Cat® C1.1 DIESEL GENERATOR SETS



Standby & Prime: 380/220V, 400/230V, 415/240V, 50Hz and 220/127V, 60 Hz



Engine Model	Cat® C1.1 In-line 3, 4-cycle diesel
Bore x Stroke	77 mm x 81 mm (3.0 in x 3.2 in)
Displacement	1.1 L (69 in³)
Compression Ratio	23:1
Aspiration	Naturally Aspirated
Fuel Injection System	Inline
Governor	Mechanical

	Model	Standby		Prime		Performance Strategy
	DE9.5E3	50 Hz	60 Hz	50 Hz	60 Hz	EU IIIA
		9.5 kVA	11.0 kVA	8.5 kVA	10.0 kVA	LO IIIA

PACKAGE PERFORMANCE

Performance		Standby	Pr	ime
Frequency	50 Hz	60 Hz	50 Hz	60 Hz
Genset Power Rating	9.5 kVA	11.0 kVA	8.5 kVA	10.0 kVA
Gen set power rating with fan @ 0.8 power factor	7.6 ekW	8.8 ekW	6.8 ekW	8.0 ekW
Fuelling strategy	EU IIIA	EU IIIA	EU IIIA	EU IIIA
Fuel Consumption				
110% Load with Fan	NA	NA	2.9 L/hr, 0.8 gal/hr	3.4 L/hr, 0.9 gal/hr
100% Load with Fan	2.9 L/hr, 0.8 gal/hr	3.4 L/hr, 0.9 gal/hr	2.6 L/hr, 0.7 gal/hr	3.0 L/hr, 0.8 gal/hr
75% Load with Fan	2.1 L/hr, 0.6 gal/hr	2.4 L/hr, 0.6 gal/hr	2.0 L/hr, 0.5 gal/hr	2.2 L/hr, 0.6 gal/hr
50% Load with Fan	1.6 L/hr, 0.4 gal/hr	1.8 L/hr, 0.5 gal/hr	1.5 L/hr, 0.4 gal/hr	1.8 L/hr, 0.5 gal/hr
Cooling System ¹				
Radiator air flow restriction (system)	125 Pa, 0.5 in. Water	125 Pa, 0.5 in. Water	125 Pa, 0.5 in. Water	125 Pa, 0.5 in. Water
Radiator air flow	24.0 m³/min, 848 cfm	32.7 m ³ /min,1155 cfm	24.0 m³/min, 848 cfm	32.7 m³/min,1155 cfm
Total coolant capacity	5.2 L, 1.4 gal	5.2 L, 1.4 gal	5.2 L, 1.4 gal	5.2 L, 1.4 gal
Inlet Air				
Combustion air inlet flow rate	0.7 m³/min, 25 cfm	0.9 m³/min, 32 cfm	0.7 m³/min, 25 cfm	0.9 m³/min, 32 cfm
Max. Allowable Combustion Air Inlet Temp	50° C	50° C	50° C	50° C
Exhaust System				
Exhaust stack gas temperature	420° C, 788° F	515° C, 959° F	368° C, 694° F	437° C, 819° F
Exhaust gas flow rate	1.8 m³/min, 64 cfm	2.4 m³/min, 85 cfm	1.7 m³/min, 59 cfm	2.2 m³/min, 78 cfm
Exhaust system backpressure (maximum allowable)	10.2 kPa, 3 in. Hg	10.2 kPa, 3 in. Hg	10.2 kPa, 3 in. Hg	10.2 kPa, 3 in. Hg
Heat Rejection				
Heat Rejection to Jacket Water	9.5 kW, 540 Btu/min	12.0 kW, 682 Btu/min	8.3 kW, 472 Btu/min	10.0 kW, 569 Btu/min
Heat Rejection to Atmosphere from Engine & alternator	4.2 kW, 239 Btu/min	4.9 kW, 279 Btu/min	3.2 kW, 182 Btu/min	4.2 kW, 239 Btu/min

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Alternator ²	50 Hz			60 Hz	
Voltages	415/240V	400/230V	380/220V	220/127V	
Motor Starting Capability @ 30% Voltage Dip	20 kVA	19 kVA	18 kVA	20 kVA	
Current	13.2 amps	13.7 amps	14.4 amps	28.9 amps	
Frame Size	LC1114B				
Excitation	SE				
Temperature Rise	105 ° C				

DEFINITIONS AND CONDITIONS

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

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BUILT FOR IT.

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.