Cat® C4.4 DIESEL GENERATOR SETS



Standby & Prime: 60 Hz, 480V (3Ph) & 240V (1Ph)



Engine Model	Cat® C4.4 In-line 4, 4-cycle diesel
Bore x Stroke	105mm x 127mm (4.1in x 5.0 in)
Displacement	4.4 L (269 in³)
Compression Ratio	16.7:1
Aspiration	Turbocharged
Fuel Injection System	Common Rail

Standby	Prime	Performance Strategy	
100 ekW	90 ekW	EPA TIER III	

PACKAGE PERFORMANCE

Performance	Star	Standby		Prime	
	3-Phase	1-Phase	3-Phase	1-Phase	
Genset power rating	125 kVA	100 kVA	113 kVA	90 kVA	
Genset power rating with fan @ 0.8 power factor	100 ekW	100 ekW	90 ekW	90 ekW	
Performance number	P4514A	P4514A	P4514C	P4514C	
Fuel Consumption					
100% Load with fan	28.8 L/hr, 7.6 gal/hr	29.1 L/hr, 7.7 g/hr	26.6 L/hr, 7.0 gal/hr	26.9 L/hr, 7.1 g/hr	
75% Load with fan	23.2 L/hr, 6.1 gal/hr	23.5 L/hr, 6.2 g/hr	21.4 L/hr, 5.7 gal/hr	21.7 L/hr, 5.7 g/hr	
50% Load with fan	17.2 L/hr, 4.5 gal/hr	17.5 L/hr, 4.6 g/hr	15.9 L/hr, 4.2 gal/hr	16.2 L/hr, 4.3 g/hr	
Cooling System ¹					
Radiator air flow restriction (system)	0.12 kPa 0.4	0.12 kPa 0.48 in. water		0.12 kPa 0.48 in. wate	
Engine coolant capacity	7.0 L 1	7.0 L 1.8 gal		7.0 L 1.8 gal	
Radiator coolant capacity	10.0 L	10.0 L 2.6 gal		10.0 L 2.6 gal	
Total coolant capacity	17.0 L,	17.0 L, 4.4 gal		17.0 L, 4.4 gal	
Inlet Air					
Combustion air inlet flow rate	8.82 m³/min, 311 cfm	8.82 m³/min, 311 cm	8.64 m³/min, 305 cfm	8.64 m³/min, 305 cfm	
Max. allowable combustion air inlet temp		45°C, 113°F			
Exhaust System					
Exhaust stack gas temperature	659°C, 1218°F	659°C, 1218°F	634°C, 1173°F	634°C, 1173°F	
Exhaust gas flow rate	20.2 m³/min, 712 cfm	20.2 m³/min, 712 cfm	19.5 m³/min, 688 cfm	19.5 m³/min, 688 cfm	
Exhaust system backpressure (maximum allowable)	15.0 kPa, 60.2 in. water	15.0 kPa, 60.2 in water	15.0 kPa, 60.2 in. water	15.0 kPa, 60.2 in wate	
Exhaust flange size (internal diameter)	64.0 mm, 2.5 in	64 mm, 2.5 in	64.0 mm, 2.51 in	64 mm, 2.51 in	
Heat Rejection					
Heat rejection to coolant (total)	54.9 kW, 3122 Btu/min	54.9 kw, 3122 Btu/min	50.6 kW, 2878 Btu/min	50.6 kw, 2878 Btu/mir	
Heat rejection to exhaust (total)	91.3 kW, 5192 Btu/min	91.3 kw, 5192 Btu/min	86.3 kW, 4908 Btu/min	86.3 kw, 4908 Btu/mir	
Heat rejection to atmosphere from Engine	15.6 kW, 887 Btu/min	15.6 kw, 887 Btu/min	14.4 kW, 819 Btu/min	14.4 kw, 819 Btu/min	
Heat rejection from alternator	8.3 kW, 472 Btu/min	11.1 kw, 631.2 Btu/min	8.3 kW, 472 Btu/min	9.8 kw, 557.3 Btu/mir	
Lube System	· 				
Sump refill with filter	8.4 L, 2.2 gal	8.4 L, 2.2 gal	8.4 L, 2.2 gal	8.4 L, 2.2 gal	

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Emissions (Nominal) ²	Standby		Prime	
	3-Phase	1-Phase	3-Phase	1-Phase
NOx + HC	3.6 g/kW-hr	3.6 g/kW-hr	3.6 g/kW-hr	3.6 g/kW-hr
CO	0.9 g/kW-hr	0.9 g/kW-hr	0.9 g/kW-hr	0.9 g/kW-hr
PM	0.12 g/kW-hr	0.12 g/kW-hr	0.12 g/kW-hr	0.12 g/kW-hr
Alternator ³				
Voltages	480V	240V	480V	240V
Motor starting capability @ 30% Voltage Dip	215 skVA	229 skVA	215 skVA	229 skVA
Frame Size	LC3114D	LCB3114F	LC3114D	LCB3114F
Excitation	Self Excited	Self Excited	Self Excited	Self Excited
Temperature Rise	150°C, 270°F	130°C, 234°F	125°C, 225°F	105°C, 189°F

DEFINITIONS AND CONDITIONS

APPLICABLE CODES AND STANDARDS:

AS1359, CSA C22.2 No 100-04, UL142, UL489, UL601, UL869, UL2200, NFPA 37, NFPA 70, NFPA 99, NFPA 110, IBC,IEC60034-1, ISO3046, ISO8528, NEMA MG 1-22, NEMA MG 1-33, 72/23/EEC, 98/37/EC, 2004/108/EC.

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.

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

Fuel Rates are based on fuel oil to specification EPA 2D 89.330-96 with a density of 0.845 – 0.850 kg/L (7.052 – 7.094 lbs/U.S. gal.) @ 15°C (59°F) and fuel inlet temperature 40°C (104°F). Additional ratings may be available for specific customer requirements, contact your Cat representative for details.

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BUILT FOR IT.

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

² The nominal emissions data shown is subject to instrumentation, measurement, facility and engine to engine variations. Emissions data is based on 100% Prime load. This information should not be used for permitting purposes and is subject to change without notice. Contact your Caterpillar dealer for further details.

³ Generator temperature rise is based on a 40°C (104°F) ambient per NEMA MG1-32