Cat® C7.1 DIESEL GENERATOR SETS

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

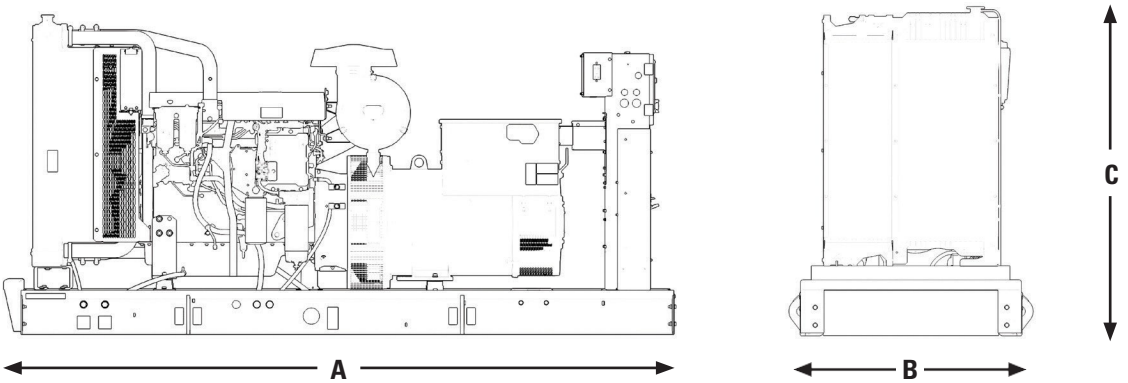
Performance	Standby
Frequency	60 Hz
Genset power rating with fan @ 0.8 power factor	200 ekW
Performance number	P4364A
Fuel Consumption	
100% load with fan, L/hr (gal/hr)	56.4 (14.4)
75% load with fan, L/hr (gal/hr)	44.3 (11.7)
50% load with fan, L/hr (gal/hr)	31.6 (8.3)
25% load with fan, L/hr (gal/hr)	13.8 (3.7)
Cooling System[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, 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)

Emissions (Nominal)[2]	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[3]							
Duty Cycle		Standby					
Phase		3-Phase					
Voltages*, V		480/277	380/220	240/120	220/127	208/120	600/347
Current Amps		301	380	601	656	694	241
Excitation		SE	SE	SE	SE	SE	AREP
Frame: LC5014F	Temperature Rise @ 40°C	130			150		
	Motor Starting Capability @ 30% Voltage Dip skVA	456			392		
Frame: LC5014H	Temperature Rise @ 40°C	105	362	105		105	
	Motor Starting Capability @ 30% Voltage Dip skVA	543	130	425		425	
Frame: LC5014J	Temperature Rise @ 40°C			105		105	
	Motor Starting Capability @ 30% Voltage Dip skVA			536		536	
Frame: LC5024F	Temperature Rise @ 40°C						150
	Motor Starting Capability @ 30% Voltage Dip skVA						516
Frame: LC5024H	Temperature Rise @ 40°C						105
	Motor Starting Capability @ 30% Voltage Dip skVA						656

*Note: 220 V and 380 V are additional offerings for the Latin American market.

WEIGHTS & DIMENSIONS



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

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:

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

Note: Codes may not be available in all model configurations. Site level review needed for NFPA70. Please consult your local 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.

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] 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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