

Prime: 50Hz; 400V



Image shown might not reflect actual configuration

Engine Model	Cat® C18 ACERT™ In-line 6, 4-cycle diesel
Bore x Stroke	145mm x 183mm (5.7in x 7.2in)
Displacement	18.1 L (1106 in ³)
Compression Ratio	14.5:1
Aspiration	Turbocharged Air-to-Air Aftercooled
Fuel Injection System	MEUI
Governor	Electronic ADEM™ A4

Model	Prime	Emission Strategy
DE600C3	600 kVA, 480 ekW	China Non-Road-III

PACKAGE PERFORMANCE

Performance	Prime
Frequency	50 Hz
Genset Power Rating	600 kVA
Gen set power rating with fan @ 0.8 power factor	480 ekW
Fuelling strategy	China Non-Road-III
Performance Number	EM0553
Fuel Consumption	
100% load with fan	127.2 L/hr, 33.6 gal/hr
75% load with fan	100.6 L/hr, 26.5 gal/hr
50% load with fan	70.0 L/hr, 18.4 gal/hr
25% load with fan	39.6 L/hr, 10.4 gal/hr
Cooling System ¹	
Radiator air flow restriction (system)	0.12 kPa, 0.48 in. Water
Radiator air flow	374 m ³ /min, 13207 cfm
Engine coolant capacity	20.8 L, 5.5 gal
Radiator coolant capacity	34 L, 8.9 gal
Total coolant capacity	54.8 L, 14.4 gal
Inlet Air	
Combustion air inlet flow rate	37.8 m ³ /min, 1335 cfm
Max. Allowable Combustion Air Inlet Temp	49 °C 120 °F
Exhaust System	
Exhaust stack gas temperature	543.1 °C, 1009.6 °F
Exhaust gas flow rate	83.5 m ³ /min, 2948.0 cfm
Exhaust system backpressure (maximum allowable)	10.0 kPa, 40.0 in. water
Heat Rejection	
Heat rejection to jacket water	151 kW, 8587 Btu/min
Heat rejection to exhaust (total)	483 kW, 27468 Btu/min
Heat rejection to aftercooler	117 kW, 6654 Btu/min
Heat rejection to atmosphere from engine	75 kW, 4265 Btu/min

Emissions (Nominal) ²	
NOx	1419 mg/Nm ³ , 3.0 g/hp-hr
CO	311 mg/Nm ³ , 0.69 g/hp-hr
HC	5.1 mg/Nm ³ , 0.01 g/hp-hr
PM	29 mg/Nm ³ , 0.08 g/hp-hr
Alternator ³	
Voltages	440V
Motor Starting Capability @ 30% Voltage Dip	1739 skVA
Current	794A
Frame Size	A3335L4
Excitation	SE
Temperature Rise	105°C, 221°F

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.

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: 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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