

Standard Features:

- Cummins Water-Cooled Diesel Engine
- Marathon Alternator
- Sound Attenuated Aluminum Housing with Rounded Corners
- **Custom Radiator with Multi-Wing Fan**
- Dual Automatic Voltage Regulators with Changeover Switch
- Led Instrument Panel Voltage, Amperage, Hertz
- Analog Engine Gauges Coolant Temperature, Oil Pressure, Hourmeter, Battery Volts
- Outlet Panel
 - 4 sets Camlock Receptacles
 2 100 Amp BATES Connectors
 2 15 Amp Edison Receptacles (Busbar Connectors available)
- Rotary Voltage Selector Switch Two Position

- Mechanical Fan Drive
- 120/240 Single Phase 100 kW
 120/208 Three Phase 150 kW
- Main Line Circuit Breaker 400 Amp
- Racor 900 Fuel/Water Filter
- B20 Bio-diesel Compliant Engine
- Electric Priming Feature
- Crystal Sync Internal Electronic Engine Governor
- Internal DC Lighting with Timer
- Stainless Steel Water Lines, Exhaust Piping, Hinges and Outer Hardware
- Automatic Overhead Doors
- Inlet Rain Door with Automatic Intake Door Closure
- Critical Grade Exhaust Silencer with Rain Cap



APPLICATION DATA

Alternator Specifications			
Manufacturer/Model	Marathon Magna Plus / 431PSL6206		
Туре	4-Pole, Rotating Field		
Exciter Type	Brushless, voltage regulated		
Number of Leads	12 Lead		
Insulation	NEMA MG1-1.66		
Material	Class H		
Generator RPM	1800		
Power Factor	0.8		
Amortisseur Windings	Full		
Coupling	Single bearing, flexible		
Cooling Air Volume	1200 CFM		
Voltage Regulation (no load to full load)	<u>+</u> 1%		
Single Step Load Acceptance per NFPA 110	100% of Rating		

Engine Specifications				
Manufacturer/Model	Cummins / QSL9-G2			
Туре	4-cycle, charged air cooled, turbocharged			
Cylinder Arrangement	6 In-Line			
Displacement	8.8 L (543 in ³)			
Bore	4.49 in. (114 mm)			
Stroke	5.69 in. (145 mm)			
Compression Ratio	16.8 : 1			
Piston Speed	1707 ft/min (8.7 m/s)			
Cylinder Block	Cast iron			
Cylinder Head	Cast iron			
Crankshaft	Nodular Iron			
Brake Mean Effective Pressure (BMEP)	260 psi (1792 kPa)			
Rated RPM	1800 RPM			
Max. Power At Rated RPM (with fan)	320 hp (239 kWm)			
Governor Type	Crystal Sync Electronic			
Frequency Regulation: No load to full load	Isochronous under varying loads from no load to 100% rated load			
Frequency Regulation: Steady State	<u>+0.25%</u> of mean value for constant loads from no load to full load			
Air Cleaner Type	Replaceable, Paper insert			

Exhaust System	
Exhaust Flow at Rated kW	1095 cfm (31.0 m³/min)
Exhaust Temperature at Rated kW	1055°F (570°C)
Maximum Allowable Backpressure	41 in H ₂ O (10.1 kPa)
Heat Rejection To Exhaust	13350 Btu/min (235 kW)

Compliant with NEMA MG1-22, BS5000, CSA-C22-2,
IEC-34-1 standards for temperature rise.

- Sustained short-circuit current up to 300% of rated current for up to 10 seconds.
- Drip-proof, self-venting, amortisseur windings.
- Epoxy impregnated windings with tropical insulation for increased environmental protection and long life.
- Exceptional waveshape and voltage balance; 2/3 pitch winding to minimize harmonic distortion.
- Solid-state, volts-per-hertz voltage regulator with ±1% no-load to full-load voltage regulation.

Amperage		
Voltage	Phase	Amperage
120/240V	Single - zig zag	800A total
120/208V	Three - 4 wire	1200A total

Fuel System			
Fuel Injection Pump Make	Bosch HPCR		
Recommended Fuel	ASTM-D975/No.2-D		
Maximum Fuel Flow 43 gal/hr (165 L/hr)			
Fuel Filters	Spin-on type		
Trailer Fuel Tank Capacity	150 gal (567.7 L)		
Fuel Consumption			
Diesel Fuel At % of Load	gal/hr (L/hr)		
100%	16.8 (64)		
75%	13.4 (51)		
50%	9.3 (35)		
25%	4.7 (18)		

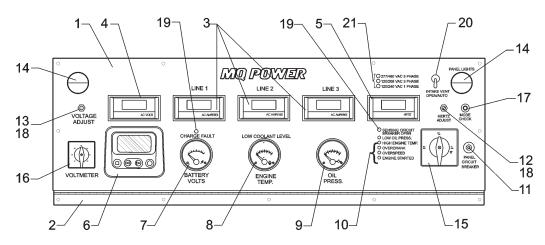
Lubrication System	
Туре	Full pressure system
System Capacity-With Filter	7 gal (26.5 L)
Oil Filter	Full flow, spin-on
Oil Cooler	Full flow, integrated design
Oil Pressure At Rated Speed	40-60 psi (276-414 kPa)



