

**Standby & Prime: 60 Hz, 480V**



Engine Model	Cat® C13 ACERT™ In-line 6, 4-cycle diesel
Bore x Stroke	130mm x 157mm (5.1in x 6.2in)
Displacement	12.5 L (763 in³)
Compression Ratio	16.3:1
Aspiration	Turbocharged Air-to-Air Aftercooled
Fuel Injection System	MEUI
Governor	Electronic ADEM™ A4

Standby	Prime	Performance Strategy
<b>400 ekW, 500 kVA</b>	<b>365 ekW, 456.25 kVA</b>	<b>TIER III Non-Road</b>

## PACKAGE PERFORMANCE

Performance	Standby		Prime	
Frequency	60 Hz		60 Hz	
Genset power rating	500 kVA		456.25 kVA	
Genset power rating with fan @ 0.8 power factor	400 ekW		365 ekW	
Fuelling strategy	TIER III Non-Road		TIER III Non-Road	
Performance number	EM1694-00		EM1695-01	
<b>Fuel Consumption</b>				
100% load with fan	105.8 L/hr	27.9 gal/hr	96.4 L/hr	25.5 gal/hr
75% load with fan	90.7 L/hr	24.0 gal/hr	84.8 L/hr	22.4 gal/hr
50% load with fan	66.2 L/hr	17.5 gal/hr	61.3 L/hr	16.2 gal/hr
25% load with fan	37.7 L/hr	9.9 gal/hr	35.1 L/hr	9.3 gal/hr
<b>Cooling System<sup>1</sup></b>				
Radiator air flow restriction (system)	0.12 kPa	0.48 in. Water	0.12 kPa	0.48 in. Water
Radiator air flow	497 m³/min	17551 cfm	497 m³/min	17551 cfm
Engine coolant capacity	14.2 L	3.8 gal	14.2 L	3.8 gal
Radiator coolant capacity	30 L	8 gal	30 L	8 gal
Total coolant capacity	34 L	12 gal	34 L	12 gal
<b>Inlet Air</b>				
Combustion air inlet flow rate	27.4 m³/min	966.6 cfm	25.9 m³/min	914.9 cfm
Max. allowable combustion air inlet temp	47 °C	116 °F	45 °C	113 °F
<b>Exhaust System</b>				
Exhaust stack gas temperature	567.4 °C	1053.4 °F	552.8 °C	1027.0 °F
Exhaust gas flow rate	82.0 m³/min	2894.9 cfm	75.2 m³/min	2655.4 cfm
Exhaust system backpressure (maximum allowable)	10.0 kPa	40.0 in. water	10.0 kPa	40.0 in. water
<b>Heat Rejection</b>				
Heat rejection to jacket water	156 kW	8857 Btu/min	144 kW	8204 Btu/min
Heat rejection to exhaust (total)	398 kW	22607 Btu/min	363 kW	20629 Btu/min
Heat rejection to aftercooler	71 kW	4023 Btu/min	61 kW	3472 Btu/min
Heat rejection to atmosphere from engine	52 kW	2945 Btu/min	47 kW	2656 Btu/min
Heat rejection from alternator	29 kW	1661 Btu/min	26 kW	1467 Btu/min

Emissions (Nominal) <sup>2</sup>	Standby		Prime	
NO <sub>x</sub>	2313.9 mg/Nm <sup>3</sup>	4.6 g/hp-hr	2277.4 mg/Nm <sup>3</sup>	4.6 g/hp-hr
CO	616.5 mg/Nm <sup>3</sup>	1.2 g/hp-hr	608.3 mg/Nm <sup>3</sup>	1.2 g/hp-hr
HC	4.0 mg/Nm <sup>3</sup>	0.01 g/hp-hr	4.9 mg/Nm <sup>3</sup>	0.01 g/hp-hr
PM	21.3 mg/Nm <sup>3</sup>	0.1 g/hp-hr	22.7 mg/Nm <sup>3</sup>	0.1 g/hp-hr
Alternator <sup>3</sup>	Standby		Prime	
Voltages	480V		480V	
Motor starting capability @ 30% Voltage Dip	880 skVA		880 skVA	
Current	601 amps		549 amps	
Frame Size	LC6114B		LC6114B	
Excitation	SE		SE	
Temperature Rise	150 ° C		125 ° C	

## 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, NO<sub>x</sub>. 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.

## 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 are based on fuel oil of 35° API [16° C (60° F)] gravity having an LHV of 42 780 kJ/kg (18,390 Btu/lb) when used at 29° C (85° F) and weighing 838.9 g/litre (7.001 lbs/U.S. gal.). Additional ratings may be available for specific customer requirements, contact your Caterpillar representative for details. For information regarding Low Sulfur fuel and Biodiesel capability, please consult your Cat dealer.

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