

Cat® C4.4

Diesel Generator Sets



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

Model	Standby		Prime		Emission Strategy
DE88E0	50 Hz	60 Hz	50 Hz	60 Hz	Low BSFC
	88.0 kVA (70.4 kW)	100.0 kVA (80.0 kW)	80.0 kVA (64.0 kW)	90.0 kVA (72.0 kW)	

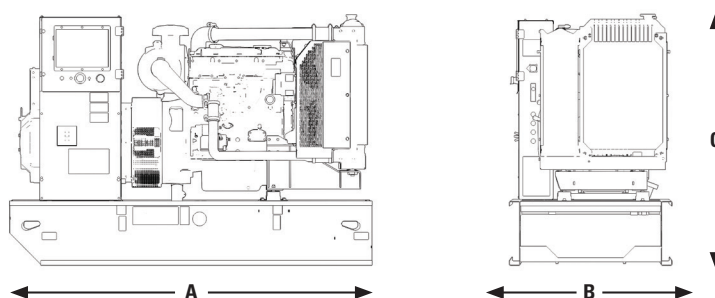
PACKAGE PERFORMANCE

Performance	Standby		Prime	
Frequency	50 Hz	60 Hz	50 Hz	60 Hz
Genset Power Rating	88.0 kVA	100.0 kVA	80.0 kVA	90.0 kVA
Genset power rating with fan @ 0.8 power factor	70.4 kW	80.0 kW	64.0 kW	72.0 kW
Emissions	Low BSFC			
Performance Number	P2516B	P2516A	P2516B	P2516A
Fuel Consumption				
Fuel Tank Capacity, litres (US gal)	219 (57.9)			
100% load with fan, L/hr (gal/hr)	19.8 (5.2)	23.3 (6.2)	18.0 (4.8)	21.0 (5.5)
75% load with fan, L/hr (gal/hr)	14.9 (3.9)	17.7 (4.7)	13.6 (3.6)	16.1 (4.3)
50% load with fan, L/hr (gal/hr)	10.3 (2.7)	12.5 (3.3)	9.5 (2.5)	11.6 (3.1)
Cooling System¹				
Radiator air flow, m³/min (CFM)	121.2 (4280)	140.4 (4958)	121.2 (4280)	140.4 (4958)
Total coolant capacity, L (gal)	13.0 (3.4)			
Inlet Air				
Max. Combustion Air Intake Restriction, kPa (in water)	8.0 (32.1)			
Combustion air inlet flow rate, m³/min (CFM)	5.1 (180)	6.5 (230)	4.8 (170)	6.2 (219)
Max. Allowable Combustion Air Inlet Temp, °C (°F)	50 (122)			
Exhaust System				
Exhaust stack gas temperature, °C (°F)	580 (1076)	560 (1040)	555 (1031)	535 (995)
Exhaust gas flow rate, m³/min (CFM)	13.3 (470)	15.9 (560)	12.5 (441)	15.0 (530)
Exhaust system backpressure (maximum allowable), kPa (in water)	10.0 (41)	15.0 (60.2)	10.0 (41)	15.0 (60.2)
Heat Rejection				
Heat rejection to jacket water, kW (BTU/min)	51.0 (2900)	57.0 (3242)	46.0 (2616)	53.0 (3014)
Heat rejection to alternator, kW (BTU/min)	6.7 (381)	7.1 (404)	6.7 (381)	7.1 (404)
Heat rejection to atmosphere from engine, kW (BTU/min)	20.7 (1177)	22.1 (1257)	18.9 (1075)	20.1 (1143)

Alternator ²		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		254	231	134	127	122	231	210	122	116	111
Frame: LC3114D Excitation SE	Temperature Rise, @ 40°C	163	163	163	163	163	125	125	125	125	125
	Motor Starting Capability 30% Voltage Dip, skVA	184	217	168	184	196	184	217	168	184	196

Alternator ²		60 Hz															
Duty Cycle		Standby								Prime							
Phase		3-Phase								3-Phase							
Voltages, V		208/120	220/127	220/110	240/139	240/120	380/220	440/254	480/277	208/120	220/127	220/110	240/139	240/120	380/220	440/254	480/277
Current, Amps		277.6	262.4	262.4	240.6	240.6	151.9	131.2	120.3	249.8	236.2	236.2	216.5	216.5	136.7	118.1	108.3
Frame: LC3114D Excitation: SE	Temperature Rise, @ 40°C	105	105	130	105	105	130	105	105	105	80	105	80	105	105	80	80
	Motor Starting Capability @ 30% Voltage Dip, skVA	168	185	144	215	168	143	185	215	168	185	144	215	168	143	185	215

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)	1058 (2332)

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.