Cat® DG150
GAS GENERATOR SETS

Image shown may not reflect actual configuration.

Engine Model	9.1L V8 TCAC
No. of Cylinders	8
Bore x Stroke	109.5 mm x 120.7 mm
Displacement	9.1 Liter
Compression Ratio	9.5:1
Aspiration	Turbocharged & Aftercooled
Fuel / Ignition System	Electronic Regulator / Spark Ignition
Governor	G1 Class - Electronic

Model	Standby		Demand Response		Prime		Emissions Strategy
	Natural Gas ekW	Propane ekW	Natural Gas ekW	Propane ekW	Natural Gas ekW	Propane ekW	
DG150	150	135.6	150	135.6	121.6	121.6	U.S. EPA Certified for Emergency and Non-Emergency

PACKAGE PERFORMANCE

Performance	Standby (3-Phase)		Demand Response (3-Phase)		Prime (3-Phase)	
	Natural Gas	Propane	Natural Gas	Propane	Natural Gas	Propane
Frequency, Hz	60					
Genset power rating with fan, ekW (3-Phase)	150	135.6	150	135.6	121.6	121.6
Performance Number	EM6953	EM6954	EM6955	EM6956	EM6957	EM6958
Fuel System / Fuel Consumption						
Minimum Running pressure to Electronic Pressure Regulator# (EPR), psi (in. water)	0.25 (7)					
Maximum Running pressure to Electronic Pressure Regulator# (EPR), psi (in. water)	0.40 (11)					
100% load with fan,kg/hr (ft³/hr)	39.1 (1769)	32.9 (622)	39.1 (1769)	32.9 (622)	30.3 (1369.5)	30.2 (571.3)
75% load with fan,kg/hr (ft³/hr)	31.32 (1337)	25.3 (477.8)	31.32 (1337)	25.3 (477.8)	24 (1084.2)	24 (454.2)
50% load with fan,kg/hr (ft³/hr)	20.7 (887)	18.2 (345)	20.7 (887)	18.2 (345)	17.7 (799)	17.8 (336.6)
Cooling System[1]						
Radiator air flow, m³/min (cfm)	301 (10630)					
Radiator air flow restriction (system), kPa (in. water)	0.12					
Engine coolant capacity, L (gal)	18.9 (5)					
Radiator coolant capacity, L (gal)	11.4 (3)					
Total coolant capacity, L (gal)	30.3 (8)					
Inlet Air						
Combustion air inlet flow rate, m³/min (cfm) (kg/hr)	9.7 (341) (643)	7.8 (273.5) (515.6)	9.7 (341) (643)	7.8 (273.5) (515.6)	7.3 (257.7) (486)	7.0 (246) (463.7)
Maximum allowable intake air restriction, kPa (in. water)	3.48 (13.98)					
Exhaust System						
Exhaust gas temperature after turbo,°C (°F)	706 (1302)	696 (1284)	706 (1302)	696 (1284)	659 (1218)	682 (1259)
Exhaust gas flow rate, m³/min (cfm) (kg/hr)	35.5 (1253) (682)	27.2 (960) (548.5)	35.5 (1253) (682)	27.2 (960) (548.5)	25.5 (900.5) (516)	24.8 (875.8) (494)
Exhaust system back pressure max allowable, kPa (in. water)	20 (80.4)					

PACKAGE PERFORMANCE (contd.)

