Cat® C4.4
Diesel Generator Sets

Image shown may not reflect actual configuration.

Engine Model	Cat® C4.4 In-line 4, 4-cycle diesel
Bore x Stroke	105.0 mm x 127.0 mm (4.13 in x 5.0 in)
Displacement	4.4 L (268.5 in^3)
Compression Ratio	18.2:1
Aspiration	Turbocharged
Fuel Injection System	Common Rail
Governor	Electronic (adjustable)

Model	Standby	Emissions Strategy
D50-4LC	50 ekW, 63 kVA	SCAQMD Complaint (Meets nonroad U.S. EPA Tier 3 equivalent emission standards)

PACKAGE PERFORMANCE

Performance	Standby
Frequency	60Hz
Genset Power Rating	63 kVA
Genset power rating with fan @ 0.8 power factor	50 ekW
Performance Number	P3454A
Fuel Consumption	
100% load with fan, L/hr (gal/hr)	16.8 (4.4)
75% load with fan, L/hr (gal/hr)	12.8 (3.4)
50% load with fan, L/hr (gal/hr)	9.3 (2.5)
Cooling System[1]	
Radiator air flow restriction (system), kPa (in. Water)	0.12 (0.48)
Engine coolant capacity, L (gal)	7.0 (1.8)
Radiator coolant capacity, L (gal)	9.5 (2.5)
Total coolant capacity, L (gal)	16.5 (4.4)
Inlet Air	
Combustion air inlet flow rate, m^3/min (cfm)	5.2 (183.6)
Max. Allowable Combustion Air Inlet Temp, °C (°F)	50 (122)
Exhaust System	
Exhaust stack gas temperature, °C (°F)	559 (1039)
Exhaust gas flow rate, m^3/min (cfm)	12.8 (452.0)
Exhaust system backpressure (maximum allowable), kPa (in. water)	15.0 (60.2)
Heat Rejection	
Heat rejection to coolant, kW (Btu/min)	46.1 (2622)
Heat rejection to exhaust (total), kW (Btu/min)	66.9 (3805)
Heat rejection to atmosphere from engine, kW (Btu/min)	14.9 (847.3)
Emissions (Nominal)[2]	
NOx + HC, g/kW-hr	4.42
CO, g/kW-hr	1.02
PM, g/kW-hr	0.26

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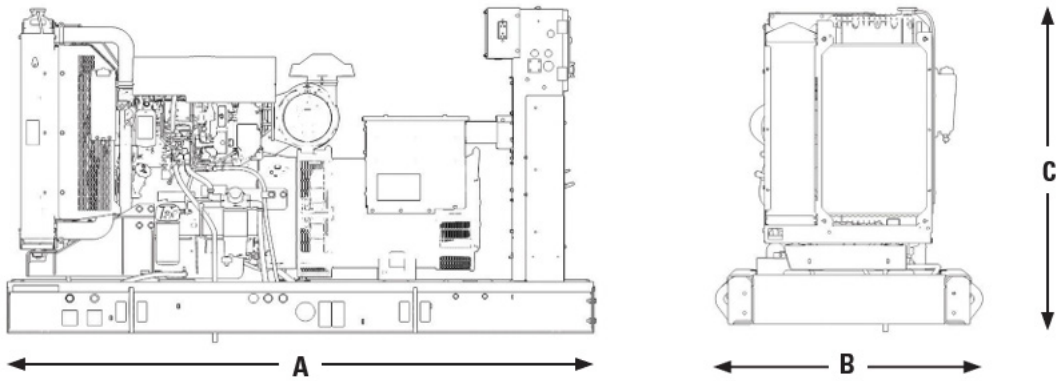
Electric Power

Alternator[3]	
Voltages	480V
Motor starting capability @ 30% Voltage Dip, skVA	131
Temperature Rise, °C	105
Frame Size	LC1514N
Excitation	Self Excited

WEIGHTS & DIMENSIONS



Length "A" mm (in)	Width "B" mm (in)	Height "C" mm (in)	Dry Weight kg (lb)
1972 (77.6)	1000 (39.4)	1175 (46.3)	981 (2163)

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, ISO 3046, ISO 8528, 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.

PRIME: Output available with varying load for an unlimited time. Average power output is 70% of the prime power rating. Typical peak demand is 100% of prime rated ekW with 10% overload capability for emergency use for a maximum of 1 hour in 12. Overload operation cannot exceed 25 hours per year.

RATINGS: Ratings are based on SAE J1349 standard conditions. These ratings also apply at ISO 3046 standard conditions.

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 ISO 8178-1 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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