Cat® D400 GC DIESEL GENERATOR SETS

Standby: 60 Hz, 480V & 600V

Image shown might not reflect actual configuration

Engine Model	Cat® C13 In-line 6, 4-cycle diesel
Bore x Stroke	130mm x 157mm (5.1in x 6.2in)
Displacement	12.5 L (763 in^3)
Compression Ratio	16.3:1
Aspiration	Turbocharged Air-to-Air Aftercooled
Fuel Injection System	MEUI
Governor	Electronic ADEM™ A4

Standby	Performance Strategy
400 ekW, 500 kVA	**EPA Certified for Stationary Emergency Application**

PACKAGE PERFORMANCE

Performance	Standby	
Frequency	60 Hz	
Genset Power Rating	500 kVA	
Gen set power rating with fan @ 0.8 power factor	400 ekW	
Emissions	EPA TIER 3	
Performance Number	EM1694	
Fuel Consumption		
100% load with fan	105.8 L/hr	27.9 gal/hr
75% load with fan	90.7 L/hr	24.0 gal/hr
50% load with fan	66.2 L/hr	17.5 gal/hr
25% load with fan	37.7 l/hr	10.0 gal/hr
Cooling System[1]		
Radiator air flow restriction (system)	0.12 kPa	0.48 in. Water
Radiator air flow	497 m^3/min	17551 cfm
Engine coolant capacity	14.2 L	3.8 gal
Radiator coolant capacity	30 L	8 gal
Total coolant capacity	34 L	12 gal
Inlet Air		
Combustion air inlet flow rate	24.4 m^3/min	966.6 cfm
Max. Allowable Combustion Air Inlet Temp	47 ° C	116 ° F
Exhaust System		
Exhaust stack gas temperature	567.4 ° C	1053.4 ° F
Exhaust gas flow rate	82.0 m^3/min	2894.9 cfm
Exhaust system backpressure (maximum allowable)	10.0 kPa	40.0 in. water
Heat Rejection		
Heat rejection to jacket water	156 kW	8857 Btu/min
Heat rejection to exhaust (total)	398 kW	22607 Btu/min
Heat rejection to aftercooler	71 kW	4023 Btu/min
Heat rejection to atmosphere from engine	52 kW	2945 Btu/min
Heat rejection from alternator	29 kW	1661 Btu/min

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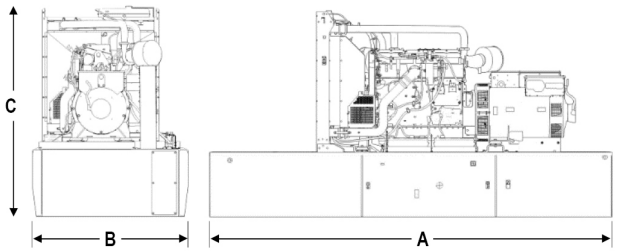
Emissions (Nominal)[2]	Standby	
NOx	2274.7 mg/Nm³	4.58 g/hp-hr
CO	666.9 mg/Nm³	1.35 g/hp-hr
HC	6.2 mg/Nm³	0.01 g/hp-hr
PM	39.4 mg/Nm³	0.10 g/hp-hr
Alternator[3]		
Voltages	**480V**	**600V**
Motor Starting Capability @ 30% Voltage Dip	871	731
Current	601.4	481.1
Frame Size	M3134L4	M3115L4
Excitation	S.E	AREP
Temperature Rise	105°C	130°C

WEIGHTS & DIMENSIONS – OPEN SET



Base	Dim "A" mm (in)	Dim "B" mm (in)	Dim "C" mm (in)	Generator Set Weight kg (lb)
Skid (Wide Base)	4625 (182.8)	1630 (64.2)	2039 (80.3)	3325 (7330.4)
Integral Tank Base	4625 (182.8)	1630 (64.2)	2456 (96.7)	4107 (9054.4)

FUEL TANK CAPACITY

Tank Design	Total Capacity		Useable Capacity	
	Litre	Gallon	Litre	Gallon
Integral	2820	744.9	2553	674.4

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.

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 are 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.

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