

Standby & Prime: 50 Hz, 230, 380, 400V & 415V



Image shown might not reflect actual configuration.

Engine Model	Cat® C9 ACERT™ 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 in³)
Compression Ratio	16.1:1
Aspiration	Turbocharged Air-to-Air Aftercooled
Fuel Injection System	HEUI
Governor	Electronic ADEM™ A4

Model	Standby	Prime	Prime
DE275E0	275 kVA, 220 ekW	250 kVA, 200 ekW	Non-Certified Emissions

PACKAGE PERFORMANCE

Performance	Standby	Prime
Frequency	50 Hz	
Genset Power Rating	275 kVA	250 kVA
Gen set power rating with fan @ 0.8 power factor	220 ekW	200 ekW
Fuelling strategy	Non-Certified Emissions	
Performance Number	EM0878	EM1035
Fuel Consumption		
100% load with fan, L/hr (gal/hr)	55.7 (14.7)	50.7 (13.4)
75% load with fan, L/hr (gal/hr)	42.6 (11.3)	39.0 (10.3)
50% load with fan , L/hr (gal/hr)	30.5 (8.1)	28.2 (7.4)
25% load with fan , L/hr (gal/hr)	18.8 (5.0)	17.7 (4.7)
Cooling System¹		
Radiator air flow restriction (system), kPa (in. Water)	0.12 (0.48)	
Radiator air flow, m³/min (cfm)	409 (14443)	
Engine coolant capacity, L (gal)	13.9 (3.7)	
Radiator coolant capacity, L (gal)	43 (11.5)	
Total coolant capacity, L (gal)	56.9 (15.2)	
Inlet Air		
Combustion air inlet flow rate, m³/min (cfm)	16.1 (537)	15.2 (537)
Max. Allowable Combustion Air Inlet Temp, °C (°F)	48 (118)	
Exhaust System		
Exhaust stack gas temperature, °C (°F)	470 (879)	471 (880)
Exhaust gas flow rate, m³/min (cfm)	38.8 (1371)	39.1 (1381)
Exhaust system backpressure (maximum allowable), kPa (in. Water)	10.0 (40.0)	
Exhaust System		
Heat rejection to jacket water, kW (Btu/min)	111 (6312)	103 (5857)
Heat rejection to exhaust (total), kW (Btu/min)	177 (10065)	162 (9212)
Heat rejection to aftercooler, kW (Btu/min)	30.4 (1729)	27.6 (1570)
Heat rejection to atmosphere from engine, kW (Btu/min)	38 (2161)	32.8 (1865)

Emissions (Nominal) ²		Standby		Prime	
NOx, mg/Nm ³ (g/hp-hr)		4407(9.1)		4216 (8.8)	
CO, mg/Nm ³ (g/hp-hr)		845 (1.76)		717 (1.5)	
HC, mg/Nm ³ (g/hp-hr)		15 (0.04)		14.4 (0.03)	
PM, mg/Nm ³ (g/hp-hr)		33 (0.09)		30.6 (0.08)	
Alternator ³		Standby		Prime	
Voltages		230V	380V	400V	415V
Motor Starting Capability @ 30% Voltage Dip		546 skVA	493 skVA	546 skVA	588 skVA
Current, amps		690	403	397	362
Frame Size		R2475L4			
Excitation		SE			
Temperature Rise, °C (°F)		130 (266)			

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.

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 kW 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.

FUEL RATES: Fuel consumption reported in accordance with ISO3046-1.

LET'S DO THE WORK.™

LEHE20232-00-ISO3046 (02/21)