### C9 ACERT 275 ekW/ 344 kVA/ 60 Hz/ 1800 rpm/ 600 V/ 0.8 Power Factor



# Rating Type: PRIME

Emissions: U.S. EPA Certified for Stationary Emergency Use Only (Tier 3 Nonroad Equivalent Emission Standards)

**C9 ACERT** 

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Image shown may not reflect actual configuration

	Metric	English
Package Performance		
Genset Power Rating with Fan @ 0.8 Power Factor	275 ekW	
Genset Power Rating	344 kVA	
Aftercooler (Separate Circuit)	N/A	N/A
Fuel Consumption		
100% Load with Fan	80.5 L/hr	21.3 gal/hr
75% Load with Fan	64.0 L/hr	16.9 gal/hr
50% Load with Fan	50.5 L/hr	13.3 gal/hr
25% Load with Fan	32.8 L/hr	8.7 gal/hr
Cooling System <sup>1</sup>		
Engine Coolant Capacity	13.9 L	3.7 gal
Inlet Air		
Combustion Air Inlet Flow Rate	25.3 m³/min	891.8 cfm
Max. Allowable Combustion Air Inlet Temp	51 ° C	124 ° F
Exhaust System		
Exhaust Stack Gas Temperature	495.7 ° C	924.2 ° F
Exhaust Gas Flow Rate	67.4 m³/min	2379.6 cfm
Exhaust System Backpressure (Maximum Allowable)	10.0 kPa	40.0 in. water

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Heat Rejection		
Heat Rejection to Jacket Water	113 kW	6431 Btu/min
Heat Rejection to Exhaust (Total)	307 kW	17454 Btu/min
Heat Rejection to Aftercooler	83 kW	4726 Btu/min
Heat Rejection to Atmosphere from Engine	18 kW	1009 Btu/min
Heat Rejection to Atmosphere from Generator	20 kW	1120 Btu/min

Alternator <sup>2</sup>		
Motor Starting Capability @ 30% Voltage Dip	754 skVA	
Current	331 amps	
Frame Size	LC5024J	
Excitation	AR	
Temperature Rise	125 ° C	

Emissions (Nominal) <sup>3</sup>		
NOx	1975.0 mg/Nm <sup>3</sup>	3.6 g/hp-hr
CO	103.9 mg/Nm <sup>3</sup>	0.2 g/hp-hr
HC	23.2 mg/Nm <sup>3</sup>	0.1 g/hp-hr
PM	10.5 mg/Nm <sup>3</sup>	0.0 g/hp-hr

# **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. 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.
- 3. 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.

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### 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.

**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 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/liter (7.001 lbs/U.S. gal.). Additional ratings may be available for specific customer requirements, contact your Cat representative for details. For information regarding Low Sulfur fuel and Biodiesel capability, please consult your Cat dealer.

www.Cat-ElectricPower.com

Performance No.: DM8500-05 Feature Code: C09DE48 Generator Arrangement: 4490581 Date: 02/09/2016 Source Country: U.S.

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