

## 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 in <sup>3</sup> )
Compression Ratio	16.7:1
Aspiration	Turbocharged Air-to-Air-Aftercooled
Fuel Injection System	Electronic, Common Rail
Governor	Electronic

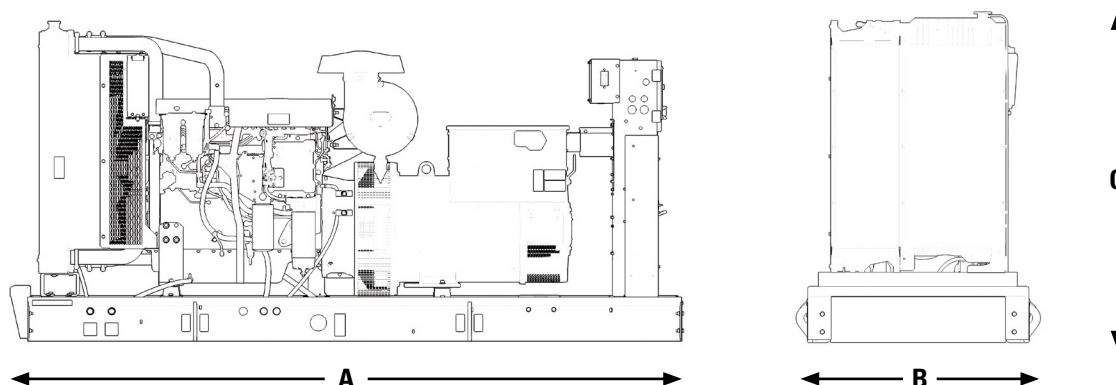
Model	Standby	Prime	Emission Strategy
<b>C7.1</b>	<b>175 ekW</b>	<b>158 ekW</b>	<b>EPA TIER III</b>

## PACKAGE PERFORMANCE

Performance	Standby	Prime
Frequency	60 Hz	
Genset Power Rating	219 kVA	196.9 kVA
Genset power rating with fan @ 0.8 power factor	175 ekW	157.5 ekW
Emissions	EPA TIER III	
Performance Number	P4378A-00	P4378C-00
<b>Fuel Consumption</b>		
100% load with fan, L/hr (gal/hr)	49.6 (13.1)	46.5 (12.3)
75% load with fan, L/hr (gal/hr)	40.6 (10.7)	37.1 (9.8)
50% load with fan, L/hr (gal/hr)	27.7 (7.3)	24.7 (6.5)
<b>Cooling System<sup>1</sup></b>		
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)
<b>Inlet Air</b>		
Combustion air inlet flow rate, m <sup>3</sup> /min (cfm)	15.4 (543.8)	15.2 (536.8)
Max. Allowable Combustion Air Inlet Temp, °C (°F)	51 (124)	
<b>Exhaust System</b>		
Exhaust stack gas temperature, °C (°F)	509 (948)	487.2 (909)
Exhaust gas flow rate, m <sup>3</sup> /min (cfm)	34.8 (1229)	33.7 (1190)
Exhaust system backpressure (maximum allowable) kPa (in. water)	15.0 (60.2)	15.0 (60.2)
<b>Heat Rejection</b>		
Heat rejection to exhaust (total) kW (Btu/min)	159.0 (9042)	149.0 (8473)
Heat rejection to aftercooler, kW (Btu/min)	37.0 (2104)	36.0 (2047)
Heat rejection to atmosphere from engine, kW (Btu/min)	32.0 (1820)	30.2 (1717)

Emissions (Nominal) <sup>2</sup>	Standby	Prime
NOx + HC g/kW-hr	4.0	4.0
CO	1.0	1.0
PM	0.2	0.2
Alternator <sup>3</sup>		
Voltages	480V	480V
Motor starting capability @ 30% Voltage Dip	387 skVA	387 skVA
Frame Size	LC5014D	LC5014D
Excitation	Self Excited	Self Excited
Temperature Rise °C (°F)	105 (234)	105 (189)

## 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:

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** are based on SAE J1349 standard conditions. These ratings also apply at ISO3046 standard conditions.

**Fuel Rates** fuel Consumption reported in accordance with ISO3046-1.

### 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.

**FUEL RATES:** Fuel consumption reported in accordance with ISO3046-1.

## LET'S DO THE WORK.™

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