Cat® C15 DIESEL GENERATOR SETS

Standby & Prime: 50Hz

Image shown might not reflect actual configuration

Engine Model	Cat® C15 In-line 6, 4-cycle Diesel
Bore x Stroke	137 mm x 171 mm (5.4 in x 6.8 in)
Displacement	15.2 L (928 in³)
Compression Ratio	16.1:1
Aspiration	Turbocharged Air-to-Air Aftercooled
Fuel Injection System	MEUI
Governor	Electronic ADEM™ A4 - G3 Class* capable

Model	Standby	Prime	Emission Strategy
DE550E0	**550 kVA, 440 ekW**	**500 kVA, 400 ekW**	**Non-Certified Emissions**

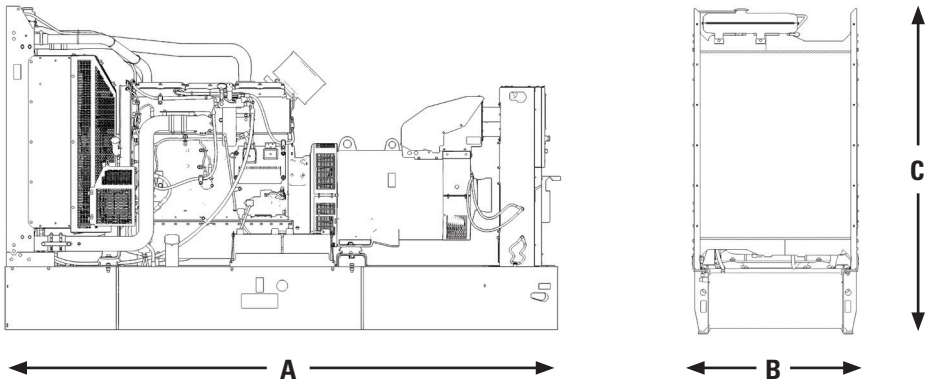
PACKAGE PERFORMANCE

Performance	Standby	Prime
Frequency	50 Hz	
Genset Power Rating	550 kVA	500 kVA
Genset power rating with fan @ 0.8 pf	440 ekW	400 ekW
Emissions	Non-Certified Emissions	
Performance Number	DM8495	DM8494
Fuel Consumption		
100% load with fan, L/hr (gal/hr)	109.4 (28.9)	99.2 (26.2)
75% load with fan, L/hr (gal/hr)	81.8 (21.6)	74.1 (19.5)
50% load with fan, L/hr (gal/hr)	57.5 (15.2)	52.5 (13.8)
25% load with fan, L/hr (gal/hr)	34.6 (9.1)	31.8 (8.4)
Cooling System[1]		
Radiator air flow restriction (system), kPa (in. water)	0.12 (0.48)	0.12 (0.48)
Radiator air flow, m³/min (CFM)	476 (16810)	476 (16810)
Engine coolant capacity, L (gal)	20.8 (5.5)	20.8 (5.5)
Radiator coolant capacity, L (gal)	27 (7.1)	27 (7.1)
Total coolant capacity, L (gal)	47.8 (12.6)	47.8 (12.6)
Inlet Air		
Combustion air inlet flow rate, m³/min (CFM)	29.9 (1056.8)	28.1 (992.2)
Max. allowable air intake restriction, (kPA	3.7 (clean element) / 6.2 (dirty element)	
Exhaust System		
Exhaust stack gas temperature, °C (°F)	527.0 (980.5)	511.3 (952.4)
Exhaust gas flow rate, m³/min (CFM)	86.0 (3037.7)	79.2 (2797.7)
Exhaust system backpressure (maximum allowable), kPa (in. water)	10.0 (40.0)	10.0 (40.0)
Heat Rejection		
Heat rejection to jacket water, kW (BTU/min)	166 (9441)	149 (8458)
Heat rejection to exhaust (total), kW (BTU/min)	398 (22635)	360 (20485)
Heat rejection to aftercooler, kW (BTU/min)	83 (4715)	75 (4272)
Heat rejection to atmosphere from engine, kW (BTU/min)	70 (3975)	46 (2605)

Emissions[2] (Nominal)	Standby	Prime
NOx, mg/Nm³ (g/hp-hr)	3689.6 (7.2)	3438.4 (6.8)
CO, mg/Nm³ (g/hp-hr)	168.2 (0.3)	170.2 (0.3)
HC, mg/Nm³ (g/hp-hr)	5.8 (0.01)	5.3 (0.01)
PM, mg/Nm³ (g/hp-hr)	7.0 (0.02)	7.9 (0.02)

Alternator[3]							
Duty Cycle		Standby			Prime		
Phase		3-Phase			3-Phase		
Voltages, V		380	400	415	380	400	415
Current, Amps		836	794	765	760	722	696
Frame: LC6114F Excitation: SE	Temperature Rise, @ 40°C	163	163	163	125	125	125
	Motor Starting Capability @ 30% Voltage Dip, skVA	1106	1213	1296	1106	1213	1296
Frame: LC6114G Excitation: SE	Temperature Rise, @ 40°C	130	130	130	105	105	105
	Motor Starting Capability @ 30% Voltage Dip, skVA	1117	1227	1311	1117	1227	1311
Frame: A2985L4 Excitation: SE	Temperature Rise, @ 40°C		150	150		125	125
	Motor Starting Capability @ 30% Voltage Dip ,skVA		1291	1391		1291	1391

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)
3830 (151)	1130 (44)	2255 (89)	3700 (8157)

APPLICABLE CODES AND STANDARDS:

AS1359, IEC60034-1, ISO3046, ISO8528, NEMA MG1-33, EAC,CE,UKCA.
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] Generator temperature rise is based on a 40° C ambient per IEC60034-1.

* Governing Class capability as per ISO8528-5.Consult your local Cat dealer for configuration and site specific transient performance classification.

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