Cat® DG175
GAS GENERATOR SETS
NORTH AMERICA

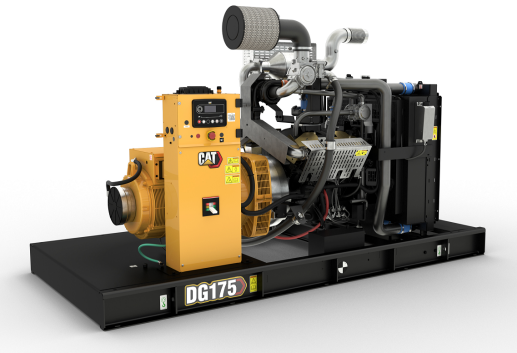


Image shown may not reflect actual configuration

Engine Model	10.3L V8 TCAC
No. of Cylinders	8
Bore x Stroke	116.8 mm x 120.6 mm
Displacement	10.3 Liter
Compression Ratio	9.6:1
Aspiration	Turbocharged & Aftercooled
Fuel / Ignition System	Electronic Regulator / Spark Ignition
Governor	Electronic - G2 Class* capable

For North America, 60 Hz Market

Model	Emergency Standby		Demand Response		Prime		Emissions Strategy
	Natural Gas ekW	Propane ekW	Natural Gas ekW	Propane ekW	Natural Gas ekW	Propane ekW	
DG175	175	144	175	144	140	117	U.S. EPA Certified for Emergency and Non-Emergency

PACKAGE PERFORMANCE

Performance	Emergency Standby		Demand Response		Prime	
	Natural Gas	Propane	Natural Gas	Propane	Natural Gas	Propane
Frequency, Hz	60					
Genset power rating with fan, ekW (3-Phase)	175	144	175	144	140	117
Performance number	EM7511	EM7513	EM7515	EM7517	EM7519	EM7521
Fuel System / Fuel Consumption						
Minimum required fuel delivery pressure at rail connector, psi (in. water)	0.36 (10)					
Maximum required fuel delivery pressure at rail connector, psi (in. water)	0.43 (12)					
100% load with fan,kg/hr (CFH)	47.7 (2145)	46.9 (886)	47.7 (2145)	46.9 (886)	40.8 (1835)	40.8 (771)
75% load with fan,kg/hr (CFH)	37.3 (1678)	36.8 (695)	37.3 (1678)	36.8 (695)	32.1 (1443)	32.0 (604)
50% load with fan,kg/hr (CFH)	26.8 (307)	25.0 (472)	26.8 (307)	25.0 (472)	23.4 (1052)	23.2 (438)
Cooling System[1]						
Radiator air flow, m^3/min (CFM)	498 (17588)					
Radiator air flow restriction (system), kPa (in. water)	0.12 (0.48)					
Engine coolant capacity, L (gal)	10.9 (2.8)					
Radiator coolant capacity, L (gal)	32.2 (8.5)					
Total coolant capacity, L (gal)	43.1 (11.3)					
Inlet Air						
Combustion air inlet flow rate, m^3/min (CFM) (kg/hr)	12.3 (434) (789.2)	12.2 (431) (780.3)	12.3 (434) (789.2)	12.2 (431) (780.3)	10.5 (371) (675.2)	10.4 (367) (669.7)
Maximum allowable intake air restriction, kPa (in. water)	3.54 (14.2)					
Exhaust System						
Exhaust gas temperature after turbo,°C (°F)	782 (1440)	820 (1508)	782 (1440)	820 (1508)	775 (1427)	793 (1459)
Exhaust gas flow rate, m^3/min (CFM) (kg/hr)	46.9 (1656) (837)	47.2 (1666) (827)	46.9 (1656) (837)	47.2 (1667) (827)	38.6 (1363) (716)	39.5 (1395) (711)
Exhaust system back pressure max allowable, kPa (in. water)	20 (80.4)					

PACKAGE PERFORMANCE (contd.)

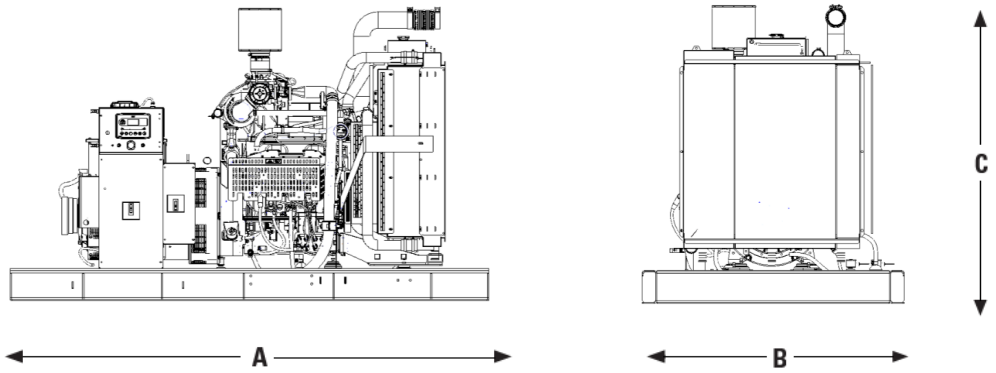
Heat Rejection	Standby		Demand Response		Prime	
	Natural Gas	Propane	Natural Gas	Propane	Natural Gas	Propane
Heat rejection to jacket water, kW (BTU/min)	112 (6369)	105 (5971)	112 (6369)	105 (5971)	102 (5800)	97 (5516)
Heat rejection to after cooler, kW (BTU/min)	25 (1422)	20 (1137)	25 (1422)	20 (1137)	19 (1080)	16 (910)
Heat rejection to oil cooler, kW (BTU/min)	35.4 (2013)	33 (1876)	35.4 (2013)	33 (1876)	33 (1877)	32 (1820)
Heat rejection to atmosphere from engine, kW (BTU/min)	46 (2616)	46 (2619)	46 (2616)	46 (2619)	37 (2104)	43 (2445)
Heat rejection to exhaust (Total), kW (BTU/min)	197 (11203)	200 (11374)	197 (11203)	200 (11374)	167 (9497)	166 (9440)
Lube System						
Oil dry fill capacity, L (gal)	13.7 (3.6)					
Maximum oil temperature, °C (°F)	121 (250)					
Maximum oil capacity, L (gal)	13.8 (3.6)					
Minimum oil capacity, L (gal)	10.4 (2.7)					
Emissions (Meets EPA Stationary Non-Emergency Limits)						
NOx + HC, g/kW-hr	0.8					
CO, g/kW-hr	20.6					

