Cat® C7.1 DIESEL GENERATOR SETS

Standby & Prime: 60Hz

Image shown might not reflect actual configuration

Engine Model	Cat® C7.1 In-line 6, 4-cycle diesel
Bore x Stroke	105mm x 127mm (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	Electronic, Common Rail
Governor	Electronic

Model	Standby	Prime	Emission Strategy
C7.1	**150 ekW**	**135 ekW**	**EPA TIER III**

PACKAGE PERFORMANCE

Performance	Standby	Prime
Frequency	60 Hz	
Genset Power Rating	187.5 kVA	168.8 kVA
Genset power rating with fan @ 0.8 power factor	150 ekW	135 ekW
Emissions	EPA TIER III	
Performance Number	P4390A-00	P4390C-00
Fuel Consumption		
100% load with fan, L/hr (gal/hr)	43.0 (11.3)	40.0 (10.6)
75% load with fan, L/hr (gal/hr)	34.9 (9.2)	32.1 (8.5)
50% load with fan, L/hr (gal/hr)	25.0 (6.6)	22.9 (6.0)
Cooling System[1]		
Radiator air flow restriction (system), kPa (in. Water)	0.12 (0.48)	0.12 (0.48)
Engine coolant capacity, L (gal)	9.5 (2.5)	9.5 (2.5)
Radiator coolant capacity, L (gal)	11.5 (3.0)	11.5 (3.0)
Total coolant capacity, L (gal)	21 (5.5)	21 (5.5)
Inlet Air		
Combustion air inlet flow rate, m³/min (cfm)	15.3 (540.3)	14.9 (526.2)
Max. Allowable Combustion Air Inlet Temp, °C (°F)	51 (124)	
Exhaust System		
Exhaust stack gas temperature, °C (°F)	441 (825)	432 (809)
Exhaust gas flow rate, m³/min (cfm)	31.2 (1102)	30.6 (1081)
Exhaust system backpressure (maximum allowable) kPa (in. water)	15.0 (60.2)	15.0 (60.2)
Heat Rejection		
Heat rejection to exhaust (total) kW (Btu/min)	132.0 (7496)	126.0 (7166)
Heat rejection to aftercooler, kW (Btu/min)	38.0 (2138)	35.0 (2013)
Heat rejection to atmosphere from engine, kW (Btu/min)	29.0 (1649)	27.4 (1558)

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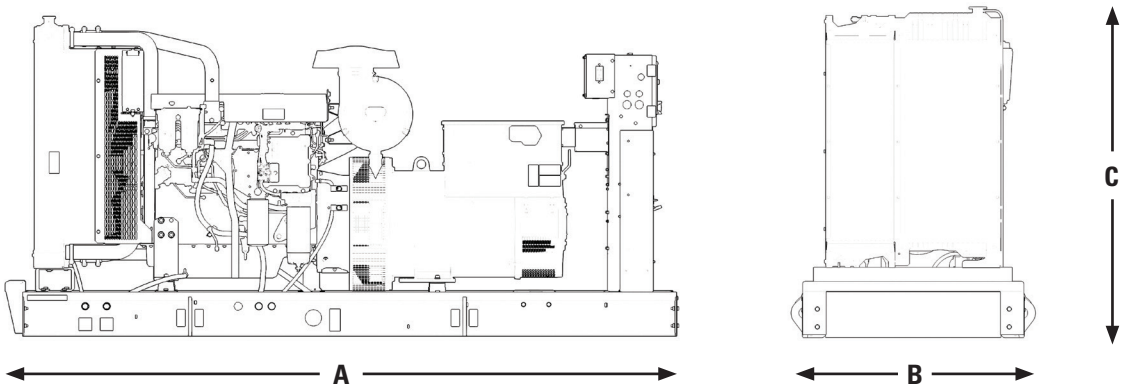
Emissions (Nominal)[2]	Standby	Prime
NOx + HC g/kW-hr	4.0	4.0
CO g/kW-hr	1.0	1.0
PM g/kW-hr	0.2	0.2
Alternator[3]		
Voltages	480V	480V
Motor starting capability @ 30% Voltage Dip	452 skVA	452 skVA
Frame Size	LC3114J	LC3114J
Excitation	Self Excited	Self Excited
Temperature Rise	130°C	105°C

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 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] 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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LEHE1583-01 (05/20)