Cat® C9 DIESEL GENERATOR SETS



Standby & Prime: 50Hz



Image shown might not reflect actual configuration

Engine Model	Cat® C9 ACERT™ In-line 6, 4-cycle diesel
Bore x Stroke	112mm x 149mm (4.4in x 5.9in)
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	Emission Strategy		
DE300E3	300 kVA, 240 ekW	275 kVA, 220 ekW	EU IIIA		

PACKAGE PERFORMANCE

Performance	Standby	Prime
Frequency	50	Hz
Genset Power Rating	300 kVA	275 kVA
Genset power rating with fan @ 0.8 power factor	240 ekW	220 ekW
Emissions	EU	IIIA
Performance Number	EM1548	EM1549
Fuel Consumption		
100% load with fan, L/hr (gal/hr)	64.7 (17.1)	60.5 (16)
75% load with fan, L/hr (gal/hr)	52.2 (13.8)	48.8 (12.9)
50% load with fan, L/hr (gal/hr)	38.6 (10.2)	35.9 (9.5)
25% load with fan, L/hr (gal/hr)	24.22 (6.4)	22.7 (6.0)
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)	438 (15467)	438 (15467)
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)	56.9 (15.2)	56.9 (15.2)
Inlet Air		
Combustion air inlet flow rate, m³/min (cfm)	16.7 (592)	16 (567)
Max. Allowable Combustion Air Inlet Temp, °C (°F)	48 (118)	48 (118)
Exhaust System		
Exhaust stack gas temperature, °C (°F)	487 (908)	487 (908)
Exhaust gas flow rate, m³/min (cfm)	43 (1516)	43 (1516)
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)	101 (5744)	95 (5411)
Heat rejection to exhaust (total) kW (Btu/min)	216 (12292)	209 (11880)
Heat rejection to aftercooler, kW (Btu/min)	45.5 (2588)	40.6 (2310)
Heat rejection to atmosphere from engine, kW (Btu/min)	47.5 (2699)	44 (2502)

LEHE1610-02 1/2

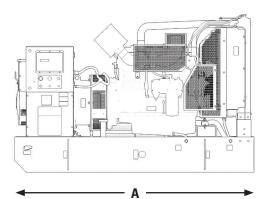
Cat® C9 DIESEL GENERATOR SETS

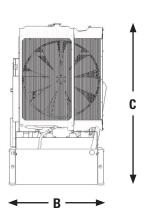


Emissions (Nominal) ²	Standby	Prime
NOx, mg/Nm³ (g/hp-hr)	2360 (4.97)	2515 (4.6)
CO, mg/Nm³ (g/hp-hr)	652 (1.37)	703 (1.4)
HC, mg/Nm³ (g/hp-hr)	16.7 (0.04)	14.6 (0.04)
PM, mg/Nm³ (g/hp-hr)	11.7 (0.03)	14.4 (0.04)
Alternator ³		

Alternator ³				
Voltages	230V	380V	400V	415V
Motor starting capability @ 30% Voltage Dip	827 skVA	746 skVA	827 skVA	886 skVA
Current	753 amps	456 amps	433 amps	417 amps
Frame Size	A2658L4	A2658L4	A2658L4	A2658L4
Excitation	SE	SE	SE	SE
Temperature Rise	125°C	125°C	125°C	125°C

WEIGHTS & DIMENSIONS





Note: General configuration not to be used for installation. See general dimension drawings for detail.

Dim "A" mm (in)	Dim "B" mm (in)	Dim "C" mm (in)	Dry Weight kg (lb)
2662 (89)	1030 (41)	1754 (69)	2110 (4652)

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 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.

LET'S DO THE WORK.

Cat® C9 Enclosures





Image shown might not reflect actual configuration

C9 ACERT™ Sound Attenuated Level 1 & Level 2 Enclosures

50 Hz: 230 – 330 kVA

60 Hz: 180 - 300 ekW

Features

Robust/Highly Corrosion Resistant Construction

- Galvanized steel construction
- Factory installed on integral fuel tank base
- Environmentally friendly, polyester powder baked paint
- Compression door latches giving solid door seal
- Zinc-plated or black-coated stainless-steel fasteners
- Internally-mounted critical exhaust silencing system
- All-round overhanging base to protect enclosure (Lvl-1, Lvl2: 275-330 kVA)
- High grade engineering thermoplastic corner posts for protection

Excellent Access

- Large cable entry area for installation ease
- Accommodates side mounted breaker and control panel
- Vertically-hinged double doors on both sides
- Removable ducts providing maintenance access with enclosure in place.
- Lube oil and coolant drains piped to base frame side rail, on exterior.
- · Radiator fill cover

Security and Safety

- · Lockable access doors which give full access to control panel and breaker
- Cooling fan and battery charging alternator fully guarded
- Fuel fill, oil fill, and battery can only be reached via lockable access
- Externally-mounted emergency stop button
- Designed for spreader-bar lifting to ensure safety
- Control panel viewing window
- Stub-up area is rodent proof.

