ELECTRIC POWER - Technical Spec Sheet STANDARD



580 ekW/ 725 kVA/ 50 Hz/ 1500 rpm/ 400 V/ 0.8 Power Factor

Rating Type: PRIME Fuel Strategy: LOW FUEL CONSUMPTION



Image shown may not reflect actual configuration

3412C 580 ekW/ 725 kVA 50 Hz/ 1500 rpm/ 400 V

	Metric	English
Package Performance		
Genset Power Rating with Fan @ 0.8 Power Factor	580 ekW	
Genset Power Rating	725 kVA	
Aftercooler (Separate Circuit)	91.0 ° C	195.8 ° F
uel Consumption		
100% Load with Fan	153.7 L/hr	40.6 gal/hr
75% Load with Fan	117.5 L/hr	31.0 gal/hr
50% Load with Fan	82.5 L/hr	21.8 gal/hr
25% Load with Fan	48.2 L/hr	12.7 gal/hr
cooling System ¹		
Engine Coolant Capacity	58.6 L	15.5 gal
nlet Air		
Combustion Air Inlet Flow Rate	N/A	N/A
Max. Allowable Combustion Air Inlet Temp	N/A	N/A
xhaust System		
Exhaust Stack Gas Temperature	N/A	N/A
Exhaust Gas Flow Rate	N/A	N/A
Exhaust System Backpressure (Maximum Allowable)	6.7 kPa	27.0 in. water

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Heat Rejection		
Heat Rejection to Jacket Water	347 kW	19734 Btu/min
Heat Rejection to Exhaust (Total)	571 kW	32473 Btu/min
Heat Rejection to Aftercooler	66 kW	3776 Btu/min
Heat Rejection to Atmosphere from Engine	103 kW	5857 Btu/min
Heat Rejection to Atmosphere from Generator	22 kW	1268 Btu/min

Alternator ²				
Motor Starting Capability @ 30% Voltage Dip	1815 skVA			
Current	1046 amps			
Frame Size	597			
Excitation	PM			
Temperature Rise	105 ° C			

Emissions (Nominal) ³		
NOx	2932.1 mg/Nm³	6.1 g/hp-hr
CO	171.7 mg/Nm³	0.4 g/hp-hr
HC	102.6 mg/Nm ³	0.2 g/hp-hr
PM	45.0 mg/Nm ³	0.1 g/hp-hr

DEFINITIONS AND CONDITIONS

- 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.

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, 72/23/EEC, 98/37/EC, 2004/108/EC

Note: Codes may not be available in all model configurations. Please consult your local Cat Dealer representative for availability.

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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 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.: DM0627-04 Feature Code: 412DEBA

Generator Arrangement: 1533077

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