Cat® DG30 GAS GENERATOR SETS NORTH AMERICA





Image shown may not reflect actual configuration

Engine Model	3.6L NA Inline
No. of Cylinders	4
Bore x Stroke	105.54 mm x 102.87 mm
Displacement	3.6 Liter
Compression Ratio	9.8:1
Aspiration	Naturally Aspirated
Fuel / Ignition System	Electronic Regulator / Spark Ignition
Governor	Electronic

For North America, 60 Hz Market

Emergency Standby		y Standby	Demand Response		Prime			
Model	Natural Gas	Propane ekW	Natural Gas	Propane _{ekW}	Natural Gas	Propane ekW	Emissions Strategy	
DG30	30	30	30	30	30	30	U.S. EPA Certified for Non-Emergency Application	

PACKAGE PERFORMANCE

	Emergency Standby		Demand Response		Prime	
Performance	Natural Gas	Propane	Natural Gas	Propane	Natural Gas	Propane
Frequency, Hz			6	0	ı	
Genset power rating with fan, ekW (3-Phase / 1-Phase)	30 / 30	30 / 30	30 / 30	30 / 30	32 / 32	30 / 30
Performance number	-	-	-	-	-	-
Fuel System / Fuel Consumption						
Minimum required fuel delivery pressure at rail connector, psi (in. water)			0.28	3 (8)		
Maximum required fuel delivery pressure at rail connector, psi (in. water)			0.43	(12)		
100% load with fan, kg/hr (CFH)	9.69 (439)	9.69 (181)	9.69 (439)	9.69 (181)	9.69 (439)	9.69 (181)
75% load with fan, kg/hr (CFH)	7.0 (317)	7.0 (131)	7.0 (317)	7.0 (131)	7.0 (317)	7.0 (131)
50% load with fan, kg/hr (CFH)	5.0 (226)	5.0 (93)	5.0 (226)	5.0 (93)	5.0 (226)	5.0 (93)
Cooling System ¹						
Radiator air flow, m³/min (CFM)			53.7 (1896)		
Radiator air flow restriction (system), kPa (in. water)			0.	12		
Engine coolant capacity, L (gal)			2.5 (0.6)		
Radiator coolant capacity, L (gal)			18.3	(4.8)		
Total coolant capacity, L (gal)			20.8	(5.5)		
Inlet Air						
Combustion air inlet flow rate, m³/min (CFM) (kg/hr)	2.4 (86) (159.6)	2.4 (86) (159.6)	2.4 (86) (159.6)	2.4 (86) (159.6)	2.4 (86) (159.6)	2.4 (86) (159.6)
Maximum allowable intake air restriction, kPa (in. water)	3.5 (14)					
Exhaust System						
Exhaust gas temperature, °C (°F)	721 (1330)	790 (1454)	721 (1330)	790 (1454)	721 (1330)	790 (1454)
Exhaust gas flow rate, m³/min (CFM) (kg/hr)	8.7 (307) (169.4)	8.7 (307) (169.4)	8.7 (307) (169.4)	8.7 (307) (169.4)	8.7 (307) (169.4)	8.7 (307) (169.4)
Exhaust system back pressure max allowable, kPa (in. water)	7.0 (28)					

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PACKAGE PERFORMANCE (contd.)

	Emergency Standby		Demand Response		Prime	
	Natural Gas	Propane	Natural Gas	Propane	Natural Gas	Propane
Heat Rejection						
Heat rejection to jacket water, kW (BTU/min)	38 (2161)	34.5 (1962)	38 (2161)	34.5 (1962)	38 (2161)	34.5 (1962)
Heat rejection to atmosphere from engine, kW (BTU/min)	19.3 (1097)	18.4 (1046)	19.3 (1097)	18.4 (1046)	19.3 (1097)	18.4 (1046)
Heat rejection to exhaust (total), kW (BTU/min)	36.6 (2081)	39.7 (2257)	36.6 (2081)	39.7 (2257)	36.6 (2081)	39.7 (2257)

Lube System					
Oil dry fill capacity, L (gal)	8.3 (2.2)				
Maximum oil temperature, °C (°F)	121 (250)				
Maximum oil capacity, L (gal)	7.6 (2.0)				
Minimum oil capacity, L (gal)	5.7 (1.5)				
Emissions Meets (EPA Stationary Non-Emergency Limits)					
NOx + HC, g/kW-hr	0.8				
CO, g/kW-hr	20.6				

ALTERNATOR DATA

DG30				•		
Alternator	60 Hz 1-Phase	60 Hz 3-Phase				
Voltages	240/120	480/277	240/120	240/139	208/120	600/346
Temperature rise ² , °C	105	105	105	105	105	105
Motor starting capability @ 30% Voltage Dip, skVA	-	-	-	-	-	-
Frame size	M1736L4	M1736L4	M1736L4	M1736L4	M1736L4	M1736L4
Excitation	SE	SE	SE	SE	SE	SE
Rated Current, Amps - Natural Gas / Propane						
Emergency Standby	125 / 125	45 / 45	90 / 90	90 / 90	104 / 104	36 / 36
Demand Response	125 / 125	45 / 45	90 / 90	90 / 90	104 / 104	36 / 36
Prime	125 / 125	45 / 45	90 / 90	90 / 90	104 / 104	36 / 36

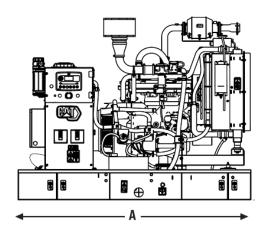
Motor starting capability is based on the assumption of 0.6 pf. $\,$

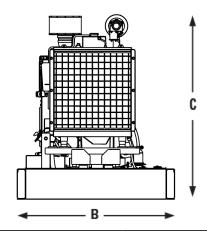
Temperature rise is based on the rating type and the respective site conditions.

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WEIGHTS & DIMENSIONS





Length "A"	Width "B" mm (in)	Height "C"	Dry Weight	
mm (in)		mm (in)	Kg (lb)	
1950 (77)	1300 (51)	1530 (60)	696 (1534)	

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.

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/Nm³ for Natural Gas and 92.1 MJ/Nm³ 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 20°C air inlet temperature. Derate varies between 4% to 9% for every 500m. Refer derate chart for more details.

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.