9.0 m/sec)	
Bearing Main Number/Type	7, Replaceable, Precision	
Cylinder Block	Cast iron	
Cylinder Head Material	Cast iron	
Crankshaft Material	Forged steel Dual, Poppet Type	
Valves		
Brake Mean Effective Pressure (BMEP)	338 psi (2330 kPa)	
Rated RPM (60 Hz)	1800 RPM	
Max. Power At Rated RPM (with fan)	1120 hp (835.2 kW)	
Governor Type	Electronic	
Frequency Regulation: No load to full load	Isochronous	
Frequency Regulation: Steady State	<u>+</u> 0.25 Hz	
Air Cleaner Type - All Models	Dry, Dual Element	

Amperage					
Voltago	Phase	Power	Continuous	s Amperes	
Voltage	Filase	Factor	Standby	Prime	
120/208	3	0.8	2602	2082	
277/480	3	0.8	1128	902	

Engine Electrical System		
Battery Charging Alternator Ground Type	Negative	
Volts	24 VDC	
Ampere Rating	70A	
Starter Motor Rated Voltage	24 VDC	
Minimum Recommended Battery for 0 °C / Cold Cranking Performance	700 CCA	

Exhaust System		
Exhaust Temperature at Rated kW (Dry Exhaust)	915 °F (491 °C)	
Exhaust Flow at Rated kW	6370 cfm (180.4 m <sup>3</sup> /min)	
Silencer Type	Critical	
Maximum Allowable Backpressure	40.8 in/wc (10.0 kPa)	
Exhaust Outlet Size at hook-up	Dual 5.0 in. (127 mm)	

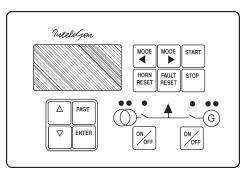


Cooling System				
Exhaust Manifold Type	Dry			
Radiator Design	Standard horizontal discharge			
Coolant Capacity - Engine Only	17.5 gal. (66 L)			
Coolant Capacity - Engine and Radiator	66.5 gal (252 L)			
Water Pump Design/Type	Belt Driven, Centrifugal			
Coolant Flow	89 gal/min (337 L/min)			
Heat Rejection to Coolant	19625 BTU/min (344.8 kW)			
Fan Horsepower	56.0 hp (42 kW)			
Thermostat	185 °F (82 °C)			

Fuel System				
Recommended Fuel	ASTM-D975/No.1 or No.2-D			
Fuel Pump Maximum Lift	6.8 ft. (2.1 m)			
Filter Micron Size	2			
Total Fuel Flow	280 gal./hr. (1061 L/Hr.)			
Fuel Consumption				
Diesel @ % of load	gal/hr	L/hr		
25%	15.2	57.5		
50%	26.9	101.8		
75%	39.4	149.1		
100%	54.7	207.1		

Lubrication System		
Туре	Full Pressure System	
Oil Filters	3 Spin-on Full Flow	
Oil Pan Capacity	18.0 gal. (69.0 L)	
Oil Capacity with Filters	25.0 gal. (94.1 L)	
Oil Pressure at Rated Speed	100 - 130 psi (690 - 896 kPa)	

Derating (60Hz)		
The engine power available up to 3300 ft. and 77°F at standby rating, without		Ambient Temperature
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:	Above 3300 ft. derate at 1.5%	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)



## **Optional Features and Accessories**

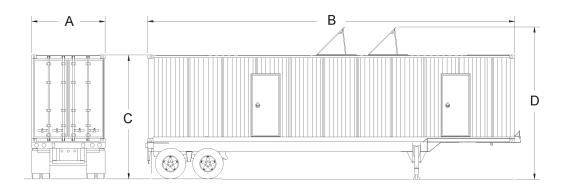
### **Generator Set**

- 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

### 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

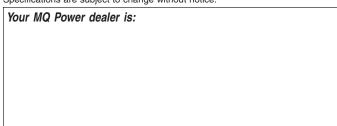


40 ft Container

Weight and Dimensions					
Α	В	С	D		
96 in. (2,438 mm)	480 in. (12,192 mm)	163 in. (4,137 mm)	199 in (5,054 mm)		
Weight (Wet)*		37,540 lbs (17,030)			
Weight (Wet with trailer)*		44,280 lbs (20,085 kg)			

<sup>\*</sup> Weight is approximate. Wet weight does not include fuel.

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. Specifications are subject to change without notice.





#### MQ POWER

POST OFFICE BOX 6254 CARSON, CA 90749 310-537-3700 • 800-421-1244

FAX: 310-632-2656

E-MAIL: mqpower@multiquip.com WEBSITE: www.mqpower.com