Options

- Caterpillar yellow or white paint
- Integral dual wall fuel tank base for total fluid containment (fuel, oil, and coolant) DEFRA compliant (Lvl-1, Lvl2: 275-330 kVA)
- Integral lifting frame

LEHE1856-04 1/3

Cat® C9 Enclosures



Enclosure Package Operating Characteristics

A. Sound Attenuated-Level 1

				;	Sound Pressu	re Levels dB	Air Flow Rate		Ambient Capability		
Model	Hz	kVA	SB/PP	1m (1m (3.3ft) 7m (23ft)		All Flow hate		@100% Load		
				75% Load	100% Load	75% Load	100% Load	m³/s	cfm	°C	°F
DE250E0	50	250	SB	83	84	73	74	4.5	9535	47	117
DEZOUEU	50	230	PP	83	84	73	74	4.5	9535	50	122
DE275E0	50	275	SB	83	84	73	74	4.5	9535	44	111
DEZ/SEU	50	250	PP	83	84	73	74	4.5	9535	47	117
DE200SE0	60	250	SB	88	88	78	79	6.0	12173	52	125
DEZUUSEU	60	225	PP	88	88	78	79	6.0	12173	55	131
DE250SE0	60	313	SB	88	89	79	79	6.0	12173	45	112
DEZ3USEU	60	281	PP	88	89	78	79	6.0	12173	48	119

Note: Sound level measurements are subject to instrumentation, installation and manufacturing variability, as well as ambient site conditions.

B. Sound Attenuated-Level 2

	Sound Pressure Levels dBA						A	Air Fla	w Rate	Ambient Capability	
Model	Hz	kVA	SB/PP	1m (3.3ft)	7m (23ft)	All Flu	w nate	@1009	% Load
				75% Load	100% Load	75% Load	100% Load	m³/s	cfm	°C	°F
DE250E0	50	250	SB	75.2	76.0	67.3	68.5	4.6	9747	49	121
DEZOUEU	50	230	PP	75.0	75.8	67.1	68.1	4.6	9747	52	125
DE275E0	50	275	SB	75.5	76.3	67.7	68.9	4.6	9747	47	116
DEZIJEU	50	250	PP	75.2	76.0	67.3	68.5	4.6	9747	49	121
DE275E3	50	275	SB	75.0	76.6	67.6	69.3	4.6	9747	49	120
DEZIJEJ	50	250	PP	74.7	76.0	67.1	68.7	4.6	9747	52	126
DE300E0	50	300	SB	75.7	76.6	68.0	69.3	4.6	9747	44	111
DESCOLO	50	275	PP	75.5	76.3	67.7	68.9	4.6	9747	47	116
DE300E3	50	300	SB	75.4	77.2	68.1	70.0	4.6	9747	46	114
DESUUES	50	275	PP	75.0	76.6	67.6	69.3	4.6	9747	49	120
DE330E0	50	330	SB	76.0	76.9	68.4	69.7	4.6	9747	40	104
DESSUE	50	300	PP	75.7	76.6	68.0	69.3	4.6	9747	44	111
DE200SE0	60	250	SB	77.8	78.8	68.8	70.1	5.5	11654	55	131
DLZUUSLU	60	225	PP	77.6	78.4	68.4	69.6	5.5	11654	57	135
DE250SE0	60	313	SB	78.5	79.8	69.8	71.7	5.5	11654	49	112
DEZJUSEU	60	281	PP	78.2	79.3	69.8	70.9	5.5	11654	53	120
DE275SE0	60	344	SB	78.5	80.3	70.3	72.6	5.5	11654	46	112
DEZISEO	60	313	PP	78.5	79.8	69.8	71.7	5.5	11654	50	120
DE300SE0	60	375	SB	79.3	80.9	70.9	73.6	5.5	11654	43	109
DEJUUJEU	60	338	PP	78.8	80.2	70.9	73.6	5.5	11654	47	116
DE300SE3	60	375	SB	79.7	81.3	70.2	72.4	5.5	11654	44	111
DEJUUJEJ	60	338	PP	79.2	80.6	71.3	73.3	5.5	11654	48	118

LEHE1856-04 2/3

Cat® C9 Enclosures



Weights & Dimensions

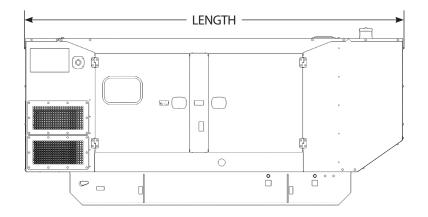
A. Level 1

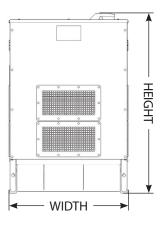
Model	Wei	ght*	Genset Overall Size (mm)		
Wodel	Kg	lb	Length Width		Height
DE200SE0	2423	5395	3988	1208	1779
DE250E0, DE275E0, DE250SE0	2447	5395	3988	1208	1779

B. Level 2

Model	Wei	ght*	Genset Overall Size (mm)			
	Kg	lb	Length	Width	Height	
DE200SE0	2770	6106	3981	1410	2032	
DE250E0, DE275E0, DE250SE0	2859	6303	3981	1410	2032	
DE275E3, DE300E3, DE300E0	3404	7505	3981	1410	2032	
DE330E0	3524	7769	3981	1410	2032	
DE275SE0, DE300SE0, DE330SE3	3404	7769	3981	1410	2032	

^{*}Weight with lube oil, coolant, no fuel. Exact weight is dependent on options.





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