

Cat® DG125

GAS GENERATOR SETS



Image shown may not reflect actual configuration.

Engine Model	6.2L V8 TCAC
No. of Cylinders	8
Bore x Stroke	101.6 mm x 95.3 mm
Displacement	6.2 Litre
Compression Ratio	9.8:1
Aspiration	Turbocharged & Aftercooled
Fuel System	Spark Ignition
Governor	Electronic

Model	Standby		Emissions Strategy
	Natural Gas ekW	Propane ekW	
DG125	125	117*	U.S. EPA Certified for Emergency and Non-Emergency

PACKAGE PERFORMANCE

Performance	Standby	
	Natural Gas	Propane
Frequency, Hz	60	
Genset power rating, kVA	156	147
Genset power rating with fan @ 0.8 power factor, ekW	125	117
Performance number	EM6754	EM6755
Fuel Consumption (% mech efficiency)		
Minimum Running pressure to Electronic Pressure Regulator (EPR), psi (in. water)	0.25 (7)	0.25 (7)
Maximum Running pressure to Electronic Pressure Regulator (EPR), psi (in. water)	0.40 (11)	0.40 (11)
100% load with fan, kg/hr (ft ³ /hr)	43.7 (1980)	15.5 (289)
75% load with fan, kg/hr (ft ³ /hr)	32.1 (1454)	11.5 (215)
50% load with fan, kg/hr (ft ³ /hr)	22.6 (1023)	8.2 (153)
Cooling System¹		
Radiator air flow, m ³ /min (cfm)	421.3 (14878)	
Radiator air flow restriction (system), kPa (in. water)	-	
Engine coolant capacity, L (gal)	7.60 (2.0)	
Radiator coolant capacity, L (gal)	19.0 (5.0)	
Total coolant capacity, L (gal)	26.6 (7.0)	
Inlet Air		
Combustion air inlet flow rate, m ³ /min (cfm) (kg/hr)	6.9 (244) (496.8)	6.3 (223.5) (456.3)
Maximum allowable intake air restriction, kPa (in. water)	3.48 (13.98)	
Exhaust System		
Exhaust stack gas temperature, °C (°F)	655 (1211)	-
Exhaust gas flow rate, m ³ /min (cfm) (kg/hr)	26.9 (949.6) (534)	24.2 (855.7) (491.4)
Exhaust system backpressure kPa (in. water)	11.8 (47.4)	10.75 (43.2)

*Preliminary Data – Subject to change without notice.

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PACKAGE PERFORMANCE (contd.)

Heat Rejection	Standby	
	Natural Gas	Propane
Heat rejection to jacket water, ekW (Btu/min)	66.4 (3779)	–
Heat rejection to after cooler, ekW (Btu/min)	20.2 (1151)	–
Heat rejection to oil cooler, ekW (Btu/min)	19.4 (1108)	–
Heat rejection to atmosphere from engine, ekW (Btu/min)	56 (3182)	–
Heat rejection to exhaust (Total), ekW (Btu/min)	118.3 (6731)	–
Lube System		
Sump refill with filter, L (gal)	5.4 (1.43)	
Maximum oil temperature, °C (°F)	121 (250)	
Maximum oil capacity, L (gal)	7.6 (2)	
Minimum oil capacity, L (gal)	–	
Emissions (Nominal)		
NOx + HC, g/ekW-hr	0.147	0.081
CO, g/ekW-hr	0.287	0.590

ALTERNATOR DATA

DG125 – Natural Gas					
Alternator	60 Hz 3P				
Voltages	480/277	240/120	240/139	208/120	600/346
Motor starting capability @ 30% Voltage Dip, skVA	370	326	290	326	396
Current, amps	188	376	376	434	150
Temperature rise, °C	105/40	105/40	105/40	105/40	105/40
Frame size	M2256L4	M2275L4	M2256L4	M2275L4	M2275L4
Excitation	PMG	PMG	PMG	PMG	PMG

DG125 – Propane					
Alternator	60 Hz 3P				
Voltages	480/277	240/120	240/139	208/120	600/346
Motor starting capability @ 30% Voltage Dip, skVA	370	326	290	326	396
Current, amps	176	355	353	409	141
Temperature rise, °C	105/40	105/40	105/40	105/40	105/40
Frame size	M2256L4	M2275L4	M2256L4	M2275L4	M2275L4
Excitation	PMG	PMG	PMG	PMG	PMG

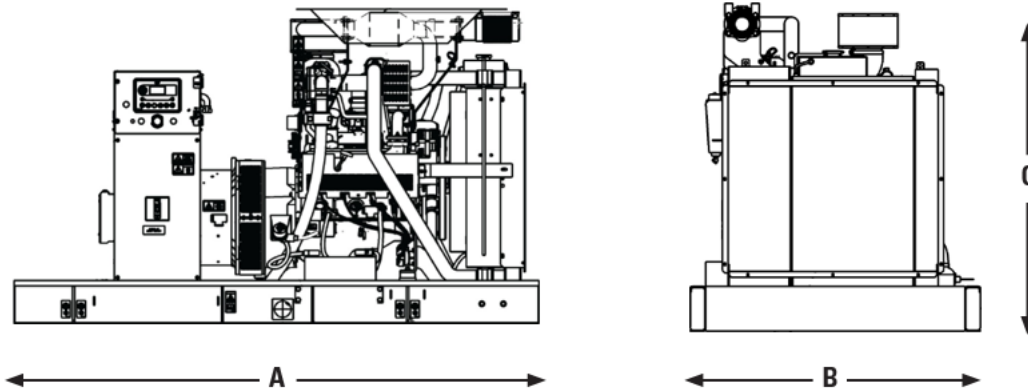
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 Motor starting capability is based on the assumption of 0.6 pf.
 Temperature rise and Current in amps are based on the Standby rating at the respective voltages.

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WEIGHTS & DIMENSIONS



Length "A" mm (in)	Width "B" mm (in)	Height "C" mm (in)	Dry Weight Kg (lb)
2442 (96)	1297 (51)	1449 (57)	1464 (3226)

Note: General configuration not to be used for installation. See general dimension drawings for detail.

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APPLICABLE CODES AND STANDARDS:

CSA C22.2 No 100-04, UL 489, UL 869, UL 2200, NFPA 37, NFPA 70, NFPA 99, NFPA 110, IBC, IEC60034-1, ISO 3046, ISO 8528, NEMA MG 1-22, NEMA MG 1-33.

DEFINITIONS AND CONDITIONS

¹ For ambient and altitude capabilities consult your Cat dealer.

Air flow restriction (system) is added to the existing restriction from the factory.

² Generator temperature rise is based on a 40°C (104°F) ambient per NEMA MG1-32.

[#] Operating Fuel Pressure is the fuel pressure required to be delivered at the genset base frame rail connection

STANDBY: Output available with varying load for the duration of the interruption of the normal source power. Average power output is 70% of the standby power rating. Typical operation is 200 hours per year, with maximum expected usage of 500 hours per year.

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

1 CFH = 1000 BTU/HR

Fuel Rates are based on heat values of 1015 BTU/SCF for Natural Gas and 2500 BTU/SFC for Propane Vapor @77°F (25°C) and 328 ft (100m) above sea level.

Additional ratings may be available for specific customer requirements, contact you Cat representative for details.

Genset Ratings are based on ambient temperature of 77°F and elevation of 1200 ft above sea level.

For higher temperatures and elevations the following derate specifications are to be used:

Altitude: Derate 3.0% per every 1000 ft (305m.) above 1200 ft (365 m).

Temperature: Derate 1.0% per 10°F (5.55°C) temperature above 77°F (25°C).

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