

Standby & Prime: 60Hz



Image shown might not reflect actual configuration

Engine Model	Cat® C7.1 ACERT In-line 6, 4-cycle diesel
Bore x Stroke	105mm x 127mm (4.1in x 5.0 in)
Displacement	7.01 L (428 in ³)
Compression Ratio	16.7:1
Aspiration	Turbocharged Air-to-Air-Aftercooled
Fuel Injection System	Electronic, Common Rail
Governor	Electronic ADEM™ A4

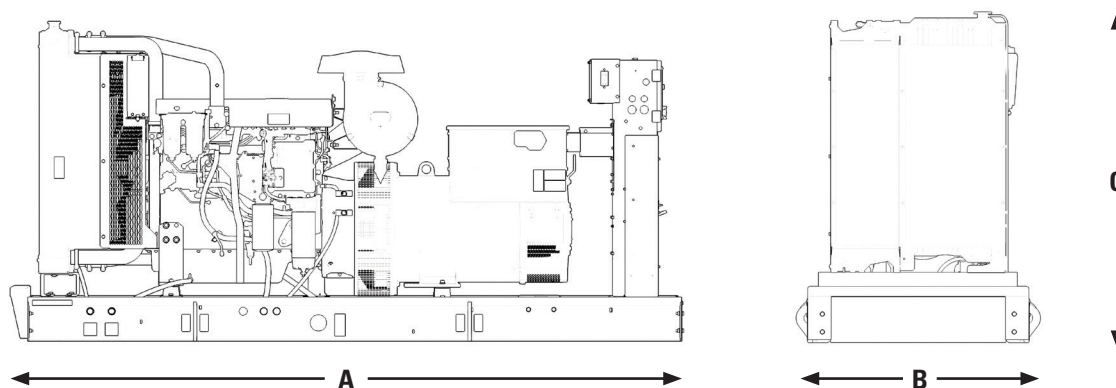
Model	Standby	Emission Strategy
C7.1	250 kVA, 200 eKW	US EPA TIER III

PACKAGE PERFORMANCE

Performance	Standby
Frequency	60 Hz
Genset Power Rating	250 kVA
Genset power rating with fan @ 0.8 power factor	200 eKW
Fuel Consumption	
100% load with fan, L/hr (gal/hr)	56.4 (14.9)
75% load with fan, L/hr (gal/hr)	45.8 (12.1)
50% load with fan, L/hr (gal/hr)	32.6 (8.6)
25% load with fan, L/hr (gal/hr)	14.3 (3.7)
Cooling System ¹	
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, m ³ /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, m ³ /min (cfm)	38.3 (1353)
Exhaust system backpressure (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)

Emissions (Nominal) ²		Standby			
NO _x + HC, mg/Nm ³ (g/hp-hr)		2196.0 (3.73)			
CO, mg/Nm ³ (g/hp-hr)		771.24 (1.31)			
PM, mg/Nm ³ (g/hp-hr)		105.8 (0.18)			
Alternator ³		Standby			
Voltages		480V	208V	600V	240V
Motor Starting Capability @ 30% Voltage Dip		454 skVA	641 skVA	516 skVA	641 skVA
Current		300 amps	693 amps	240 amps	601.4 amps
Frame Size		LC5014F	LC5024J	LC5024F	LC5024J
Excitation		SE	AR	AR	AR
Temperature Rise		130 °C	105 °C	105 °C	105 °C

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)

APPLICABLE CODES AND STANDARDS:

AS1359, CSA C22.2 No100-04, UL142, UL489, UL869, UL2200, NFPA37, NFPA70, NFPA99, NFPA110, IBC, IEC60034-1, ISO3046, ISO8528, NEMA MG1-22, NEMA MG1-33, 2006/95/EC, 2006/42/EC, 2004/108/EC.

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 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 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, NO_x. 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 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.

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