Cat® C9 DIESEL GENERATOR SETS



Standby & Prime: 60Hz



Image shown might not reflect actual configuration

Engine Model	Cat® C9 In-line 6, 4-cycle Diesel
Bore x Stroke	112 mm x 149 mm (4.4 in x 5.9 in)
Displacement	8.8 L (538 in ³)
Compression Ratio	16.1:1
Aspiration	Turbocharged Air-to-Air Aftercooled
Fuel Injection System	HEUI
Governor	Electronic ADEM™ A4 - G3 Class* capable

Model	Standby	Prime	Emission Strategy
C 9	300 ekW, 375 kVA	275 ekW, 344 kVA	TIER III Non-Road

PACKAGE PERFORMANCE

Performance	Standby	Prime
Frequency	60	Hz
Genset Power Rating	375 kVA	344 kVA
Genset power rating with fan @ 0.8 pf	300 ekW	275 ekW
Emissions	TIER III N	Ion-Road
Performance Number	DM8168	DM8500
Fuel Consumption		
100% load with fan, L/hr (gal/hr)	84.1 (22.2)	77.9 (20.5)
75% load with fan, L/hr (gal/hr)	65.3 (17.2)	62.0 (16.3)
50% load with fan, L/hr (gal/hr)	50.3 (13.2)	48.9 (12.9)
25% load with fan, L/hr (gal/hr)	32.3 (8.5)	31.7 (8.3)
Cooling System ¹		
Radiator air flow restriction (system), kPa (in. water)	0.12 (0.48)	0.12 (0.48)
Radiator air flow, m³/min (CFM)	497 (17551)	497 (17551)
Engine coolant capacity, L (gal)	13.9 (3.7)	13.9 (3.7)
Radiator coolant capacity, L (gal)	43 (11.5)	43 (11.5)
Total coolant capacity, L (gal)	57 (15)	57 (15)
Inlet Air		
Combustion air inlet flow rate, m³/min (CFM)	26.0 (916.6)	25.3 (891.8)
Max. Allowable Combustion Air Inlet Temp, °C (°F)	50 (123)	51 (124)
Exhaust System		
Exhaust stack gas temperature, °C (°F)	497.3 (927.2)	495.7 (924.2)
Exhaust gas flow rate, m³/min (CFM)	69.7 (2460.9)	67.4 (2379.6)
Exhaust system backpressure (maximum allowable), kPa (in. water)	10.0 (40.0)	10.0 (40.0)
Heat Rejection		
Heat rejection to jacket water, kW (BTU/min)	120 (6838)	113 (6431)
Heat rejection to exhaust (total), kW (BTU/min)	320 (18223)	307 (17454)
Heat rejection to aftercooler, kW (BTU/min)	92 (5239)	83 (4726)
Heat rejection to atmosphere from engine, kW (BTU/min)	23 (1312)	18 (1009)

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Emissions (Nominal) ²	Standby	Prime
NOx, mg/Nm³ (g/hp-hr)	2196.0 (4.0)	1975.0 (3.6)
CO, mg/Nm³ (g/hp-hr)	115.5 (0.2)	103.9 (0.2)
HC, mg/Nm³ (g/hp-hr)	23.1 (0.06)	23.2 (0.06)
PM, mg/Nm³ (g/hp-hr)	12.7 (0.03)	10.5 (0.03)

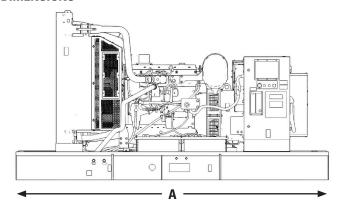
Alternator ³									
Duty Cycle		Standby			Prime				
Phase		3-Phase			3-Phase				
Voltages, V		208 240 480 600		208	240	480	600		
Current, Amps	Current, Amps 1041		902	451	361	954	827	414	331
Frame: LC6124B	Temperature Rise @ 40°C	105	105	105	105	80	80	80	80
Excitation: AREP	Motor Starting Capability @ 30% Voltage Dip, skVA	812	1055	1055	1057	812	1055	1055	1057
Frame: LC5024L Excitation: AREP	Temperature Rise @ 40°C	150	130	130	150	125	105	105	125
	Motor Starting Capability @ 30% Voltage Dip, skVA	818	1044	1044	1074	818	1044	1044	1074
Frame: LC5024J	Temperature Rise @ 40°C		150	150	150		125	125	125
Excitation: AREP	Motor Starting Capability @ 30% Voltage Dip, skVA		816	816	754		816	816	754
Frame: LC6114B	Temperature Rise @ 40°C	105	105	105		80	80	80	
Excitation: SE	Motor Starting Capability @ 30% Voltage Dip, skVA	677	880	880		677	880	880	
Frame: LC5014J Excitation: SE	Temperature Rise @ 40°C		150	150			125	125	
	Motor Starting Capability @ 30% Voltage Dip, skVA		683	683			683	683	
Frame: LC5014L	Temperature Rise @ 40°C	150	150	150		125	125	125	
Excitation: SE	Motor Starting Capability @ 30% Voltage Dip, skVA	681	869	869		681	869	869	

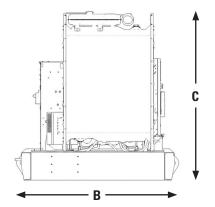
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WEIGHTS & DIMENSIONS





Dim "A" mm (in)	Dim "B" mm (in)	Dim "C" mm (in)	Dry Weight kg (lb)
3091 (122)	1622 (64)	2066 (82)	2313 (5100)

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.

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 ISO3046 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 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.
- * Governing Class capability as per ISO8528-5. Consult your local Cat dealer for configuration and site specific transient performance classification.

LET'S DO THE WORK.