Heat Rejection	Standby		Demand Response		Prime	
	Natural Gas	Propane	Natural Gas	Propane	Natural Gas	Propane
Heat rejection to jacket water, kW (Btu/min)	86.1 (4896)	66.3 (3770)	86.1 (4896)	66.3 (3770)	64 (3639)	61.7 (3508)
Heat rejection to after cooler, kW (Btu/min)	24.3 (1382)	13 (739)	24.3 (1382)	13 (739)	11.6 (659)	10.5 (597)
Heat rejection to oil cooler, kW (Btu/min)	20.8 (1183)	21.1 (1200)	20.8 (1183)	21.1 (1200)	16.4 (932)	19.7 (1120)
Heat rejection to atmosphere from engine, kW (Btu/min)	56.6 (3219)	60.4 (3435)	56.6 (3219)	60.4 (3435)	68.3 (3884)	58.5 (3326)
Heat rejection to exhaust, kW (Btu/min)	144.7 (8229)	112 (6369)	144.7 (8229)	112 (6369)	101.8 (5789)	98.8 (5618)
Lube System						
Sump refill with filter, L (gal)	12.1 (3.2)					
Maximum oil sump temperature, °C (°F)	107 (225)					
Maximum oil capacity, L (gal)	11.4 (3)					
Minimum oil capacity, L (gal)	7.6 (2)					
Emissions (Nominal)						
NOx + HC, g/kW-hr (g/hp-hr)	0.35 (0.26)	1.15 (0.86)	0.36 (0.26)	1.15 (0.86)	0.30 (0.22)	1.17 (0.87)
CO, g/kW-hr (g/hp-hr)	1.28 (0.95)	1.72 (1.28)	1.28 (0.95)	1.72 (1.28)	0.87 (0.65)	1.73 (1.29)

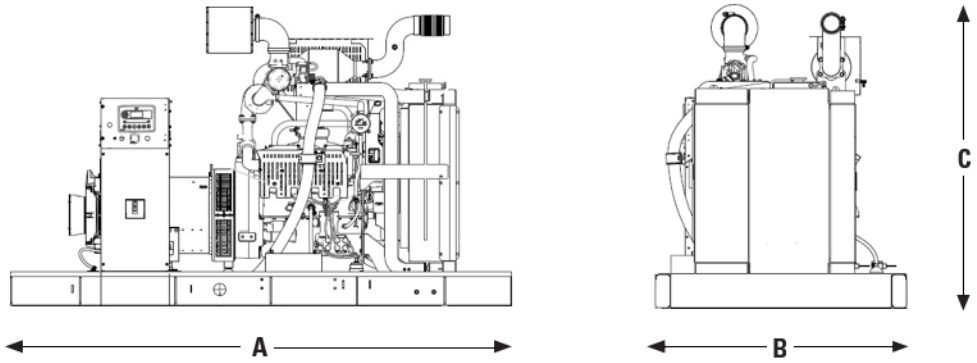
ALTERNATOR DATA

DG150					
Alternator	60 Hz 3-Phase				
Voltages	480/277	240/120	240/139	208/120	600/346
Temperature rise, °C	105	105	105	105	105
Motor starting capability @ 30% Voltage Dip, skVA	513	403	513	403	461
Frame size	M2294L4	M2294L4	M2294L4	M2294L4	M2294L4
Excitation	PMG	PMG	PMG	PMG	PMG
Rated Current, Amps - Natural Gas / Propane					
Standby	225 / 203	451 /407	451 / 408	520 / 470	180 / 163
Demand Response	225 / 203	451 / 407	451 / 408	520 / 470	180 / 163
Prime	183 / 183	366 / 366	366 / 366	366 / 366	146 / 146

Motor starting capability is based on the assumption of 0.6 pf.
Temperature rise and Current in Amps are based on Standby rating at the respective voltages.
For more optional alternator offerings, consult your Cat dealer .

DG150 GAS GENERATOR SETS
Electric Power

WEIGHTS & DIMENSIONS



Length "A" mm (in)	Width "B" mm (in)	Height "C" mm (in)	Dry Weight Kg (lb)
2892 (114)	1396 (55)	1734 (68.3)	1657 (3653)

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

APPLICABLE CODES AND STANDARDS:

CSA C22.2 No 100-04, UL142, UL489, UL869, cUL/UL2200, NFPA 37, NFPA 70, NFPA 99, NFPA 110, IBC, IEC60034-1, ISO 3046, ISO 8528, 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.

[#] Fuel pressure required to be delivered at the genset base frame rail connection.

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

DEMAND RESPONSE POWER: Output available with varying load when participating in a demand response or economic dispatch program. Average power output is 70% of the standby rated ekW. Typical operation is 200 hours per year, with maximum expected usage of 500 hours per year.

PRIME POWER: Output available with varying load for an unlimited time. Average power output is 70% of the prime rated ekW. Typical peak demand is 100% of prime rated ekW.

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 1000ft (305m.) above 1200ft (365 m). Temperature: Derate 1.0% per 10°F (5.55°C) temperature above 77°F (25°C).

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