

Cat® C4.4

Diesel Generator Sets



Standby & Prime: 50 Hz



Image shown might not reflect actual configuration

Engine Model	Cat® C3.3 Inline 4-stroke Diesel
Bore x Stroke	105.0 mm x 127.0 mm (4.1 in x 5.0 in)
Displacement	3.3 L (201.4 in³)
Compression Ratio	18.23:1
Aspiration	Turbocharged
Fuel Injection System	Inline
Governor	Mechanical

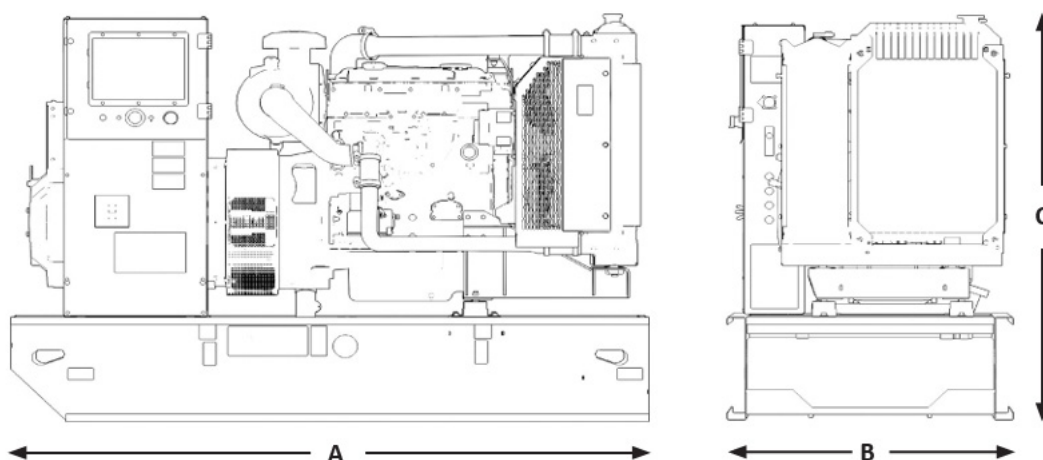
Model	Standby	Prime	Emission Strategy
DE55E3S	50 Hz	50 Hz	EU IIIA
	55.0 kVA (55.0 kW)	50.0 kVA (50.0 kW)	

PACKAGE PERFORMANCE

Performance	Standby	Prime
Frequency	50 Hz	50 Hz
Genset Power Rating	55.0 kVA	50.0 kVA
Genset power rating with fan @ 1.0 power factor	55.0 kW	50.0 kW
Emissions	EU IIIA	
Performance Number	P3908A	
Fuel Consumption		
Fuel Tank Capacity, litres (US gal)	219 (57.9)	
100% load with fan, L/hr (gal/hr)	18.2 (4.8)	16.5 (4.4)
75% load with fan, L/hr (gal/hr)	13.5 (3.6)	12.3 (3.2)
50% load with fan, L/hr (gal/hr)	9.2 (2.4)	8.4 (2.2)
Cooling System¹		
Radiator air flow, m³/min (CFM)	84.0 (2966)	
Total coolant capacity, L (gal)	16.5 (4.4)	
Inlet Air		
Max. Combustion Air Intake Restriction, kPa (in water)	6.0 (24.1)	
Combustion air inlet flow rate, m³/min (CFM)	4.9 (173)	4.7 (166)
Max. Allowable Combustion Air Inlet Temp, °C (°F)	50 (122)	
Exhaust System		
Exhaust stack gas temperature, °C (°F)	627 (1161)	570 (1058)
Exhaust gas flow rate, m³/min (CFM)	12.3 (435)	11.2 (396)
Exhaust system backpressure (maximum allowable), kPa (in water)	12.0 (3.5)	
Heat Rejection		
Heat rejection to jacket water, kW (BTU/min)	46.8 (2661)	47.0 (2673)
Heat rejection to alternator, kW (BTU/min)	5.6 (318)	
Heat rejection to atmosphere from engine, kW (BTU/min)	14.9 (847)	14.0 (796)

Alternator ²						
Duty Cycle		Standby			Prime	
Phase		1-Phase			1-Phase	
Voltages, V		220/110	230/115	240/120	220/110	230/115 240/120
Current, Amps		250	239	229	227	217 208
Frame: LCB3114D Excitation: SE	Temperature Rise @ 40°C	163	163	163	125	125 125
	Motor Starting Capability @ 30% Voltage Dip, skVA	128	136	145	128	136 145
Frame: M2235L4 Excitation: SE	Temperature Rise @ 40°C	130	130	130	105	105 105
	Motor Starting Capability @ 30% Voltage Dip, skVA	128	136	145	128	136 145

WEIGHTS & DIMENSIONS



Dim "A" mm (in)	Dim "B" mm (in)	Dim "C" mm (in)	Dry Weight kg (lb)
1925 (75.8)	1120 (44.1)	1361 (53.6)	1022 (2253)

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

APPLICABLE CODES AND STANDARDS:

AS1359, IEC60034-1, ISO 3046, ISO 8528, NEMA MG1-33, EAC, CE, UKCA.

Note: Codes may not be available in all model configurations. Please consult your Cat dealer 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 ISO 3046 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 Generator temperature rise is based on a 40°C ambient per IEC60034-1.