Cat® 4.4
Diesel Generator Sets

Standby & Prime: 50 Hz and 60 Hz

Image shown might not reflect actual configuration

Engine Model	Cat® C4.4 Inline 4-stroke Diesel
Bore x Stroke	105.0 mm x 127.0 mm (4.1 in x 5.0 in)
Displacement	4.4 L (268.5 in³)
Compression Ratio	18.3:1
Aspiration	Turbocharged Air To Air Charge Cooled
Fuel Injection System	Inline
Governor	Electronic

Model	Standby	Prime	Standby	Prime	Emission Strategy
DE110E2	50 Hz		60 Hz		EU II
	110 kVA (88 kW)	100 kVA (80 kW)	125 kVA (100 ekW)	113 kVA (90 ekW)	

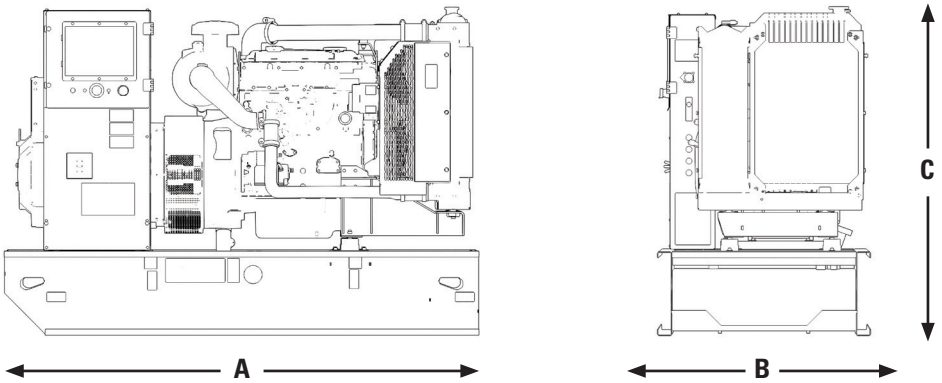
PACKAGE PERFORMANCE

Performance	Standby	Prime	Standby	Prime
Frequency	60 Hz		50 Hz	
Genset Power Rating	125 kVA	113 kVA	110.0 kVA	100.0 kVA
Genset power rating with fan @ 0.8 power factor	100 ekW	90 ekW	88.0 kW	80.0 kW
Emissions	EU II		EU II	
Performance Number	P4514A	P4514C	P2634B	P4520D
Fuel Consumption				
Fuel Tank Capacity, litres (US gal)	250 (66.0)		250 (66.0)	
100% load with fan, L/hr (gal/hr)	27.9 (7.4)	25.8 (6.8)	23.8 (6.3)	21.7 (5.7)
75% load with fan, L/hr (gal/hr)	22.5 (5.9)	20.7 (5.5)	18.0 (4.8)	16.5 (4.4)
50% load with fan, L/hr (gal/hr)	16.7 (4.4)	15.4 (4.1)	12.6 (3.3)	11.7 (3.1)
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)	224 (7910)		188 (6632)	
Total coolant capacity, L (gal)	17.5 (4.6)		17.5 (4.6)	
Inlet Air				
Max. Combustion Air Intake Restriction, kPa (in water)	5.0 (20)		8.0 (32.1)	
Combustion air inlet flow rate, m³/min (CFM)	8.82 (311)	8.64 (305)	6.3 (221)	6.0 (212)
Max. Allowable Combustion Air Inlet Temp, °C (°F)	50 (122)		50 (122)	
Exhaust System				
Exhaust stack gas temperature, °C (°F)	505 (942)	483 (901)	543 (1009)	514 (957)
Exhaust gas flow rate, m³/min (CFM)	20.2 (712)	19.5 (688)	16.3 (576)	15.2 (537)
Exhaust system backpressure (maximum allowable), kPa (in water)	15.0 (60.2)		18.0 (72)	18.0 (72)
Heat Rejection				
Heat rejection to jacket water, kW (BTU/min)	64.0 (3640)	60 (3412)	50.7 (2883)	46.1 (2622)
Heat rejection to atmosphere, kW (BTU/min)	9.4 (535)	10 (568)	7.5 (427)	7.8 (444)

Alternator[3]		50 Hz									
Duty Cycle		Standby					Prime				
Phase		3-Phase					3-Phase				
Voltages, V		200/115	220/127	380/220	400/230	415/240	200/115	220/127	380/220	400/230	415/240
Current, Amps		318		167	159	153	289		152	144	139
Frame: M2236L4 Excitation: SE	Temperature Rise @ 40°C	150		150	150	150	125		125	125	125
	Motor Starting Capability @ 30% Voltage Dip, skVA	38		166	182	194	38		166	182	194

Alternator[3]		60 Hz	
Duty Cycle		Standby	Prime
Phase		3-Phase	3-Phase
Voltages, V		380/220	380/220
Current, Amps		172	157
Frame: M2236L4 Excitation: SE	Temperature Rise @ 40°C	163	125
	Motor Starting Capability @ 30% Voltage Dip, skVA	108	108

WEIGHTS & DIMENSIONS



Dim "A" mm (in)	Dim "B" mm (in)	Dim "C" mm (in)	Dry Weight kg (lb)
2089 (82.2)	1120 (44.1)	1375 (54.1)	1092 (2408)

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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