ELECTRIC POWER - Technical Spec Sheet STANDARD

C13 ACERT

280 ekW/ 350 kVA/ 50 Hz/ 1500 rpm/ 400 V/ 0.8 Power Factor

CAT

Rating Type: PRIME Fuel Strategy: LOW FUEL CONSUMPTION



C13 ACERT 280 ekW/ 350 kVA 50 Hz/ 1500 rpm/ 400 V

Image shown may not reflect actual configuration

	Metric	English
Package Performance		
Genset Power Rating with Fan @ 0.8 Power Factor	280 ekW	
Genset Power Rating	350 kVA	
Aftercooler (Separate Circuit)	N/A	N/A
Fuel Consumption		
100% Load with Fan	72.4 L/hr	19.1 gal/hr
75% Load with Fan	54.8 L/hr	14.5 gal/hr
50% Load with Fan	39.0 L/hr	10.3 gal/hr
25% Load with Fan	23.8 L/hr	6.3 gal/hr
Cooling System ¹		
Engine Coolant Capacity	14.2 L	3.8 gal
nlet Air		
Combustion Air Inlet Flow Rate	20.3 m³/min	717.5 cfm
Max. Allowable Combustion Air Inlet Temp	44 ° C	110 ° F
xhaust System		
Exhaust Stack Gas Temperature	504.3 ° C	939.7 ° F
Exhaust Gas Flow Rate	54.8 m³/min	1936.6 cfm
Exhaust System Backpressure (Maximum Allowable)	10.0 kPa	40.0 in. water

ELECTRIC POWER - Technical Spec Sheet STANDARD



280 ekW/ 350 kVA/ 50 Hz/ 1500 rpm/ 400 V/ 0.8 Power Factor



Rating Type: PRIME Fuel Strategy: LOW FUEL CONSUMPTION

Heat Rejection		
Heat Rejection to Jacket Water	113 kW	6453 Btu/min
Heat Rejection to Exhaust (Total)	249 kW	14146 Btu/min
Heat Rejection to Aftercooler	43 kW	2425 Btu/min
Heat Rejection to Atmosphere from Engine	47 kW	2694 Btu/min
Heat Rejection to Atmosphere from Generator	20 kW	1137 Btu/min

Alternator ²				
Motor Starting Capability @ 30% Voltage Dip	793 skVA			
Current	505 amps			
Frame Size	A2925L4			
Excitation	SE			
Temperature Rise	125 ° C			

Emissions (Nominal) ³		
NOx	2874.9 mg/Nm³	5.6 g/hp-hr
CO	761.4 mg/Nm³	1.5 g/hp-hr
HC	7.2 mg/Nm³	0.0 g/hp-hr
PM	N/A	N/A

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.

ELECTRIC POWER - Technical Spec Sheet STANDARD



C13 ACERT 280 ekW/ 350 kVA/ 50 Hz/ 1500 rpm/ 400 V/ 0.8 Power Factor

Rating Type: PRIME Fuel Strategy: LOW FUEL CONSUMPTION

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.

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.: EM0431-04

Feature Code: U.K.: C13DE43, China: C13DE53

Generator Arrangement:5027413

Date:05/12/2016

Source Country: U.K. or China

The International System of Units (SI) is used in this publication. CAT, CATERPILLAR, their respective logos, ADEM, EUI, S•O•S, "Caterpillar Yellow" and the "Power Edge" trade dress, as well as corporate and product identity used herein, are trademarks of Caterpillar and may not be used without permission.

LEHE1078-00 (05/16)