Cooling System			
Exhaust Manifold	Dry type		
Radiator Design	Horizontal Discharge		
Ambient Temperature Rating	104°F (40°C)		
Coolant Capacity (with radiator)	7.8 gal (29.5 L)		
Coolant Flow	64 gal/min (242.2 L/min)		
Radiator Cooling Air	9187 cfm (260 m³/min)		
Heat Rejection to Charge Air Cooler	2770 Btu/min (50 kW)		
Heat Rejection To Coolant	5603 Btu/min (98.5 kW)		

Engine Electrical System	
Battery Charging Alternator Make	Cummins
Ground Type	Negative
Volts (DC)	24V
Ampere Rating	65 A
Starter Motor Make/Model	Bosch EV
Starter Motor Rated Voltage	24VDC
Starter Motor Battery Capacity:	2 x 750 cca

GENERATOR CONTROLLER



- 1. AC Digital Panel
- 2. Hinge Panel
- 3. LCD Ammeter 1000A
- 4. LCD Voltage Meter
- 5. LCD Frequency Meter
- 6. Murphy Engine Diagnostic Display
- 7. Voltmeter Gauge, 24 VDC
- 8. Water Temp. Gauge
- 9. Oil Pressure Gauge
- **10.** Engine Control Unit
- 11. Panel Circuit Breaker 10 Amp
- 12. Speed Adjust Pot
- **13.** Voltage Adjust Pot
- 14. Panel Lights

- 15. Engine Control Switch
- 16. Voltage Selector Switch
- 17. Panel Light/Mode Check Switch
- 18. Locknut Pot Shift
- 19. LED 24V DC Red
- 20. Intake Vent Door Switch
- 21. Voltage Indicator LED

CONTROLLER FEATURES

- EMI/RFI Noise Immunity and Surge Performance per IEEE C62.41
- Certified to UL508 and CSA 22.2 #14 Industrial Control Equipment Standards
- 12 or 24 Volt DC compatible
- Individual Ammeters L1, L2, L3
- Volt Adjusting Rheostat
- Optional kW Meter available

- ECU (Engine Control Unit)
 - Solid State 5-Light Engine Monitor

Safety Shutdown and Fault Alarm for:

- Low Oil Pressure
- High Coolant Temperature
- Overspeed
- Overcrank

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.



Generator Set Optional Features:

- Block Heater
- Battery Charger
- 277/480 Volt Three Phase with Three Position Selector Switch
- 5 kVA Transformer (allows Edison receptacles to be "hot" in 480 Volt)
- Exterior Lighting Package
- Upgrade to 1600 or 1800 Amp Machine (Hydraulic Fan Drive required)
- Variable Speed Hydraulic Fan Drive for Low Load / Low Temp. Noise Reduction
- Oil Level Sight Glass
- Outlet Panel Light
- Battery Disconnect Switch
- Stainless Steel Corners
- Forklift Pocket Skid Base
- Isolation Transformer
- Racor 1000 Filter

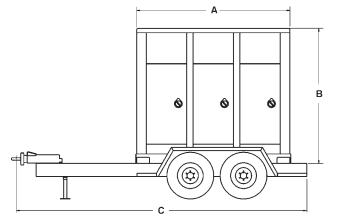
- Dual Racor Filters
- Custom Paint Color
- Paralleling Gear (GAC)
- Generator Set Up with DC power
- Custom Outlet Panel
- Hubble Connectors (50 amp / 120/240V)
- Extra Bates Connectors (60 or 100 amp /120V or 100 amp / 240V)
- Alternator with PMG and Digital Voltage Regulator
- Fire Extinguisher Box Flush Mounted in Housing
- 100 Gallon Sub-Base Fuel Tank (with forklift pockets)
- Distribution Boxes (Pin and Sleeve, Camlok Load Centers, Base Camp Packages etc.)
- Entertainment Cable

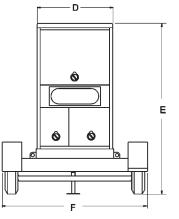
Trailer Standard Features:

- Tandem Axle Trailer with 150 Gallon Fuel Tank
- 8-Lug Chrome Wheels (5) with Chrome Center Caps and Lug Nuts
- Goodyear Wrangler Tires with Mounted Spare
- Tool Box
- Diamond Plate Decking
- Electric or Hydraulic Brakes

Trailer Optional Features:

- Alcoa Aluminum Wheels (5)
- Electric Jack Stand
- Adjustable Style 10" Hitch
- Line-X Trailer Fenders and A-frame
- Ground Rod Holder
- Wheel Chalk Basket in A-frame
- LED Lighting
- Lockable Pintle Eye
- Rear Stabilizing Jacks





Weight and Dimensions						
	Generator Set Dimensions with Trailer					
Α	В	С		D	E	F
100 in.	87 in.	with Electric Brakes	with Hydraulic Brakes	48 in.	110.5 in.	72 in.
		173 in.	180 in.			
Appx. Net Weight - Generator			6480 lbs. (2939 kg)			
Appx. Net Weight - Trailer		2580 lbs (1170 kg)				
Trailer GVWR		12000 lbs (5443 kg)				

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 WEBSITE: www.mqpower.com