Cat® 3.3
Diesel Generator Sets

Standby & Prime: 50 Hz and 60 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	17.25:1
Aspiration	Turbocharged
Fuel Injection System	Inline
Governor	Mechanical

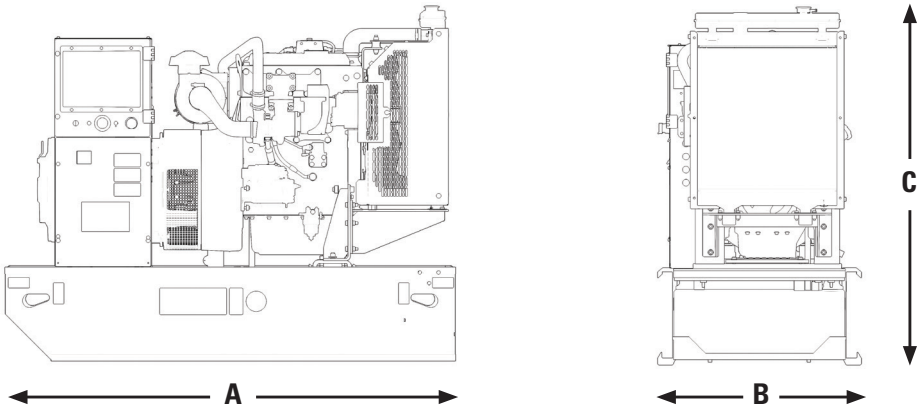
Model	Standby	Prime	Standby	Prime	Emission Strategy
DE55E0	50 Hz		60 Hz		Low BSFC
	55.0 kVA (44 ekW)	50.0 kVA (40 ekW)	62.5 kVA (50 ekW)	56.3 kVA (45 ekW)	

PACKAGE PERFORMANCE

Performance	Standby	Prime	Standby	Prime
Frequency	60 Hz		50 Hz	
Genset Power Rating	62.5 kVA	56.3 kVA	55.0 kVA	50.0 kVA
Genset power rating with fan @ 0.8 power factor	50 kW	45 kW	44 kW	40 kW
Emissions	Low BSFC		Low BSFC	
Performance Number	P2506C	P2506A	P2506D	P2502B
Fuel Consumption				
Fuel Tank Capacity, litres (US gal)	219 (57.9)		219 (57.9)	
100% load with fan, L/hr (gal/hr)	15.1 (4.0)	12.9 (3.4)	12.7 (3.4)	11.7 (3.1)
75% load with fan, L/hr (gal/hr)	11.4 (3.0)	9.7 (2.6)	9.5 (2.5)	8.7 (2.3)
50% load with fan, L/hr (gal/hr)	8.2 (2.2)	7.0 (1.9)	6.7 (1.8)	6.0 (1.6)
Cooling System[1]				
Radiator air flow, m³/min (CFM)	105.6 (3729)		86.4 (3051)	
Total coolant capacity, L (gal)	10.2 (2.7)		10.2 (2.7)	
Inlet Air				
Max. Combustion Air Intake Restriction, kPa (in water)	8.0 (32.1)		8.0 (32.1)	
Combustion air inlet flow rate, m³/min (CFM)	4.9 (173)	3.9 (138)	3.9 (138)	3.1 (109)
Max. Allowable Combustion Air Inlet Temp, °C (°F)	50 (122)		50 (122)	
Exhaust System				
Exhaust stack gas temperature, °C (°F)	564 (1047)	551 (1024)	571 (1060)	537 (999)
Exhaust gas flow rate, m³/min (CFM)	12.5 (441)	9.5 (335)	10.4 (367)	7.7 (272)
Exhaust system back pressure (maximum allowable), kPa (in water)	15.0 (4.4)		10.0 (3.0)	
Heat Rejection				
Heat rejection to jacket water, kW (BTU/min)	43.0 (2445)	34.0 (1934)	38.0 (2161)	30.0 (1706)
Heat rejection to alternator, kW (BTU/min)	5.9 (336)	5.4 (307)	5.4 (307)	5.2 (296)
Heat rejection to atmosphere from engine, kW (BTU/min)	11 (626)	9 (512)	11 (626)	8 (455)

Alternator[3]		50 Hz								60 Hz	
Duty Cycle		Standby				Prime				Standby	Prime
Phase		3-Phase				3-Phase				3-Phase	
Voltages, V		200/115	380/220	400/230	415/240	200/115	380/220	400/230	415/240	380/220	380/220
Current, Amps		159	80	79	77	144	72	72	70	82	74
Frame: M1756L4 Excitation SE	Temperature Rise, °C	163	163	163	163	125	125	125	125	163	125
	Motor Starting Capability 30% Voltage Dip, skVA	23	74	81	86	23	74	81	86	64	64

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)	863 (1902)

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

APPLICABLE CODES AND STANDARDS:

AS1359, IEC60034-1, ISO3046, ISO8528, NEMA MG1-33,EAC,CE,UKCA.

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] Generator temperature rise is based on IEC60034-1.

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