

### Standby: 60Hz



Image shown might not reflect actual configuration

Engine Model	Cat® C7.1 In-line 6, 4-cycle Diesel
Bore x Stroke	105 mm x 127 mm (4.1in x 5.0 in)
Displacement	7.01 L (428 in³)
Compression Ratio	16.7:1
Aspiration	Turbocharged Air-to-Air-Aftercooled
Fuel Injection System	Common Rail
Governor	Electronic ADEM™ A4

Model	Standby	Emission Strategy
C7.1	250 kVA, 200 ekW	US EPA TIER III

### **PACKAGE PERFORMANCE**

Performance	Standby
Frequency	60 Hz
Genset power rating with fan @ 0.8 power factor	200 ekW
Performance number	P4364A
Fuel Consumption	
100% load with fan, L/hr (gal/hr)	56.4 (14.4)
75% load with fan, L/hr (gal/hr)	44.3 (11.7)
50% load with fan, L/hr (gal/hr)	31.6 (8.3)
25% load with fan, L/hr (gal/hr)	13.8 (3.7)
Cooling System <sup>1</sup>	
Radiator air flow restriction (system), kPa (in. water)	0.12 (0.48)
Engine coolant capacity, L (gal)	9.5 (2.5)
Radiator coolant capacity, L (gal)	11.5 (3.0)
Inlet Air	
Combustion air inlet flow rate, m³/min (CFM)	15.8 (558)
Max. allowable combustion air inlet temp, °C (°F)	51 (124)
Exhaust System	
Exhaust stack gas temperature, °C (°F)	533 (991)
Exhaust gas flow rate, m³/min (CFM)	38.3 (1353)
Exhaust system back pressure (maximum allowable), kPa (in. water)	15.0 (60.2)
Heat Rejection	
Heat rejection to jacket water, kW (BTU/min)	91.8 (5221)
Heat rejection to exhaust (total), kW (BTU/min)	183.0 (10407)
Heat rejection to aftercooler, kW (BTU/min)	45.0 (2559)
Heat rejection to atmosphere from engine, kW (BTU/min)	35.3 (2019)

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Emissions (Nominal) <sup>2</sup>	Standby
NOx + HC, mg/Nm³ (g/hp-hr)	2196.0 (3.73)
CO, mg/Nm³ (g/hp-hr)	771.24 (1.31)
PM, mg/Nm³ (g/hp-hr)	105.8 (0.18)

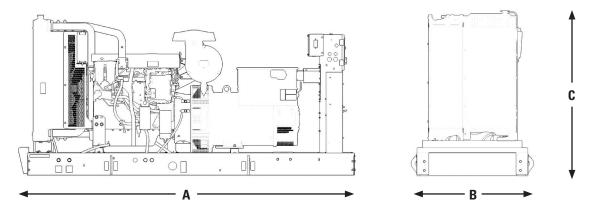
Alternator <sup>3</sup>					
Duty Cycle			Standby		
Phase			3-Phase		
Voltages, V		480/277	480/277 240/120 208/120 600/34		600/347
Current, Amps		301	301 601 694 241		241
Excitation		SE SE SE		AREP	
Frame: LC5014F	Temperature Rise, °C	130			
	Motor Starting Capability @ 30% Voltage Dip, skVA	456			
Frame: LC5014H	Temperature Rise, °C	105	105	105	
	Motor Starting Capability @ 30% Voltage Dip, skVA	543	425	425	
Frame: LC5014J  Temperature Rise, °C  Motor Starting Capability ©	Temperature Rise, °C		105	105	
	Motor Starting Capability @ 30% Voltage Dip, skVA		536	536	
Frame: LC5024F	Temperature Rise, °C				150
	Motor Starting Capability @ 30% Voltage Dip, skVA				516
Frame: LC5024H	Temperature Rise, °C				105
	Motor Starting Capability @ 30% Voltage Dip, skVA				656

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# Cat® C7.1 DIESEL GENERATOR SETS



#### **WEIGHTS & DIMENSIONS**



Dim "A" mm (in)	Dim "B" mm (in)	Dim "C" mm (in)	Dry Weight kg (lb)
3039 (120)	1110 (44)	1476 (58)	1500 (3307)

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

### **APPLICABLE CODES AND STANDARDS:**

CSA C22.2 No 100-04, UL142, UL489, UL869, cUL/UL2200, NFPA 37, NFPA 70, NFPA 99,NFPA 110, IBC, IEC60034-1, ISO 3046, ISO 8528, NEMA MG 1-33.

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.

RATINGS: Ratings are based on SAE J1349 standard conditions. These ratings also apply at ISO3046 standard conditions.

### **DEFINITIONS AND CONDITIONS**

- <sup>1</sup> For ambient and altitude capabilities consult your Cat dealer. Air flow restriction (system) is added to existing restriction from factory.
- <sup>2</sup> 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.
- <sup>3</sup> UL 2200 Listed packages may have oversized generators with a different temperature rise and motor starting characteristics. Generator temperature rise is based on a 40° C ambient per NEMA MG1-32.

### **LET'S DO THE WORK.**