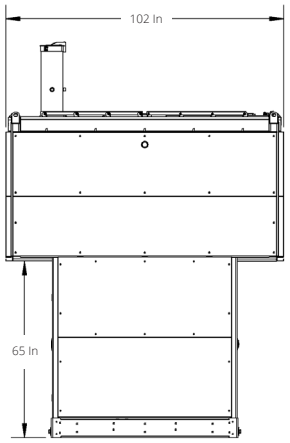
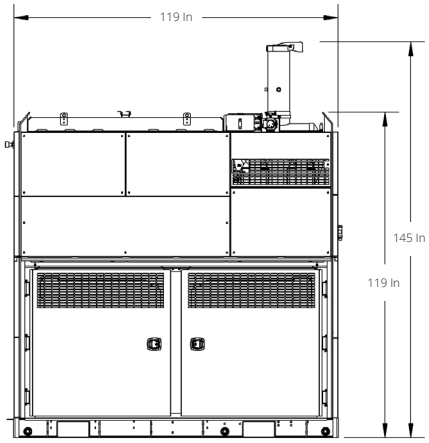
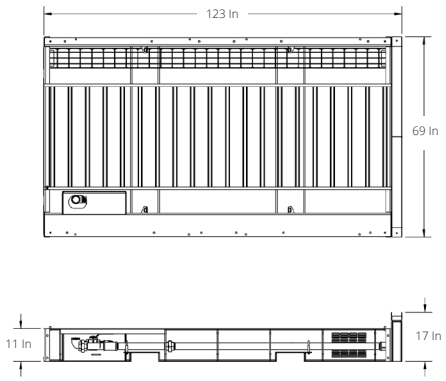
Mesa GV22 PowerCore







General PowerCore Information	
Model Number	A201001-02
Sound Level	71.6 dB at 7m
UL Certification	Certified to UL2200
EPA Certified	40 CFR Part 60 Subpart JJJJ and Part 1048

Dry Weight kg (lb)	Wet Weight kg (lb)	Base Weight kg (lb)	Max Shipping Weight kg (lb)
7,530 (16,600)	7,688 (16,949)**	400 (882)	8,111 (17,881)

Engine Information	
Engine Model	A401EL01-02 GV22PU
No. of Cylinders	12
Bore x Stroke	128 mm x 142 mm (5.0 in x 5.6 in)
Displacement	21.9 Liter (1336 in³)
Compression Ratio	10.2:1
Aspiration	Turbocharged, Intercooled
Fuel/Ignition System	Electronic Regulator / Spark Ignition
Governor	Electronic - G2 Class* capable

Generator	
Model	WEG AG10-315MN50AI
Power Rating	650 kVA
Generator	60 Hz, 3-Phase, 0.8 pf, 2/3 Pitch, Class H Insulation
Voltage	480 V
Temperature rise, °C	125 / 40
Frame size	(IEC) 315
Excitation	PMG

Motor starting capability is based on the assumption of 0.4 pf.
Temperature rise is based on the rating type and the respective site conditions.

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Performance[1]	Emergency Standby (ESP)		Limited-Time Power (LTP)		Prime Power (PRP)	
	Natural Gas	Propane	Natural Gas	Propane	Natural Gas	Propane
Frequency, Hz	60					
Genset Power Rating, kWe (kVA)	450 (562)	350 (437)	425 (531)	315 (393)	400 (500)	315 (393)
Rated Current, Amps	677	526	639	473	601	473

Fuel System / Fuel Consumption[2]						
Minimum fuel supply pressure, kPa (PSI)	13.9 (2)					
Maximum fuel supply pressure, kPa (PSI)	68.9 (10)					
	ESP		LTP		PRP	
100% load with fan, kg/hr (ft^3/hr)	104 (4,964)	87 (1,658)	99 (4,723)	80 (1,515)	94 (4,483)	80 (1,515)
75% load with fan, kg/hr (ft^3/hr)	81 (3,891)	69 (1,306)	78 (3,716)	63 (1,204)	74 (3,542)	63 (1,204)
50% load with fan, kg/hr (ft^3/hr)	60 (2,854)	51 (974)	57 (2,741)	48 (910)	55 (2,628)	48 (910)

Cooling System	
Radiator air flow, m^3/min (cfm)	903 (31,900)
Radiator air flow restriction (system), kPa (in. water)	0.90 (3.6)
Engine coolant capacity, L (gal)	53 (14)
Radiator coolant capacity, L (gal)	136 (36)
Total coolant capacity, L (gal)	189 (50)

Exhaust System	
Max. exhaust gas temperature, °C (°F)	673 (1250)
Max. exhaust gas flow rate, kg/hr (lb/hr)	2,084 (4595)
Exhaust system back pressure max allowable, kPa (in. water)	15 (60)

