

Cat® C3.3

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
DE50E2	50 Hz	50 Hz	EU II
	50.0 kVA (40.0 kW)	45.0 kVA (36.0 kW)	

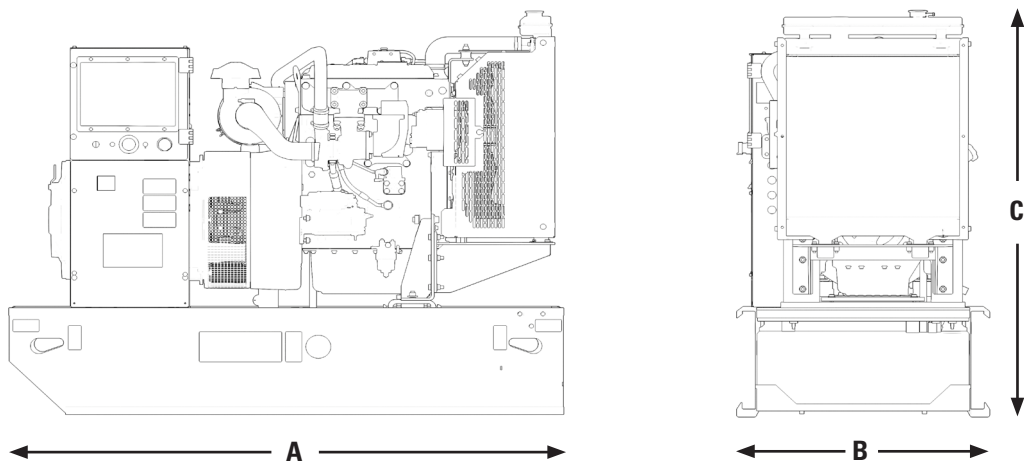
PACKAGE PERFORMANCE

Performance	Standby	Prime
Frequency	50 Hz	50 Hz
Genset Power Rating	50.0 kVA	45.0 kVA
Genset power rating with fan @ 0.8 power factor	40.0 kW	36.0 kW
Emissions	EU II	
Performance Number	P3348A	
Fuel Consumption		
Fuel Tank Capacity, litres (US gal)	219 (57.9)	
100% load with fan, L/hr (gal/hr)	11.9 (3.1)	10.6 (2.8)
75% load with fan, L/hr (gal/hr)	8.9 (2.4)	8.0 (2.1)
50% load with fan, L/hr (gal/hr)	6.2 (1.6)	5.7 (1.5)
Cooling System¹		
Radiator air flow, m³/min (CFM)	62.4 (2204)	
Total coolant capacity, L (gal)	10.2 (2.7)	
Inlet Air		
Max. Combustion Air Intake Restriction, kPa (in water)	5.0 (20.1)	
Combustion air inlet flow rate, m³/min (CFM)	3.1 (109)	2.9 (102)
Max. Allowable Combustion Air Inlet Temp, °C (°F)	50 (122)	
Exhaust System		
Exhaust stack gas temperature, °C (°F)	660 (1220)	610 (1130)
Exhaust gas flow rate, m³/min (CFM)	7.7 (272)	7.0 (247)
Exhaust system backpressure (maximum allowable), kPa (in water)	12.0 (3.5)	
Heat Rejection		
Heat rejection to jacket water, kW (BTU/min)	29.0 (1649)	26.4 (1501)
Heat rejection to alternator, kW (BTU/min)	5.2 (296)	
Heat rejection to atmosphere from engine, kW (BTU/min)	13.7 (779)	12.1 (688)



Alternator ²					
Duty Cycle		Standby		Prime	
Phase		3-Phase		3-Phase	
Voltages, V		400/230	415/240	400/230	415/240
Current, Amps		72	70	65	63
Frame: LC1514L Excitation: SE	Temperature Rise, @ 40°C	163	163	125	125
	Motor Starting Capability @ 30% Voltage Dip, skVA	72	69	72	69
Frame: M1754L4 Excitation: SE	Temperature Rise, @ 40°C	163	163	125	125
	Motor Starting Capability @ 30% Voltage Dip, skVA	69	74	69	74

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)	850 (1873)

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.