Cat[®] C9 DIESEL GENERATOR SETS



Standby & Prime: 50Hz



Engine ModelCat® C9 ACERT™ In-line 6, 4-cycle dieselBore x Stroke112mm x 149mm (4.4in x 5.9in)Displacement8.8 L (538 in³)Compression Ratio16.1:1AspirationTurbocharged Air-to-Air AftercooledFuel Injection SystemHEUIGovernorElectronic ADEM™ A4 - G3 Class* capable

Image shown might not reflect actual configuration

Model	Standby	Prime	Emission Strategy
DE300E0	300 kVA, 240 ekW	275 kVA, 220 ekW	Non-Certified Emissions

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	Non-Certifie	d Emissions	
Performance Number	EM0877	EM1034	
Fuel Consumption			
100% load with fan, L/hr (gal/hr)	64.3 (17)	59 (15.6)	
75% load with fan, L/hr (gal/hr)	48.4 (12.8)	44.6 (11.8)	
50% load with fan, L/hr (gal/hr)	34.4 (9.1)	32.1 (8.5)	
25% load with fan, L/hr (gal/hr)	20.8 (5.5)	19.6 (5.2)	
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 (14443)	438 (14443)	
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, m ³ /min (cfm)	16.5 (584)	15.7 (557)	
Max. Allowable Combustion Air Inlet Temp, °C (°F)	48 (118)	48 (118)	
Exhaust System			
Exhaust stack gas temperature, °C (°F)	551 (1024)	545 (1012)	
Exhaust gas flow rate, m ³ /min (cfm)	48.2 (1704)	45.3 (1600)	
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)	115 (6565)	110 (6255)	
Heat rejection to exhaust (total) kW (Btu/min)	217 (12320)	200 (11341)	
Heat rejection to aftercooler, kW (Btu/min)	46 (2592)	40 (2280)	
Heat rejection to atmosphere from engine, kW (Btu/min)	27 (1559)	25.3 (1441)	

Cat[®] C9 DIESEL GENERATOR SETS



Emissions (Nominal) ²	Standby		Prime	
NOx, mg/Nm ³ (g/hp-hr)	3322 (6.8)		3638 (7.3)	
CO, mg/Nm ³ (g/hp-hr)	892 (1.8)		687.5 (1.42)	
HC, mg/Nm ³ (g/hp-hr)	11.9 (0.03)		13.1 (0.03)	
PM, mg/Nm ³ (g/hp-hr)	28.4 (0.07)		30.4 (0.08)	
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.
- * Governing Class capability as per ISO8528-5.Consult your local Cat dealer for configuration and site specific transient performance classification.



LEHE1616-03 (10/24)

www.cat.com/electricpower

© 2024 Caterpillar, All Rights Reserved.

Materials and specifications are subject to change without notice. The International System of Units (SI) is used in this publication. CAT, CATERPILLAR, LET'S DO THE WORK, their respective logos, "Caterpillar Corporate Yellow", the "Power Edge" and Cat "Modern Hex" trade dress as well as corporate and product identity used herein, are trademarks of Caterpillar and may not be used without permission.