Cat® D600 GC
Diesel Generator Sets

Standby: 60 Hz

Image shown may not reflect actual configuration.

Engine Model	Cat® C18 In-line 6, 4-cycle diesel
Bore x Stroke	145 mm x 183 mm (5.7 in x 7.2 in)
Displacement	18.1 L (1106 in³)
Compression Ratio	14.5:1
Aspiration	Turbocharged Air-to-Air Aftercooled
Fuel Injection System	MEUI
Governor	Electronic ADEM™ A4

Model	Standby	Emission Strategy
D600 GC	600 ekW, 750 kVA	EPA Certified for Stationary Emergency Application

PACKAGE PERFORMANCE

Performance	Standby
Frequency	60 Hz
Genset Power Rating	750 kVA
Genset power rating with fan @ 0.8 power factor	600 ekW
Emissions	EPA TIER 2
Performance Number	DM8518
Fuel Consumption	
100% load with fan, L/hr (gal/hr)	159.5 (42.1)
75% load with fan, L/hr (gal/hr)	127.9 (33.8)
50% load with fan, L/hr (gal/hr)	90.5 (23.9)
25% load with fan, L/hr (gal/hr)	46.2 (12.2)
Cooling System[1]	
Radiator air flow restriction (system), kPa (in water)	0.12 (0.48)
Radiator air flow, m³/min (cfm)	803 (28357)
Engine coolant capacity, L (gal)	20.8 (5.5)
Radiator coolant capacity, L (gal)	61 (16)
Total coolant capacity, L (gal)	82 (22)
Inlet Air	
Combustion air inlet flow rate m³/min (cfm)	47.8 (994.3)
Max. allowable combustion air inlet temp, °C (°F)	49 (122)
Exhaust System	
Exhaust stack gas temperature, °C (°F)	534.6 (994.3)
Exhaust gas flow rate, m³/min (cfm)	135.5 (4784.4)
Exhaust system backpressure (maximum allowable) kPa (in. water)	10.0 (40.0)
Heat Rejection	
Heat rejection to jacket water, kW (Btu/min)	180 (10236)
Heat rejection to exhaust (total), kW (Btu/min)	595 (33837)
Heat rejection to aftercooler, kW (Btu/min)	141 (8019)
Heat rejection to atmosphere from engine, kW (Btu/min)	77 (4379)
Heat rejection from alternator, kW (Btu/min)	33 (1854)
Emissions (Nominal)[2]	
NOx, mg/Nm³ (g/hp-hr)	2703.5 (5.5)
CO, mg/Nm³ (g/hp-hr)	161.0 (0.3)
HC, mg/Nm³ (g/hp-hr)	4.6 (0.01)
PM, mg/Nm³ (g/hp-hr)	13.2 (0.03)

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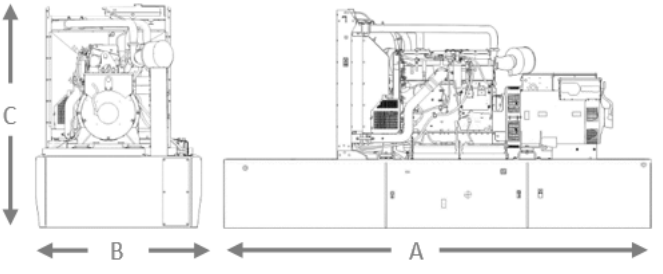
Electric Power

Alternator[3]		
Voltages	480V	600V
Motor starting capability @ 30% Voltage Dip, skVA	1438	1494
Current Amps	902.1	721.7
Frame Size	M3154L41	M3156L41
Excitation	S.E	AREP
Temperature Rise, °C	105	130

WEIGHTS & DIMENSIONS – OPEN SET



FUEL TANK CAPACITY

Tank Design	Total Capacity L (gal)	Useable Capacity L (gal)
Integral	4292 (1133.8)	3889 (1027.3)

Base	Length "A" mm (in)	Width "B" mm (in)	Height "C" mm (in)	Generator Set Weight kg (lb)
Skid (Wide Base)	4980 (196.1)	1865 (73.4)	2009 (79.1)	4064 (8959.6)
Integral Tank Base	4980 (196.1)	1865 (73.4)	2563 (100.9)	5200 (11647.0)

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

APPLICABLE CODES AND STANDARDS:

AS1359, CSA C22.2 No100-04, UL142, UL489, UL869, UL2200, NFPA37, NFPA70, NFPA99, NFPA110, IBC, IEC60034-1, ISO3046, ISO8528, NEMA MG1-22, NEMA MG1-33, 2006/95/EC, 2006/42/EC, 2004/108/EC.
Note: Codes may not be available in all model configurations. Please consult your local Cat Dealer representative for availability.

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: Ratings are based on SAE J1349 standard conditions. These ratings also apply at ISO3046 standard conditions.

FUEL RATES: Based on fuel oil of 35° API [16° C (60° F)] gravity having an LHV of 42 780 kJ/kg (18,390 Btu/lb) when used at 29° C (85° F) and weighing 838.9 g/litre (7.001 lbs/U.S. gal.). Additional ratings may be available for specific customer requirements, contact your Caterpillar representative for details.
For information regarding Low Sulfur fuel and Biodiesel capability, please consult your Cat dealer.

DEFINITIONS AND CONDITIONS

[1] For ambient and altitude capabilities consult your Cat dealer. Air flow restriction (system) is added to existing restriction from factory.

[2] Emissions data measurement procedures are consistent with those described in EPA CFR 40 Part 89, Subpart D & E and ISO8178-1 for measuring HC, CO, PM, NOx. Data shown is based on steady state operating conditions of 77° F, 28.42 in HG and number 2 diesel fuel with 35° API and LHV of 18,390 BTU/lb. The nominal emissions data shown is subject to instrumentation, measurement, facility and engine to engine variations. Emissions data is based on 100% load and thus cannot be used to compare to EPA regulations which use values based on a weighted cycle.

[3] UL 2200 Listed packages may have oversized generators with a different temperature rise and motor starting characteristics. Generator temperature rise is based on a 40° C ambient per NEMA MG1-32.

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