# ELECTRIC POWER - Technical Spec Sheet STANDARD



400 ekW/ 500 kVA/ 60 Hz/ 1800 rpm/ 440 V/ 0.8 Power Factor

Rating Type: STANDBY Fuel Strategy: LOW FUEL CONSUMPTION





Image shown may not reflect actual configuration

3406C 400 ekW/ 500 kVA 60 Hz/ 1800 rpm/ 440 V

	Metric	English
Package Performance		
Genset Power Rating with Fan @ 0.8 Power Factor	400 ekW	
Genset Power Rating	500 kVA	
Aftercooler (Separate Circuit)	78.0 ° C	172.4 ° F
Fuel Consumption		
100% Load with Fan	110.5 L/hr	29.2 gal/hr
75% Load with Fan	79.3 L/hr	21.0 gal/hr
50% Load with Fan	54.6 L/hr	14.4 gal/hr
25% Load with Fan	32.3 L/hr	8.5 gal/hr
Cooling System <sup>1</sup>		
Engine Coolant Capacity	34.1 L	9.0 gal
nlet Air		
Combustion Air Inlet Flow Rate	32.1 m³/min	1133.4 cfm
Max. Allowable Combustion Air Inlet Temp	96 ° C	205 ° F
Exhaust System		
Exhaust Stack Gas Temperature	572.7 ° C	1062.9 ° F
Exhaust Gas Flow Rate	96.4 m³/min	3403.5 cfm
Exhaust System Backpressure (Maximum Allowable)	6.7 kPa	27.0 in. water

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Heat Rejection		
Heat Rejection to Jacket Water	251 kW	14272 Btu/min
Heat Rejection to Exhaust (Total)	396 kW	22516 Btu/min
Heat Rejection to Aftercooler	58 kW	3309 Btu/min
Heat Rejection to Atmosphere from Engine	99 kW	5611 Btu/min
Heat Rejection to Atmosphere from Generator	25 kW	1399 Btu/min

Alternator <sup>2</sup>		
Motor Starting Capability @ 30% Voltage Dip	1694 skVA	
Current	656 amps	
Frame Size	LC7024J	
Excitation	AR	
Temperature Rise	105 ° C	

Emissions (Nominal) <sup>3</sup>			
NOx	2692.0 mg/Nm <sup>3</sup>	5.8 g/hp-hr	
CO	794.3 mg/Nm³	1.7 g/hp-hr	
HC	19.1 mg/Nm³	0.0 g/hp-hr	
PM	106.5 mg/Nm³	0.2 g/hp-hr	

#### **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. 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.
- 3. 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.

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### **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.

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/liter (7.001 lbs/U.S. gal.). Additional ratings may be available for specific customer requirements, contact your Cat representative for details. For information regarding Low Sulfur fuel and Biodiesel capability, please consult your Cat dealer.

www.Cat-ElectricPower.com

Performance No.: DM2275-03

Feature Code: 406DES2

Generator Arrangement: 2351220

Date: 03/06/2016

Source Country: U.S.

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