Inlet Air	ESP	LTP	PRP
Combustion air inlet flow rate, kg/hr	1979	1884	1790
Maximum allowable intake air restriction, kPa (in. water)	1.2 (5) - Clean Filter, 3.7 (15) - Dirty Filter		

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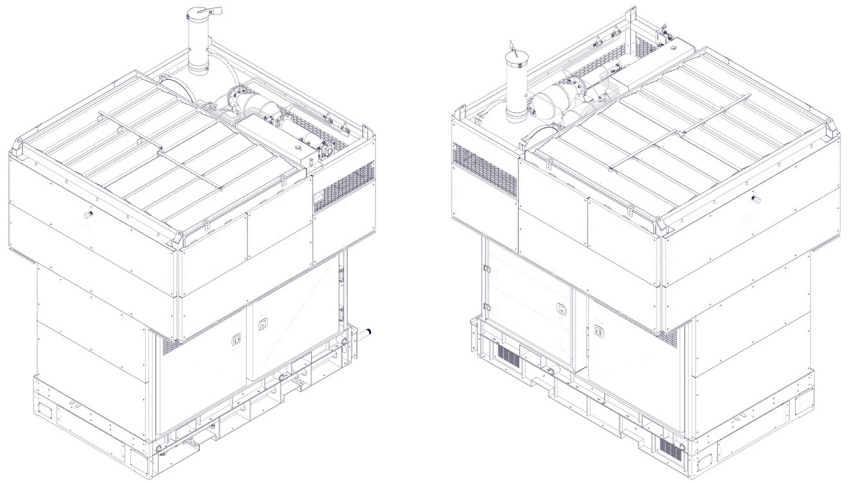
Emissions Control	
EPA Stationary Non-Emergency (g/bhp-hr)	NO_x: 1.0, CO: 2.0, VOC: 0.7
East Texas Ultra Low NO_x Capable	< 0.047 g/bhp-hr

Lube System	
Minimum Engine oil capacity, L (gal)	33 (8.7)
Maximum Engine oil capacity, L (gal)	40 (11)
Engine oil day tank capacity, L (gal)	53 (14)
Total oil capacity, L (gal)	93 (24.7)

Heat Rejection	ESP	LTP	PRP
Heat rejection to jacket water, kW (BTU/min)	469 (26,672)	464.6 (26,421)	460.2 (26,171)
Heat rejection to after cooler, kW (BTU/min)	73.8 (4,197)	66.4 (3,776)	58.9 (3,350)
Heat rejection to atmosphere from engine, kW (BTU/min)	38 (2,161)	36 (2,047)	33 (1,877)
Heat rejection to exhaust, kW (BTU/min)	340 (19,335)	305 (17,345)	270 (15,355)



APPLICABLE CODES AND STANDARDS:

Compliant to: CSA C22.2 No 100-04, cUL/UL2200
Applicable to: ISO 3046, ISO 8528

EMERGENCY STANDBY POWER (ESP):

ESP is the maximum power available for a generator set during a utility outage or under test conditions. Operation is permitted for up to 200 hours per year, with a permissible average load factor of 70% of ESP over any 24-hour period. ESP is not intended for use in parallel with the utility or for continuous operation.

LIMITED TIME POWER (LTP):

LTP is the maximum power a generator set can deliver for up to 500 hours per year under defined operating conditions. It is suitable for constant loads where the maximum output is required for a limited duration. No overload capacity is permitted under LTP.

PRIME POWER (PRP):

PRP is the maximum power a generator set can deliver with a variable load for an unlimited number of hours per year. The permissible average load over any 24-hour period is 70% of PRP. A 10% overload is permitted for up to 1 hour in every 12 hours of operation.

Ratings are based on SAE J1349 standard conditions.
These ratings also apply at ISO 3046 standard conditions.

DEFINITIONS AND CONDITIONS

[1] Electrical Power Output & Fuel Consumption Tested at a Power Factor of 1.0.Operational characteristics consider maximum ambient conditions 40 °C (104 °F). Derate factors may apply under typical site conditions.

[2] b. Tested per ISO 8528-6 2023 at an elevation of 5067 ft (1544 m) and ambient temperature of 10°C (50°F).

[2] c. FUEL SPECIFICATION: Gas properties for fuel consumption data: NG: Density = 0.737 kg/m3, HHV = 1041 BTU/SCF (39 MJ/m3).

* Governing Class capability as per ISO-8528-5. Consult your local Mesa sales rep for configuration and site specific transient performance classification.

** Wet Weight includes weight of coolant, oil, and full day tank.