ALTERNATOR DATA

DG175					
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	629	490	629	490	599
Frame size	M2736L4	M2736L4	M2736L4	M2736L4	M2736L4
Excitation	PMG	PMG	PMG	PMG	AREP
Rated Current, Amps - Natural Gas / Propane					
Standby	263 / 216	526 / 433	526 / 433	607 / 499	210 / 173
Demand Response	263 / 216	526 / 433	526 / 433	607 / 499	210 / 173
Prime	210 / 175	421 / 352	421 / 352	486 / 406	168 / 140

Motor starting capability is based on the assumption of 0.6 pf.
Temperature rise is based on the rating type and the respective site conditions.

WEIGHTS & DIMENSIONS



Length "A" mm (in)	Width "B" mm (in)	Height "C" mm (in)	Dry Weight Kg (lb)
2985 (117.5)	1600 (63)	1820 (72)	1780 (3924)

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.

Note: Codes may not be available in all model configurations. Please consult your local Cat Dealer representative for availability.

EMERGENCY STANDBY POWER (ESP): Typical usage of 50 hours per year with a maximum of 200 hours per year with varying loads. Average variable load factor is 70% of the ESP rating. No overload is available. Not for maintained utility paralleling applications.

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 LHV of 35.83 MJ/Nm^3 for Natural Gas and 92.1 MJ/Nm^3 for Propane Vapor @77°F (25°C) and 328 ft (100 m) above sea level and a relative humidity of 30%.Temperatures and elevations greater than this standard must be accounted for as follows:

A derate of 1.5% for every 5°C above 25°C air inlet temperature.
A derate of 2.2% for every 200m above 100m.

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 40°C (104°F) ambient per NEMA MG1-32.

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

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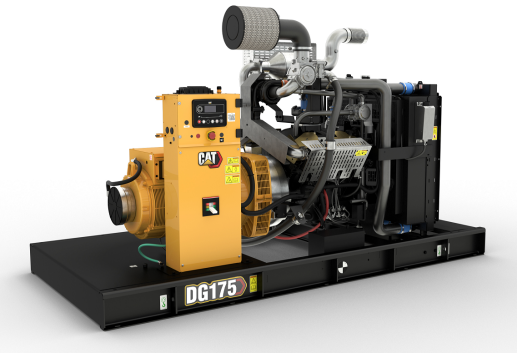
GAS GENERATOR SETS
LATIN AMERICA



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Emissions (Meets EPA Stationary Non-Emergency Limits)				
NOx + HC, g/kW-hr	0.8			
CO, g/kW-hr	20.6			

ALTERNATOR DATA

DG175							
Alternator	60 Hz 3-Phase						
Voltages	480/277	380/220	220/127	240/120	240/139	208/120	600/346
Temperature rise[2], °C	105	105	105	105	105	105	105
Motor starting capability @ 30% Voltage Dip, skVA	629	416	444	490	629	490	599
Frame size	M2736L4	M2736L4	M2294L4	M2736L4	M2736L4	M2736L4	M2736L4
Excitation	PMG	PMG	PMG	PMG	PMG	PMG	AREP
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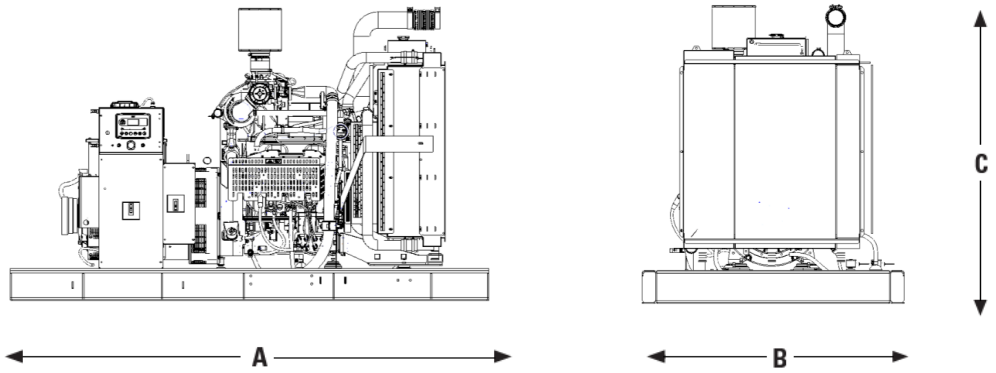

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