

ELECTRIC POWER - Technical Spec Sheet STANDARD



C9

220 ekW/ 275 kVA/ 50 Hz/ 1500 rpm/ 400 V/ 0.8 Power Factor

Rating Type: STANDBY

Fuel Strategy: LOW FUEL CONSUMPTION



Image shown may not reflect actual configuration

C9

220 ekW/ 275 kVA
50 Hz/ 1500 rpm/ 400 V

Metric

English

Package Performance

Genset Power Rating with Fan @ 0.8 Power Factor	220 ekW	
Genset Power Rating	275 kVA	
Aftercooler (Separate Circuit)	N/A	N/A

Fuel Consumption

100% Load with Fan	57.5 L/hr	15.2 gal/hr
75% Load with Fan	44.0 L/hr	11.6 gal/hr
50% Load with Fan	31.5 L/hr	8.3 gal/hr
25% Load with Fan	19.4 L/hr	5.1 gal/hr

Cooling System¹

Engine Coolant Capacity	13.9 L	3.7 gal
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Inlet Air

Combustion Air Inlet Flow Rate	16.1 m ³ /min	569.5 cfm
Max. Allowable Combustion Air Inlet Temp	48 °C	119 °F

Exhaust System

Exhaust Stack Gas Temperature	480.5 °C	896.9 °F
Exhaust Gas Flow Rate	42.2 m ³ /min	1491.5 cfm
Exhaust System Backpressure (Maximum Allowable)	10.0 kPa	40.0 in. water

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Heat Rejection

Heat Rejection to Jacket Water	111 kW	6310 Btu/min
Heat Rejection to Exhaust (Total)	177 kW	10056 Btu/min
Heat Rejection to Aftercooler	38 kW	2161 Btu/min
Heat Rejection to Atmosphere from Engine	30 kW	1730 Btu/min
Heat Rejection to Atmosphere from Generator	19 kW	1103 Btu/min

Alternator²

Motor Starting Capability @ 30% Voltage Dip	465 skVA
Current	397 amps
Frame Size	LC5014H
Excitation	SE
Temperature Rise	163 ° C

Emissions (Nominal)³

NOx	4407.1 mg/Nm ³	9.2 g/hp-hr
CO	845.2 mg/Nm ³	1.8 g/hp-hr
HC	15.0 mg/Nm ³	0.0 g/hp-hr
PM	33.2 mg/Nm ³	0.1 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.: EM0878-01

Feature Code: C09DE1G

Generator Arrangement: 4652292

Date: 07/31/2017

Source Country: U.K.

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